



# California's Compost And Mulch Producing Infrastructure – Third Assessment

**Strategic Policy Development Committee**

**September 9, 2009**

**Committee Agenda Item 6**

**(Board Agenda Item 6)**

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## **2008 Assessment Survey**

- **Statewide Survey of California's Compost and Mulch Producing Facilities**
- **Adds to Previously Submitted Information**
- **Provides Aggregated Data on the Industry**
- **Imparts Quantitative Assessment and Estimate**



## **Survey Objectives**

- **Number of Composters and Processors**
- **Amount, Feedstock Types, and Sources of Organic Materials Recycled**
- **Product Diversity and Markets**
- **Several Air and Water Quality Questions**



# Survey Design

- **Independent Contractor and Organics Industry Steering Committee**
- **Survey E-mails and Mailings, Telephone Follow-Up, and Facility Site Visits**
- **Facility Questions from Previous Surveys Included for Continuity**



## **New for 2008**

### **Additional Topics Included on Survey Form:**

- **Facility Ownership/Purpose**
- **Facility Expansion**
- **Number of Employees and Type**
- **Stormwater Management Practices**



## **New for 2008**

- **Impact of New Diesel Particulate Rules**
- **Small Particulate Emission Controls**
- **VOC Emission Controls**
- **How Organics Processing Facilities are Responding to Regulatory Challenges**



# Participation in Each Survey

	<u>2000</u>	<u>2003</u>	<u>2008</u>
<b>Facilities in Operation:</b>			
<b>Composters</b>	<b>104</b>	<b>101</b>	<b>115</b>
<b>Processors</b>	<b>65</b>	<b>69</b>	<b>115</b>
	<b>169</b>	<b>170</b>	<b>230</b>
<b>Returned Survey Form:</b>			
<b>Composters</b>	<b>99</b>	<b>85</b>	<b>87</b>
<b>Processors</b>	<b>59</b>	<b>53</b>	<b>70</b>
	<b>158</b>	<b>138</b>	<b>157</b>



## Percent Participation in Survey

	<u>2000</u>	<u>2003</u>	<u>2008</u>
<b>Composters</b>	<b>95%</b>	<b>84%</b>	<b>76%</b>
<b>Processors</b>	<b>91%</b>	<b>77%</b>	<b>61%</b>
<b>Total</b>	<b>93%</b>	<b>81%</b>	<b>68%</b>

