

Gello di Pontedera - Italy



Selected BTA References

Final Client: • GEOFOR S.p.A.

Partner: • BTA Italia GmbH

Capacity: 44.000 tons/year FORSU 7.000 tons/year Green Waste

Start-up: • 2025

Plant sections: • Waste reception

• BTA® Hydromechanical Pre-Treatment

Wet anaerobic digestion

• Biogas valorization in CHP units

• Two step solid-liquid separation

Composting

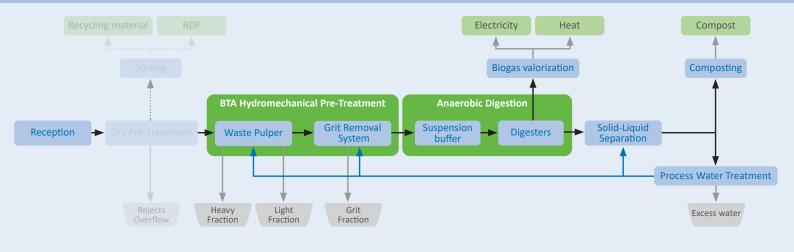
• Internal process water management

• Effluent treatment





The BTA Process



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Description

Biowaste collected in the municipalities of Pisa, Italy, is now being treated in the Anaerobic Digestion Plant in Gello di Pontedera.

The Public Private Partnership GEOFOR S.p.A., has assigned BTA Italia GmbH the activities for completting construction, installation and commissioning of this facility according to the BTA® Process.

The AD Plant Gello di Pontedera treats up to 44.000 ton/year of biowaste and 7.000 ton/year of green waste. The waste is directly fed, without any previous mechanical pre-treatment, into the BTA® Hydromechanical Pre-Treatment for the removal of impurities from the digestible organic fraction before the obtained organic suspension is processed in a wet anaerobic digestion step in two 4.000 m³ fully mixed digesters. The produced biogas, approx. 4,65 million Nm³/year is valorized in CHP units, obtaining approx. 12 million kWh/year. Dewatering is executed in two steps, thus allowing reducing both the consumption of flocculants and fresh water. An intelligent process water management — another advantage of the BTA® Process — furthermore minimizes water consumption and therefore effluent water.

Due to the low content of remaining impurities, the digestate solids are an ideal raw material for **quality compost**. Composting is executed on-site in a closed hall with boxes with a controlled aeration.

Thus, the AD Plant Gello di Pontedera allows both an energetic as well as material valorization of the biowaste collected in this region of Tuscany.

