### Leveraging Regional Assets for Energy Conversion Initiatives

USCC Conference 2011
January 25, 2011
Jo Zientek, Deputy Director
Integrated Waste Management
City of San José

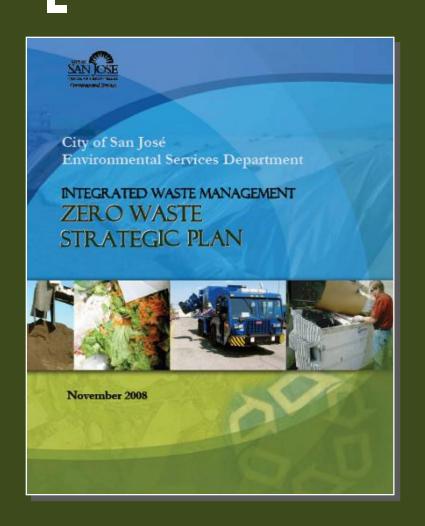
#### San José Green Vision

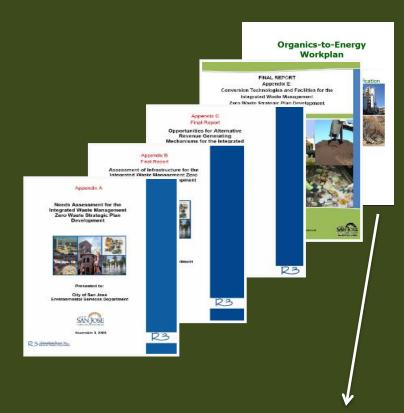


#### **Achieve these GOALS by 2022:**

- 1. 25,000 Clean tech jobs
- 2. 50% Reduction energy use per capita
- 3. 100% Renewable electrical power
- 4. 50 million ft<sup>2</sup> retrofitted green bldgs
- 5. Zero Waste & waste to energy
- 6. 100% wastewater beneficially re-used
- 7. Sustainability in General Plan
- 8. 100% alternative fuel City vehicles
- 9. 100,000 new trees planted
- 10.100 miles of interconnected trails

## Zero Waste Strategic Plan





**Organics to Energy Plan** 

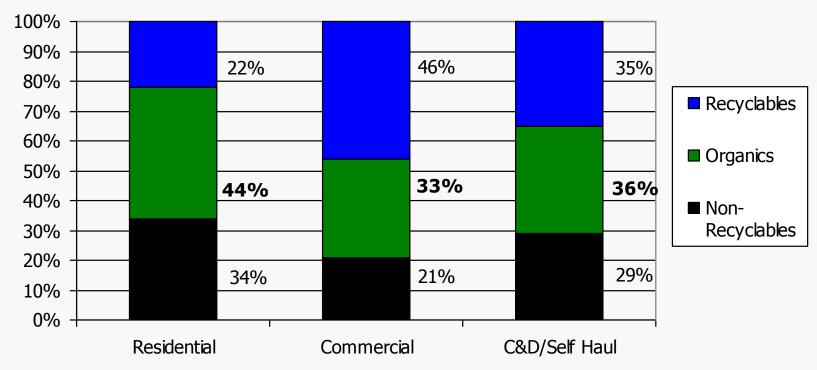
## **Organics to Energy Plan**

#### Strategies

- Identify Feedstock Commercial Solid Waste RFP & Single-family organics
- 2. Assess AD for Food & FOG
- Analyze Gasification / Develop Conversion Research & Incubation Center

# **Integrating Conversion** into Organics Infrastructure





### Organics Capture: Infrastructure Existing Facilities

- 2 Large ScaleComposting Facilities
- 1 MSW Processing Facility
- 3 single-stream MRFs
- 7 C&D Processing Facilities
- 3 Landfills



### Organics capture: Infrastructure Automated Preprocessing

- GreenWaste Facility
- Located in central San José
- 42,000 square foot
- New state of the art equipment
  - Bulk Handling Systems
  - Unique side by side singlestream & MSW sort lines
- 300kw solar-powered system