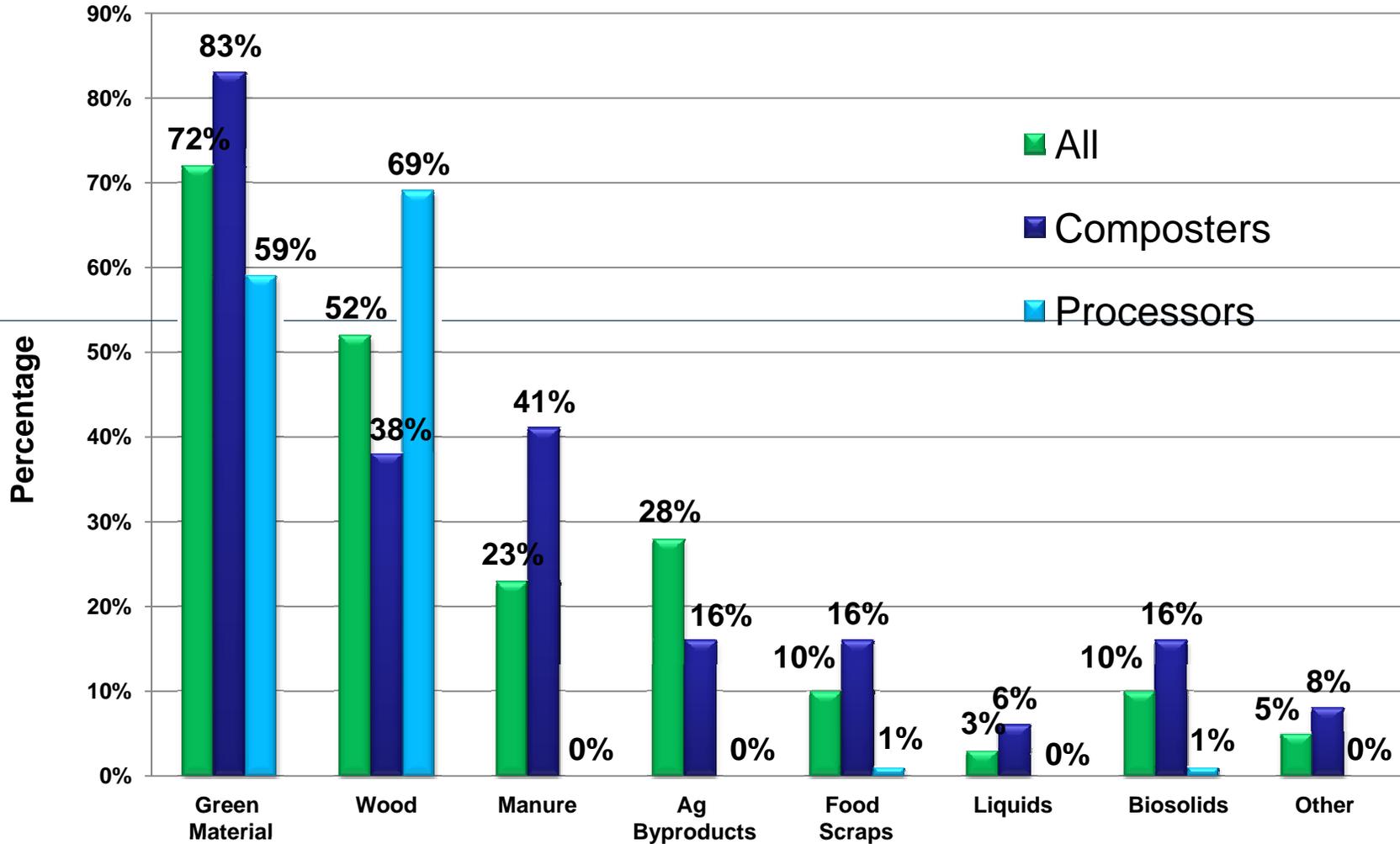


# Adjusted Tonnage of Feedstock Processed (Million Tons/Year)

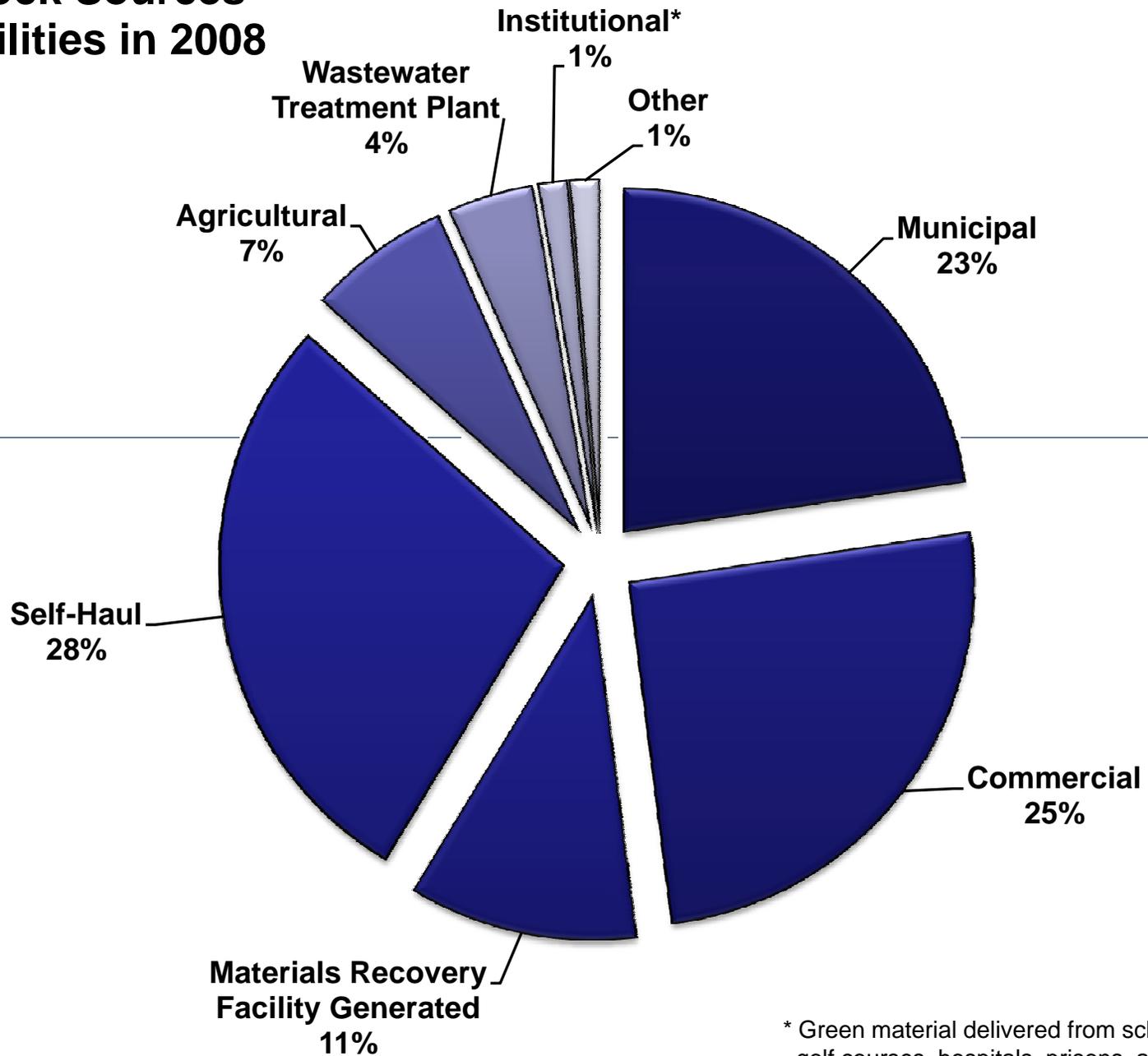
	<u>2000</u>	<u>2003</u>	<u>2008</u>
<b>Composters</b>	<b>3.4*</b>	<b>4.8</b>	<b>5.8</b>
<b>Processors</b>	<b>2.7*</b>	<b>5.1</b>	<b>3.5</b>
<b>Total</b>	<b>6.1*</b>	<b>9.9</b>	<b>9.3</b>

9 \* Reported tonnage only - none estimated for non-participants.

