recovering
energy
natural Resources and
economic Benefit from
waste for

COUNCILMAN
GREIG SMITH

A Resource Management Blueprint for the City of Los Angeles
2005 - 2025
The RENEW LA Goal

To reduce, reuse, recycle, or convert the resources (municipal solid waste) now going to landfills so as to achieve an overall recovery level of 90% or more by 2025.

The purpose of the RENEW LA plan is to create a new paradigm of Zero Waste and concrete strategy to get there.
Key Qualities

- Sustainability
- Resource conservation
- Maximum material recovery
- Environmental protection
- Renewable energy
- Economic benefit
- Environmental justice
THE CHALLENGE
WHERE WE ARE NOW

TRASH: 9.3 Million tons per year

5.8 Million tons recycled

3.5 Million tons disposed

14,000 tons of trash and garbage goes to landfills every day from Los Angeles

1 ton for every man, woman, and child in the City of Los Angeles
RENEW LA STRATEGY
2005 - 2025

TRASH

Existing Recycling Programs

Increased & Additional Recycling Programs

Conversion Plants

Green Energy
Green Fuels
Compost
Bio-Chemicals

Traditional recyclable & compost
CONVERSION TECHNOLOGIES

- **Organic Materials**
  - **Gasification & Pyrolysis**
    - Over 80 plants in Japan. Big renewable energy producer. Minimal residual.
  - **Anaerobic Digestion**
    - Over 80 plants in Europe. All biological process. Major product is compost.
  - **MSW Composting**
    - Several full scale plants in North America. Simple operation.
  - **Autoclave**
    - First 2 plants in construction in U.S. Flexibility of products. Potential frontend for other CTs.
  - **Fermentation**
    - Huge demand for product - ethanol. First plants on-line.

- **STEAM, ELECTRICITY, FUELS**
- **COMPOST, HEAT, ELECTRICITY, FUELS**
- **COMPOST**
- **PAPER PULP, RECYCLABLES, GREEN ENERGY, COMPOST**
- **ETHANOL, CHEMICALS, GREEN ENERGY**
THE WAVE OF THE FUTURE
THE RENEW LA PLAN

Anaerobic Digestion Plants (Belgium)
Gasification Plants (Germany)
RENEW LA PLAN
ZERO WASTE TARGET 2025

![Graph showing waste generation and diversion from 2005 to 2025.]

- **Citywide Generation (Assumes 2% per year increase)**
- **Existing Diversion Programs**
- **Total New Diversion**

**2005**
- Citywide Generation: 37,959 tons per day
- Existing Diversion Programs: 23,673 tons per day
- Total New Diversion: 62% overall diversion

**2010**
- Citywide Generation: 41,910 tons per day
- Existing Diversion Programs: 26,137 tons per day
- Total New Diversion: 68% overall diversion

**2015**
- Citywide Generation: 46,272 tons per day
- Existing Diversion Programs: 28,857 tons per day
- Total New Diversion: 77% overall diversion

**2020**
- Citywide Generation: 51,088 tons per day
- Existing Diversion Programs: 31,861 tons per day
- Total New Diversion: 87% overall diversion

**2025**
- Citywide Generation: 56,405 tons per day
- Existing Diversion Programs: 35,177 tons per day
- Total New Diversion: 93% overall diversion
Build & Improve Existing Programs

- Curbside Recycling
- C&D Processing
- Mixed Material “MRFing”
- Food Waste Recycling
- Green Waste Composting
Create New Recycling Programs

- Multi-family recycling – 100,000 units online by December, 2007
- Business recycling – Task Force on Commercial Recycling & Green Business Incentives Formed
- Industry recycling – i.e.: Green Building
- Styrofoam Recycling – Launched July 1, 2007
- Universal Waste – S.A.F.E. Centers & Take it Back Partnership
  – Exploring a curbside U-waste collection (Garcetti-Smith motion)
- E-Waste – S.A.F.E. Centers and Curbside Collection

RECOVER THE REST THROUGH CONVERSION TECHNOLOGY
- Regional Coverage
- Environmental Justice
  - Seven “wastesheds”
  - Each hosts a local facility
  - Possibility of partnering with neighboring jurisdictions

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Cleaner Air
Less Truck Traffic
Best and Highest Use of Resources
Green, Renewable Energy
Reduce Dependency on Foreign Oil & Fossil Fuel
Not only does the RENEW LA plan lead the way to sustainability, environmental protection, and resource recovery and conservation…

*It does it while providing many economic benefits!*
Economic Benefit

Continued…

- Creates new industry to handle - process - recycle our resources

Current Recycling in Los Angeles:

600 Companies
8,000 Jobs
$200 Million Payroll
$1.8 Billion Revenue

Just the beginning!

- “Green collar” jobs created

  7:1 Engineering & Construction multiplier
  10:1 Operational multiplier over landfill jobs
- Conversion Technologies are less expensive than rail haul

Especially when all the savings in traffic, air quality, use of foreign oil, and resource depletion are taken into account.

- Diversion vs. Disposal
  - Total sales and value added impacts more than doubled
  - Total income impacts nearly doubled
  - Jobs nearly doubled
KEY Recommendations For Action by City of Los Angeles

- RENEW LA Plan – Adopted February ‘06
- Add food waste to green can recycling – Pilot in development
- Modify zoning code – Ordinance coming to Planning Commission in August ‘07
- Site and develop 1st and 2nd CT plants – RFP due back August ‘07
- Implement commercial recycling and establish city tax breaks to encourage resource recovery – Task Force Created, initial recommendations due in September ‘07
- Implement multi-family recycling – Rollout in progress -100,000 units by December ‘07
- Establish DWP green energy producer bonus – Working with DWP
- Revise City Procurement Policy – EPP policy passed & funded in 07-08 Budget
- Adopt Zero Waste Policy – Scheduled for next Ad-Hoc RENEW LA committee meeting
CITY OF L.A. COMPLEMENTARY POLICIES, LEGISLATION AND INITIATIVES

- Green LA - GHG emissions reduction to 35% below 1990 levels by 2030
  - Accelerated RPS Goals - 20% by 2010 and 35% by 2020
  - 100% of BOS fleet powered by alternative fuels by 2010
  - Recycle 70% of waste by 2015 (former goal 2020)
- Mayoral Directive for first Alternative Technology Facility by 2010
- S.W.I.R.P. - Six-year stakeholder process
- Blue Bins in 236 LAUSD Schools
- Recycle For Dollars - Education and incentive program
- Expansion of Restaurant Foodwaste collection - Residential Foodwaste Pilot in development
- Rebates against the City's Private Hauler Fees - For loads taken to a certified processor for recycling
- Minimum LEED Silver Standard for Municipal Buildings
- C & D Recycling Ordinance - Stepping it up to a mandatory requirement
- Curbside Collection of Universal Waste - Legislation introduced
- Time-Certain Reduction in Tonnage to the Sunshine Canyon Landfill - 0 TPD by 2011
- Newly Negotiated Recycling Contracts - Require contractors to take all plastics 1-7, including Polystyrene while providing a local market for the material
- Commercial Waste Action Plan - Creating Green Business certification
“Some people see things as they are and say why? I dream of things that never were and say why not?”

- Robert Kennedy

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