



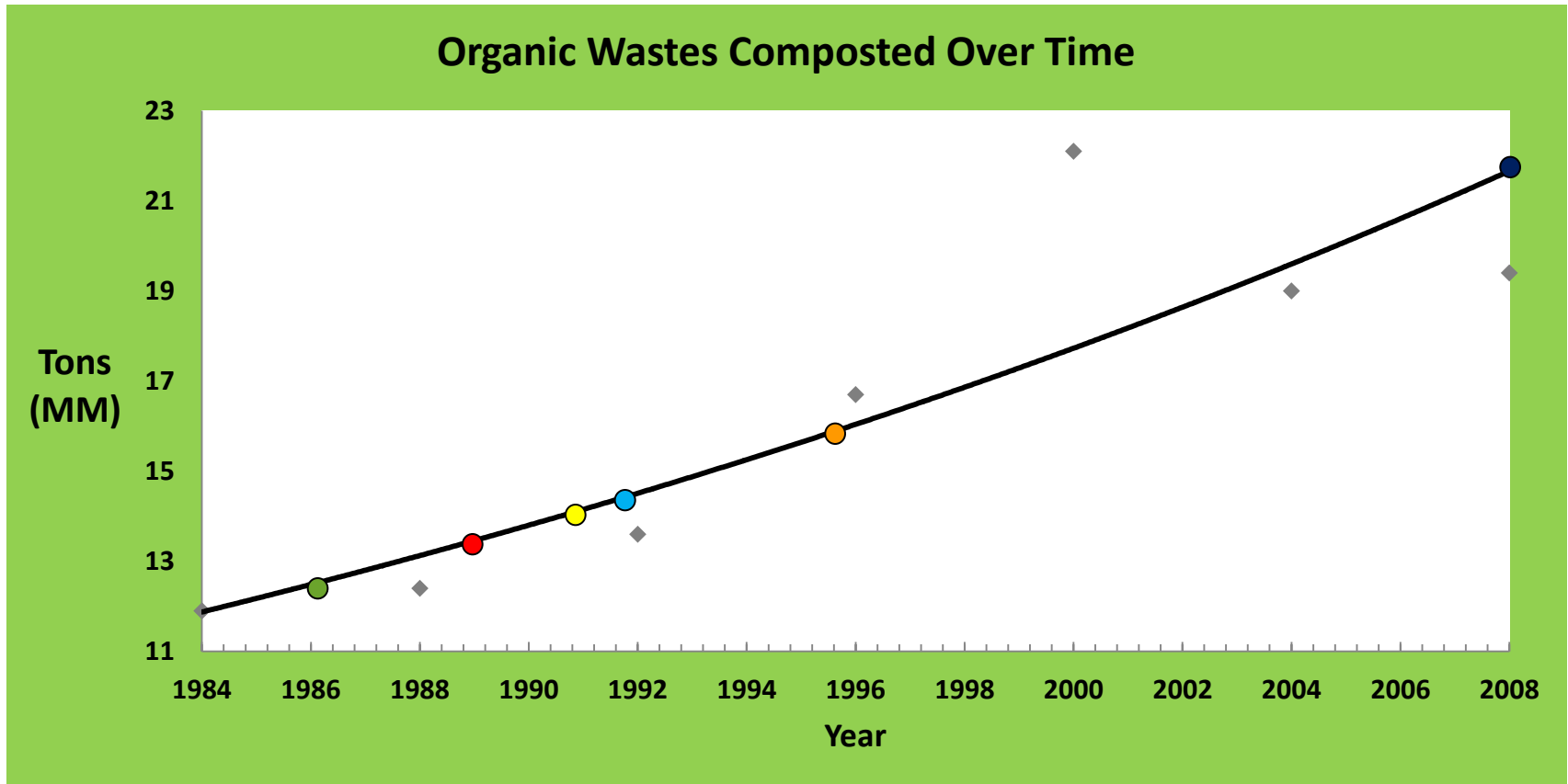
# ***Anaerobic Digestion Opportunities and Challenges for Connecticut***

