

Eqtec's new CEO, Ian Price, discusses the growing market for waste gasification

# Opening doors onto a huge market

by **Joshua Heer**

Innovative UK-listed technology firm Eqtec has ambitious goals for its advanced gasifier conversion technology following a successful 2018. Here, *Bioenergy Insight* speaks with its newly appointed CEO, Ian Price, to discuss current plans and the company's future, including exciting advancements in the Asian gasification market.

## How has 2018 been for Eqtec?

2018 has been a year of significant progression for Eqtec as we ramp up our efforts to advance our pipeline of waste-to-energy gasification projects to the operational phase.

This year, we have signed a Strategic Alliance Agreement with Cobra (part

of the huge Spanish ACS group), a worldwide leader in developing, building and operating infrastructure projects, to identify and collaborate on waste-to-energy projects that will utilise the company's proprietary Eqtec Gasifier Technology.

We have a strong project pipeline and recently signed MoUs for projects in Vietnam and the US. In June, we signed an MoU with PT. Citra Metro Jaya Energi in Vietnam to supply our Eqtec Gasifier Technology for a 12 MWe power plant in Hanoi, Vietnam. In September, we signed an MoU in the US with Phoenix Biomass Energy, a California-based power company, to supply our Eqtec Gasifier Technology for two power plants in California,

USA. These projects alone can generate revenue for Eqtec of up to €30 million.

Our task now therefore, is to ensure that our best-in-class gasification technology and extensive project pipeline is delivered and translated into meaningful revenues for the Company. To this end, we have secured an increased facility with our lenders and strengthened our engineering capabilities by signing a strategic alliance with CT3 Ingeniería, underpinning our shift to a near-term focus on pipeline execution.

## What sectors and industries are showing an interest in Eqtec's technology?

Our key focus is on the waste recovery industry. The issue of increased global consumption leading to more and more waste, coupled with an increasing need for sustainable energy, is creating a highly receptive environment for our waste conversion technology.

In particular, we process Refuse Derived Fuel (RDF), a fuel which is produced by shredding and drying Municipal Solid Waste (MSW) or Commercial & Industrial (C&I) waste once all recyclable elements have been removed. By using RDF as a feedstock in our proprietary Eqtec Gasifier Technology (EGT) we are able to convert waste directly into syngas to generate electrical and heat energy.

We also have strong interest

in using the EGT for biomass fuels as demonstrated by the MoU with Phoenix.

## Could you detail your current plans for the company?

Having joined as CEO in August, I am looking forward to taking Eqtec to the next stage in its strategic development at a time of tremendous opportunity for the business.

Our goal is to make Eqtec the preferred supplier of energy recovery from waste technology. The business is increasing its engineering resources to support our current deal flow which, coupled with a number of operational efficiencies, will produce a streamlined, dynamic business capable of executing on its extensive project pipeline.

As well as delivering on our pipeline of projects, we will also focus on the strategic development of the business, which could include adding value and synergies through potential acquisitions if we identify the right opportunity.

## What do you think the future holds for the gasification market?

The advanced gasification market benefits from a considerable tailwind in the form of growing demand for environmentally friendly waste treatment and energy generation. With the world population growing and



Ian Price, CEO of Eqtec plc



6 MWe syngas engine generator room at Eqtec's Movialsa plant in Spain

associated energy demand rising, gasification has a part to play in managing both of these issues.

The key issue for gasification to deal with is to further improve the confidence of investors and their technical advisers by delivering more operational facilities in the short to medium term. Once this is achieved we will see the costs of construction coming down as EPC contractors become better placed to understand the risks of developing power generation assets using gasification technology. Also, access to cheaper forms of development and construction capital will become the norm as more successful projects are delivered.

There is also a geographic trend where we are seeing certain jurisdictions actively looking at gasification as an alternative to traditional mass burn incineration, for example, California, where gasification for biomass fuel is growing and in China where local government is looking at gasification for both MSW and biomass. Also, in the UK there has been a trend to look at gasification for both

MSW and C&I waste over the last few years. Knowing who your customers are and targeting them effectively will be important for technology suppliers as we go forward.

