

Welcome to EGG ENERGY

This brochure provides a summary of who we are and what we do here at EGG ENERGY power plant and fertilizer production plant. If you have any questions please do not hesitate to contact us for further information.

**24h a day,
every day**

Anaerobic Digestion is part of the Waste-2-Energy concept contributing to circular economy. EGG ENERGY fertilizer production plant provides close to zero waste production where valuable fermentation residues from poultry manure digestion are transformed in high quality organic fertilizers.

POWER STATION

EGG ENERGY power station is a 2 MW bio gas power station which officially opened in 2015. EGG ENERGY burns bio gas and is capable of meeting the electricity demands of 2 MW and heat energy demands of 2.1 MW with existing setup. Station upgrade capabilities allow to reach production capacity of 3 MW. Our two 1 MW internal combustion engines burn bio gas produced from pure poultry manure making EGG ENERGY one of the most unique power stations in the world.

PLANT SIZE –
2 MW electric,
2.1 MW
heat energy

Year of
construction –
2015

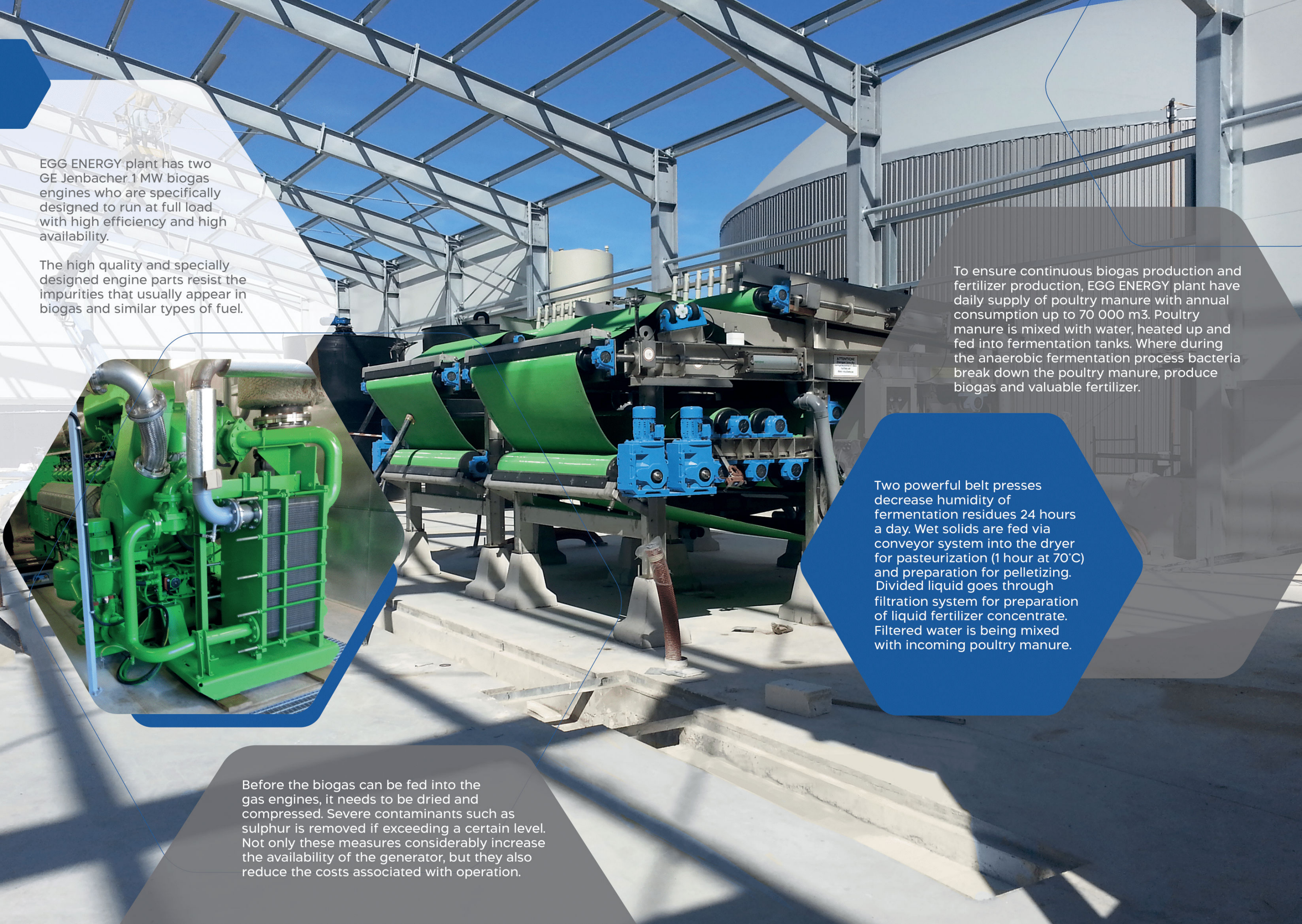
BIO MASS
SOURCE –
100%
poultry manure

EGG ENERGY technical data

BIO GAS
PRODUCTION – up to
10 000 000
m³/year

FERTILIZER PRODUCTION

- Up to
12 000 t/year
pelleted fertilizer
- Up to
6 000 m³/year
liquid concentrated
fertilizer



EGG ENERGY plant has two GE Jenbacher 1 MW biogas engines who are specifically designed to run at full load with high efficiency and high availability.

The high quality and specially designed engine parts resist the impurities that usually appear in biogas and similar types of fuel.

To ensure continuous biogas production and fertilizer production, EGG ENERGY plant have daily supply of poultry manure with annual consumption up to 70 000 m³. Poultry manure is mixed with water, heated up and fed into fermentation tanks. Where during the anaerobic fermentation process bacteria break down the poultry manure, produce biogas and valuable fertilizer.

Two powerful belt presses decrease humidity of fermentation residues 24 hours a day. Wet solids are fed via conveyor system into the dryer for pasteurization (1 hour at 70°C) and preparation for pelletizing. Divided liquid goes through filtration system for preparation of liquid fertilizer concentrate. Filtered water is being mixed with incoming poultry manure.

Before the biogas can be fed into the gas engines, it needs to be dried and compressed. Severe contaminants such as sulphur is removed if exceeding a certain level. Not only these measures considerably increase the availability of the generator, but they also reduce the costs associated with operation.