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

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
  - Sacramento: 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

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
Achieving SLCP Emission Reduction Targets for 2030

<table>
<thead>
<tr>
<th></th>
<th>Inventory (2013)</th>
<th>Forecast (2030)</th>
<th>Targets (2030)</th>
<th>Percent Reduction from 2013 Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Carbon (Anthropogenic)</td>
<td>38</td>
<td>26</td>
<td>19</td>
<td>50%</td>
</tr>
<tr>
<td>Methane</td>
<td>118</td>
<td>117</td>
<td>71</td>
<td>40%</td>
</tr>
<tr>
<td>HFCs</td>
<td>40</td>
<td>65</td>
<td>24</td>
<td>40%</td>
</tr>
</tbody>
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Emission Levels in MMTCO$_2$e (using 20 year GWPs)

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
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

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
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

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
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

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
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

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
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

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
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

Where to Send Comments

• Summit public comments on revised proposed SLCP Strategy and Revised Draft EA to:
  
  https://www.arb.ca.gov/lispub/comm/bclist.php
More Information

• SLCP Webpage:
  https://www.arb.ca.gov/cc/shortlived/shortlived.htm

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