



THE PLANT GENERATES
ITS OWN HEAT FOR THE
PROCESS, AND BY USING
CHP IT SAVED 10120
TONNES OF CO<sub>2</sub>
EMISSIONS, THE
EQUIVALENT OF 1556907
MATURE TREES
UP TO THE END
OF 2008.

**Countess Wear Sewage Treatment Works, Exeter** 

South West Water leads the way with highly efficient biogas combined heat and power technology utilising otherwise harmful digester gas.

South West Water (SWW) provides clean water and sewerage services to over 1.6 million people, 365 days a year. Dedicated to environment and conservation issues SWW is committed to using energy efficient Combined Heat and Power (CHP) generation systems.

SWW has used the biogas for a long period to generate high value electricity from waste, and then utilise the heat, generated as a by-product, in the process and around the site.

SWW's CHP equipments were in operation for 16 years when in 2003 the plant had reached the end of its lifespan. SWW tendered for the replacement of the four 165kW biogas CHP units for their Countess Wear Sewage Treatment Works in Exeter.

SWW was favourably impressed with the quality and the reliability of ENER-G's biogas CHP installations at comparable sites throughout the UK.

Also the comprehensive design and maintenance service offered by ENER-G far exceeded what SWW had previously encountered. ENER-G won the tender by offering the best value solution and has operated the units since 2003.



Anaerobic digestion can be applied for various types of biological waste, including:

- Sewage sludge
- Liquid manure
- Bio-wastes from households, slaughter houses, breweries and distilleries, dairies, sugar production, etc.
- Vegetables, Vegetable oils and animal fats
- Organic MSW

For all ENER-G systems we offer long-term operational and maintenance contract to ensure smooth operation and long engine lifetime.

Like at any sites operated by ENER-G we can assist in selling the electricity to the local grid and administer the process for the recovery of Renewable Obligation Certificates (ROCs).



## The benefits of CHP:

- Offers financial savings over conventional energy supply
- Avoids Climate Change Levy
- Primary energy savings deliver lower energy bills
- Higher efficiency offers reduced greenhouse gas emissions offsetting the impact of the Carbon Reduction Commitment
- Greater security of supply and plentiful hot water
- Flexible procurement options
- Zero CAPEX required
- VAT savings
- Possible grant funding

## **About ENER-G**

ENER-G develops, delivers and finances sustainable energy solutions and technologies on a business to business basis worldwide. We offer a "one-stop-shop" for all commercial and industrial energy requirements, from combined heat and power (CHP), renewable electricity generation from biogas, heat pump technologies, solar PV, efficient lighting, controls, metering and data solutions and energy from waste.

## For further details contact us:

ENER-G Combined Power Ltd
ENER-G House
Daniel Adamson Road
Manchester
M50 1DT

tel: +44 (0) 161 745 7450 fax: +44 (0) 161 745 7457 email: chp@energ.co.uk www.energ.co.uk