



WM Organic Recycling Solutions

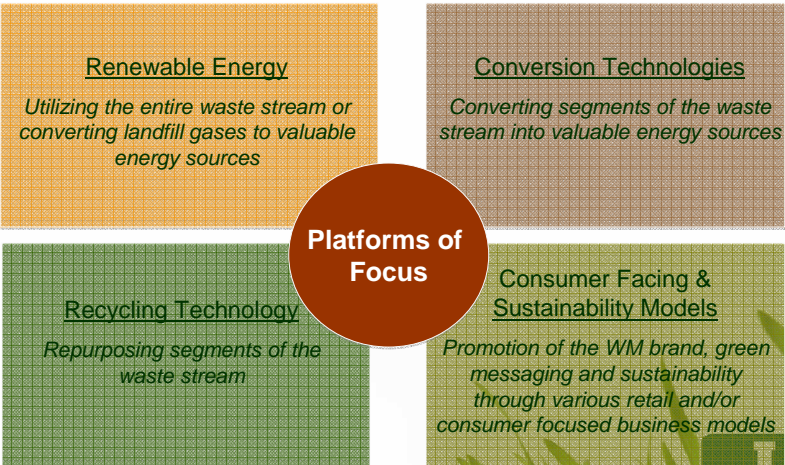
"Creating Value From Material Streams"

October 19, 2010



Think Green. © Think Waste Management.

WM Organic Growth Group Four Platforms of Focus



Renewable Energy

Utilizing the entire waste stream or converting landfill gases to valuable energy sources

Conversion Technologies

Converting segments of the waste stream into valuable energy sources


Platforms of Focus

Recycling Technology

Repurposing segments of the waste stream

Consumer Facing & Sustainability Models

Promotion of the WM brand, green messaging and sustainability through various retail and/or consumer focused business models



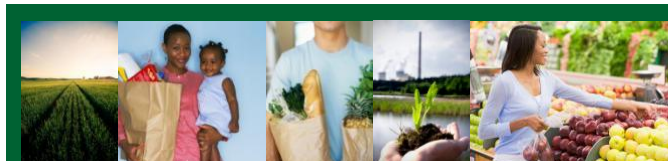


Organic Recycling Solutions



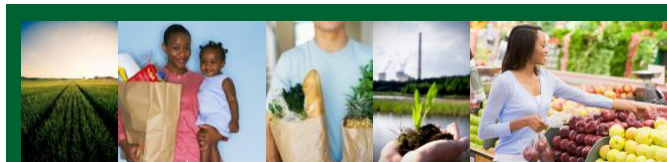
Overview of WM Organic Solutions Strategy

- Waste Management's Organic's strategy is to find higher value in the materials we manage.
- Long term for Organic Solutions, that likely means leveraging the material into green energy, or potentially converting the material into fuels or chemicals.
- The short term reality, however, is that our customers are demanding organics diversion.
- To provide a short term solution for WM customers, we are currently providing *composting solutions to provide immediate service customers.*
- Our strategy is to grow our portfolio of solutions for the organic materials we manage, so that we are better positioned to leverage them towards greater value as the technology and infrastructure catch up to the demands of the marketplace.



WM Organics Recycling Approach

- **Customized Organic Recycling Solution** – partnering to create a service that meets your needs.
- **Training & Education**
- **Collection & Transportation**
- **Infrastructure & Facilities**
 - Site, Permit, Design, Build, Finance and Operate
- **Sustainability - Productivity - “GREEN Solutions”**



Educational – What goes where?

think green. compost Food + Compostables Guide

FOOD
Meat, fish, dairy, fruit, vegetables, shells, bones, pasta, rice, spaghetti, nutshells, bread, grains

FOOD-SOILED PAPER AND APPROVED COMPOSTABLE PACKAGING*
Coffee grounds and filters, tea bags, cream condiment, rolled paper bags, kitchen paper towels, paper napkins, uncoated take-out containers and paper plates, approved compostable containers and lids, uncoated paper (recyclable to curbside)

PLANTS AND FLOWERS
Plants and flowers, landscape vegetation, holiday trees, untreated wood scraps, sodas, or sodas

GARBAGE
Household plastic wrap, chemicals, latex, magnets, window blinds, metal nails, ballpoint pens

RECYCLING
Clean, dry, uncoated paper, plastic food containers, glass bottles and jars, aluminum and steel cans

*Visit www.compostcentral.com/recycling to find an up-to-date list of all approved compostable items.

Setting Up Compost in the Workplace

- 1. FORM A GREEN TEAM**
A dedicated group of employees will set up and monitor compost collection.
- 2. DO A DEEP DIVE TO FIND COMPOSTABLES**
Take a good look at what's going into your garbage. Common compostables you'll see:
 - Wood chippings
 - Coffee filters and grounds
 - Food scraps (fruit, meat, cheese)
 - Plant and floral trimmings
 - Pellets and staves
- 3. CONTACT YOUR BUSINESS OR PROPERTY MANAGER**
Find out if compost collection is set up. If not, ask for collection and request your manager that composting can reduce waste disposal costs. If service is set up, discuss how to increase visibility and participation.
- 4. CONTACT WASTE MANAGEMENT**
Get up collection by visiting www.compostcentral.com or calling 1-800-352-8095.
- 5. COORDINATE GREEN TEAM AND JANITORIAL SERVICE**
 - Test and distribute collection containers to kitchens, lunchrooms, garden centers and anywhere compost is generated.
 - Label containers: Color labels at www.compostcentral.com.
 - Work with janitorial staff to set a daily collection schedule for collecting compostables from work stations.
 - Determine who'll collect compostables, and ensure that they're thoroughly trained.
 - Monitor numbers and procedures to keep compostables separated from garbage.
- 6. EDUCATE AND MOTIVATE STAFF**
 - Distribute guidelines to employees and janitorial staff, and post updates.
 - Grab attention with a launch event.
 - Send a memo encouraging participation.
 - Set aside time for questions and answers.
 - Schedule orientation sessions for individual departments.
- 7. MAINTAIN AND EXPAND GREEN PROGRAMS**
 - Have your Green Team meet regularly to evaluate progress.
 - Implement other sustainable practices, including promotion, energy conservation and alternative transportation.
 - Encourage staff with periodic composting tips and updates.
 - Educate new employees about composting.
 - Appoint someone to answer staff questions, manage the Green Team and oversee green procedures.
 - Always monitor composting practices to minimize promotional pieces.



