REGIONAL/COUNTYWIDE ORGANIC WASTE MANAGEMENT PLAN

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

SEPTEMBER 15, 2016

Purpose

- **Provide regional leadership**

- **Meet the goals of Los Angeles County's Roadmap to a Sustainable Waste Management Future** (adopted by the Board of Supervisors October 2014)

- **Legislation:**
  - Senate Bill 605 (SB 605) – Short-lived climate pollutants
  - Assembly Bill 1826 (AB 1826) – Mandatory organics recycling
  - Assembly Bill 876 (AB 876) – Compostable organics

Purpose (Continued)

- **Organics Management Plan driven by AB 876**

- **Commencing August 1, 2017, a county or regional agency shall include, in the annual report to CalRecycle the following information:**
  - Organic waste generated over 15 years
  - Organic waste recycling facility capacity needed to process that waste
  - Locations for new or expanded facilities

Background

- **An in-depth, lengthy analysis was performed using information provided in surveys by facility operators along with data already available to the County**

- **Surveys were sent to over 300 facility operators, both in and out of the county**

California
Statewide *Organic Waste*

Solid Waste Generation (tons/year) ≈ 88.2 million

2014	Organic Waste		
	Generation	*Disposal*	*Diversion**
Annual (tons/year)	22.7 million	12.4 million	10.3 million
Daily (tons/day-6)	72,850	39,836	33,014

*Diversion was assumed to be the difference between generation and disposal.

Sources:

1. 2014 Disposal-Facility-Based Characterization of Solid Waste in California report
2. The State of Disposal in California (Updated 2016) report.

Los Angeles County
Countywide *Organic Waste*

Solid Waste Generation (tons/year) ≈ 21.9 million

2014	Organic Waste		
	Generation	*Disposal*	*Diversion**
Annual (tons/year)	5.6 million	3.5 million	2.1 million
Daily (tons/day-6)	18,086	11,311	6,775

*Diversion was assumed to be the difference between generation and disposal.

Sources:

1. The County of Los Angeles Countywide Integrated Waste Management Plan, 2014 Annual Report.
2. 2014 Disposal-Facility-Based Characterization of Solid Waste in California report
3. The State of Disposal in California (Updated 2016) report.

Available In-County Organic Waste *Processing Capacity*

Facility Type	Daily Capacity *(tons/day-6)*	Annual Capacity *(tons/year)*
Transfer/Processing	9,540	3.0 million
Total	**9,540**	**3.0 million**

Facility Type	Daily Capacity *(tons/day-6)*	Annual Capacity *(tons/year)*
Chipping and Grinding	4,361	1.4 million
Composting	1,255	391,408
Anaerobic Digestion	274	85,576
Total	**5,890**	**1.8 million**

Note: Due to rounding, numbers may not add up exactly.

Sources:

1. Facility Surveys
2. CalRecycle's Solid Waste Information Systems Database

Available Out-of-County Organic Waste *Processing Capacity*

- Analyzed facilities in the following Counties:
  - Kern
  - Kings
  - Orange
  - Riverside
  - San Bernardino
  - Ventura

Facility Type	Daily Organic Waste Processing Capacity (tpd-6)	Annual Organic Waste Processing Capacity (tons/year)
Chipping and Grinding	1,020	318,138
Composting	33,268	10.4 million
Anaerobic Digestion	404	126,000
Totals	**34,692**	**10.8 million**

Note: Due to rounding, numbers may not add up exactly.

Sources:

1. Facility Surveys
2. CalRecycle's Solid Waste Information Systems Database

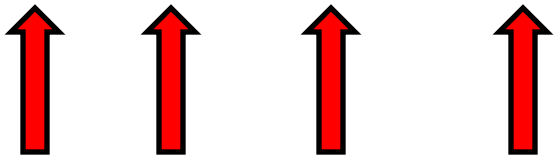
Analysis of Organic Waste Processing Capacity Need

Scenario No.	Utilization of Existing In-County Organic Waste Transfer/ Processing Capacity	Utilization of In-County Organic Waste Diversion Facility Capacity	Utilization of Out-of-County Organic Waste Diversion Facility Capacity	Diversion Rate of 37 percent Throughout Entire Planning Period (2014-2029)	Diversion Rate of 75% by year 2020	Diversion Rate of 90% by year 2025
1	✓			✓		
2		✓		✓		
3		✓	✓	✓		
4	✓				✓	
5		✓			✓	
6		✓	✓		✓	
7	✓				✓	✓
8		✓			✓	✓
9		✓	✓		✓	✓

Analysis of Organic Waste Processing Capacity Need

(A) In-County Organic **Transfer/Processing** Capacity:

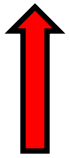
Year	Organic Waste Generation	Organic Waste Diversion Rate	Current Organic Waste Transfer/ Processing Demand (Current Diversion)	Available In-County Organic Waste Transfer/ Processing Capacity	Organic Waste Transfer/ Processing Capacity Shortfall or (Reserve)	Additional Projected Organic Waste Transfer/ Processing Demand (Current Disposal)	Additional Organic Waste Transfer/ Processing Capacity Needed
	A	B	C = A * B	D	E = C - D	F = A - C	G = E + F
	(tpd-6)	%	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
2014	18,086	37%	6,775	9,540	**(2,765)**	11,311	**8,547**



