

Orbit Energy, Inc.

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www.orbitenergyinc.com



Introduction to Orbit Energy

- Raleigh, NC based renewable energy company
- Owner of a proprietary technology
--High Solids Anaerobic Digestion (HSAD)
 - HSAD developed by U.S. Department of Energy's National Renewable Energy Laboratory (NREL) over a 10 year period of R&D
- HSAD plant in Clinton, NC operating since 2002

Enhancements to NREL's HSAD Process

- Orbit's team consists of engineers, biologists, and financial professionals
- Over 8 years of operation, Orbit has made significant enhancements to NREL's process
 - Digester design and operation
 - Materials handling
 - Optimization of bacterial performance
 - Successful demonstration with wide range of feedstocks

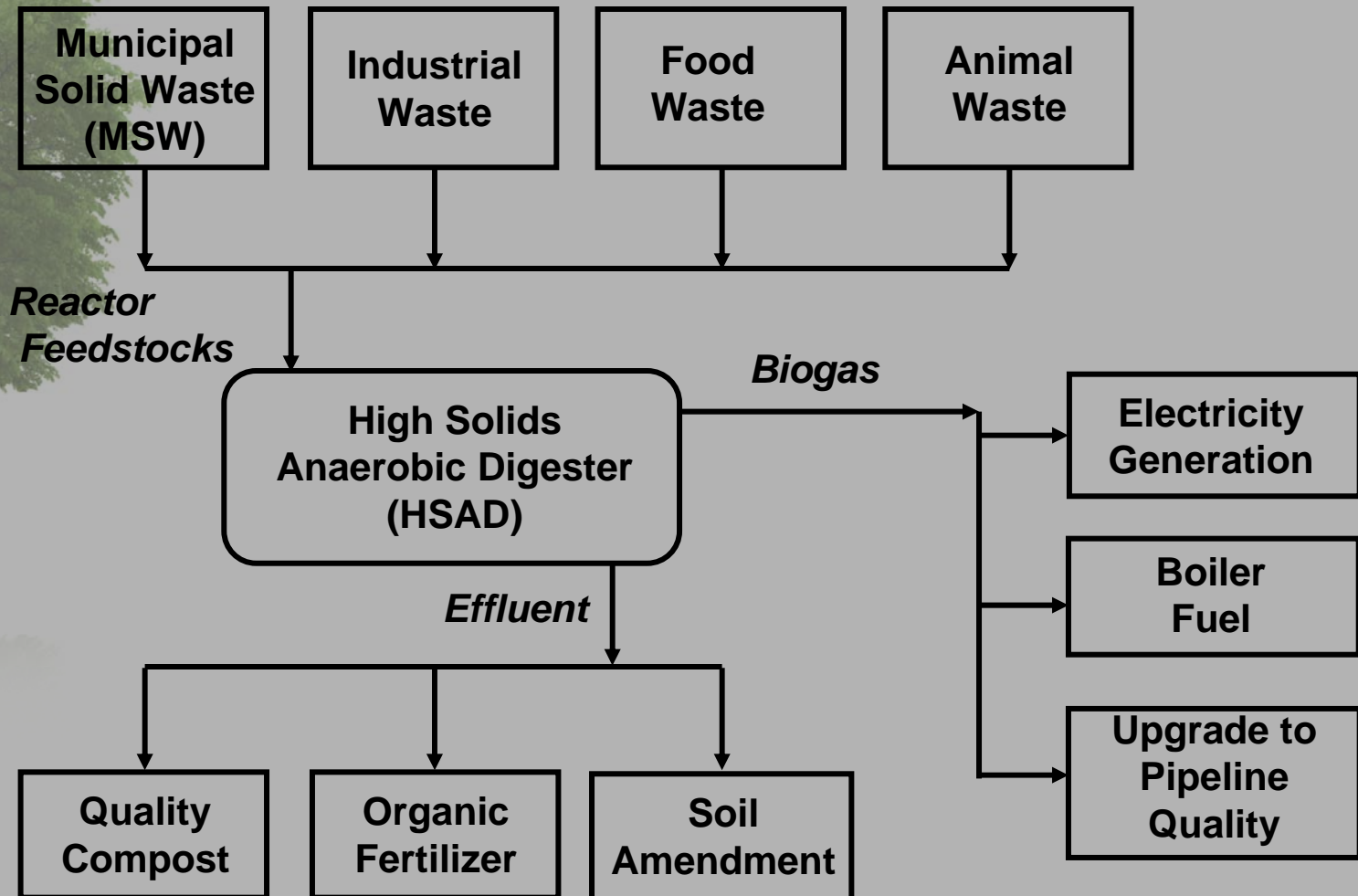
High Solids Anaerobic Digestion (HSAD) Overview

- Process waste streams up to 45% solids
- Proprietary thermophilic bacteria
- Horizontal plug flow digester design
- Operates at 131^o F
- Residence time 7-20 days
- Suitable for wastes such as food waste, paper/cardboard, yard waste, food processing wastes, agricultural and animal waste
- Biogas contains 65-70% methane

