## SB 1383

Reducing Short-Lived Climate Pollutants in California

- Hank Brady SB 1383 Manager
- Michelle Slocombe, Environmental Scientist.
- Martine Boswell, Environmental Scientist

An Overview of SB 1383's Organic Waste Reduction Requirements









### CALIFORNIA'S CLIMATE STRATEGY

#### **CALIFORNIA CLIMATE STRATEGY**

An Integrated Plan for Addressing Climate Change



#### VISION

Reducing Greenhouse Gas Emissions to 40% Below 1990 Levels by 2030

**GOALS** 



50% reduction in petroleum use in vehicles



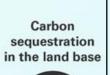
50% renewable electricity







Double energy efficiency savings at existing buildings













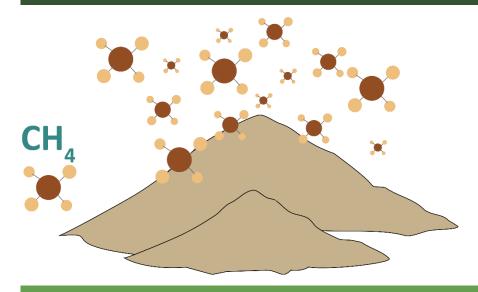
Reduce Organic Waste Disposal

Recover Edible Food from Waste Stream

Reduce Methane Emissions

#### CLIMATE CHANGE NEGATIVELY IMPACTS CALIFORNIA

# LANDFILLED ORGANICS EMIT METHANE GAS



Methane is Significantly More Powerful than C02

# METHANE GAS CONTRIBUTES TO CLIMATE CHANGE IN CALIFORNIA



Increase in Many Health Risks





Increase in Wildfire and Coastal Erosion



#### FIGHTING FOOD INSECURITY IN CALIFORNIA





1 in 8 People in California are Food Insecure

1 in 5 Children in California are Food Insecure

California Throws Away 5.6 Million Tons of Food Waste Every Year!



### SB 1383 REQUIREMENTS

2020

50 Percent Reduction in Landfilled Organic Waste (11.5 Million Tons Allowed Organic Waste Disposal)

2025

75 Percent Reduction in Landfilled Organic Waste (5.7 Million Tons Allowed Organic Waste Disposal)

2025

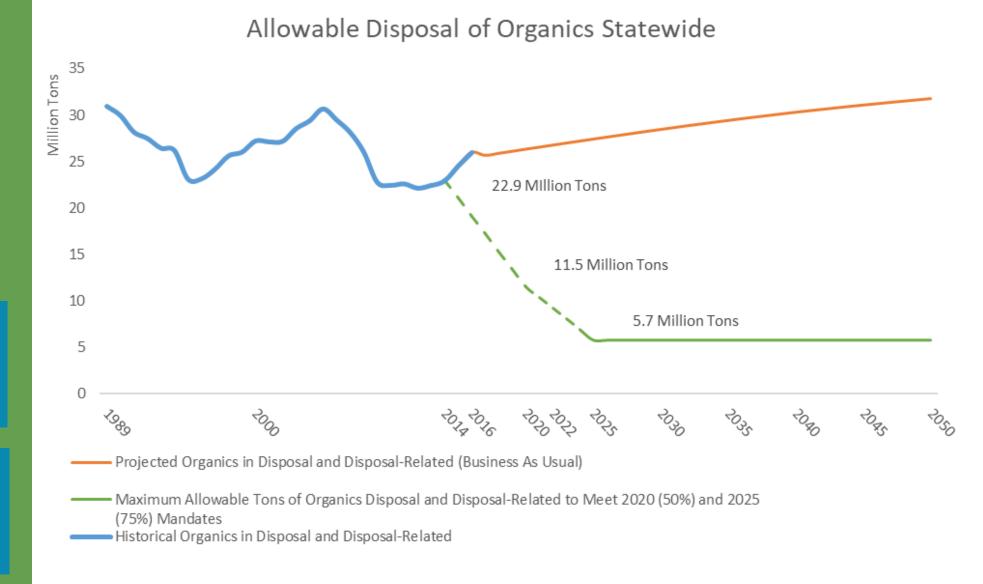
20 Percent Increase in Recovery of Currently Disposed Edible Food



