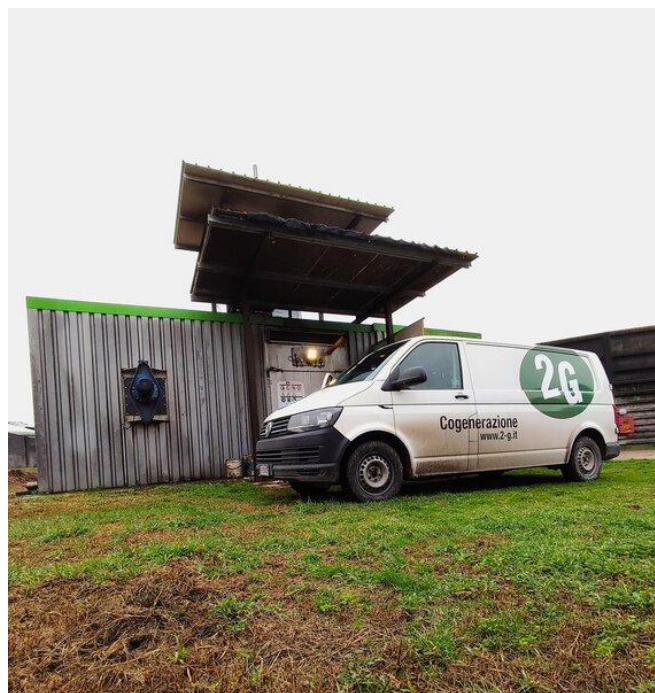




# Clean energy from biogas

## SUSTAINABLE INNOVATION IN PIG FARMING AND RICE PRODUCTION



Arioli & Sangalli integrates biogas-powered CHP unit for a more efficient and sustainable agriculture.

Founded in 1971 in Genzone (Pavia), Arioli & Sangalli is an example of excellence in Lombard agriculture. The company has developed a circular economy system in which rice is grown and pigs are reared, adding value to each stage of the process. With the help of natural fertilizers the rice is grown and milled in the company's traditional hulling plant, while the pigs are reared in a species-appropriate environment. Arioli & Sangalli integrates biogas-powered CHP unit for a more efficient and sustainable agriculture.

The company uses liquid manure from pig farming to produce biogas, a valuable resource for generating electricity and

heat. Vertical silos are used to store ground maize, an important feedstuff for pigs, while horizontal silos are used to store maize for biogas production. The biogas produced is used to feed the agenerator 404a CHP unit which delivers an electrical output of 80 kW and a thermal output of 104 kW. The system was installed to improve energy efficiency and reduce consumption.

By switching from an engine from another supplier to the 2G CHP unit, the company was able to optimize consumption and ensure more efficient and sustainable operation. The electricity generated is fed into the grid, while the heat produced is used to heat the pigsties, which benefits the animals' well-being.

## Case Study | Biogas and biomethane plants

Thanks to this innovative solution, Arioli & Sangalli has been able to reduce the environmental impact of its agricultural activity and promote a more sustainable production cycle. The company also sells its products at retail with a certificate that certifies all production steps and guarantees transparency and quality for consumers.



### **Arioli & Sangalli**

agenitor 404a

Biogas

80 kW electric

104 kW thermal

