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SB 1383

Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions

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Organic Waste Reduction Goals (HSC 39730.6)

- A 50-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020.
- A 75-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025.
- 20 percent of edible food recovery by 2025.

SEC. 3. Section 39730.6 is added to the Health and Safety Code, to read:

39730.6. (a) Consistent with Section 39730.5, methane emissions reduction goals shall include the following targets to reduce the landfill disposal of organics:

(1) A 50-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020.

(2) A 75-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025.

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Regulatory Authority to Achieve Goals (PRC 42652.5)

42652.5. (a) The department, in consultation with the State Air Resources Board, shall adopt regulations to achieve the organic waste reduction goals for 2020 and 2025 established in Section 39730.6 of the Health and Safety Code.

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What are organics?

Green materials

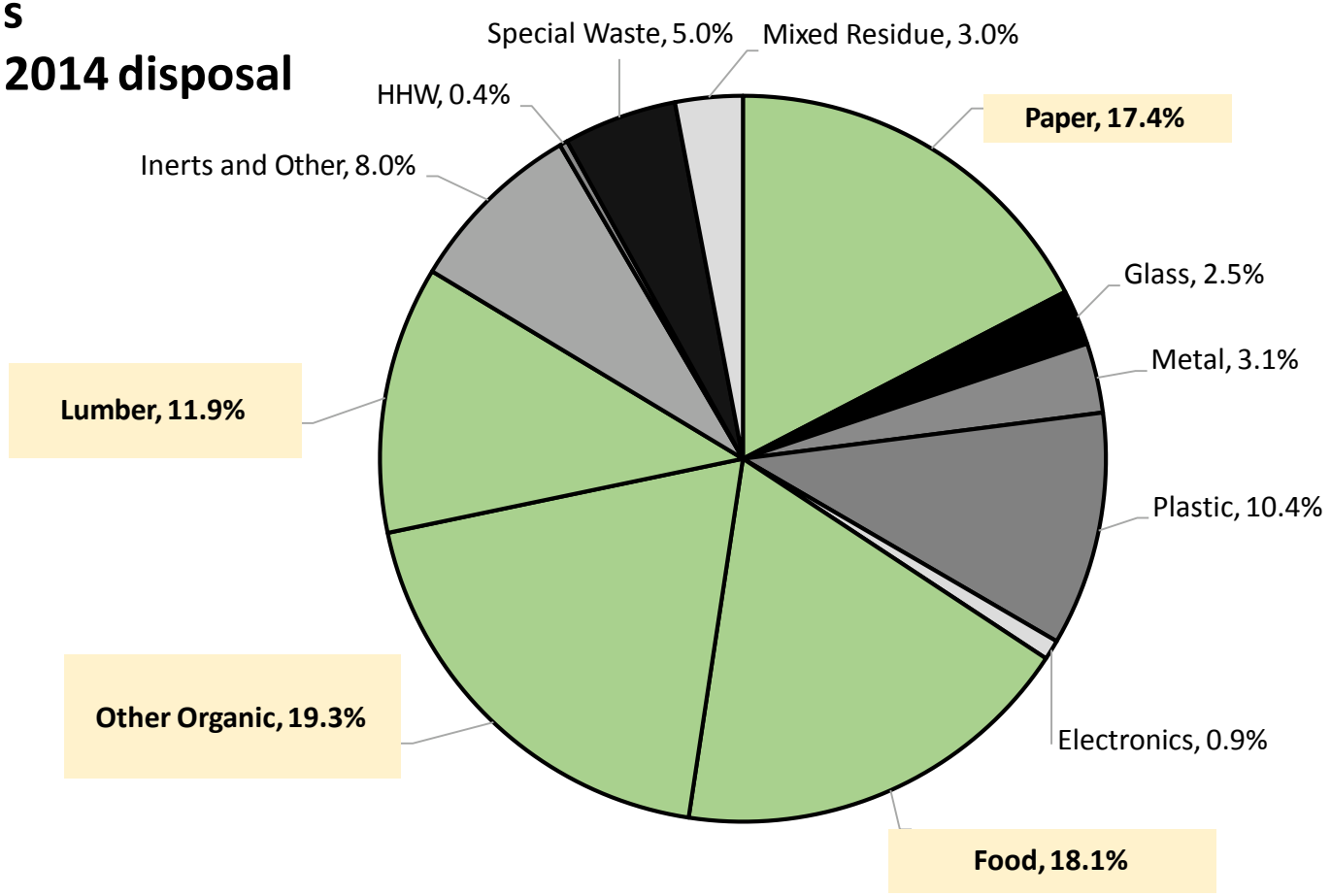
Manure

Food materials

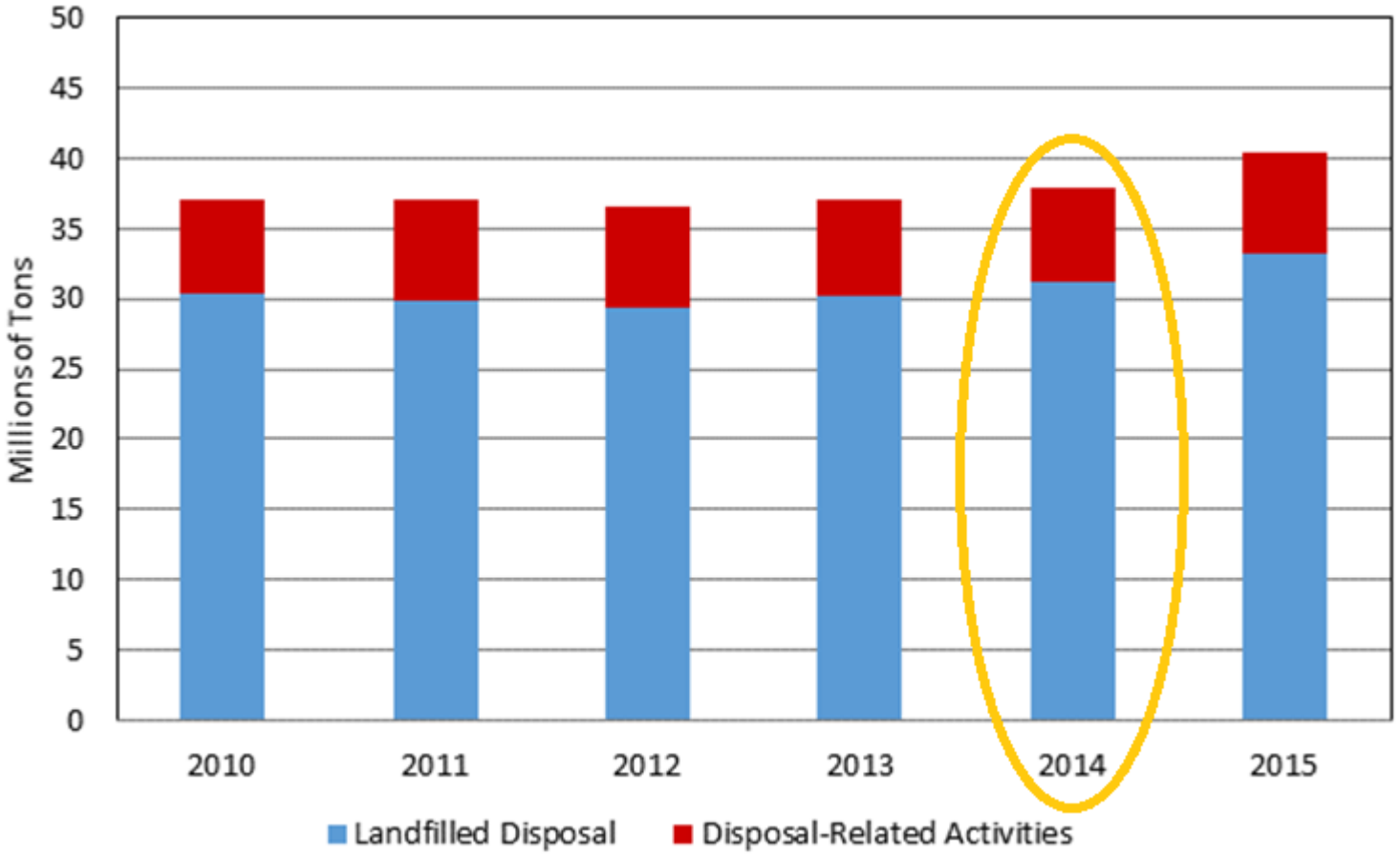
Wood waste

2014 Disposal Stream

- **Organic Waste**
- **+/- 20 Million tons**
- **+/- 66% of the of 2014 disposal**



