

Under a long-term agreement, Zero Waste Energy (ZWE) has partnered with Monterey Regional Waste Management District (MRWMD) to design and build the first U.S. based anaerobic digestion (AD) SMARTFERM® plant. In cooperation with the MRWMD, ZWE operates the facility, which includes four (4) AD digesters used to convert up to 5,000 tons per year (TPY) of organic waste into biogas. The biogas provides power for the Monterey Regional Water Pollution Control Agency's use, and heat for internal use, as well as provides high-quality compost to local farms. The plant began operations in February 2013.

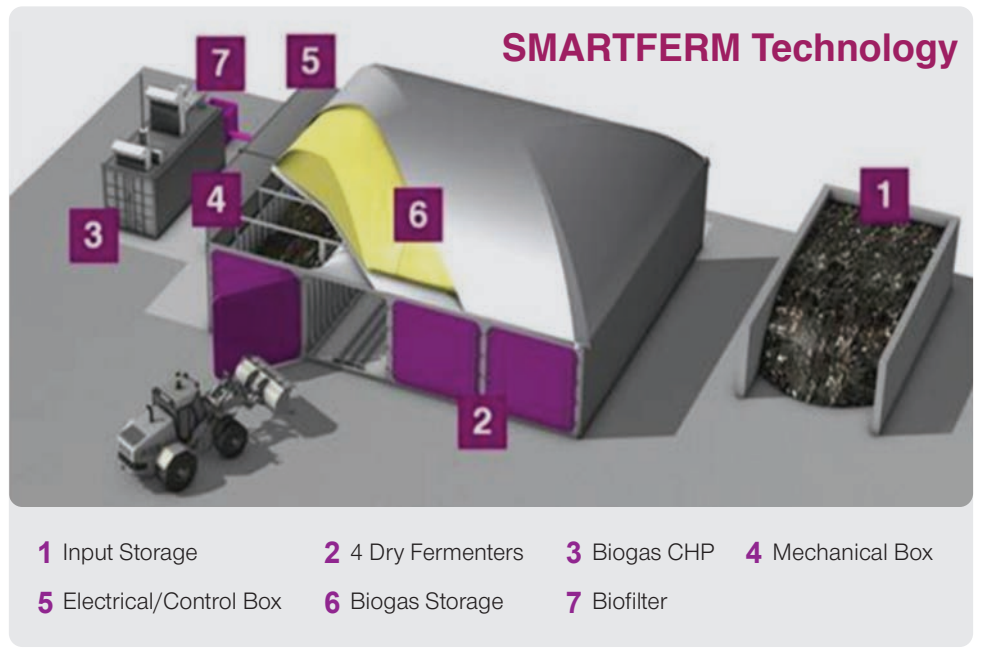


SMARTFERM Partnership



SMARTFERM is a state-of-the-art dry anaerobic digestion system that processes organic waste feedstocks and generates renewable energy. SMARTFERM systems can include biogas-processing technology for combined heat and power (CHP) generation as well as compressed natural gas (CNG). In addition, in-vessel composting (IVC) options can provide partial or complete maturing of compost for the wholesale or retail market.

Based on the amount of organic waste to be processed, SMARTFERM is offered on two platforms: shop fabricated steel digesters or cast-in-place (CIP) concrete digesters. A basic prefabricated SMARTFERM features steel fabricated digesters, requiring a minimal amount of space. The cast-in-place concrete SMARTFERM digester system combines the SMARTFERM's modular mechanical and electrical systems design with on-site construction of concrete digesters. SMARTFERM facilities can process 4,000 TPY to 100,000 TPY of almost any organic material.

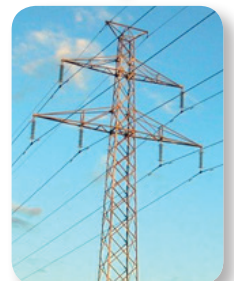


- 4 x 40' dry anaerobic digesters
- Up to 5,000 tons per year of organic waste throughput
- Below-grade, 90,000 gallon capacity concrete percolate tank
- Containerized 100 kW combined heat & power system
- Package bio-filter and roof mounted external biogas storage bladder
- Separate enclosed and negatively aerated receiving bay
- 21-day batch process transforms waste into biogas and digestate for high-quality compost

Benefits of SMARTFERM in Monterey County

- Ability to extract renewable energy from organics during the compost process
- Reduction in odor
- Generation of high-quality compost available to county agriculture growers
- Generation of renewable energy from biogas
- Generation of excess electrical power to be sold to neighboring utility Monterey Regional Water Pollution Control Agency (MRWPCA)
- Economic solution based on current tipping fees
- Reduction in volume of organic waste in landfills
- Reduction of fugitive methane emissions from landfills

SMARTFERM AD Process	Results
Annual Volume	Up to 5,000 TPY
Digester Dimensions	40' (L) x 12' (W)
Steel Digesters	4
Residence Time	21 Days
Mode of Operation	Thermophilic (125-131°F)
Biogas Yield (CF/Ton)	3,000 - 3,200
Methane Content (%)	58 - 60
Electrical Output	100 kW
Finished Compost @ 40% Moisture Content	2,200 TPY
Total Diversion	+99%



SMARTFERM was developed by a German waste processing and conversion technology company called Eggersmann Anlagenbau Concept GmbH (EAB) and is licensed in the United States to Lafayette, CA based ZWE, developer of organic waste treatment projects utilizing dry anaerobic digestion technology.

© 2013 Zero Waste Energy, LLC.
All information represented is current as of date of printing.

3470 Mt. Diablo Blvd.
Suite A215
Lafayette, CA 94549
Tel. 925.297.0600
info@zwenergy.com



www.zerowasteenergy.com



www.mrwmd.org