Organics Roadmap IV

CalRecycle Public Meeting

May 17, 2011

Background

- **Strategic Directive 6.1**
  - **Reduce the amount of organics in waste stream by 50% by 2020**
- **Key Issues**
  - **Economic Incentives**
  - **Siting & Capacity**
  - **Regulatory and Permitting**
  - **Research, Product Standards, and Technical Evaluations**
  - **Education and Promotion**

Organics in the Waste Stream

- 32 million tons disposed in 2009
- Carbon-based organics: 21 million tons
- Compostable: 6.4 million tons
- Wood waste: 4.8 million tons
- Much material is difficult to recycle

Organics Diversion

- In 2008, about 9.3 million tons of organic materials processed by over 200 compost and chip & grind facilities
- Biomass Facilities
  - Consume about 5 million bone dry tons of biomass annually
- Need to divert an additional 10 million tons

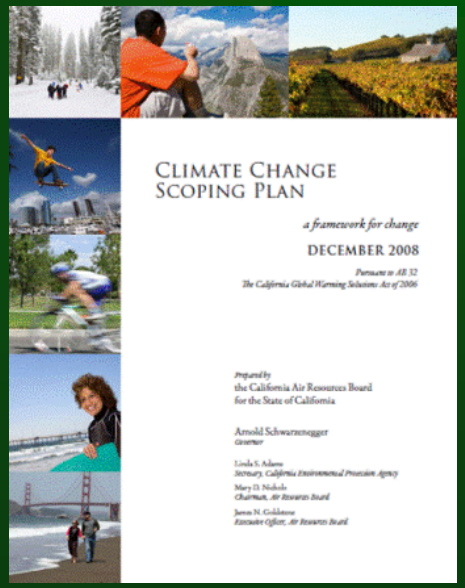
The Future

- Expansion of organics processing infrastructure
- Combination of traditional and emerging technologies
- Anaerobic digestion

East Bay Municipal Utility District

Key Policy Drivers

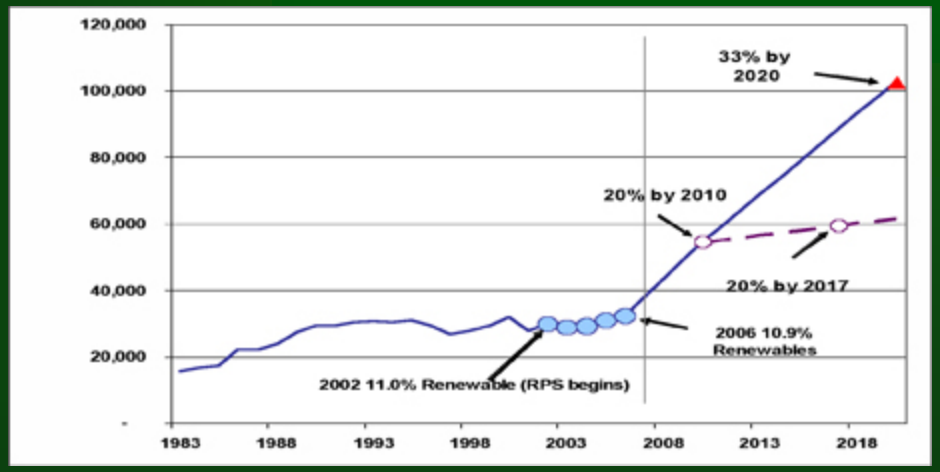
- AB 32
- Low Carbon Fuel Standard
- AB 118



Source: CARB, Low Carbon Fuel Standard

Key Policy Drivers (cont.)

- Renewables Portfolio Standard
- Bioenergy Action Plan



Key Policy Drivers (cont.)