Analysis of Organic Waste Processing Capacity Need

(B) In-County Organic **Diversion Processing** Capacity:

Year	Organic Waste Generation	Organic Waste Diversion Rate	Current Organic Waste Diversion Demand (Current Diversion	Available In-County Organic Waste Diversion Processing Capacity	Organic Waste Diversion Processing Capacity Shortfall or (Reserve)	Additional Projected Organic Waste Diversion Demand (Current Disposal)	Additional Organic Waste Diversion Capacity Needed
	A	B	C = A * B	D	E = C - D	F = A - C	G = E + F
	(tpd-6)	%	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
2014	18,086	37%	6,775	5,890	**885**	11,311	**12,197**



Analysis of Organic Waste Processing Capacity Need

(C) In- and Out-of-County Organic **Diversion Processing** Capacity:

Year	Organic Waste Generation	Organic Waste Diversion Rate	Current Organic Waste Diversion Demand (Current Diversion)	Available In-County Organic Waste Diversion Processing Capacity	Organic Waste Diversion Processing Capacity Shortfall or (Reserve)	Additional Projected Organic Waste Diversion Demand (Current Disposal)	Additional Organic Waste Diversion Capacity Needed
	A	B	C = A * B	D	E = C - D	F = A - C	H = E + F
	(tpd-6)	%	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)	(tpd-6)
2014	18,086	37%	6,775	5,890	**885**	11,311	**12,197**

Out-of-County Organic Waste Diversion Processing Capacity	Organic Waste Diversion Processing Capacity Shortfall or (Reserve)
I	J = H - I
(tpd-6)	(tpd-6)
34,692	**(22,495)**

Strategy for Meeting Organic Waste Need

- Reduce the generation of organic waste (at the source)
  - Education and Outreach
- Encourage and facilitate the development of in-County planned/proposed organic waste processing facilities (e.g., anaerobic digestion, conversion technology, composting)
  - Streamline permitting process
  - Encourage jurisdictions to adopt an ordinance
- Encourage development of compost product markets
- Utilization of out-of-County organic waste processing capacity

Organics Options Analysis

- **Option #1:** Commercial Recycling Ordinance
- **Option #2:** Single-Family Residential Recycling Ordinance
- **Option #3:** Self-Haul Standards
- **Option #4:** Flow Control
- **Option #5:** Contract Modification
- **Option #6:** Exclusive Commercial Hauling
- **Option #7:** Source Separated Organics Collection
- **Option #8:** Wet/Dry Collection
- **Option #9:** Incentives
- **Option #10:** Education Only
- **Option #11:** On-Site Management

Organics Options Analysis (Continued)

- **Evaluates the following:**
  - Cost Considerations
  - Time and Ease to Implement
  - Success of Others
  - Impacts to Haulers
  - Environmental Impacts
  - Enforcement Considerations

