

Driven by pure energy







PlanET Biogas Solutions Company Overview 2015

Company Overview - PlanET Biogas

- Founded in 1998. Headquarters in Vreden, Germany
- Opened First Canadian Office in 2006
- Built over 360 biogas plants world-wide, including nearly
 1/3 of farm-based, biogas plants in Ontario
- Currently about 200 employees worldwide
- One of the top 5 leading manufacturers of biogas plants in Germany































More than 360 successfully realized plants worldwide!



PlanET Biogas – Local Support and Expertise

Canadian Offices: St. Catharines, ON & Lethbridge, AB

US Office: Cortland, NY

Operational Plants: 13

Plants under Construction: 1

Plants in Permitting and Planning: 7



PlanET Vision and Mission

Driven by Pure Energy – sustainable for the protection of the climate

We live our slogan "design, construction & service" and see ourselves as a long-term partner for our customers.

PlanET system biogas plants are

- customer oriented
- reliable
- innovative
- efficient

PlanET Characteristics:

- Clear products
- Long-term company business
- High quality
- Life cycle focussed
- Highly motivated and trained staff







Sources of Biogas

- Liquid dairy manure
- Chicken manure
- Vegetable Waste (ie. culled veggies)
- Grocery Store Waste
- Slaughterhouse Waste
- Fats, Oils, and Greases (FOG)
- Coffee Waste





Feedstock Flexibility



20 Year FIT Contract Requires Flexibility

- Feedstock Availability GTA
- Liquid and Solid Inputs
- Tipping Fees / Energy Potential



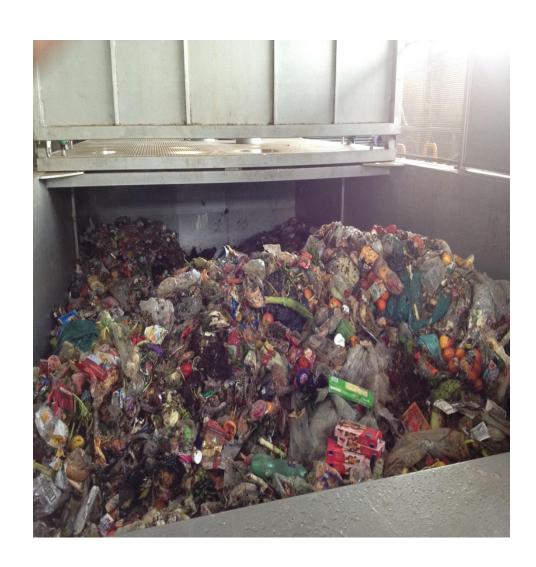


Lessons Learned



More Off-Farm Waste

- Good Communication With Neighbours
- Good Truck Access
- Higher Tipping Fees
- Higher Energy Potential
- More Contamination
 - Packaging
 - Plastics
 - Garbage
- Increased Cold Weather Protection



Solutions



- Feedstock Shredding Technologies
- De-packaging Equipment
- Pasteurization Units







Greenholm Farms (Woodstock, ON)

Construction Start July 2012

Commissioning October 2012

Digester 2,078 m³

CHP unit 250 kW

Feeding System PlanET Mix

Input materials Dairy Manure, Pet

Food, Solid Digestate









Lethbridge Biogas (Lethbridge, AB)

Construction Start

Commissioning

Digester(s)

Digestate Storage

CHP unit

Feeding system

Input materials

July 2011

March 2013

3 x 3,926 m³

1 x 5,645 m³

2 x 1,425 kW Jenbacher

PlanET Vario 74 m³

Slaughterhouse Waste,

Animal Deadstock, Food

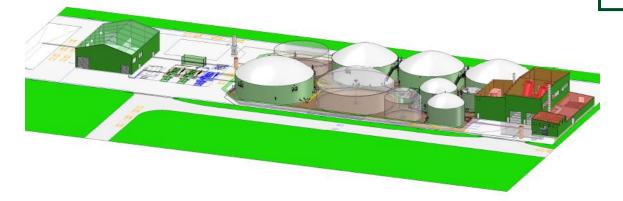
Processing Waste, Dairy

Manure



High Pressure Sterilization Pre-Process

- 180°C, 40min, 12 bar
- Capable of pre-treating SRM Material







Thank you for your attention!

Gregory Gray

Business Developement Manager

Tel. 905-935-1969 Fax. 905-935-7498

g.gray@planet-biogas.com

