MECBIO
MECHANICAL & BIOLOGICAL TREATMENT

WASTE TREATMENT TECHNOLOGIES
WTT - MEMBER OF THE CONVERTUS GROUP

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Dry Anaerobic Digestion

WHY USE DRY ANAEROBIC DIGESTION (AD)?

Anaerobic Digestion (AD) is an ideal circular solution to create biogas from organic waste which can be converted into renewable heat and power. Alternatively, by implementing and using a biogas upgrading system, the biogas can be turned into biomethane capable of fueling vehicles or to be injected into the Natural Gas grid to render Renewable Natural Gas (RNG).

BENEFITS

Like composting, waste is treated in tunnels which work as an independent reactor. This provides very high reliability to the system because, should failure occur to one of the units, the other tunnels can continue operating. Also, AD is a very low operational cost system because the waste does not require any costly pre-treatment before entering the digesters. For the same reason, maintenance is very simple. Due to our batch system, it is easy to cope with seasonal fluctuations in throughput. Additionally, OPEX are low because the digestate does not require solid/liquid separation as it would be required in a wet digestion system.

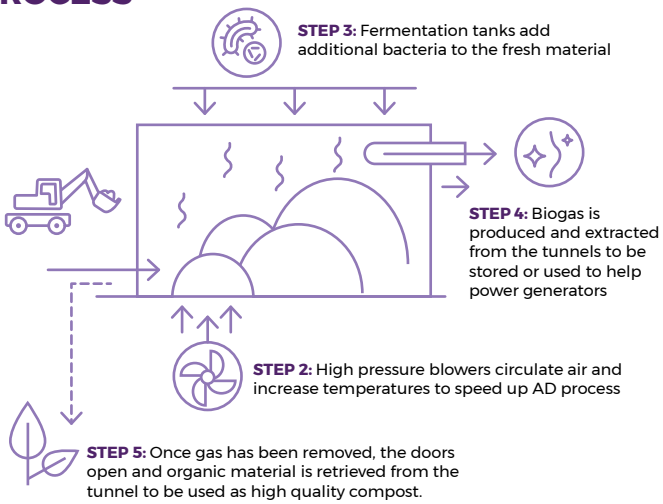
OPTIMISED PROCESS

Waste Treatment Technologies (WTT) specialises in engineering AD facilities using the latest technology. WTT's AD tunnels are equipped with an aeration floor to allow the aerobic start-up of the process to quickly reach the mesophilic temperature, after which the process becomes anaerobic. Also, this allows the complete flushing of the biogas at the end of the process, not only in the upper part of the tunnels, but also in the material. Furthermore, WTT's system is inoculated via extensive irrigation with percolate, therefore avoiding material recirculation in the tunnels, which results in higher throughput.

Biogas from a Dry AD plant is:

- 100% renewable (no new carbon)
- Permanently available
- Transportable
- Storable

THE AD PROCESS



WE THINK AHEAD

We are committed to delivering quality throughout our cycle of service. We specialise in solid preparation and strive to anticipate our customers' critical requirements.

Our system of delivery is built on years of operational experience and extensive knowledge. From process design and engineering to testing, installation, training, and customer support. We strive to maximise cost efficiency and focus on customer needs. In addition, our solutions are sustainable aimed at preserving finite natural resources and reduction of greenhouse gas emissions.

Having realised over 120 complete waste processing and recycling projects worldwide, comprising more than 1.200 tunnels, all to full satisfaction of our clients, we believe that WTT is the ideal partner for designing and building a high-tech solution for AD.

Alexander Horvath
Managing Director WTT

Let's partner together to make a more sustainable future.
We cooperate with local partners to deliver technology for building sustainable and state-of-the-art organic waste treatment facilities and enable our partners to become the best operator.

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Key Advantages

- **Reliable continual operation**
- **Stable quantity and quality of Biogas**
- **Easy maintenance**
- **Low operational costs**
- **High net energy production**

Help keep our planet healthy.
AD facilities reduce the amount of organic waste in landfills, which helps reduce the amount of greenhouse gases (e.g., methane) released into the atmosphere.