

Green energy supply in Australia

PORK PRODUCER RIVALEA GENERATES ENERGY FROM MANURE

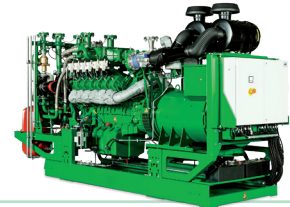


Rivalea (Australia) Pty Ltd is one of Australia's leading pork producers. Headquartered in the Riverina district in the state of New South Wales, Rivalea operates a vertically integrated production system with stock feed mills, farrow to finish pig farms along with a network of contract grow out farms. The company also operates meat processing and distribution facilities. Rivalea has been operating for over 40 years and employs more than 1,100 people across its sites.

The installation of an avus 500plus in April 2017 at one of the company's biogas plants provided Rivalea with an ecological and very cost-effective supply of energy. Around one quarter of the sites electricity requirements are met by the avus 500plus with its electrical output of 500 kW. The gas required by the CHP is produced in a 40 ML covered anaerobic biogas lagoon located right next to the power unit. In contrast to a European digester plant, no

additional thermal energy is used to support the fermentation process. Instead, an earthen lagoon is excavated from the abundant land and completely sealed with a special plastic cover to form a covered anaerobic lagoon. Effluent from the piggery sheds flows through the large lagoon. The gas is captured under the cover and piped to the CHP and a flare station. The 2G system was installed in a 12 meter long container and delivered ready to be commissioned. The client supplied a firm concrete base and connections to the mains power supply and the gas supply. The system is supplied with warm country package and combustion air cooling to allow full load operation even at high temperatures of 40 degrees. The biogas that forms in the lagoon is methane rich (70%) with a sulfur content of 1,500 ppm. The warm and wet biogas is routed through a gas cooling plant and then finally into an activated carbon filter which reduces sulfur content of < 100 ppm ready for combustion in the avus 500plus.

Rivalea is very proud of its new ecological power supply and biogas lagoon which reduces its annual CO₂ emissions by 28,000 tons by destroying methane and avoiding power consumption from the national grid.



Rivalea Australia Pty Ltd

rivalea.com

avus 500plus

Biogas

500 kW electrical

518 kW thermal

Container solution

