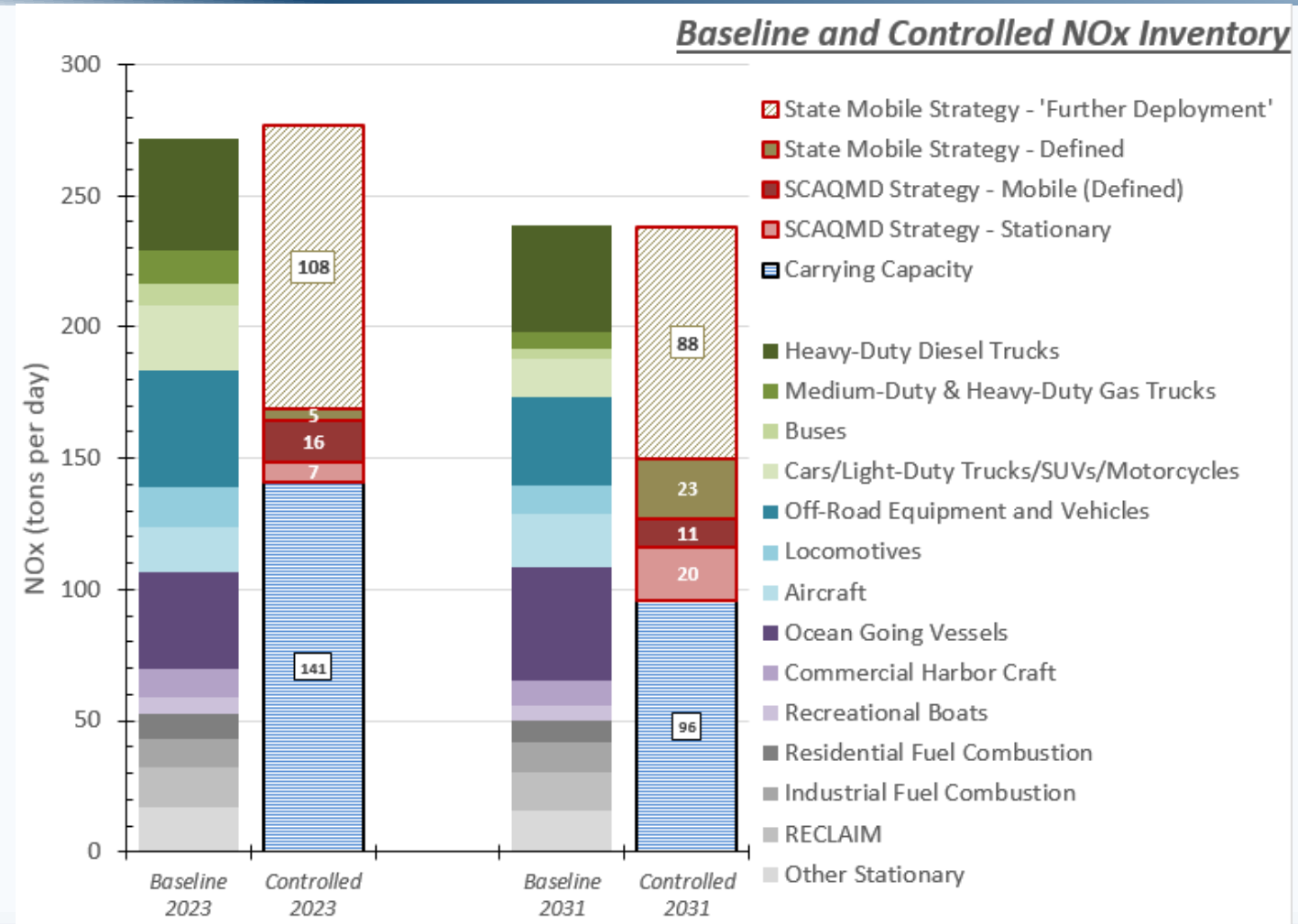
Implementation of 2016 AQMP – Stationary Source Incentive Guidelines