HSAD: Competitive Advantage

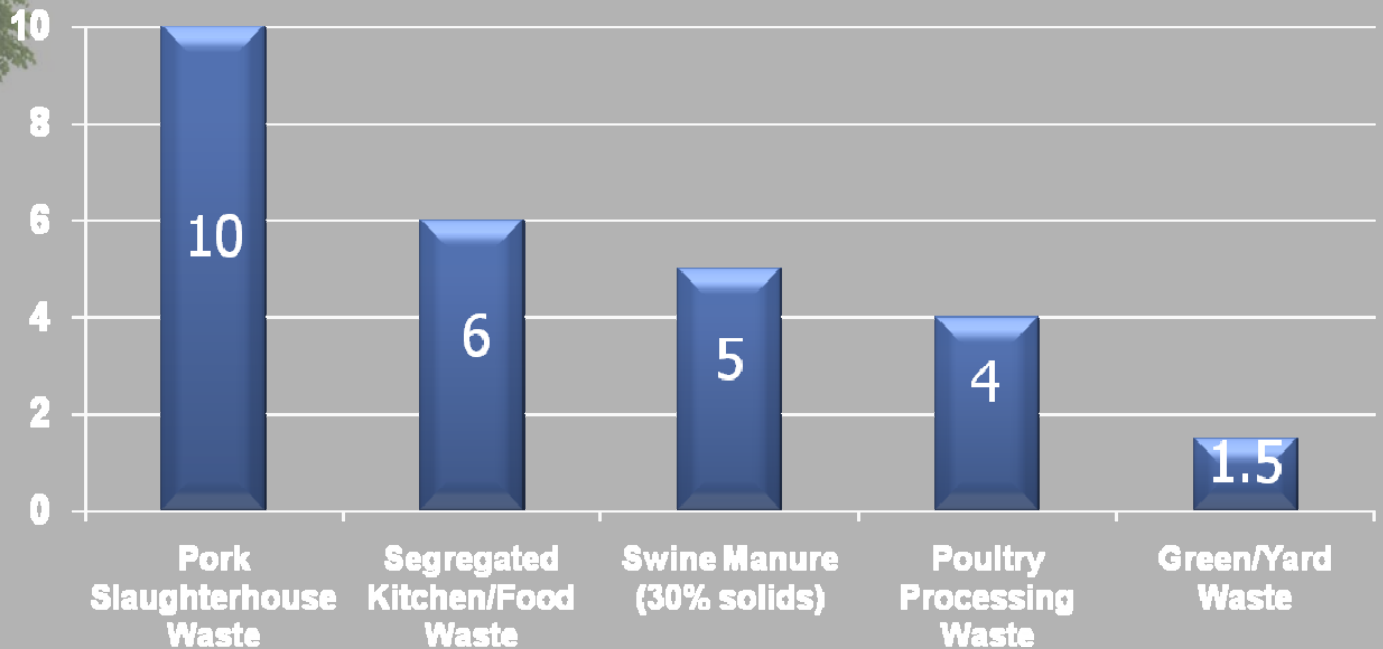
- **High Solids Processing (45%)**
 - Eliminates need for waste water treatment and disposal
 - Relatively low moisture content in the process allows drying of digestate through waste heat from power generators
 - Higher energy production per ton of material fed
- **Thermophilic operation (131⁰ F)**
 - Virtually pathogen free compost
 - Short residence times (7-20 days)

The HSAD Process



Energy Production

Decatherms (MM Btu) per ton (as fed) of feed stock based on U.S. wastes



Orbit Business Model

- **Build, own, operate HSAD-based power plants**
- **Minimum 3 MW capacity**
 - **100-120 tons/day of food waste/MSW**
- **Target states with Renewable Portfolio Standards (RPS)**
 - **30 States currently have RPS**



Business Goals

- **Build 60 Orbit-owned/operated plants by 2020 in the U.S.**
- **Begin construction on 30MW in 2010**
- **Currently 3 plants under power purchase contracts negotiations**

Orbit Projects in Pipeline

- **Charlotte, NC: A plant producing 6 MW power, processing food waste and chicken processing waste under a 20 year power purchase agreement (PPA) with Duke Energy**
 - PPA expected in April
 - Plant will be operational in Q1 2011

Orbit Projects in Pipeline

- **Northern California: Two plants with combined capacity of 13 MW processing food waste/MSW**
 - PPA expected to be finalized by June 2010
 - Plant expected to be operational in 2011



Orbit Projects in Pipeline

- **Clinton, NC: A plant processing swine waste and segregated food waste under a 20 year PPA with Progress Energy Carolinas (1.6 MW)**
 - PPA expected by October 2010





Other Projects

- Two proposals under evaluation
 - Massachusetts--6 MW
 - Washington---9 MW
 - Decisions Expected Late Summer to Early Fall 2010

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Our mission is to be a significant part of the renewable energy revolution with a focus on harvesting renewable energy from organic wastes.

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