Anaerobic Digestion: Overcoming the Challenges

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EPA New England AD Conference

May 8, 2012
Harvest Power is ushering in a new era of organic waste management by harvesting the renewable energy and soil-building potential in organic waste at its state-of-the-art organics recycling facilities.

**Corporate Profile**

- **Business**: Founded in 2008 as builder, owner and operator of organics processing facilities
  - 3 AD facilities in active development
  - Operate one of largest compost sites in North America (250,000 MT/year) in Richmond BC
  - Major compost marketer through Harvest GardenPro
  - Expanding technology portfolio supported by industry-leading science and technology advisors

- **Capacity**: Handle 1.8 million metric tonnes of waste per year across 15 sites; Sell 29 million bags of soil and mulch and 400,000 cubic yards in bulk

- **Team**: 350 employees; 200+ years experience on management team

- **Revenue**: $100 million annualized revenue

- **Investors**: Include Kleiner Perkins, Generation Investment Management, Waste Management, True North Venture Partners

- **Capital**: More than $275 million in equity, debt, & grants raised to date
1990: State yard waste landfill bans begin to take effect, USCC formed

1991: Ocean dumping of biosolids completely prohibited

• **Technology Challenges**
  - There are no technology challenges for AD (really?)
  - Front-end and back-end innovations required to make economics more attractive

• **Economic Challenges**
  - Feedstock collection, logistics, and processing
  - Energy off-take
    - Pricing in the age of shale gas
    - Contracting and inter-connect
  - Nutrient product markets
  - Engineering and construction costs
  - Municipal customers
• **Public Policy and Stakeholder Challenges**
  
  o Siting
    - Regulatory framework
    - Public engagement
    - The Ick Factor

  o Regulatory framework
    - Permitting
    - Mandatory Diversion: The Chicken and Egg Problem
# Details on DEP’s CERP Website

www.mass.gov/dep/energy/funding_organics.htm

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