2014
Landfill Disposal = 31M Tons



Organic Waste
≈ 2/3rds of Disposal

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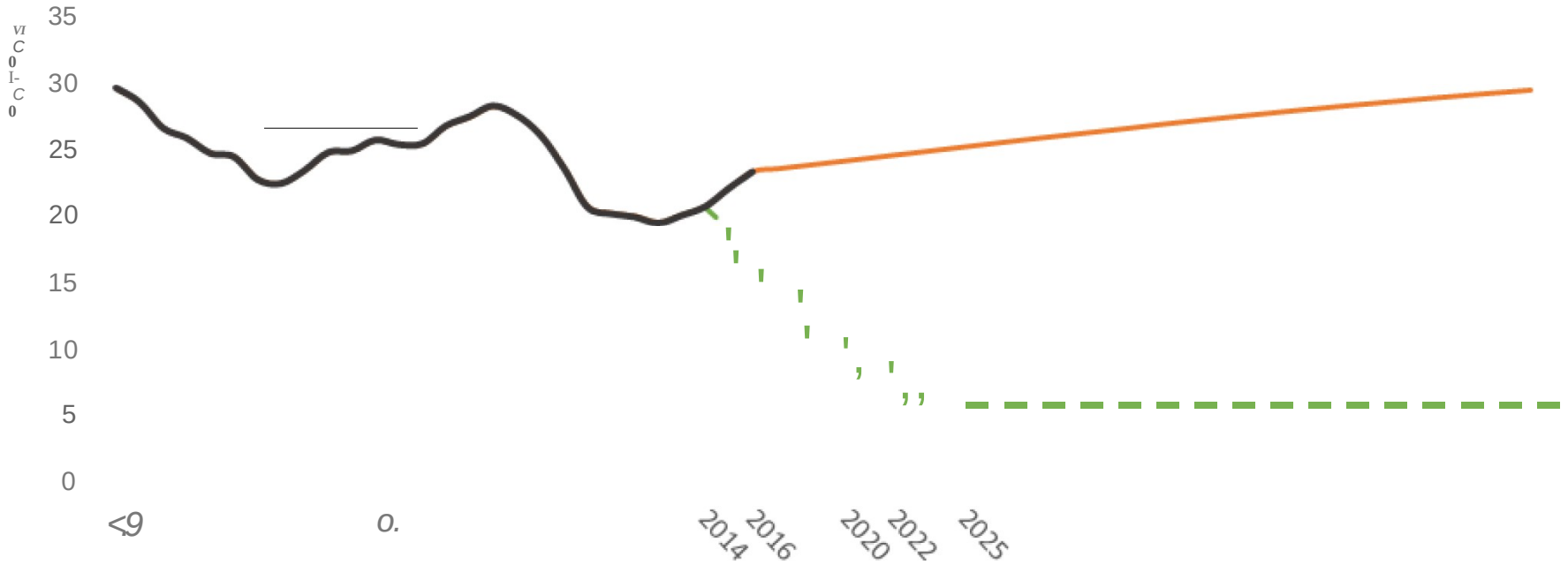
Allowable Disposal of Organics Statewide



- Projected Organics in Disposal (Business As Usual)
- Maximum Allowable Tons of Organics Disposal to Meet 2020 (50%) and 2025 (75%) Mandates
- Historical Organics in Disposal

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CalRecycle and ARB Timeline and Regulations

- 2017 Informal rulemaking workshops
- 2018 Formal rulemaking and adoption of regulations
- **2020 50 percent reduction in organics disposal (≥10M tons)**
- 2020 Analysis on waste sector progress
- 2022 Regulations take effect
- **2025 75 percent reduction in organics disposal (≥5M tons)**

Infrastructure Cost Needs

- Composting → $8-15 M for 100,000 TPY facility
- Anaerobic digestion → $3-$50 M for 100,000 TPY
  - Upgrade WWTP facility ➔ $1.3-$35 M
- Total infrastructure investment of at least $2-3 billion

Organics Infrastructure: Facility Needs

- # of facilities to handle additional 10 million tons
  - At 500 TPD ➔ 180,000 TPY ➔ ~50 expansions or new
  - At 300 TPD ➔ 100,000 TPY ➔ ~ 100 expansions or new
  - At 1000 TPD ➔ 365,000 TPY ➔ ~ 30 expansions or new
- 30-100 expansions or new facilities needed

SB 1383
Organic Waste and Renewable Natural Gas

- Recycling organic waste via in-vessel digestion
  - 20 – 30 billion SCF of renewable natural gas
  - 17-18 million diesel gallon equivalents (DGE)
- Market expansion is needed
  - Collection of sufficient and clean feedstock
  - Market demand for RNG

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Tracking Projects and Facilities

CalRecycle gathers project info from:

- ✓ Direct communication with stakeholders, facilities
- ✓ Coordination within CalRecycle and other agencies
- ✓ State databases
- ✓ Waste characterization studies
- ✓ News/publications/press releases
- ✓ *Future reporting* re: AB876, SB1383

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Tracking Projects and Facilities

CalRecycle uses facility info and data to:

- Inform policy, regulations, funding
- Quantify benefits
- Identify barriers
- Coordinate interagency efforts to address needs/barriers
- Share select info with other agencies and stakeholders

Current Data/Info Gaps

- ❑ Current RNG utilization by fleets
- ❑ Biomethane utilization by utilities
- ❑ Electricity and pipeline interconnect case studies

Major Barriers

- Difficulty securing long-term feedstock contracts
- Cost and time required for interconnect
- End-use markets for energy; difficulty securing long-term offtake agreements

Thank You!

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