# ORGANIC WASTE REDUCTION TARGETS

By 2020 10 Million TPY

2025 → 20+ Million TPY





## SB 1383 KEY IMPLEMENTATION DATES

Jan. 1, 2022 Jan. 1, 2025 Jan. 1, 2020 **Regulations and 50 Percent Reduction in** 75% Reduction in 2017-2018 **CalRecycle Enforcement Organics Disposal Organic Waste Disposal** Informal Begin Rulemaking 20% Increase in **Edible Food Recovery** July 1, 2020 Jan. 1, 2024 2014 2018-2019 **CalRecycle and ARB Analysis Regulations Require Locals Organic Waste Formal** to Take Enforcement on Market Conditions **Disposal Base** Rulemaking Year



## ORGANIC WASTE RECYCLING INFRASTRUCTURE







SB 1383 Requires 50-100

New or Expanded

Organic Waste Recycling Facilities



## SETTING GREENHOUSE GAS EMISSIONS REDUCTION **TARGETS** WORKSI

## AB 32 (2006)

Required California to Cut Greenhouse Gas Emissions to 1990 Levels by 2020

In 2016, California reached this goal early!



#### SB 1383: An Integral Part of California's Climate **STRATEGY**















OFFICE OF THE GOVERNOR

#### Governor Brown Signs Nation's Toughest Super Pollutant Restrictions into Law

Published: Sep 19, 2016





LONG BEACH - Governor Edmund G. Brown Jr. today signed SB 1383 by Senator Ricardo Lara (D-Bell Gardens), which establishes the nation's toughest restrictions on destructive super pollutants including black carbon, fluorinated gases and methane, If followed worldwide, these acts would help cut the projected rate of global warming in half by 2050.

"Cutting black carbon and other super pollutants is the critical next step in our program to combat climate change," said Governor Brown at a signing ceremony near a Long Beach playground bordered by oil refinery smokestacks. "This bill curbs these dangerous

pollutants and thereby protects public health and slows climate change,"

"Cutting black carbon and other super pollutants is <u>the</u> eer pollutants (also known as short-lived climate pollutants) and promotes renewable gas by requiring a methane and hydrofluorocarbon from 2013 levels by 2030, Sources of these

<u>critical next step</u> in our program to combat climate change" in California and reflected in the health of our children and future generations to come."

September 19, 2016

Many strategies will be necessary to redirect manure and organic waste toward more productive uses that reduce emissions and stimulate our

economy...

yele to explore all means, including appropriate pricing tools, to generate the development of the infrastructure and workforce needed to reach the super pollutant

GOVERNOR EDMUND G. BROWN JR. . SACRAMENTO, CALIFORNIA 95814 . (916) 445-2841





### LEGAL REQUIREMENTS FOR THE REGULATIONS

#### Senate Bill No. 1383

#### CHAPTER 395

An act to add Sections 39730.5, 39730.6, 39730.7, and 39730.8 to the Health and Safety Code, and to add Chapter 13.1 (commencing with Section 42652) to Part 3 of Division 30 of the Public Resources Code, relating to methane emissions.

[Approved by Governor September 19, 2016. Filed with Secretary of State September 19, 2016.]

LEGISLATIVE COUNSEL'S DIGEST

SB 1383, Lara. Short-lived climate pollutants: methane emissions: dairy and livestock: organic waste: landfills.

(1) The California Global Warming Solutions Act of 2006 designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases. The state board is required to approve a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions level in 1990 to be achieved by 2020. The state board is also required to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants, as defined, in the state.

This bill would require the state board, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40%, hydrofluorocarbon gases by 40%, and anthropogenic black carbon by 50% below 2013 levels by 2030, as specified. The bill also would establish specified targets for reducing organic waste in landfills.

This bill would require the state board, in consultation with the Department of Food and Agriculture, to adopt regulations to reduce methane emissions from livestock manure management operations and dairy manure management operations, as specified. The bill would require the state board to take certain actions prior to adopting those regulations. This bill would require the regulations to take effect on or after January 1, 2024, if the state board, in consultation with the department, makes certain determinations.

This bill would require the state board, the Public Utilities Commission, and the State Energy Resources Conservation and Development Commission to undertake various actions related to reducing short-lived climate pollutants in the state. The bill would require state agencies to consider and, as appropriate, adopt policies and incentives to significantly increase the sustainable production and use of renewable gas.

(2) The Čalifornia Integrated Waste Management Act of 1989, which is administered by the Department of Resources Recycling and Recovery, establishes an integrated waste management program that requires each What Does the Law Require?

What Does the Law Permit?



What Does the Law Prohibit?

