



Renewables

Intrinergy eyes renewable CHP projects in US and Europe

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Five years ago, the polluter-pays-principle may have seemed dismissive in the board rooms of major industrial companies.

Though the idea had been kicked around for years and given serious credence by groups like the OECD (Organisation for Economic Co-operation and Development), the proverbial winds of change were still far from strong enough to blow down heavy industry doors.

In that climate, a small company called Intrinergy was founded in 2004 with the idea that corporate energy users were best suited to embrace renewable technologies rather than dismiss them.

Unlike other green technologies (wind, solar and hydro), Intrinergy's cogeneration plans would provide a renewable heat alternative to burning fossil-fuels.

Since then, the company has developed a growing biomass CHP business using renewable feedstocks and attracting industrial customers who understand both the political and economic drivers behind climate change.

Intrinergy's biomass operations span two continents - the US and Europe - and include more than 35 projects under development.

The company's business model targets large industrials with heat and power needs and offers a service-based structure to design, build, finance, operate and maintain renewable cogeneration facilities on-site.

The plants are backed by long-term Power Purchase Agreements and have been project financed with debt facilities ranging from US\$10 million to US\$30 million.

Intrinergy has operating facilities in the US, Germany and Belgium. Depending on the location, its projects generally benefit from attractive feed-in tariffs and green certificates.

Speaking exclusively to *IJ News*, the company's chief executive John Keppler and executive vice president Thomas Meth outlined a typical deal structure, explaining how a New England-based paper company recognized the value of Intrinergy's operating model and approached the company to oversee its energy needs.

In this case, Intrinergy said it will install a fluidized bed boiler on-site, taking over the existing boiler house to manage steam delivery to the plant.

The new facility will produce 4MW of electric power and on average 80,000 lbs/hour (or 24 MW thermal) of steam for process use at the paper plant.

Typically, Keppler said Intrinergy projects range from 1-5MW, though they could scale up to 10MW depending on the customer's need and the availability of a suitable feedstock.

Keppler added that feedstocks were typically managed by a subsidiary dedicated to sourcing and transporting renewable materials for Intrinergy plants.

In the case of the New England paper company, the project is fuelled by fibre residues, yard trimmings, bark and other woody biomass. The facility will displace the use of fuel oil at the plant, thereby dramatically improving localized air pollution as well as reducing carbon emissions.

The electricity generated by the facility will be sold directly to the paper plant, and the Renewable Energy Credits will be marketed separately to third-parties.

Intrinergy claims that the switch to renewable biomass will reduce costs of steam production at the plant by over 30 per cent, saving US\$2.5 million over current fossil-fuel base operations.