

HIGH HEDLEY HOPE

An Envi-tec Biogas AG project 499kW combined heat and power plant.

CWE started on site in November 2014 to install the complete LV power systems and control cabling throughout the plant.

Electricity generation commenced in December 2014 and exported to the grid after the successful G59 certification.

CWE liaised closely with Envi-tec and Schultz the electrical control system provider, on the technical aspect of the project, this was CWE's first contract with Envi-tec.

PLANT SCHEDULE

CHP rated at 499Kw

Fully automatic feeding system delivering a variety of liquid and solid organic matter to be used and mixed prior to feeding into digesters.

Food waste and abattoir waste from local sources are pasteurised prior to being pumped to the mixing room.

Packaged food waste is unpacked via the Atritor machine which separates the organic food from the packaging.

Pasteurisation plant and digester tank heating is supplied from a heating exchange unit on the CHP

Full gas safety system (ETOX) with CH₄ and H₂S sensors to maintain gas quality at all times.

All external pipework was fitted with ATEX rated electrical trace heating tapes.

CWE installed all LV field wiring and control wiring to 2 digesters, water tank, slurry tank, 2 waste tanks, liquid waste tank, de-pack waste tank, CHP, pump room, separator, effluent tank, gas container, emergency gas flare and all cabling in the de-packing plant room.

CWE also installed a full trace heating system to combat the extreme weather conditions on site.

RESULT

The plant was successfully commissioned early in 2015 and is now producing 500kW of green energy electricity, utilising food waste to minimize landfill an environmental success story.