

# Public Workshops to Discuss Revised Proposed Short-Lived Climate Pollutant Reduction Strategy

Fresno: December 12, 2016  
Diamond Bar: December 15, 2016  
Sacramento: December 16, 2016

California Environmental Protection Agency  
 **Air Resources Board**

## Today's Presentation

- Most significant changes made to SLCP Strategy
- Next steps for SLCP Strategy
- Email address for sending comments during workshop
  - Diamond Bar: [SLCP@arb.ca.gov](mailto:SLCP@arb.ca.gov)
  - Sacramento: [auditorium@calepa.ca.gov](mailto:auditorium@calepa.ca.gov)

## Development of the SLCP Strategy

- Required by SB 605 (Lara, 2014)
- Concept Paper released May 2015
- Draft Strategy released Sept 2015
- Proposed Strategy released April 2016
- SB 1383 (Lara, 2016), signed in September 2016, necessitated modifications to Strategy
- Revised Proposed Strategy and Revised Draft EA released November 2016

3

## SB 1383

- Requires implementation of the SLCP Strategy by January 1, 2018
- Codifies 2030 SLCP emission reduction targets in earlier versions of Strategy
- Focuses on anthropogenic sources of black carbon
- Provides specific direction on development of methane reductions from:
  - Dairy and livestock operations
  - Landfills (via diversion of organic materials)
- Encourages State policies for production and use of renewable natural gas

4

## Achieving SLCP Emission Reduction Targets for 2030

	Inventory (2013)	Forecast (2030)	Targets (2030)	Percent Reduction from 2013 Levels
Black Carbon (Anthropogenic)	38	26	19	50%
Methane	118	117	71	40%
HFCs	40	65	24	40%

*Emission Levels in MMTCO<sub>2</sub>e (using 20 year GWPs)*

5

## Black Carbon Measures

- Incentive programs to replace wood burning stoves
  - 2016 2017 fiscal year budget (AB 1613, SB 859) includes \$5 million of C&T proceeds for woodstove replacements
  - ARB to administer program
  - Existing local air district programs
- Additional black carbon reductions from other planning activities to meet air quality and GHG goals
  - State Implementation Plans
  - 2030 Target Scoping Plan Update
- No recommended measures are included for forestry

6

## Dairy and Livestock Sector Manure Methane Reductions

- Support near-term actions to reduce manure methane through:
  - Financial incentives
  - Collaborations to overcome barriers
  - Development of policies to encourage RNG production
  - Other market support
- ARB in partnership with CDFA and other relevant agencies, and stakeholders, to form dairy workgroup(s) in 2017
- 2016-2017 fiscal year budget includes \$50 million in C&T proceeds to reduce manure methane from dairy and livestock sector

7

## Dairy and Livestock Sector Manure Methane Reductions

- By July 1, 2020, ARB and CDFA evaluate the methane reduction progress by dairy and livestock sector and may modify emission reduction goals
- ARB in partnership with CDFA to develop regulation to reduce manure methane emissions from the dairy and livestock sector for implementation on or after January 1, 2024
- Progress report must be posted to website before regulations are adopted; must discuss proposed regulation's
  - Technological and economic feasible
  - Cost effectiveness
  - Potential to minimize / mitigate leakage
- Progress report must also evaluate incentive based programs

8

## Dairy and Livestock Sector Manure Methane Reductions

- By January 1, 2018:
  - ARB, in consultation with CEC and CPUC, establishes energy infrastructure development and procurement policies to support dairy biomethane projects
  - CPUC, in consultation with ARB and CDFA, directs utilities to develop at least 5 dairy biomethane pipeline injection projects
  - ARB develops a pilot financial mechanism to reduce economic uncertainty with environmental credits for dairy related projects
  - ARB provides guidance on the impact of potential regulations on LCFS credits and Cap and Trade compliance offsets

9

## Dairies — Enteric Emissions

- State agencies to:
  - Explore voluntary, incentive-based approaches to reducing enteric fermentation emissions
  - Support and monitor research on methods to reduce these emissions
  - Evaluate regulatory action when cost-effective and scientifically-proven methods to reducing these emissions are available

10

## Landfills

- CalRecycle in partnership with ARB to develop regulations by 2018 to divert organics from landfills:
  - By 2020, organic waste entering landfills must be reduced by 50 percent from 2014 levels
  - By 2025, organic waste entering landfills must be reduced by 75 percent from 2014 levels
  - 20 percent of edible foods destined for organic waste stream must be redirected to food banks and other similar programs by 2025
  - Regulations to be implemented on or after January 1, 2022

11

## Landfills

- By July 1, 2020, CalRecycle and ARB to conduct analysis of progress towards meeting the 2020 and 2025 organic waste reduction goals:
  - Status of new organics infrastructure development
  - Status of efforts to reduce regulatory barriers to siting organics recycling facilities
  - Effectiveness of policies to facilitate the permitting of organics recycling infrastructure
  - Status of markets for products generated by organics recycling facilities

12

## Support for Renewable Natural Gas

- CEC, in consultation with CPUC and ARB, to develop recommendations for the development and use of renewable gas as part of 2017 Integrated Energy Policy Report
- Based on recommendations, CPUC, in consultation with CEC and ARB, to develop additional policies to support development and use of in-state renewable gas

13

## HFC Measures

- Global phasedown of HFC production agreed upon in Kigali, Rwanda, at the October 2016 Montreal Protocol Meeting of the Parties
- ARB to assess impact of agreement on future California HFC emission reductions
- Pending results, additional measures may be proposed to meet 40 percent reduction target
  - Incentive program for early adoption of low-GWP refrigeration
  - Restrictions on sales of new very-high GWP refrigerants
  - Prohibition of use of high-GWP refrigerants in new stationary equipment

14

## Economic Analysis Revisions

- Changes made in response to public comments and SB 1383
- Smaller organic waste diversion costs due to SB 1383 target
- Manure methane reductions:
  - New manure methane reduction scenarios evaluated
  - Considered effects of dairy size on sector-wide costs
  - General updates to specific cost assumptions

15

## Environmental Analysis

- Revised Draft Environmental Analysis (EA) completed
  - Potentially significant impacts found for some resource areas
- Released for public comment
  - November 26, 2016 – January 17, 2017
- ARB staff will prepare written responses to comments received on Revised Draft EA

16



## Next Steps

- Comment period ends for revised Proposed Strategy and Revised Draft EA on January 17, 2017
- Present final SLCP Strategy, written responses, and Final EA for Board consideration in March 2017
- Final SLCP Strategy to be integrated into upcoming 2030 Target Scoping Plan Update

17

## Where to Send Comments

- Submit public comments on revised proposed SLCP Strategy and Revised Draft EA to:

<https://www.arb.ca.gov/lispub/comm/bclist.php>

18

## More Information

- SLCP Webpage:

<https://www.arb.ca.gov/cc/shortlived/shortlived.htm>

- Contacts:

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