

# UK Green Investment Bank and Foresight Group forge investment consortium to construct £47.8m renewable energy plant in Birmingham

- Joint project to construct 10.3 MWe renewable energy plant in Tyseley, Birmingham, the first of its kind in the UK, using innovative gasification process, proven in North America;
- Per annum the project is expected to save around 107,000 tonnes of CO<sub>2</sub>e emissions, divert up to 67,000 tonnes of recovered wood from landfill, and produce enough electricity to supply the equivalent of more than 17,000 homes;
- The project will create over 100 engineering, project management and construction jobs and 19 full time jobs once operational, as well as supporting local SME, JM Envirofuels Ltd.

# Press Release: EMBARGOED UNTIL 7.01am 12 December 2013

The UK Green Investment Bank (GIB) and Foresight Group (Foresight) have today announced the investment of £47.8 million by a consortium of investors into the construction of a new 10.3MWe recovered wood gasification venture in Tyseley, Birmingham, to be known as Birmingham Bio Power Ltd.

The consortium comprises GIB, Balfour Beatty plc, Eternity Capital Management Limited, Foresight's UK Waste Resources and Energy Investments (UKWREI) fund, in which GIB is a cornerstone investor, and GCP Infrastructure Fund ("GCP") with the developer, Carbonarius.

The project, the first of its kind in the UK, will be built on the Webster and Horsfall site, and is expected to become operational by early 2016. The plant will convert recovered wood into electricity using gasification technology, a form of advanced thermal treatment of waste where the carbon-based material in the waste is converted into a gas which is used to raise steam. This is then passed through a turbine to produce electricity.

Shaun Kingsbury, Chief Executive of UK Green Investment Bank, said:

"As the UK works towards its targets to generate more power from green sources, it's important that we bring on new technologies. I'm pleased the Green Investment Bank has been able to support the first gasification plant of its kind in the UK and hope it offers a positive demonstration effect that others will follow.

"The project also highlights the wider economic benefits of investing in new green technologies with a hundred new jobs to construct the plant, 19 good quality new jobs in its ongoing operation and a long term contract for a local small business."

Business Secretary Vince Cable said:

"It is encouraging to see this innovative new technology coming to the UK for the first time. This investment will create green jobs and help the environment by reducing carbon emissions and converting wood diverted from landfill into cleaner energy for thousands of homes and businesses. It is also good news for the local area helping to build a stronger economy by creating over 100 private sector jobs in Birmingham."



Carbonarius has selected Nexterra Systems Corp. to provide the gasification system. Nexterra has successfully delivered seven similar gasification facilities in the USA and Canada and it is this same Nexterra technology which will power the new plant. The equipment meets the criteria of a UK Advanced Conversion Technology (ACT) qualifying the project for the highest band of Renewable Obligations Certificate (ROC).

The project will be supplied with around 70,000 tonnes per annum of Grade A-C recovered wood secured under a long-term fuel supply contract from JM Envirofuels Ltd., a Birmingham based SME. It is also expected to create more than 100 engineering, construction and project management jobs and 19 full time jobs once operational.

Over its expected 20 year lifetime, the new plant is forecast to supply enough renewable energy to power 17,000 homes each year and is expected to deliver a reduction in greenhouse gas emissions of around 2.1 million tonnes of  $CO_2$  equivalent, and to save around 1.3 million tonnes of wood from landfill.

Carbonarius is a Joint Venture between O-Gen UK and UNA Group. MWH will be responsible for building and operating the plant under the Engineer, Procure, Construct ("EPC") and five year Operations and Maintenance ("O&M") contracts.

GIB is directly investing £12 million by way of a preferred loan. Through its cornerstone investment in the Foresight managed fund, UKWREI, it is indirectly investing a further £6.2 million in equity in the project. Equity co-investment, on the same terms as the UKWREI, is provided by Eternity Capital Management who are investing £6.2 million and Balfour Beatty Investments, whose £12.4 million completes the c. £24.8 million equity investment in the project. GCP Infrastructure Fund (GCP) is providing the final £11 million as preferred loans.

James Samworth, Investment Director at Foresight Group commented:

"The Foresight deal team is proud of the work with Carbonarius, the funding consortium, and the contractors and suppliers to structure the investment in this plant which is the first of its kind in the UK. This is the third investment by the UKWREI Fund, in which the Green Investment Bank is the cornerstone investor, and makes a further contribution to the UK's green economy."

Alon Laniado of Eternity Capital Management said:

"Eternity Capital is excited to fund this opportunity and to work alongside partners in delivering this project which contributes to providing treatment solutions for recovered wood and to meeting EU emissions targets. This investment reflects Eternity's strategy to build a portfolio of waste-to-energy projects as part of its wider focus on waste and environmental services".

Ian Brooking and David Pike of Carbonarius commented:

"It has taken some while from the initial discussions with Webster and Horsfall (the Landowner) to bring this 'first of a kind' renewable energy facility to closure. This exciting development is the cornerstone and the first stage of a consented Energy Park in Tyseley, Birmingham. These are exciting times in our industry and we are delighted to be working with this dedicated investment team on this significant project and we look forward to continue to work with them for our future projects across the UK.

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Ronan Kierans of Gravis Capital Partners, the investment adviser to GCP, said:

"We are delighted to be involved in the provision of preferred loans to assist in the funding of this project, working alongside some excellent partners to deliver this ground-breaking scheme in the UK."

Mike Scott of Nexterra Systems Corp, the gasification system provider, said:

"We are pleased to have been selected by the developer, MWH and the Consortium for our first project in the UK. We believe our proven reliable gasification systems are an ideal fit for the needs of the UK market and look forward to making this project a success."

