

PROMOTING ON-SITE POWER AND COGENERATION

WebSupervisor

Map view

History

Reports

WIP

WORLDWIDE INDEPENDENT POWER

OCTOBER 2013

www.comap.uk.com/power

ComAp:
Remote Management
Find smarter efficiency
using technology





Microgeneration - heralding a power transformation in Europe

Thanks to work by Greenenvironment two 200 kW microturbine CHP plants will be built in Germany to convert associated petroleum gas (APG) from the extraction of crude oil into electricity as well as heat. But this is only part of the bigger picture, as WIP reports.

The cogeneration specialist company Greenenvironment has received orders from an oil and gas producer to build two 200 kW microturbine CHP plants in Germany to convert associated petroleum gas (APG) from the extraction of crude oil into electricity as well as heat.

To achieve this, Greenenvironment is building a pilot plant that aims to demonstrate that fluctuating volumes of gas with a varying composition can be effective in microturbines. Electricity generated will mainly be used for operating the plant. Excess electricity will be fed into the local utility grid while the thermal energy produced will be used as process heat.

"Though these are German projects, it gives us a lot of know-how about how the turbines can be used on associated petroleum gas," said Matti Malkamäki, CEO of Greenenvironment.

Greenenvironment is a European company active in the decentralised energy generation market which plans, builds and operates cogeneration heat and power plants (CHP).

The company offers CHP plants in a power range of 30 kWel to 4 MWel and is a market leader in the use of innovative microturbine technology in electricity generation from biogas and natural gas.



Greenenvironment is an important distribution & technology partner of **Capstone Turbine Corp.** a world-market leader in the production of microturbines. Microturbines benefit from low maintenance requirements, low emissions, favourable EEG and KWKG bonus compensation and flexible heat use. All Greenenvironment CHP plants are operated by a highly-efficient centralised process management system at the operations centre in Berlin, says the company.

In August 2011 GGC Energy s.r.o., a 50% subsidiary of Greenenvironment Plc signed a contract for the delivery of four 4 MW microturbine plants by January 2012.

These are destined for installation at the NOVY VEK (New Century) shopping centre in the Black Sea city of Sochi. A 2 MW chiller will also be installed in the old energy centre of the shopping mall while a 3 MW chiller will be placed in a technical area on the parking area and fired via a heat pipeline from the heat exchangers as well as additional boilers from the energy centre.

The chilling solution will use two technologies. Firstly, absorption chillers

together with normal cooling towers will be used. Secondly, specialists from GGC Energy and IBT Group will work together to prepare a water/water exchanger solution based on groundwater.

The installation and commissioning of the plants will be assisted by the Russian Capstone-distribution partner BPC Group (www.bpcgroup.ru) and other regional companies from the Sochi area.

Richard Benda, CEO of Enkom a.s., told WIP: "As we now have also the world-class chiller system from the IBT Group, we look forward to a combination of the two chosen technologies; microturbines and absorption chillers."

Ilario Vigani, CEO of IBT Group, also commented to WIP: "It's encouraging to realise that all the new and modern large infrastructural developments around Europe are implementing trigenerative technologies. It is definitely the way to go and we are ready to satisfy any kind of power generation demand in this area."

Internet link

www.greenenvironment.de

WIP