



Pressemitteilung

Press release · Communiqué de presse

Vechta, March 2021

WELTEC BIOPOWER Builds Biogas Plant in Finland

Finland Relies on Sustainable Nutrient Recycling for Water Protection

WELTEC BIOPOWER recently commissioned a biogas plant near Turku in southwestern Finland. This region is characterised by livestock farms and therefore the 250-kW plant runs entirely on liquid manure. The energy plant belongs to a group of three pig farmers. In this project, the German plant builder cooperates with its long-standing Finnish partner Doranova.

The orientation of environmental policy in the Scandinavian state is increasingly based on sustainable nutrient recycling. Agriculture in particular plays a strategically important role in regions with intensive animal husbandry. While in other parts of the world manure and slurry are seen as waste, the Fins rely on the advantages of the so-called black gold. Fertilisation with this organic substance improves the structure of the soil and increases the carbon storage in the ground. Moreover, an upstream biogas process delivers climate-neutral energy and ensures even better plant availability of the fertiliser.

Both the farm structure and the location of the Finnish pig farmers present an ideal setting for the new anaerobic digestion project. Currently, three fattening houses are being built in addition to the existing piglet production sites. In this way, some 40,000 t of pig manure are available as input material for the stainless-steel digester, which has a capacity of 4,903 m³. Other substrates will not be used. The heat generated by the 250-kW CHP unit is used to preheat the liquid manure, which is first buffered in an upstream slurry pit. To minimise the loss of heat in the harsh Finnish winter, WELTEC equipped the digester cladding with an extra-thick insulation layer. This will result in a more efficient digestion process.

The fully automated biogas plant operation culminates in the separation of the digestate. By compressing the nutrients, the transportability is increased and this helps to balance any regional nutrient surpluses and reduce the entry of these nutrients in the Baltic Sea and other bodies of water. „Back in 2013, we received the ‚Baltic Manure Handling Award‘ in Helsinki in recognition of our biogas technology to reduce the accumulation of nutrients close to waters“, reports Hajo Schierhold, Head of Sales at WELTEC, and adds: „We emphasise individual engineering and a high technical standard. This is something our customers in 25 countries greatly appreciate.“

With the help of biogas technologies of experienced manufacturers like WELTEC BIOPOWER, Finland is sure to reach its recycling target. By 2025, 50 percent of the approximately 17.3 million tons of animal dung are to be processed. Apart from the energy production, this will cover more than three quarters of the phosphorus required for arable farming. „Such efficient nutrient recycling effectively prevents the eutrophication of the water system and eliminates the need for elaborately produced artificial fertiliser“, says Mikko Saalasti, Head of the Biogas department of Doranova. According to Saalasti, the use of nutrients from the black gold thus represents an essential step towards the improvement of all water systems in the country. In addition to water protection, the production of green power will also ensure climate protection.

A video about the construction process of the plant can be found here:

<https://www.youtube.com/watch?v=yKpk6arA7rE>

Next Page: Pictures/Captions



Pressemitteilung

Press release · Communiqué de presse

Organic energy worldwide

Pictures/Captions



WELTEC BIOPOWER recently commissioned a biogas plant near Turku in southwestern Finland. This region is characterised by livestock farms and therefore the 250-kW plant runs entirely on liquid manure. The energy plant belongs to a group of three pig farmers.



Currently, three fattening houses are being built in addition to the existing piglet production sites. In this way, some 40,000 t of pig manure are available as input material for the stainless-steel digester, which has a capacity of 4,903 m³.

Next Page: Company Portrait



Pressemitteilung

Press release · Communiqué de presse

Company Portrait

The **WELTEC** Group from Vechta, Germany, has developed into a globally leading specialist for the construction and operation of biogas and biomethane plants since it was founded back in 2001. The Group designs, plans and sets up energy plants, operates them on a permanent or temporary basis, provides 24/7 service and delivers sustainable usage concepts for output flows, thereby covering the entire biogas value chain.

The establishment of individual, technically mature solutions up to a plant size of 10 MW is one of the strengths of **WELTEC BIOPOWER**. The high proportion of custom-developed components is a key success factor. Moreover, the use of stainless-steel technologies ensures flexible substrate input, quick and inexpensive assembly and a consistently high quality standard, regardless of the location. Following the commissioning, **WELTEC**'s mechanical and biological service plays a significant role in ensuring the plant efficiency.

The company also boasts a wealth of experience in the field of biogas generation and utilisation. The company's nine decentralised plants generate 96 million standard m³ of biogas a year. Most of it is processed to biomethane and made available to energy suppliers and petrol station operators via the public gas network. Additionally, at 16 locations in Germany – e.g. in the field of horticulture, housing construction and healthcare as well as communities – the biomethane is used for generating heat within the framework of **WELTEC** energy contracting.

The biogas specialist is well aware of the importance of customer and investor proximity. Accordingly, the Group's sales and service network spans the entire globe. The range of customers includes businesses from industries such as agriculture, food, waste and wastewater. So far, the 120 employees of the **WELTEC** Group have implemented more than 300 energy plants in 25 countries on five continents. These plants save about 485.000 tons of CO_{2eq} a year.

If you publish the press release please forward a copy to us:

Ann Börries
Marketing
WELTEC BIOPOWER GmbH
Phone: +49 4441/99978-220
Email: presse@weltec-biopower.de

Social Media:

You can also find us on the following social media platforms:



www.twitter.com/WELTECGermany



www.linkedin.com/company/weltec-biopower-gmbh/



www.youtube.com/user/WELTECBIOPOWER