

# ELECTRATHERM<sup>®</sup>

## CASE STUDIES



### **BIOGAS/HEAT-TO-POWER APPLICATION**

**Location:** Trechwitz, Germany  
**Site Gross Power Output Range:** 30-35kWe  
**Thermal Heat Input Range:** 375-450kWt  
**Hot Water Input Range:** 90-95°C  
**Hot Water Flow Range:** 39 m<sup>3</sup>/hour  
**Ambient Temperature:** 0-15°C



### **POWER GENERATION WITH STATIONARY ENGINE**

**Location:** South Texas, USA  
**Max Gross Power Output:** 28kWe  
**Thermal Heat Input:** 235 - 450kWt  
**Hot Water Input Range:** 82°- 88°C  
**Hot Water Flow:** 45 m<sup>3</sup>/hour  
**Direct Condenser:** Ambient air temperature ranges from -1 - 38°C avg is 21°C



### **BIOGAS IN CZECH REPUBLIC**

Biogas/Heat-to-Power Application on two MWM Internal Combustion Engines  
**Site:** Brno, Czech Rep.  
**Green Machine Gross Power Output Avg:** 32-39 kWe  
**Thermal Input to the Green Machine:** 375-500kWt  
**Hot Water Input Range:** 86 - 92°C  
**Hot Water Flow:** 35 m<sup>3</sup>/hour  
**Ambient Temperature:** 0-25°C



### **USING BIOMASS TO PUT POWER BACK ON THE GRID**

**Location:** St. Helena Island, South Carolina  
**Gross Power Output:** up to 43kWe  
**Thermal Heat Input:** 200 - 500kWt  
**Hot Water Input Range:** 71-113°C  
**Hot Water Flow:** 34 m<sup>3</sup>/hour  
**Cold Water Input:** 20°C  
**Cold Water Flow:** 150 GPM



### **INSTALLED BIOGAS PLANT IN AUSTRIA**

Biogas/Heat-to-Power Application on a GE Jenbacher 312  
**Location:** Inning, Austria  
**Gross Power Output Range:** 18 - 32kWe  
**Thermal Heat Input Range:** 260 - 450kWt  
**Hot Water Input Range:** 82- 93°C  
**Hot Water Flow Range:** 11-30 m<sup>3</sup>/hour



### **LOWER-TEMP GEOTHERMAL ENERGY PRODUCTION**

**Location:** Mississippi Oilfield USA  
**Gross Power Output:** 19kWe  
**Total Installation Time:** 50 hrs  
**Thermal Heat Input:** 500kWt  
**Hot Water Input Range:** 96°C  
**Hot Water Flow:** 27 m<sup>3</sup>/hour  
**Ambient Temp Range:** 16 - 41°C