Compost and Organics Product Market Evaluation

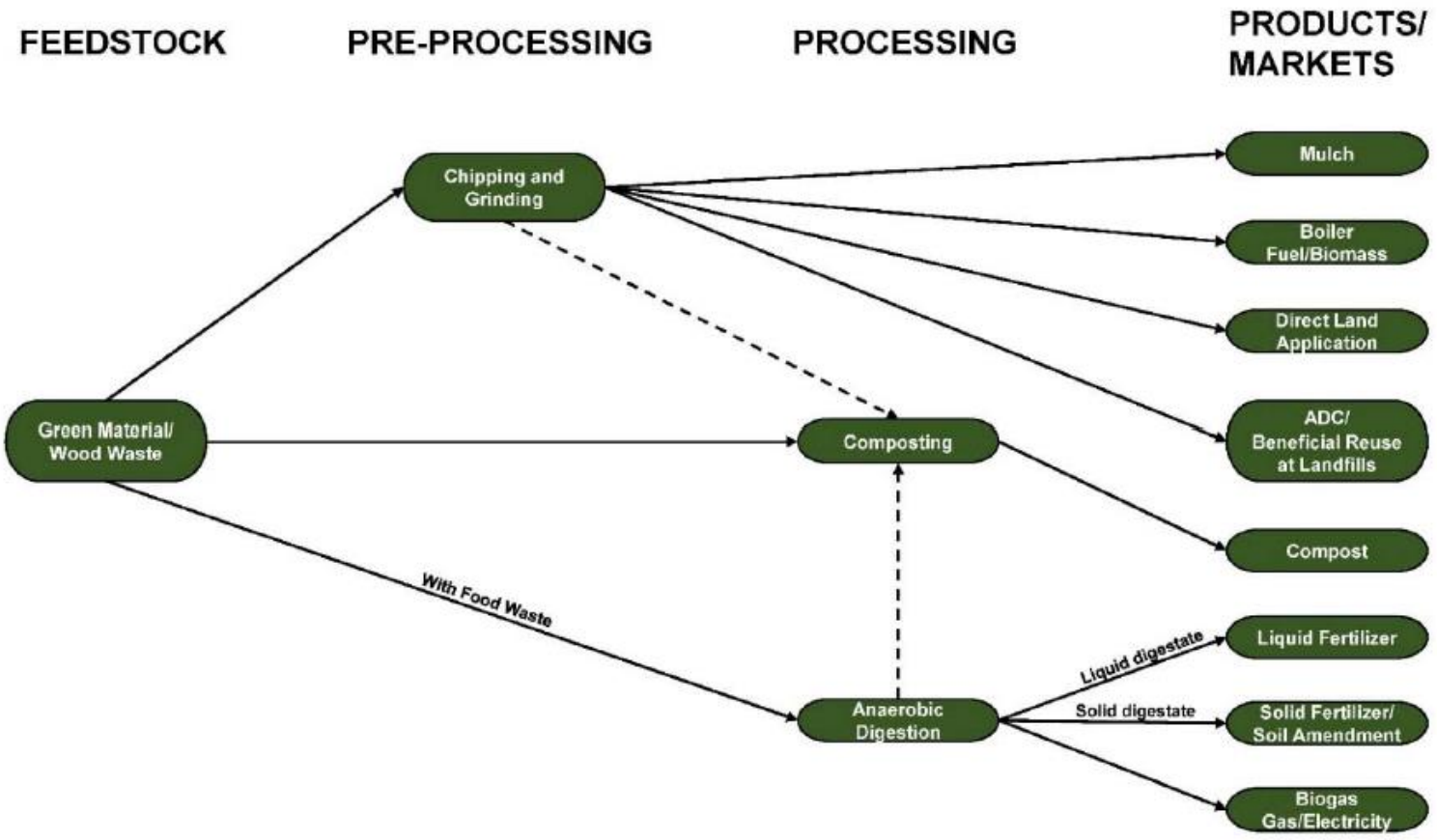


Figure 2-1: Green Material and Wood Waste

Compost and Organics Product Market Evaluation (Continued)

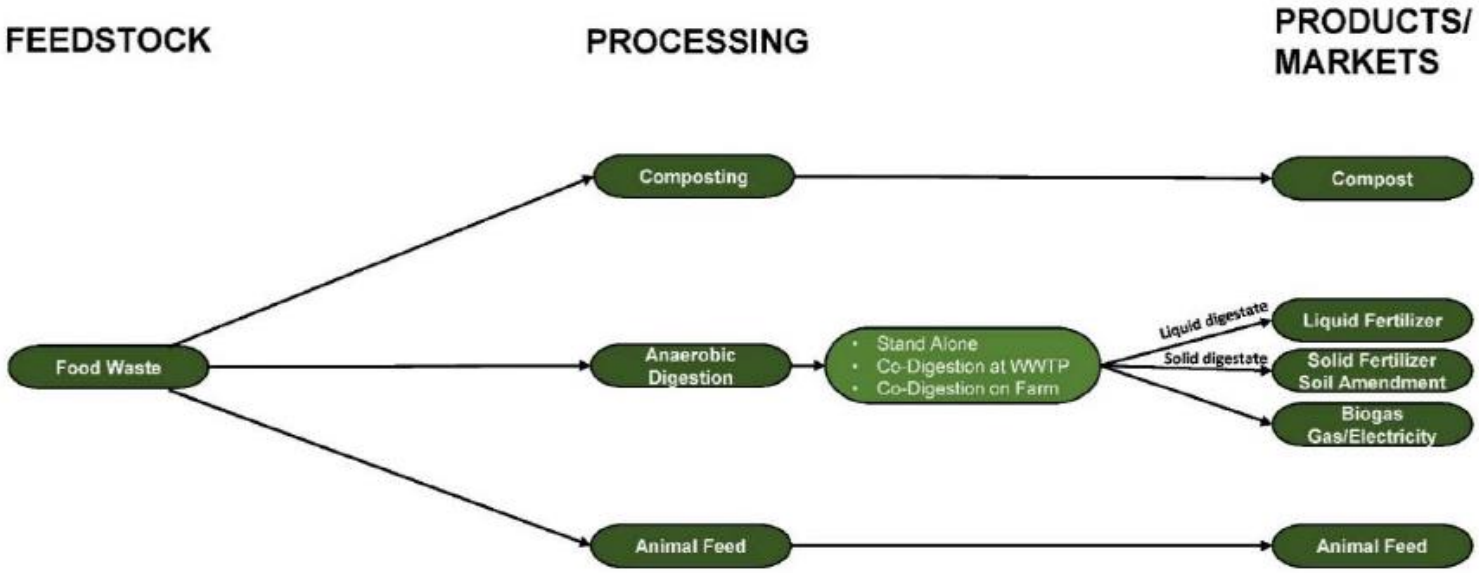


Figure 2-2: Food Scraps

Comment and Review Period

- **Subcommittee comment and review period:**
  - 30 days, commencing September 15, 2016
- **Main Task Force comment and review period:**
  - 30 days, commencing October 20, 2016
- **Released to Cities and the Public:**
  - Early 2017

Questions or Comments?

Thank You!