Collection Options - Examples



3-65 gallon toters in cart dumper



1.5 yard Plastic Cart



Cart dumper – 65 gal toters or 1.5 yard carts

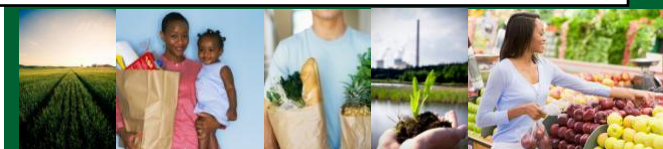
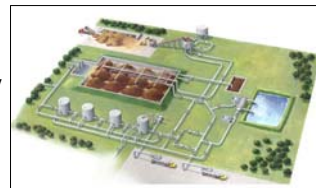


Roll-off/Sludge Box



WM Organic Recycling Systems and Solutions

- **Composting**
- **Wet & Dry Anaerobic Digestion**
 - **Production of Renewable Energy**
 - **Biogas**
 - Steam Production
 - Liquid Natural Gas
 - Combined Heat & Power
 - **Production higher quality products from Organic Recyclables**
 - Green Gasoline
 - Syngas to Methanol (beneficial fuels and chemical products)



Various Composting Methods

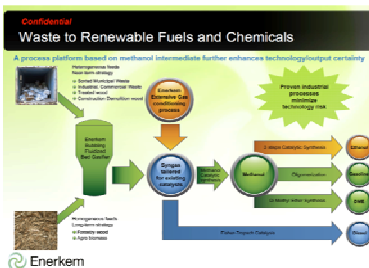
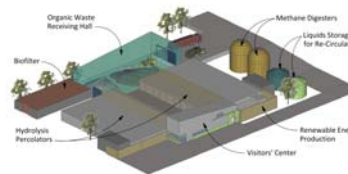


WM's Technology Partners

TERRABON



HARVEST



WM's Technology Partners

Garick

Garick LLC, a leading manufacturer, marketer and distributor of organic lawn and garden products.

Garick's operations will add over one million tons of processing capacity as well as commercial and consumer organic products to Waste Management's organics recycling business.

This expansion of organic recycling services and products will be beneficial to the WM's residential, commercial and industrial customers seeking to convert their organic wastes into products such as compost, mulch and organic soil amendment

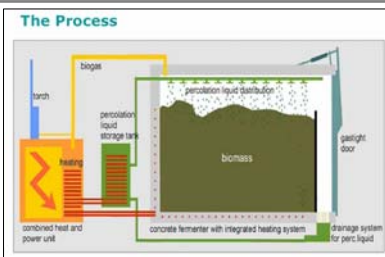


WM's Technology Partners



Harvest builds and acquires organic waste management facilities, which capture the embedded value in the organic waste stream through high solids anaerobic digestion (biogas to power), composting and finished product marketing. The partnership of WM and Harvest could result in volume retention, speed to market and rapid control and expansion of the organic waste market.

We are considering multiple project with Harvest in multiple WM market areas



WM's Technology Partners

Terrabon

Terrabon technology converts organic waste (excl' plastics) into proprietary "green gasoline" and other no-fuel chemicals. Flexible plant size allows facilities to be placed strategically in accordance with available waste stream.

WM has partnered with Valero Energy to advance this development stage technology.

WM is considering multiple demonstration plants scaling to commercial projects in a number of WM market areas.



WM's Technology Partners

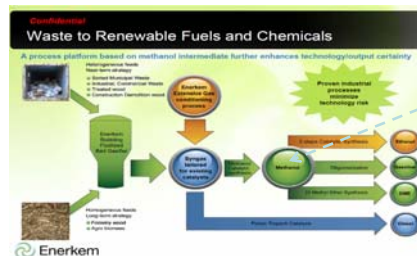
Enerkem

250 tpd modular fluidized bed gasification process (specific to large scale organics, plastics, wood waste, tires, ...)

Operational 40 tpd demonstration plant in Westbury QC and building commercial 500tpd facility in Edmonton BC.

Complimentary to S4 Energy Solutions

Company is currently producing Methanol from syngas and will be producing ethanol by end of June at Westbury. Construction of a commercial scale facility begins in July at the Edmonton Integrated Waste Facility.



Very flexible conversion of syngas to ethanol in the short run and valuable chemicals



WM's Technology Partners

S4 Energy Solutions

WM created a joint venture with InEnTec, LLC with a goal of developing state of the art waste processing and conversion technology components and systems that can be integrated and customized in ways that enable the production of a wide range of clean energy products to meet the needs of our customers.



Landfill Gas to Liquid Natural Gas (LNG)

- WM formed a joint venture with Linde North America to build an LNG plant designed to purify and liquefy landfill gas. The facility was operational in Q3 2009 and at full production will make 13,000 gallons of LNG a day.



WM Gas-to-Liquids (GTL)

- WM GTL, Inc. is developing a landfill gas to liquid process that will be cost competitive with gas to electric, LNG and CNG transportation fuel and gas sales options. WM GTL will design, fabricate, deploy and operate the GTL units.



Thank You