Working Group # 1

December 13, 2017

2016 AQMP - Overall Control Strategy (NOx)



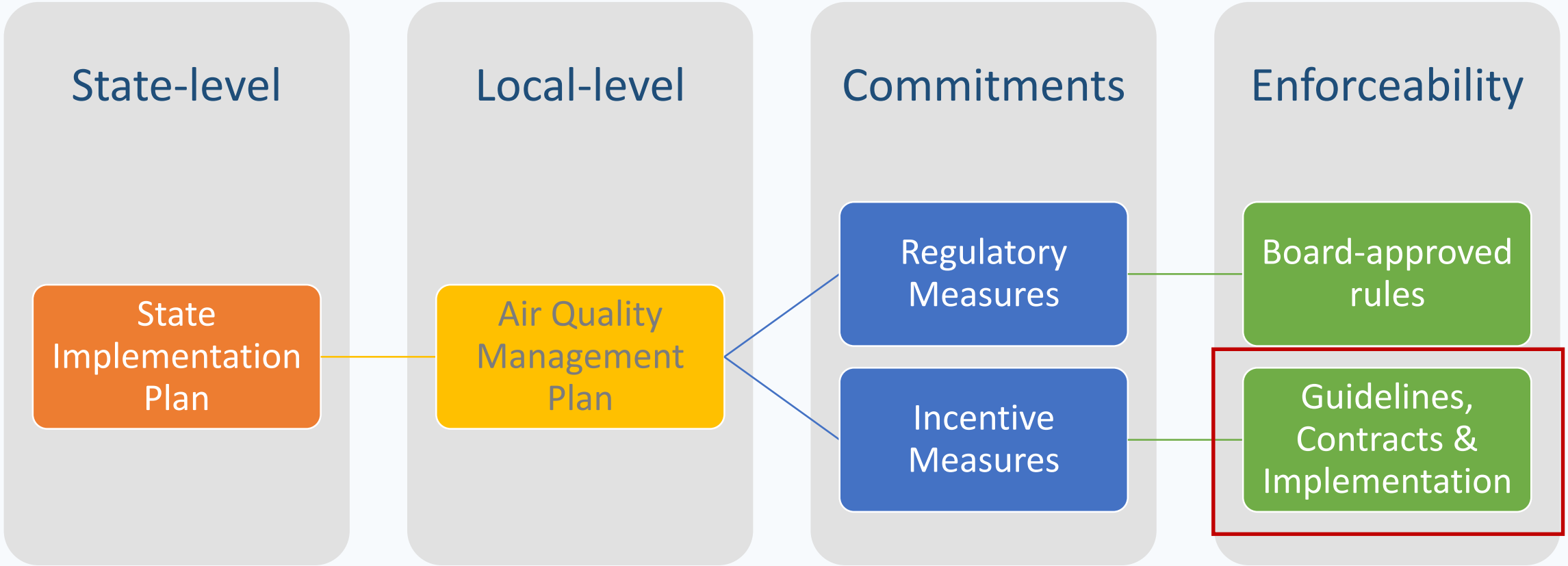
SCAQMD Mobile Source Measures with Incentives Components (Carl Moyer, Prop 1B, SOON, Extended Exchange Program, etc.)

- 15.9 tpd by 2023
- 10.8 tpd by 2031

Stationary Source Measures with Incentives Components (CMB-01, CMB-02, ECC-03, etc.)

- 4.8 tpd by 2023
- 10.9 tpd by 2031

2016 AQMP Commitments



2016 AQMP Measures with Incentive Components

Stationary Source Control Measures

- CMB-01 (Transition to Zero and Near-Zero Emissions Technologies for Stationary Sources)
- CMB-02 (Emission Reductions from Replacement with Zero and Near-Zero NOx Appliances in Commercial and Residential Applications)
- ECC-03 (Additional Enhancements in Reducing Existing Residential Building Energy Use)

