

CASE STUDY: ENER-CORE POWERSTATION at Attero Landfill Schinnen, Holland

TRANSFORMING LOW-BTU LANDFILL GAS INTO CLEAN ONSITE POWER

THE CHALLENGE:

Attero, one of the leading waste management companies in the Netherlands and producer of green gas, had a closed landfill in Schinnen, Holland, which was producing low quality gas with a methane content below 30% which conventional gas turbines could not efficiently operate on. Attero sought a technology that could effectively deal with low methane gases.

THE SOLUTION:

The 250kW Ener-Core Powerstation FP250 became the perfect solution, transforming previously unusable low-Btu biogas into a source of onsite electricity using gradual oxidation technology whereby sufficient heat is released to drive the turbine. The Ener-Core Powerstation is effectively a hybrid between an emissions control device and a clean power generator device.



THE RESULTS & BENEFITS:

Since commission in 2014, the Ener-Core Power station has been generating 250kW of clean electricity with the following achievements:

- Complete Flare Shutdown
- Can operate on Methane levels as low as 1.5%
- Less than 1 ppm NO_x emissions
- Low CO emissions
- No H₂S, Siloxane, or Moisture Removal
- Produces Electricity
- Can produce useful landfill gas for at least 10 years longer
- Transitions to standby mode, continues operation for up to 5 minutes without gas supply as grid re-establishes connection