# ENDS

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#### Notes to editors:

The project will be built and operated by MWH which is currently in the development phase of two other energy from waste projects due to commence in 2014. Nexterra Systems Corp., which has completed seven similar projects in the US and Canada, will provide the complete biomass gasification system.

Webster and Horsfall, founded in 1720, has been on the Hay Mills site since the mid 19<sup>th</sup> century, when James Horsfall rebuilt a disused blade and sword factory as a steam driven mill beside the River Cole. It was from this site that Webster and Horsfall manufactured the first transatlantic cable which was laid in 1866, comprising 30,000 miles of wire taking 250 workers more than 11 months to manufacture.

#### About the Green Investment Bank (GIB)

The UK Green Investment Bank was launched in November 2012. With £3.8 billion of funding from the UK Government, it is the first bank of its kind in the world. It is a "for profit" bank, whose mission is to accelerate the UK's transition to a greener economy, and to create an enduring institution, operating independently of Government.

www.greeninvestmentbank.com

# About Foresight

Foresight Group has been managing investment funds on behalf of institutions and retail clients for almost 30 years. With a background in Private Equity and Venture Capital, Foresight has diversified activities and today manages institutional funds principally in European Infrastructure (Solar and PPP), Environmental and UK small cap Private Equity, including six years of specific Infrastructure experience.



Foresight has £1 billion of assets under management and boasts one of the UK's leading Environmental infrastructure investment teams. It is responsible for managing approximately £140 million of environmental assets which include the £50m mandate from the UK Government's Green Investment Bank for UK environmental infrastructure. Foresight also manages the £60 million Foresight Environmental Fund (FEF).

www.foresightgroup.eu

# About Eternity Capital Management Limited

Eternity Capital is a specialist group that provides funding dedicated to waste recycling and waste-toenergy investments. It focuses on building a portfolio of UK and international investment opportunities with high growth potential and which operate in segments that contribute to delivering the EU waste and environmental targets.

www.eternitycapital.com

# About Balfour Beatty

Balfour Beatty (<u>www.balfourbeatty.com</u>) is an international infrastructure group that delivers world class services essential to the development, creation and care of infrastructure assets; from finance and development, through design and project management to construction and maintenance.

Its businesses draw on more than 100 years of experience to deliver the highest levels of quality, safety and technical expertise to its clients principally in the UK, the US, Southeast Asia and the Middle East. Balfour Beatty continues to develop its business in key growth markets in South Africa, Australia, Canada, Brazil and India.

With proven expertise in delivering infrastructure critical to support communities and society today and in the future, Balfour Beatty's key market sectors include transportation (roads, rail and aviation), power and energy, mining, water and social infrastructure such as hospitals and schools.

Balfour Beatty employs 50,000 people around the world.

#### About Carbonarius

O-Gen UK was formed in 2005 to develop waste wood Advanced Conversion Technology energy plants, with the first plant, 'O-Gen Acme Trek' being developed in Stoke on Trent. The Una Group, a multifaceted property and environmental group, joined forces with O-Gen UK to form Carbonarius in 2009, this primarily to develop an ACT facility in Plymouth (O-Gen Plymtrek). Carbonarius is the majority shareholder in this facility which is currently undergoing hot commissioning.

Following the success of these facilities Carbonarius has sought to develop mid sized facilities, of which the Tyseley project is the first. Carbonarius's continuing growth is aimed at developing 10MWe to 20MWe projects using a variety of biomass feedstocks and proven technologies which are new to the UK.

In 2013, Carbonarius won the Best Energy from Waste Initiative category in the MRW National Recycling Awards. <u>http://www.nationalrecyclingawards.com/747094</u>

#### **About GCP Infrastructure Fund**

GCP is an open-ended investment company that seeks to generate returns from senior and subordinated infrastructure debt and related and/or similar assets. GCP achieves this by investing in loans secured against long dated, public sector-backed cash flows and offers partial inflation

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protection. The majority shareholder of GCP is GCP Infrastructure Investments Limited ("GCPIIL"), which is a closed-ended investment company incorporated in Jersey, admitted to the Official List and to trading on the London Stock Exchange's Main Market. GCP and GCPIIL are advised by Gravis Capital Partners LLP.

www.gcpuk.com/gcp-infrastructure-fund-ltd

#### About Nexterra Systems Corp.

Nexterra is a global leader in plant-scale, energy from waste gasification systems for the production of clean, renewable heat and power. The company offers a proven fixed bed updraft gasification technology with over 150,000 hours of commercial operation and uptime of over 90%. The typical scale of systems ranges from 2 - 40 MWt (8 - 120 MMBtu/hr) net useable heat for thermal systems, or from 2 - 12 MW electricity for power systems. Nexterra's gasification technology features lower cost, higher reliability, lower emissions and great fuel flexibility compared to conventional biomass energy systems. Nexterra has completed seven commercial systems in Canada and the US.

www.nexterra.co.uk

#### About MWH

MWH Global is a strategic consulting, technical engineering and construction services firm leading the wet infrastructure sector. Offering a full range of services and innovative, award-winning solutions beginning in the initial planning phases through construction and asset management, the company partners with clients in multiple industries to implement projects and programs that focus on water, energy, natural resources and infrastructure. With almost 8,000 employees in 35 countries spanning six continents dedicated to fulfilling MWH's purpose of Building a Better World, which reflects the company's commitment to sustainable development. MWH is a private, employee-owned firm with a rich legacy beginning in 1820.

www.mwhglobal.com.