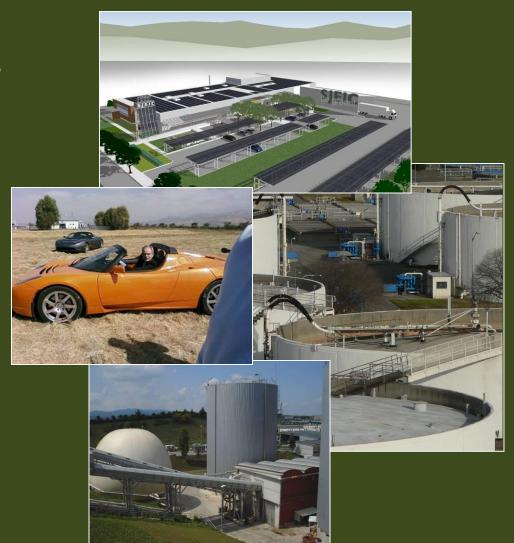
## San Jose Drives Conversion Technology Development

- Siting & Permitting
- Land
- Feedstock Commitments
- Collection Systems
- Risk-Benefit Sharing
- Joint Grant Proposals
- Compost Marketing
- Policy Drivers



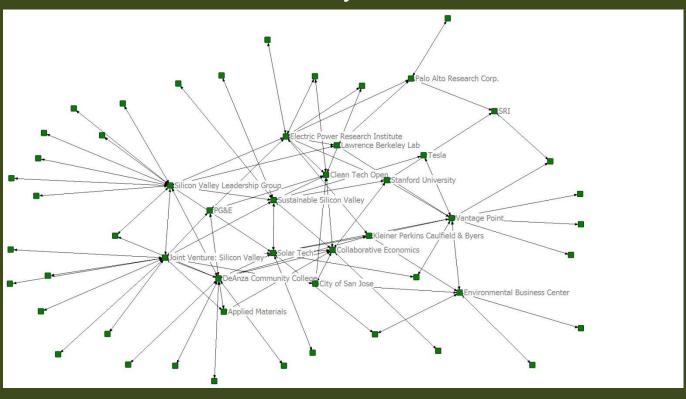
## **Demonstration Policy**

- Use of land & facilities
- Financial assistance
- Non-disclosure agreement
- Procurement fast track
- City risk-sharing
- Short approval time frame



## **Fostering Innovation**

#### The Silicon Valley Green Network

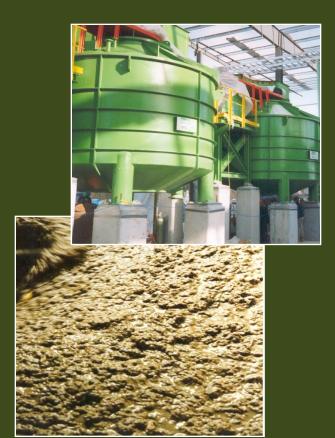




## **Conversion Initiatives**

#### Anaerobic Digestion

- Zero Waste Energy Development
- Proposal to City
- Land & Lease Agreement



## **Conversion Initiatives**

#### Commercial Redesign — RFP Underway

- Service Standardization
- 75% Diversion
- System Innovations
- Conversion Processing Options
- Integrated Processing Infrastructure



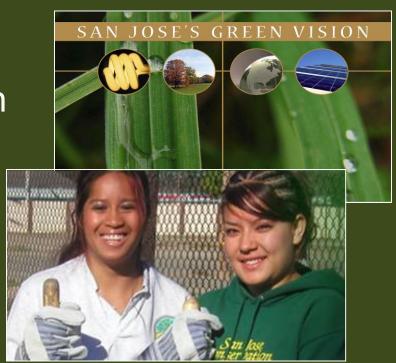
# **Conversion Initiatives** *Gasification Feasibility*

- DemonstrationPartnership Policy
- Grant Funding Partnership
- Two Phase Process
- Regional Collaboration



## **Next Steps**

- AD Lease / Initial Study Spring 2011
- Commercial Recommendation Late March 2011
- Gasification Feasibility January 2012



#### Resources to Share

- UrbanCompost.com
  - San Jose Zero Waste Resource Documents
    - Strategic plans
    - Technology review
    - RFI
    - Municipal Conversion Technology Survey summary
- Commercial RFP on Bidsync.com
- RebuildthePlant.org

