

Sustainable Innovation

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Executive Director | Sustainability Services

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Waste Management Sustainability Services

Consulting Services and Business Development

Broad Talent Base | A collaboration of skills, talent, and experience



Certified Energy Managers —●

GHG Management Expertise —●

Global Reporting Initiative (GRI)
Certified Professionals —●

ISO14001/QS9000 Expertise —●

Lean Six Sigma —●



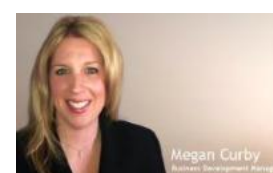
●— Engineers / MBAs / Architects

●— LEED Accredited Professionals

●— Green Event Managers

●— IT and data management expertise

●— Certified Hazardous Material Managers



Company Overview

“Our company has a goal - to help ensure that we pass on the planet to the next generation in better shape than we inherited it. Now, that is a lofty goal and we can’t do it alone, but we hope to set an example for others to follow.”

David Steiner CEO

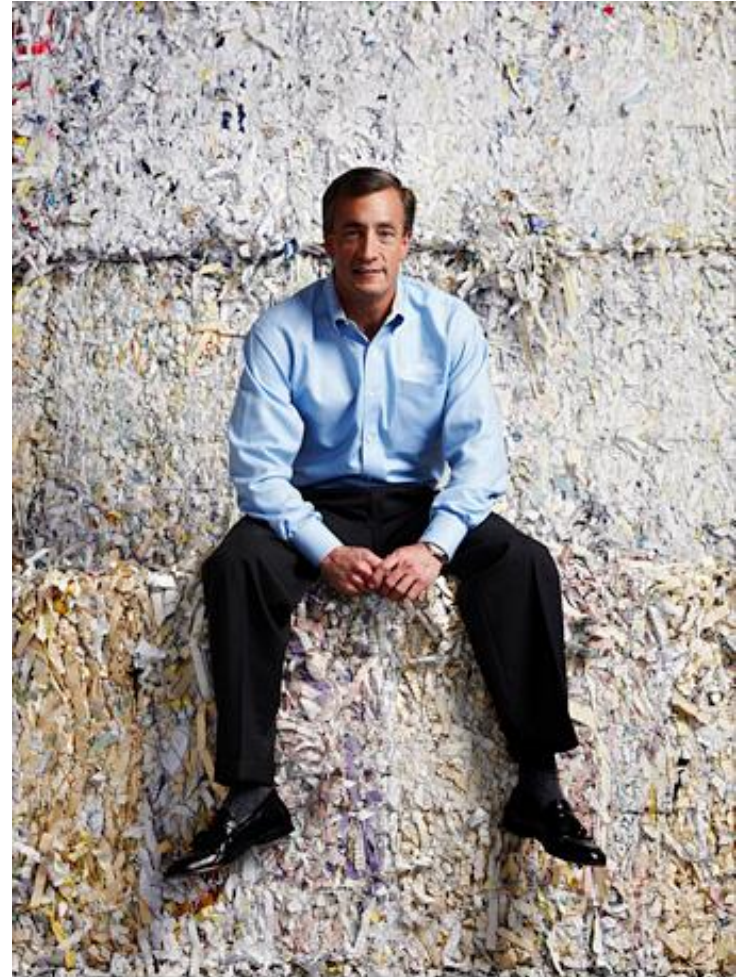
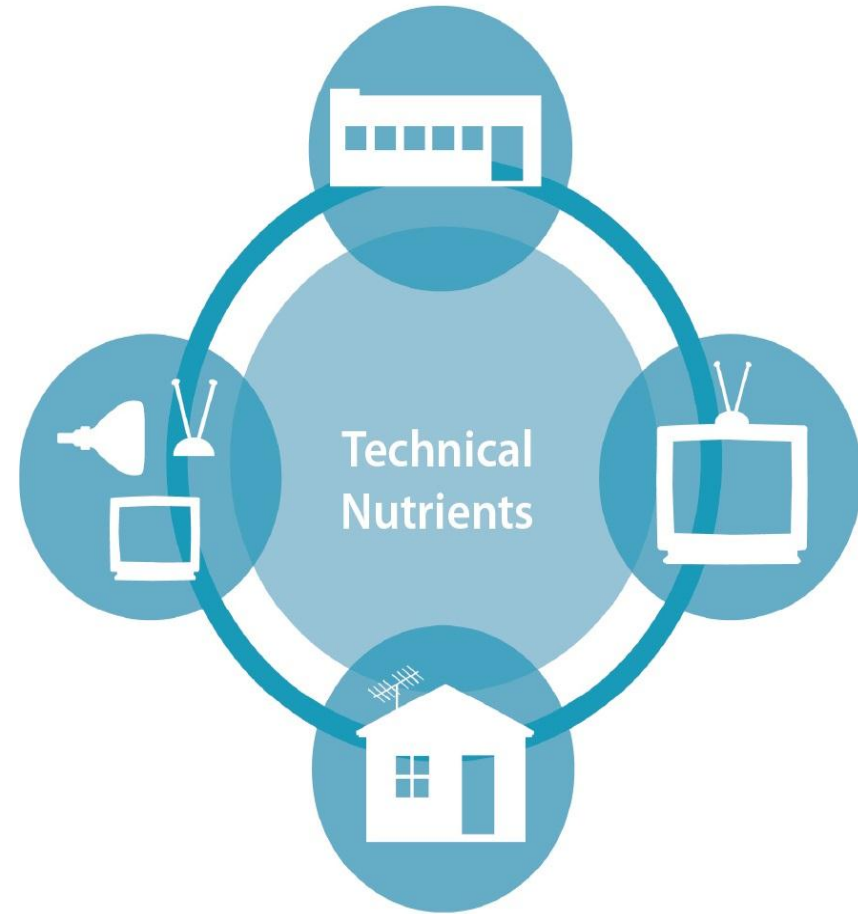
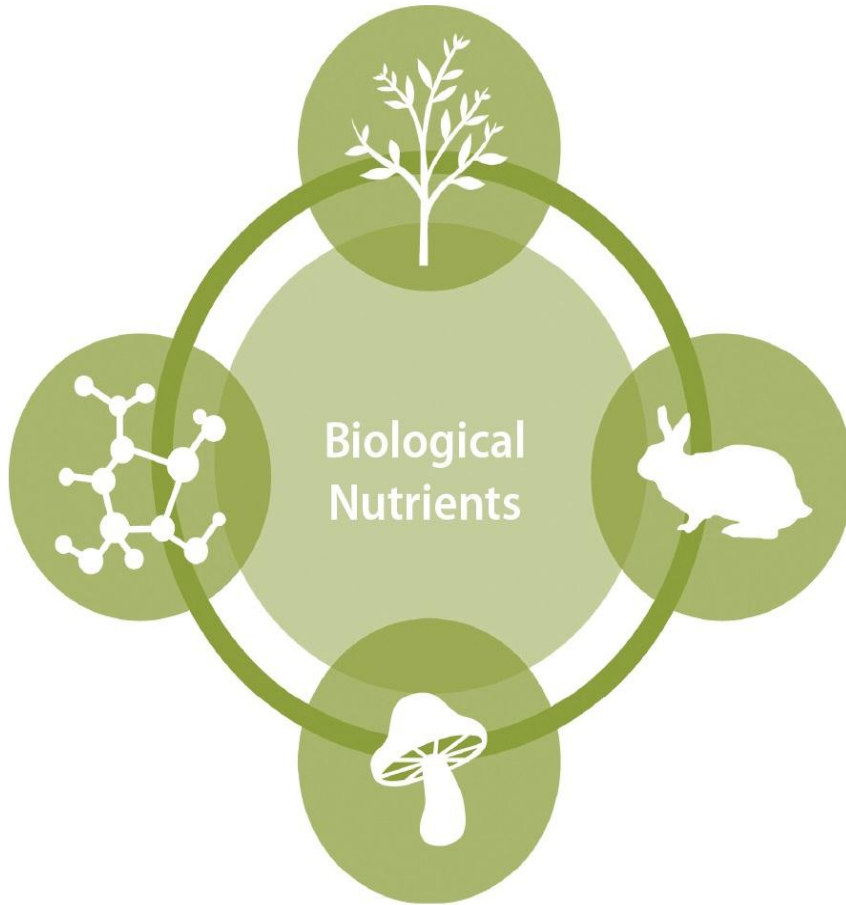


PHOTO: NIGEL PARRY/CPI

Nutrient Potential



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Designing Up from the Dumpster



Creating Energy from Waste

The energy in waste...

