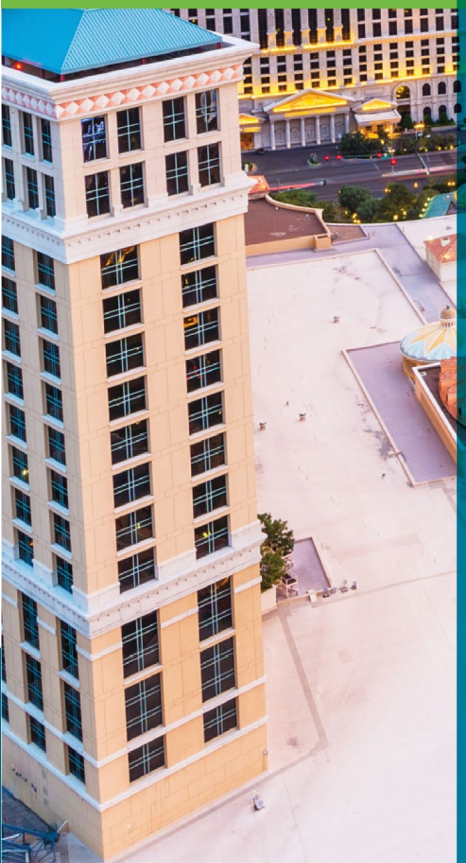
Waste EXPO®

an event by Waste360™



Developments in Processing of Organic Fraction from MSW (OFMSW)

Eric Herbert
President, Bulk Handling Systems
CEO, Zero Waste Energy

Waste 360

EREF Environmental Research & Education Foundation
Lighting the way towards a more circular economy

Integrated Solutions and Technologies for Separation & Organics Processing

BHS

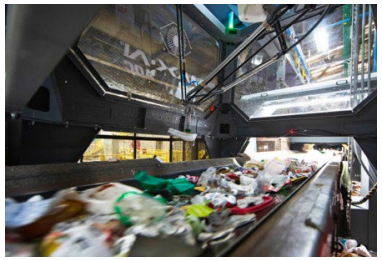
Material Screening and conveyors

NIHOT®

Air Separation

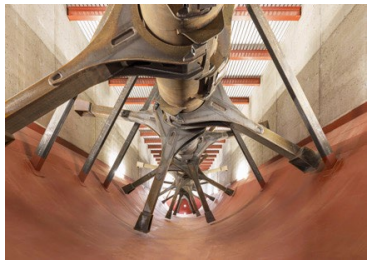
nrt

Optical Sorting



MAX·AI®

AI & Robotics



ZEROWASTE

AD with SMARTFERM, Thoeni Plug Flow and Wet

ZEROWASTE

IVC with SMARTTURN dynamic and static tunnels

A few points to start

- Significant Diversion: 25-55% of the MSW are organics, a combination of food waste, yard waste, and non-recyclable fiber
- Greenhouse Gas Emissions (CA SB 13838, NASA Landfill gas emissions study)

Organics Processing Technology

- Zero Waste Energy, a Bulk Handling System subsidiary
- Specializes in organics treatment

Lane Turner

IVC with Automated lane turning for dynamic composting and Exhaust Air Control. Fastest Approach

In Vessel Composting (IVC)

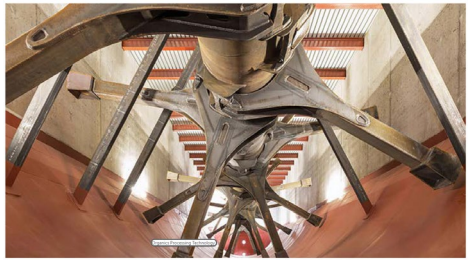
Static Tunnels with Air and Heat and Exhaust Air Control

SMARTFERM

Plug Flow

Continuous Processing

- Biogas production utilizing Thöni's continuous, plugflow high-solids AD technology



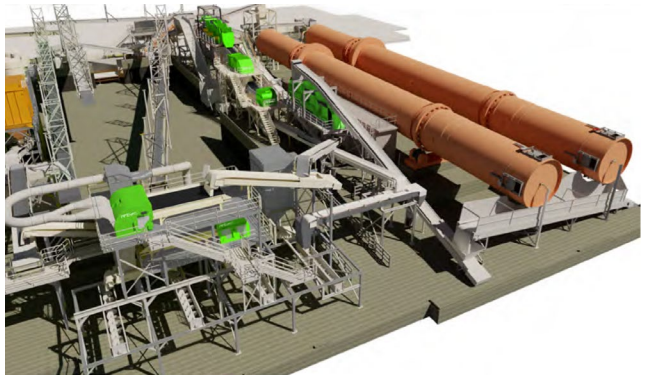
Batch Processing

High solids dry AD

- For facilities 5,000 TPY to ,000 TPY
- High-solids, batch processing for almost any organic material

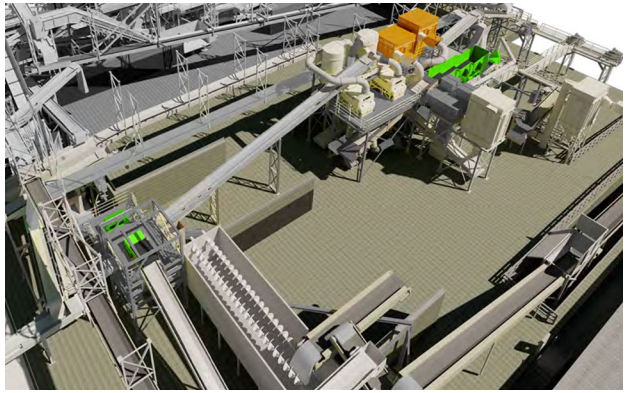
Pre-Process for Organics from MSW

- Prepare for organics process: cleaning, sizing, storing
- Approaches: size reduction, rotary drum reactors, steam hydrolyzing, screening, air separation



Post-Process for Organics from MSW

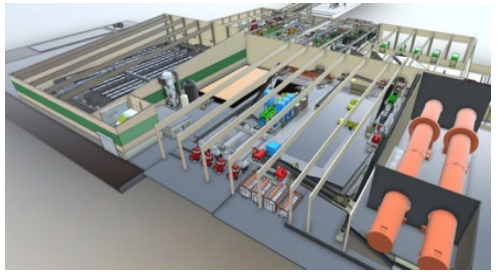
- Usage: Compost or Alternative Daily Cover
- Approaches: screening, densimetric, air
- Pyrolysis/Gasification are emerging as alternatives



Cost and Performance

Total Cost Perspective

- Total impact and Cost compared to tons diverted and energy produced.
- Total Cost is System Impact as measured by Customer Rates
- RNG production with Environmental Attribute Values – D3 RINS.
- Diversion as Value
- Comparison to other approaches to reach same goals



Waste EXPO
an event by Waste360
WasteExpo 2025
May 6-8, 2025, Las Vegas, NV
Visit us at Booth 1026
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