



# The biogas plant in Klučnice (Czech Republic)

Planning

Construction

Start-up

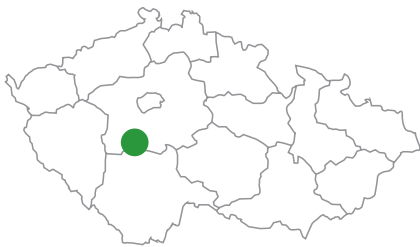
Operation

Service



← Grain silo

→ Technical building and fermenter



**Location:**

**Klučnice / Czech Republic**

**Capacity:**

**703 kW<sub>el</sub>**

**In operation since:** 12/2010

**Input materials:**

**Semi-liquid cattle manure, corn silage, silage, GPS, cereal grains**

**Features:**

**Agricultural biogas plant with separation unit**

## Fact sheet

### The biogas plant in Klučnice (Czech Republic)

The Klučnice biogas plant, which has been in operation since the end of 2010, has an electrical output of 703 kW. All produced electricity is supplied to the CEZ distribution system. The thermal energy is used to heat the adjacent farm buildings. In the future, it is planned to use the waste heat from the cogeneration unit for processing a steam engine which will generate additional electricity.

The biogas plant, being conceived as a traditional agricultural biogas plant, uses separating technology. It is used to separate solid and liquid components of the fermentate. After separation, the liquid component is brought back to the process to dilute the input substrates and thus replaces the need for using process water. After separation, the solid component is used as bedding in the cattle stables.

The Klučnice biogas plant processes the input substrates in the following composition:

Semi-liquid cattle manure: 12,000 tons/year

Corn silage: 5,800 tons/year

Silage: 1,000 tons/year

GPS: 1,000 tons/year

Cereal grains: 650 tons/year

All technology which is necessary for the processing of raw materials is located in the technical building. After that, the raw material is batched into a fermentation tank and a cogeneration unit. The digestate is stored, amongst others, in the existing lagoons on the premises of the farm.