# Percentage of Composters and Processors Using Specific Feedstock in 2008

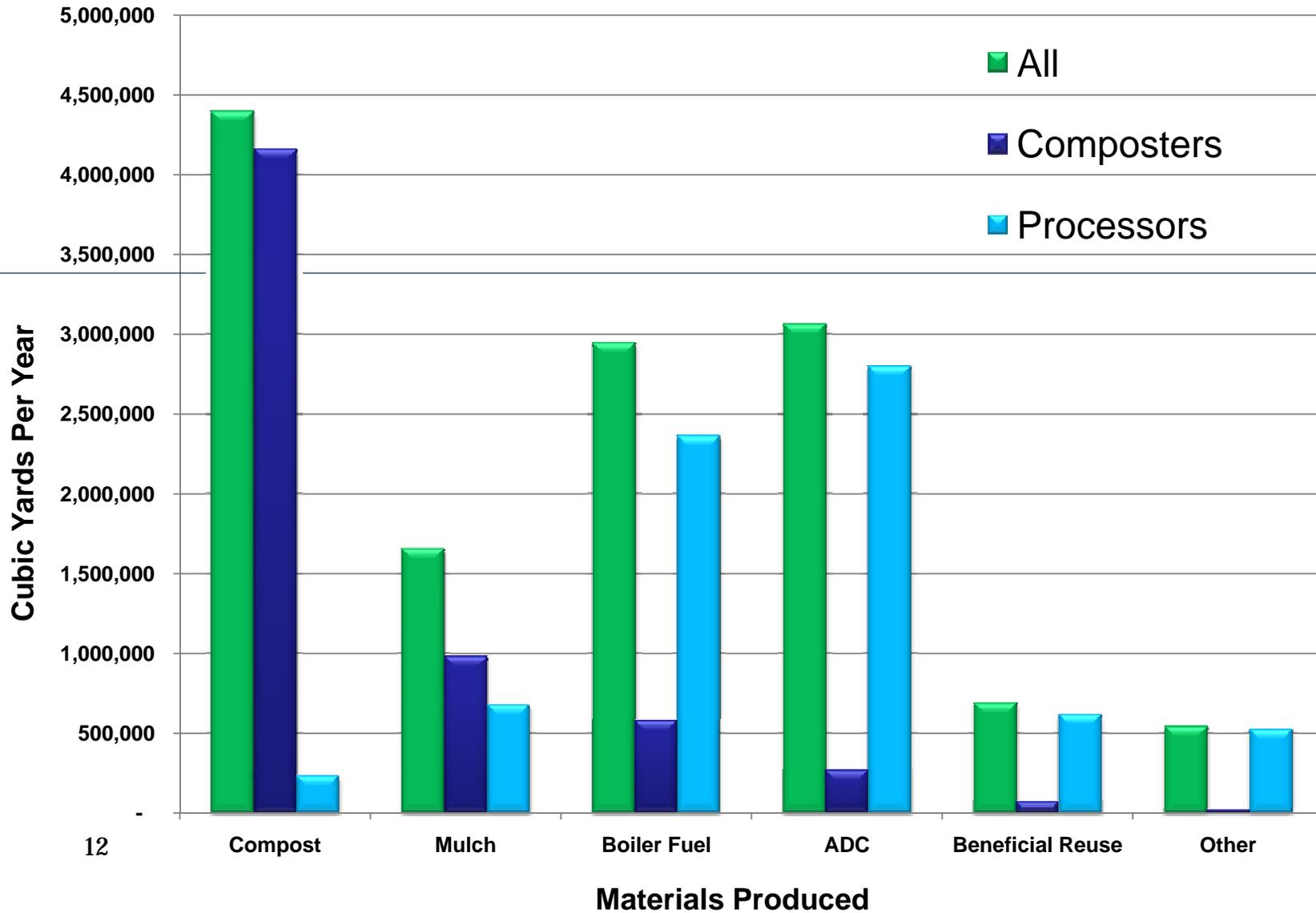


# Feedstock Sources - All Facilities