93



**AB 939** 

**All Materials** 

**Focus on Organics** 

**Statewide Targets** 

**Jurisdiction Targets** 

Recycling Linked to Landfill Diversion

**Targets subject to Per Capita Growth** 

Jurisdictions Plan and Select Programs

Quadrennial State
Evaluation of Jurisdiction
Programmatic Effort to
Meet Their Targets [Good
Faith Effort]

Reduce Landfill Disposal

**Significant Behavior Change Required** 

**Reporting to State** 

Allows for Fee
Assessment
to Cover Cost

Recycling linked to Landfill AND Methane Reductions

Targets locked to 2014 baseline

**SB 1383** 

Statewide Minimum Program/Requirements

State, Jurisdiction, and LEA Enforcement of State Minimum Standards

Edible Food Recovery



## LEGAL REQUIREMENTS FOR THE REGULATIONS

**Legal Highlights** 

Regulations May Include Penalties and May Require Jurisdictions to Impose Requirements

Regulations Shall Include Requirements to Recover at Least 20% of Currently Disposed Edible Food

**Develop Requirements Consistent with SLCP Strategy and 2017 Integrated Energy Policy Report** 

**Support Cost Effective and Environmentally Beneficial Uses of Bio-methane Derived from Solid Waste Facilities** 



# WHO IS IMPACTED BY THIS?









## Collection and Processing of Organic Waste

#### Today's Overview

**Monitoring, Outreach and Enforcement** 

**Recycled Product Procurement** 

**Edible Food Recovery** 



#### KEY ELEMENTS OF REGULATIONS

COLLECTION
AND
PROCESSING
OF ORGANIC
WASTE

Each Jurisdiction (Or Their Designee) Must Provide An Organic Waste Collection Service to all Generators

Regulations Allow a Menu of Service Options, Each Option is Subject to Minimum Standards

#### Source Separated Systems (3 + Bins)

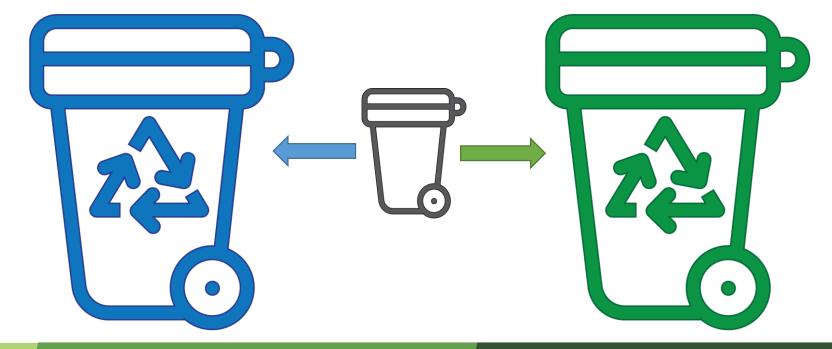
COLLECTION
AND
PROCESSING
OF ORGANIC
WASTE



#### Partially Separated (2 bin systems)

At least one container must go to a high diversion facility

COLLECTION
AND
PROCESSING
OF ORGANIC
WASTE





#### **Unsegregated Systems**

COLLECTION
AND
PROCESSING
OF ORGANIC
WASTE



#### **Contamination Monitoring**

Monitoring, Outreach and Enforcement **Quarterly Route Reviews** 

**Respond to Contamination Notices From Facilities** 

Notices to Generators.









#### **Education and Outreach**





Monitoring, Outreach and Enforcement Provide Annual Education to all Generators (Commercial and Residential)

**Annually Confirm Commercial Businesses Compliance** 

2022-2024 Education and Noticing for Noncompliance

2024 Enforcement For Noncompliance



#### **Enforcement**

Monitoring, Education and Outreach Jurisdiction Progressive Enforcement and Compliance Structure

**Notices of Violation** 

**Penalty Structure** 



#### **Jurisdiction Progressive Enforcement and Compliance Structure**

#### **Notices of Violation**

#### MONITORING, EDUCATION AND OUTREACH

**Progressive Penalty Structure** 

#### Table 1

Requirement	Description of Violation	1st Violation	2 <sup>nd</sup> Violation	3 <sup>rd</sup> and subsequent Violation
Property and Business Owner Responsibility Requirement Section 30.10	Property owner or business owner fails to provide or arrange for organic waste collection services consistent with Article 3 of this chapter for employees, contractors, tenants, and	Level 1	Level 2	Level 4



# SB 1383

Reducing Short-Lived Climate Pollutants in California

An Overview of SB 1383's Organic Waste Reduction Requirements









## KEY ELEMENTS OF REGULATIONS

RECYCLED PRODUCT PROCUREMENT

**Recovered Organic Waste Products Recycled Content Paper Record-Keeping** 



#### RECOVERED ORGANIC WASTE PRODUCTS

RECYCLED PRODUCT PROCUREMENT

Jurisdiction Procurement Target

Compost and/or Renewable Natural Gas (RNG) transportation fuel.