**Unlocking the Value: Transforming the Connecticut Materials Economy**

**Wayne Davis**

March 22, 2012

# Birth of an Industry – US Policy Works



● 1990: State yard waste landfill bans begin to take effect, USCC formed

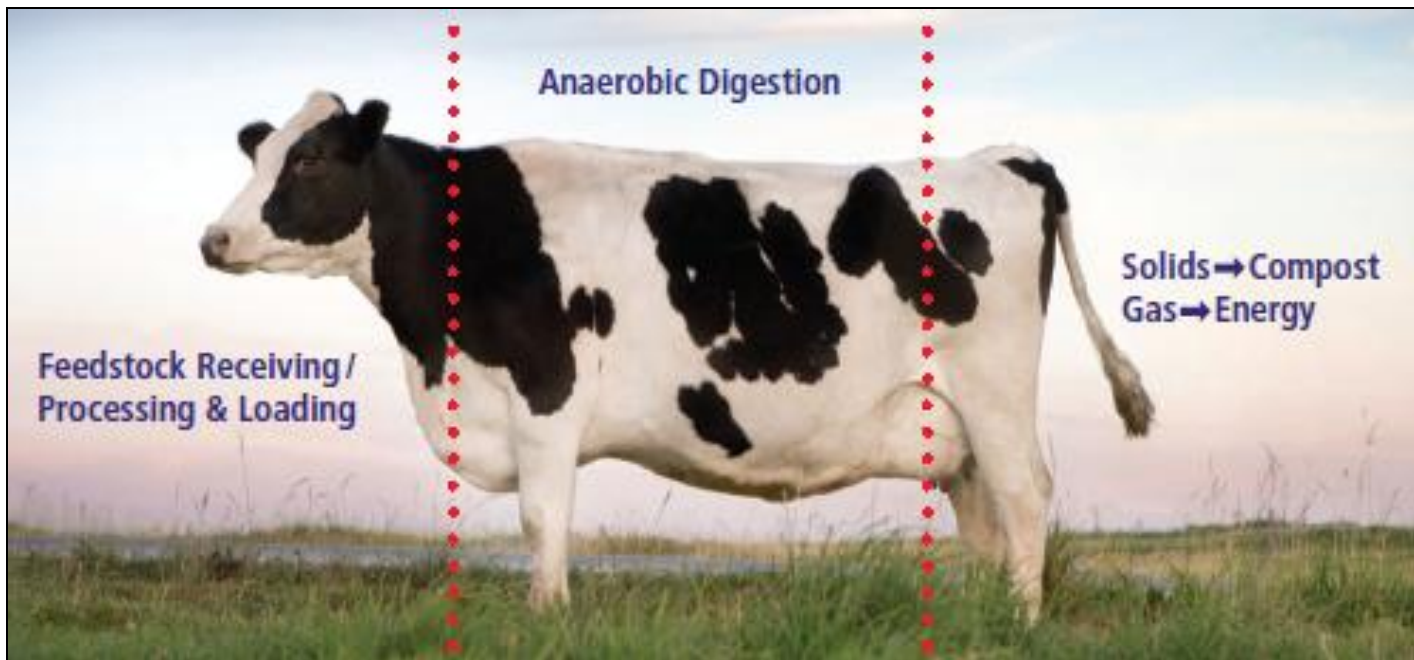
● 1991: Ocean dumping of biosolids completely prohibited

# The Harvest Organics Operating System™



## Our Technology

Anaerobic digestion mimics the processes that occur in a cow's stomach. We use similar micro-organisms in a large chamber, capture and utilize the biogas as it is produced. We optimize biogas production by creating an ideal environment for the microbes to do their work.



## Organics Recycling Centers

Harvest **finances, designs, builds, owns, and operates** state-of-the-art organics recycling centers in North American communities



- Recycle residential, commercial, industrial, and institutional organics
  - Highly efficient technologies
  - Maximum odor control
- Produce clean, reliable, renewable energy
- Reduce greenhouse gas emissions
- Provide local energy independence
- Minimize footprint and allow for expansion
- Create nutrient-rich compost and fertilizer end products

## AD Technology Choices

Technology choice is driven by the markets for feedstocks and end products.

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Contamination Tolerance	High	Medium	Lower
Quantity of Liquid Effluent	De minimus	Medium	High

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# Promoting AD – Policy & Economic Considerations

## *Factors Influencing Developers and Investors to Pursue Large-Scale AD Development in a Particular Jurisdiction*

### Policy Factors

#### Permitting Pathway

- **Predictability:** is it clear *how* to proceed and *what* information will be required?
- **Speed**
- **Cost and complication:** how many different agencies?

#### Organics Policies

- **Diversion:** encouraged or required (*note:* commercial & institutional more important than residential)
- **Operating Rules:** are standards re: contamination, odor-control, *etc.* up-to-date and realistic?

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## The Siting Challenge

Issues	Opportunities
“Waste” perception	Focus on 3 R’s <ul style="list-style-type: none"><li>• <u>R</u>ecycling</li><li>• Energy <u>R</u>ecovery</li><li>• <u>R</u>eplenishing soil</li></ul>

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<b>Odor and vector concerns</b>	Keep it indoors Education
<b>Developer mistrust</b>	Early outreach to community Transparency Real benefits that matter to community

## Unlocking the Potential

### Solid Foundation

- Population density along I-95 and I-84 corridors
- Strong executive leadership
- PA 11-80 framework for renewable energy
- PA 11-217 mandatory commercial food scrap recycling

### Needs

- Added energy contracting flexibility and higher volume caps under PA 11-80
- Clarify Class I REC status
- Public education

*There's a better path for organics —  
help us get there.*



**Wayne Davis, VP - Government Affairs**

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