Power and heat from sewage sludge

APELDOORN SEWAGE PLANT USES THE GENERATED ENERGY ITSELF

2G has installed an avus 800b power plant at the Apeldoorn waste water treatment plant for highly efficient power and heat production from sewage sludge at the largest sewage treatment plant in the Vallei en Veluwe water association.

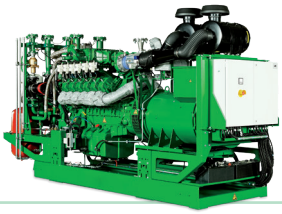
avus 800b fed with biogas from sewage sludge

The Apeldoorn wastewater treatment plant purifies wastewater from Apeldoorn, Beekbergen, Ernst, Hoenderlo, Hoeg Soeren, Oosterhuizen, Vaassen and Wenum-Wiesel. Built in 2003, the plant is one of the largest waste water treatment plants in the Netherlands. In cooperation with its partner Van der Wiel Biogas BV, 2G Energy AG commissioned an avus 800b combined heat and power plant that runs on biogenic material. The aim of the project was to make use of the gas obtained from the sewage sludge in the entire drainage area as efficiently

as possible. The avus 800b uses the sewage gas to produce power and heat with the heat used to promote the fermentation process and the power used to operate the water treatment plant. The CHP paid for itself in a very short time.

A special thermal solution put into practice
The avus series from 2G was specifically developed for high power requirements. A notable feature of this project is that the exhaust gas is cooled to a temperature level of 110 °C as well as an increased supply temperature of 95 °C. With 889 kW at an efficiency rating of 42%, the avus 800b is also a reliable partner when it comes to electrical output.

In addition to the special thermal solution, the CHP is distinguished by a special form of access: a specially made stairway with safety railing provides access to the roof of the container. Painted red and white, the container also blends in well with the surroundings on site.



Waterschap Vallei en Veluwe
vallei-veluwe.nl

avus 800b
Sewage gas
889 kW electrical
875 kW thermal
Container solution