California-Baja California Regional Workshop on Solid Waste and Waste Tire Management

California’s Solid Waste Management and Recycling Programs

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Statewide Recycling Rate

Year

Percent Recycling


Statewide Recycling Rate

75% Goal

44%
Disposal Stream - 2014

- Paper, 17.4%
- Glass, 2.5%
- Metal, 3.1%
- Plastic, 10.4%
- Electronics, 0.9%
- Food, 18.1%
- Other Organic, 19.3%
- Lumber, 11.9%
- Mixed Residue, 3.0%
- Special Waste, 5.0%
- Inerts and Other, 8.0%
- HHW, 0.4%
- Special Waste, 5.0%
- Mixed Residue, 3.0%
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- Glass, 2.5%
- Metal, 3.1%
- Plastic, 10.4%
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CalRecycle – Key Statutes

• Assembly Bill 341 – 75% reduction in disposal of solid waste by 2020
• Senate Bill 1383 - 75% reduction in disposal of organics by 2025
• Beverage Container Recycling Program
• Electronic Waste Recycling Act
• Used Oil Recycling Act
• Extended Producer Responsibility laws– carpet, mattress, paint
• Tire Recycling Act
Beverage Containers
Beverage Containers

• 1986 – Beverage Container Recycling & Litter Reduction Act
  • Assembly Bill 2020
• Covers most beverage containers packaged in aluminum, glass, plastic, and bi-metal
  • Notable exceptions: milk, wine, distilled spirits
• Redemption value deposit/return
  • Consumers pay redemption value, get deposit back upon return
  • Funds support processors, collection programs, incentive payments, grants, other activities
• Recycling rate in 2016 = 80%
Beverage Containers – Management

Recycling Center
Reverse Vending Machine

Curbside

Material Recovery Facility
Organics

Green materials

Food materials

Manure

Wood waste

Biosolids
Organics

• Major statutes
  • Assembly Bill 1826 (2014) – mandatory commercial organics recycling
  • Senate Bill 1383 (2016) – reduce amount of organics being disposed by 75% by 2025
    • Significant new authority for CalRecycle; new rulemaking in 2018

• Financing:
  • No direct financing except some grants for infrastructure, from State’s climate change investment fund
  • General support for staffing from landfill tipping fee

• Current management
  • 18-20 million tons disposed per year; 5 million tons of food waste
  • 6 million tons recycled per year
Organics – Management

- To meet goals, need 50-100 new or expanded facilities
- Estimated capital cost = $2-3 billion
Covered Electronic Waste (CEW)
Covered Electronic Waste (CEW)

- All electronic devices are considered hazardous in California
  - If managed for Recycling, Department of Toxic Substances Control regulates them as Universal Waste
- 2003 – Electronic Waste Recycling Act
  - Unique model compared to rest of U.S. and Europe
  - CalRecycle system provides payments for management of “covered” devices (most video display devices are covered: televisions, monitors, laptops, tablets)
  - Electronic products without screens are not included in payment system
- Financing
  - Consumer pays fee on new Covered Electronic Devices
  - Fees are used to make payments to cover costs of collection and recycling
- Over 2 billion pounds through the CalRecycle payment system since 2005
E-Waste Management
Used Oil
Used Oil

• 1991 -- Oil Recycling Enhancement Act
• Used oil is considered hazardous in California
  • Department of Toxic Substances Control regulates physical management
  • CalRecycle pays recyclers for proper management of used oil
• Financing
  • Manufacturers pay fee for every gallon of lubricating oil sold in California
  • Fees are used to make payments to re-refiners, collection centers, cities/counties
• 3316 certified collection centers
• 71% recycling rate in 2015 (lubricating and industrial oil)
Used Oil - Management
Construction & Demolition Debris
Construction & Demolition Debris

- No single statute
- Regulations governing permitting of C&D facilities
- California Building Codes include requirements on recycling of C&D from certain construction sites
- Financing -- no formal financing
- How much is recycled??
Construction & Demolition Debris – Management
Product Stewardship Programs
Product Stewardship Programs

• Three product stewardship or extended producer responsibility (EPR) statutes
  • Among first EPR programs in U.S.
  • 2010 – Carpets
  • 2010 – Paint
  • 2013 - Mattresses

• Financing
  • Each program has “stewardship organization” made up of manufacturers
  • Each stewardship organization finances programs with fee on sale of product in California, and then spends revenues according to an approved plan

• Success to date – mixed results
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Questions?
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