One
Ton of
Waste =

- 11 million BTUs of energy
- Holds the energy equivalent to:



- ✓ 1 barrel of oil
- ✓ ½ ton of coal
- ✓ 11 Decatherms of Natural Gas

- Waste can make:
 - ✓ 5,500 lbs of steam
 - ✓ 400 to 600 KW Hrs of electricity
 - ✓ 50 gallons of ethanol

Source: GBB SW Consultants



Converting mixed-waste-plastics to high-octane synthetic crude oil



- Pyrolysis technology converts low value, hard to recycle and contaminated plastics into a high value, synthetic crude oil.
- The first full scale plant is operating in the Portland, Oregon

Waste Management SpecFUEL

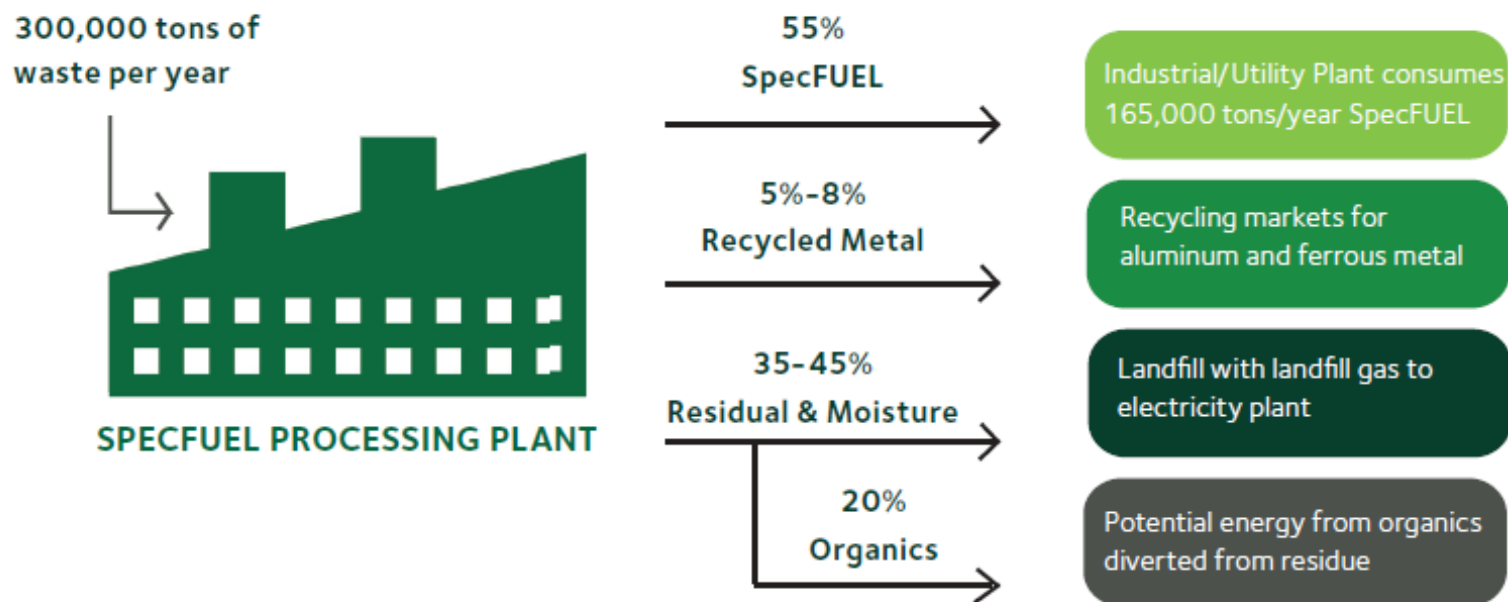
Covel Gardens Commercial Demonstration Plant

Start-Up October 2011



Environmental Attributes of SpecFUEL

- **Emissions savings:** Use of SpecFUEL results in 15% fewer GHG emissions associated with landfill disposal combined with the use of the equivalent amount of coal.
- **Energy savings:** SpecFUEL production from one plant results in annual energy savings of the equivalent of more than 161,000 tons of coal enough energy to power more than 39,000 homes for one year.



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For More Information



www.wmsustainabilityservices.com

[WMSS YouTube Channel](#)