

GREEN POWER IN BAD BLEIBERG

High-efficient cogeneration in Carinthia

BIO HEAT AND ELECTRICITY

Bad Bleiberg is a spa town in the West of Carinthia and many of its visitors know it for its healthy climate caves and thermal waters. In this region, however, the focus is not only on health but also – or perhaps because of health – on the use of renewable energy. The wood chip thermal power station of Bioenergie Bad Bleiberg already supplies many consumers with bio-heat. In 2017, Bioenergie retrofitted the local heat network with two wood pellet gasifier systems of the BURKHARDT company to continue guaranteeing the supply to all of its heat consumers. As a positive side effect, besides 520 kW heat to cover the basic thermal load, the cogeneration units also feed 330 kW worth of green power into the public grid

SUBSIDY IN AUSTRIA

In Austria, BURKHARDT units fall into the category of high-efficiency plants up to 500 kW el and are therefore subsidized with a higher tariff (2018: 21.78 cents per kWh). However, they need a

proven efficiency of >70 % to qualify. BURKHARDT guarantees 75 %. As the subsidies are granted on a per year basis, there may be some standby time before the applicant can implement the project. Currently, six wood gasifiers are in operation in Austria. (Stand: 08/2018).

COVERING THE BASE THERMAL LOAD WITH WOOD GASIFIERS

By integrating the CHPs, the biomass unit can halve its annual full load hours, extending its service life. Now it is possible to operate the furnace only during the cold season and decommission it during the summer (at least three months) when the load is low. The main consumers of the produced heat are spa hotels and several neighbouring residential buildings. In case of an emergency, during maintenance work or if there are unexpected cold surges during summer, the customer has an oil-fired boiler that goes online to support the two wood gas combined heat and power plants.



Central heating plant in Bad Bleiberg with two Burkhardt wood gasifiers

FACTS AND FIGURES

Location: Astra Bioenergie GmbH, Bad Bleiberg (Austria)

Information Company: Wood gasifier for covering the base thermal load / wood chip firing plant for peak load

Information Burkhardt plants:

2x Burkhardt wood gasifier V 3.90

2x Burkhardt CHP ECO 165HG

with a total output of:

330 kWel and 520 kWth

Commissioning: 2018



Because of limited space, the CHP is on a higher level.



One of the two wood gasifiers