

The Long-Term Promise of Conversion Technologies:

A Look at Project Development in Los Angeles County

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An aerial photograph of the Rose Bowl stadium, showing the green field with "USC" and "BY INVITATION" markings, surrounded by tiered seating and a large parking lot. A green semi-transparent text box is overlaid at the top.

Each year, LA County disposes of over 10 million tons of trash per year...

An aerial photograph of the Rose Bowl stadium, showing the green field with "USC" and "BY INVITATION" markings, surrounded by tiered seating and a large parking lot. A green semi-transparent text box is overlaid at the bottom.

enough trash to fill the Rose Bowl 30 times!

How waste is managed in LA County

- LA County has the largest and most complex solid waste management system in the country servicing the needs of over 10 million residents in 88 cities and 150 unincorporated areas

Infrastructure	
Permitted waste haulers – 120	Inert landfills – 12
Major MSW landfills (Class 3) – 7	C&D debris recycling facilities -- 44
Transfer Stations/MRFs – 29	Recyclers -- 350
Waste to Energy facilities – 2	Commercial composting -- 0

- Proactive and sustainable solutions are vital to addressing the environmental challenges faced by a jurisdiction of our size

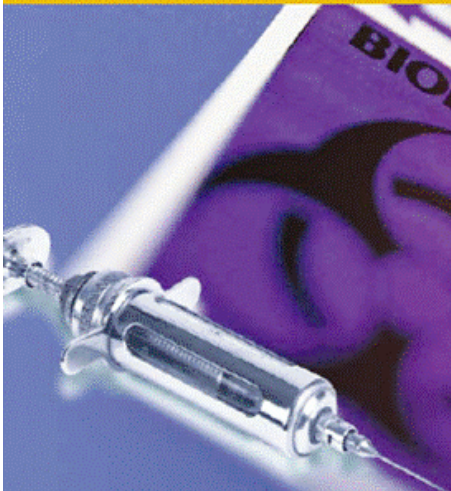
What we do at Public Works

- Public Works wears multiple regulatory/administrative hats in dealing with solid waste management issues
- Assist the County Department of Regional Planning in drafting CUP conditions for solid waste facilities
- Staff the Los Angeles County Integrated Waste Management Task Force
- Compile solid waste management strategies for a 15-year time period
- Develop/implement Countywide recycling and waste reduction programs


Recycling & Reuse Programs

Your guide to
household
hazardous
waste

Home-Generated Sharps Waste Management Program
County of Los Angeles
Department of Public Works



*Do the right thing and save your environment!
Learn how to dispose of your sharps properly.*



County of Los Angeles Department of Public Works
Environmental Programs Division
Household Hazardous Waste Management Program
www.888CleanLA.com
1(888)CLEAN LA



Clean LA
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
www.CleanLA.com 1(888) CLEAN LA



Environmental Defenders



Los Angeles
County
Recycling
Market
Development
Zone



smartgardening.com

Our diversified approach



Conversion technologies

- These technologies are a way to turn solid waste into useful products, green fuels, and clean, renewable electricity (non incineration processes)



- County is a national leader in the evaluation of conversion technologies

Benefits of conversion technologies



Reduce disposal
and recover
resources



Improve air quality



Create green
collar jobs




Promote new biofuels &
energy independence

Obstacles to Development in California

- Cost
 - Most new CT plants have a large start up cost
 - Landfill disposal is (currently) relatively cheap
- Misconceptions
 - Perception of CT as similar to incineration
 - Perception that facilities will emit high levels of toxic emissions (esp. dioxins/furans)
- Regulatory Hurdles
 - Currently only incineration or composting technologies are clearly defined
 - CTs are transitional technologies and have no clear permitting or regulatory pathway

County is on track to pioneer CT facilities in the U.S.

- Phased approach is a key to success
 - Includes collaboration with other agencies, municipalities, and stakeholders
- Phase I – Initial evaluation of conversion technologies
 - Screen and rank conversion technology companies from around the world
 - Identify local material recovery facilities (MRFs) and transfer stations
- Phase II – Develop shortlist
 - Four conversion technology companies and four sites



Conversion technologies operate successfully around the world, but there are no US commercial facilities at this time

Demonstration Projects, pictured here in locations around the world, may be the first of their kind in the United States

Board of Supervisors' Recent Approval

- On April 20, 2010, the Los Angeles County Board of Supervisors unanimously approved a motion to advance the County's conversion technology efforts
- Approved Initiating of two future phases:
 - Phase III - Demonstration projects
 - Phase IV - Commercial projects

Our findings

- **Economic**
 - Conversion technologies will be cost competitive with other alternatives such as waste-by-rail after PHL closes
 - Public-private partnerships reduce risk and save taxpayers' money
 - Projects are job creators (approximately 70-90 jobs per 10 MW of electricity produced)
- **Demonstration → Commercial**
 - Pave the regulatory pathway for future projects
 - Demonstration projects are opportunity to gather environmental, operating, financial data

Our findings

- **Environmental benefits**

- Increase recycling through the advanced sorting techniques conversion technologies employ
- Conversion technologies are localized ways to achieve zero waste and we're not depending heavily on the volatility of the international recycling market

- **Three key benefits**

1. reduction of transportation emissions resulting from long distance shipping of waste;
2. prevention of methane and other emissions from waste that would otherwise be landfilled; and
3. displacement of the use of fossil fuels from the energy (fuel and electricity) produced by conversion technologies.

For more information



www.CleanLA.com

www.SoCalConversion.org