The market must also consider the application that gasification is being used for. Where a developer is paying for the fuel used, typically in biomass projects, then efficiency is critical for the process and the use of gas engines for energy production is the best option. Where the developer is receiving a significant gate fee for

applications which is why we feel confident that there is a real opportunity to grow our business in the future.

### Are you seeing a growing interest in using RDF for energy generation?

If we take the UK as an example, the saturation of landfills and a lack of domestic waste to energy capacity forced the UK to export in excess of 3 million tonnes of RDF to European incinerators last year, accounting for 80-85% of the UK's total RDF production.

With world population growing and associated energy demand rising, gasification has a part to play in managing both of these issues

the fuel, typically in RDF projects, then efficiency can be sacrificed a little and the use of a boiler and steam turbine for energy production may be utilised. We are also seeing gasification being used in applications to produce secondary chemicals rather than for energy production.

Eqtec is working on projects involving all of these different

As recently as 2010, the UK exported zero volumes of RDF, which highlights the growth we have seen in the market.

This means that not only is the UK economy losing out on considerable gate fee revenues, but it is also forgoing an unutilised energy resource by not converting the waste into energy. As a result, there is a significant

opportunity for economic, environmentally friendly waste processing plants in the UK that can undercut the cost of shipping waste to processors on continental Europe.

Similar issues can be seen around the globe and there has been a proliferation of legislation and regulation at both a national and international level, including the Landfill Directive, Waste Framework Directive and Circular Economy Package.

A recent World Bank report asserted that, without urgent action, global waste will increase by 70% on current levels by 2050, due to a growing population and rapid urbanisation. The report stated that global annual waste generation is expected to jump to 3.4 billion tonnes over the next 30 years, up from 2.01 billion tonnes in 2016.<sup>1</sup>

Eqtec's Gasifier Technology is proven and ready to help to address this issue.

### Can you give us an update on Eqtec's project in Vietnam?

In June, we announced an MoU with PT. Citra Metro Jaya Energi ("Citra") to supply our Eqtec Gasifier Technology for a 12 MWe power plant in Hanoi, Vietnam. Citra is part of the Energy division of the Citra Metro Group, a leading group of companies headquartered in Indonesia involved in energy, technology and telecommunications.

The customer has informed us it anticipates having the signature of the Power Purchase Agreement and issue of permits by authorities in Q2 2019, with the purchase contract to be executed shortly thereafter.

In total, the contract is expected to generate turnover for Eqtec in the range of €20-22 million, based on a €70 million investment by the customer in this waste-to-energy facility.

The agreement with Citra is a significant step forward

for the Company and will help open doors to a large market opportunity in South East Asia.

**How important do you believe the Asian market is going to be for the gasification sector?**

The Asian market for gasification facilities is growing at a considerable pace. Societal trends are a key driver behind the waste-to-energy market and this is especially the case in Asia. Growing populations and rapidly developing economies are putting the spotlight both on how these countries dispose of their waste and how they can generate enough energy to cope with demand.

We had initially focused on developing a pipeline of projects just in Thailand but such is the level of demand that we have now expanded

this vision to include all of South East Asia.

**What are Eqtec's plans for next year?**

Strong societal growth drivers, combined with highly-efficient gasification technology and an extensive list of waste-to-energy projects, puts Eqtec in a strong position to deliver sustainable business growth.

Our core focus for the next year will be pipeline execution. From a financial standpoint, we are now well-funded, which gives us the confidence to press on with converting immediate pipeline opportunities into operational gasification facilities. ●

**Reference:**

1 What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050

**For more information:**

Visit: [www.eqteclpc.com](http://www.eqteclpc.com)



Eqtec Gasifier Technology at the company's Syngas Italy plant

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