in 2008



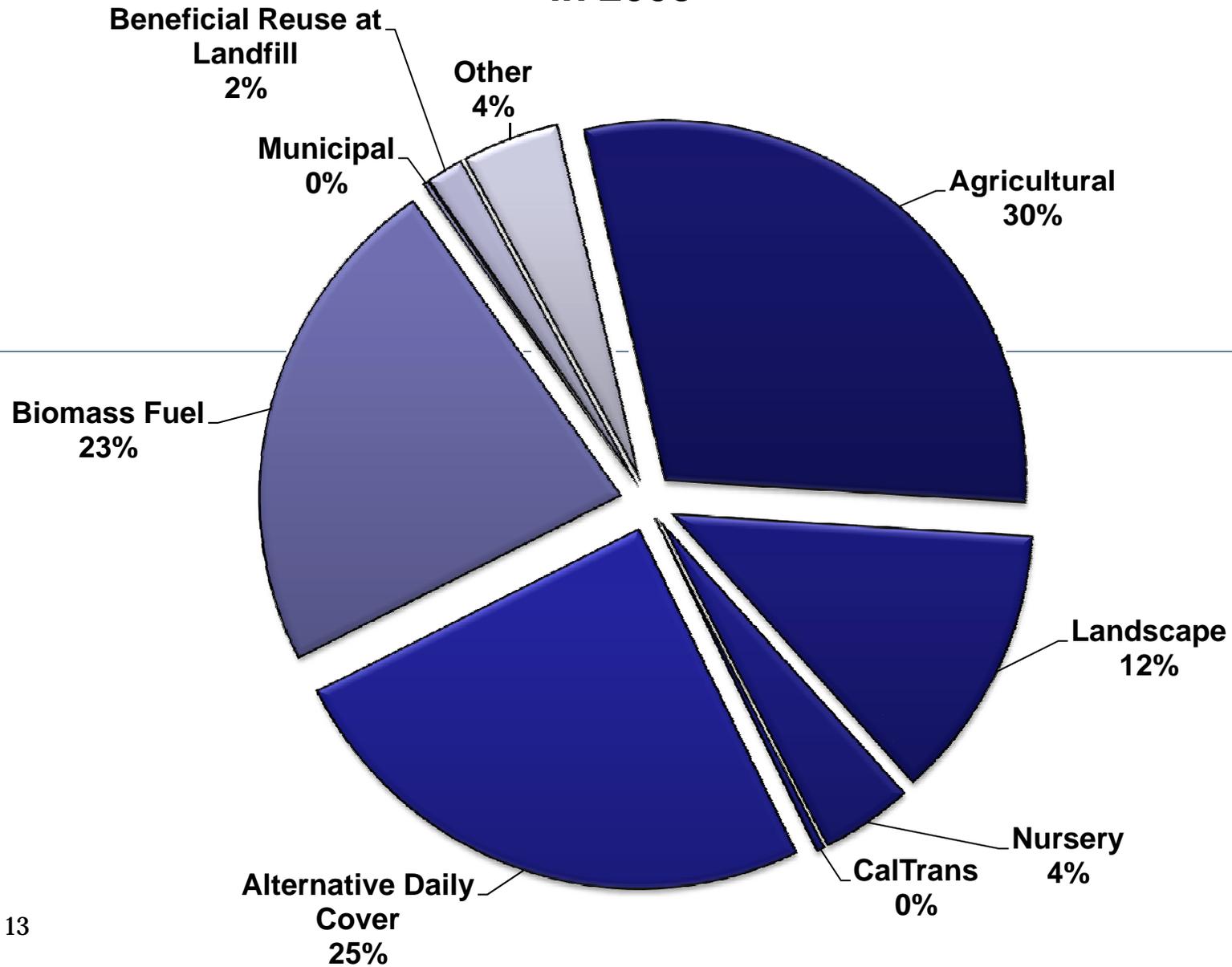
\* Green material delivered from schools, parks, golf courses, hospitals, prisons, army bases, etc.