- **Water Use Efficiency**

Economic Incentives

- AB 118 Alternative and Renewable Fuels
- CEC Bioenergy Action Plan
- RMDZ Loans
- GHG Emission Reduction Protocols
- www.calrecycle.ca.gov/business/incentives.htm

Source: www.cleanmpg.com

CALIFORNIA Climate ACTION Registry

Siting and Capacity

- Low Carbon Fuel Standard
- Threats to Compost Industry

Source: www.epcforepcs.co.uk

Light Brown Apple Moth

Pesticides

Sudden Oak Death

Regulatory and Permitting

- Air District Composting Rules
- Federal Clean Air Act New Source Review

Regulatory and Permitting (cont.)

- SWRCB WDRs for composting facilities
- Anaerobic digestion program EIR
- S.D. 8.3 regulations reviews
- Mandatory commercial recycling regulations

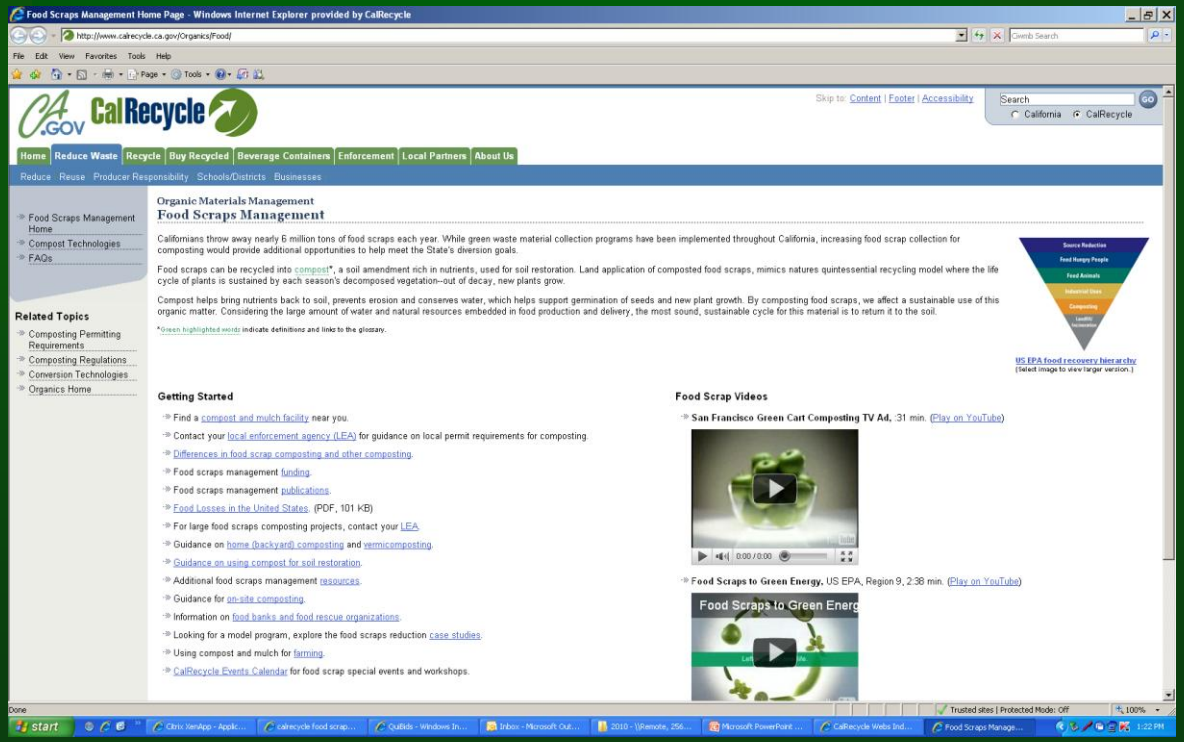
Source: Paso Robles Waste Disposal, Inc.

Research, Product Standards, and Technical Evaluations

- Reactivity of green waste VOCs
- Compost BMPs & benefits contract
- LF-based anaerobic digestion pilot
- Compost cover at landfills methane reduction
- Compost production N2O emissions

Education and Promotion

- Annual LEA training
- Organics web enhancement



Thank You

www.CalRecycle.ca.gov