#### RECOVERED ORGANIC WASTE PRODUCTS

#### **Compost**



#### **RNG Transportation Fuel**



#### **Conversion Factors:**

1 ton organic waste = 19 DGE RNG and 0.58 tons compost



#### RECYCLED CONTENT PAPER

RECYCLED PRODUCT PROCUREMENT

75% of paper purchases must contain 30% PCRC

**Paper Products & Printing and Writing Paper** 

Must be "recyclable"

**Vendors must certify PCRC and recyclability claims** 



# SB 1383

Reducing Short-Lived Climate Pollutants in California

An Overview of SB 1383's Organic Waste Reduction Requirements









#### KEY ELEMENTS OF REGULATIONS

EDIBLE FOOD RECOVERY

**Jurisdiction Edible Food Recovery Program** 

**Commercial Edible Food Generators** 

**Food Recovery Organizations and Services** 



#### **Jurisdiction Edible Food Recovery Program**

EDIBLE FOOD RECOVERY

**Educate commercial edible food generators** 

Increase access to food recovery organizations

Monitor commercial edible food generator compliance

➤ A jurisdiction may fund the actions taken to comply with this section through franchise fees, local assessments or other funding mechanisms.



#### **EDIBLE FOOD GENERATOR REQUIREMENTS**

Edible food generators shall arrange for their edible food that would otherwise be disposed to be diverted for human consumption.

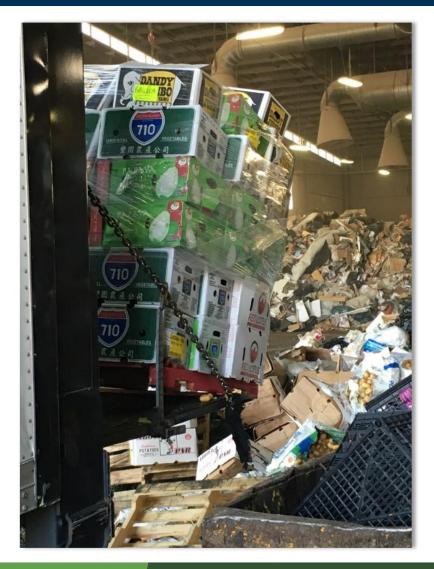
- ➤ Contracting with food recovery organizations or food recovery services that will collect their edible food.
- ➤ Self-hauling edible food to a food recovery organization.





## TIER ONE (STARTS 2022)

- Supermarket
- Grocery store with a total facility size equal to or greater than 7,500 square feet
- Food service distributor
- Wholesale food market





## TIER Two (Starts 2024)

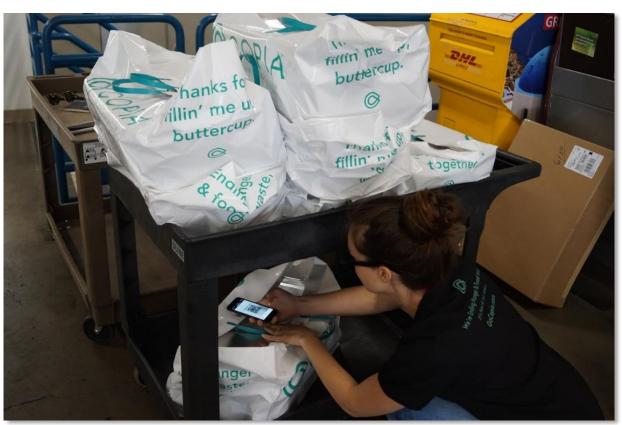
- **Restaurant** with 250 or more seats, or a total facility size equal to or greater than 5,000 square feet
- **Hotel** with an onsite food facility and 200 or more rooms
- Health facility with an onsite food facility and 100 or more beds
- Large venue
- Large event
- State agency with a cafeteria with 250 or more seats or total cafeteria facility size equal to or greater than 5,000 square feet
- Local Education Agency with an onsite food facility





# RECORDKEEPING REQUIREMENTS FOR FOOD RECOVERY ORGANIZATIONS AND SERVICES







# SB 1383

Reducing Short-Lived Climate Pollutants in California

**QUESTIONS** 

An Overview of SB 1383's Organic Waste Reduction Requirements