# Volume of Products by Type in 2008

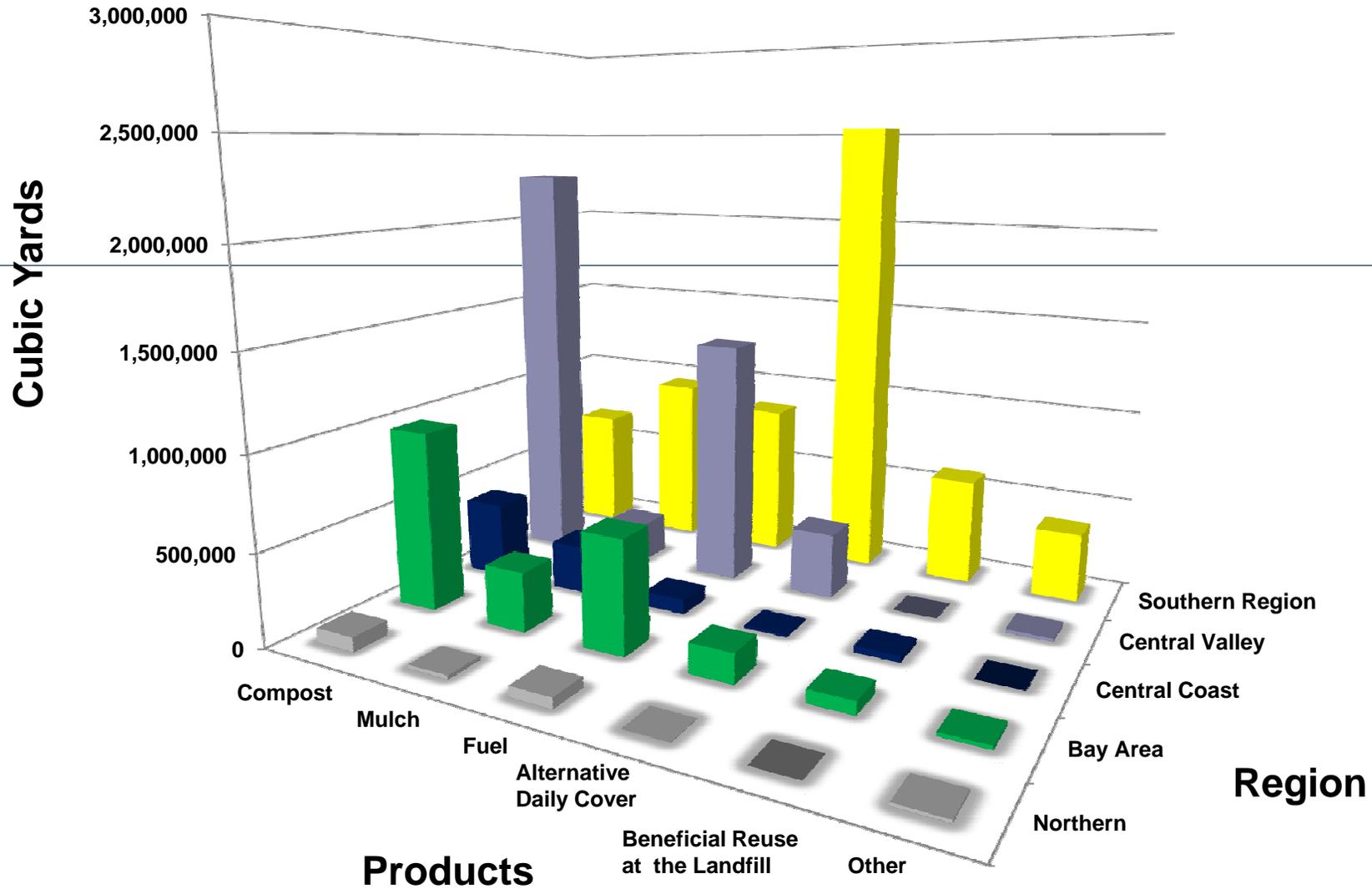


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# Percentage of Products Sold by All Facilities to Markets in 2008



# Products by Region in 2008 (All)





## **Key Findings**

- **Number of Facilities Increased 36 Percent from 2000: 115 Composters/115 Processors**
- **Facility Personnel and Equipment Often Shared On-site**
- **Majority of Facilities Process Under 49,000 Tons/Year; Mostly Woody or Green Material**
- **Estimated 9.3 Million Tons of Organic Materials Processed**



## **Key Findings**

- **Compost Production and Use Surpasses Boiler Fuel and ADC Production**
- **Agriculture is the Largest Market for Compost and Increasingly for Mulch**
- **CalTrans Continues to Be a Growing Market for Compost and Mulch**
- **Air and Water Quality Issues Are Work in Progress**



# Assessment of Infrastructure Survey Responses

- **Compost Sales Good in 2008  
Irrespective of Economic Downturn**
- **Regulatory Uncertainty and Financial  
Conditions Makes Facility Expansion or  
Equipment Replacement Difficult**



## **Next Steps**

**Continued Growth of Organics Infrastructure  
Could Be Dependent Upon:**

- **Resolution of Air and Water Quality Issues**
- **Assembly Bill 32 Measures on Organics and Anaerobic Digestion**
- **Increasing Sale of Products**

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