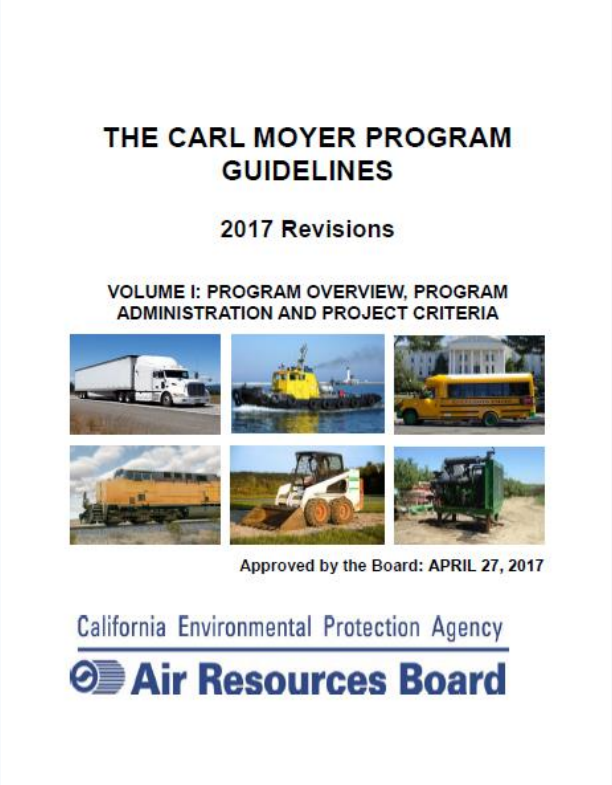
Mobile Source Control Measures

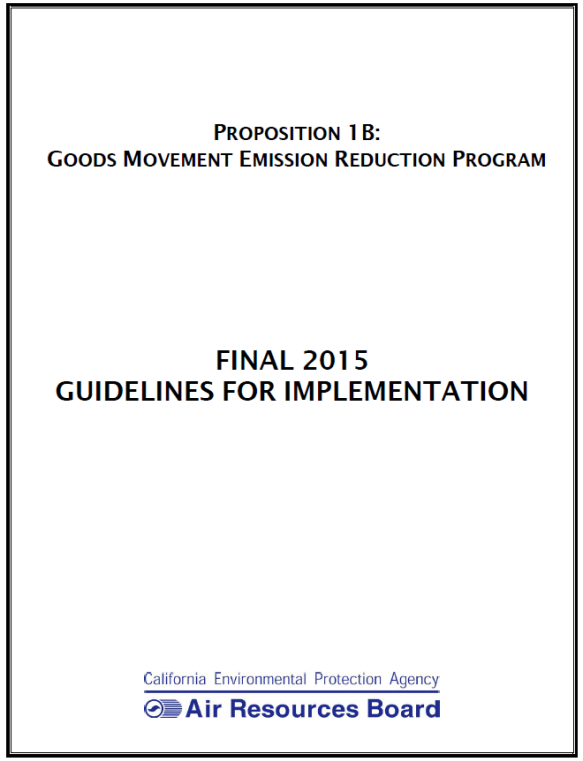
- On-road (passenger vehicles, heavy duty trucks, etc.)
- Off-road (construction, lawn and garden, locomotive, etc.)

Needs $1 Billion per year over ~14 years

Existing Incentive Guidelines

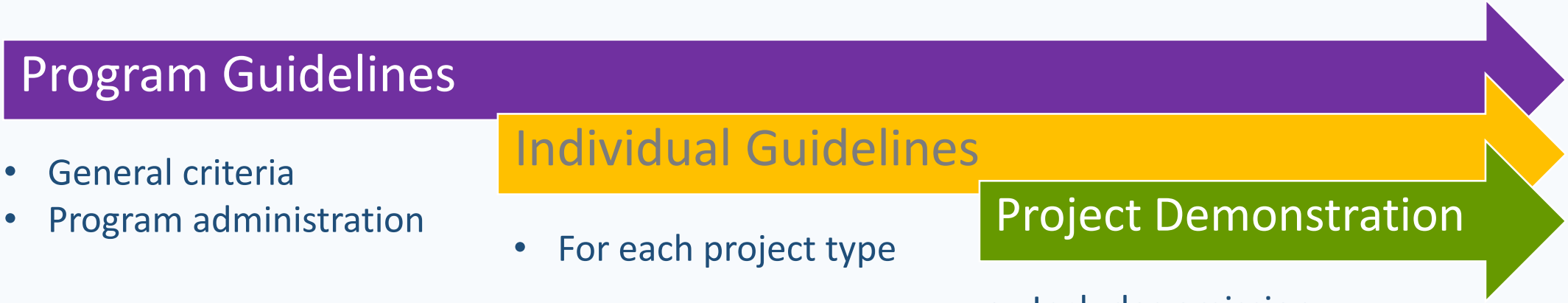
- Mobile on-road or off-road sources
  - Carl Moyer or Prop 1B
  - CARB as the funding agency
- Stationary source
  - No existing guidelines
    - Guidelines needed to get SIP credits for incentive projects





Stationary Source Incentive Guidelines Overview

Applicability: Stationary source incentive projects with emission reductions that could be counted towards the SIP



- General criteria
- Program administration

- For each project type

- Includes emission reductions & enforceable commitment

Proposed Incentive Guidelines

- Purpose
  - Provide general criteria & administrative procedures for SIP-creditable projects
- Approach
  - Follow Carl Moyer Guideline framework, modified as needed
- Project Types
  A. Replacements
  B. Retrofits
  C. Efficiencies (e.g., energy, logistics, etc.)
  D. Others

Proposed Incentive Program Guidelines – General Criteria

1. Contract Term / Project Life

- Project life - the period in which surplus emission reductions are delivered

	Carl Moyer	Proposed SCAQMD Stationary
Project life	• Minimum 3 years	• Follow Carl Moyer & span project life to future attainment date (such as 2023 for 1997 8-hr ozone attainment)

2. Project Co-Funding

- Co-funding will improve cost effectiveness
- Incentives must not exceed the total project costs
- Ensure no double counting of emission reductions for SIP credit
  - Could be challenging in some cases

Proposed Incentive Program Guidelines – General Criteria (cont.)

3. Cost-effectiveness

Type	Carl Moyer	Proposed SCAQMD Stationary
Conventional / lower emission reduction project	$30,000 per ton, PM weighted by a factor of 20	Cost effectiveness thresholds* TBD Could vary by project type considering co-benefits
Zero emission technology (or cleanest certified)	$100,000 per ton (beyond conventional reductions)	
School Bus	$276,230 per ton	*SCAQMD to provide protocols for cost effectiveness & surplus calculations (with generic examples)

Proposed Incentive Program Guidelines – General Criteria (cont.)

4. Emission Reductions to be Surplus, Quantifiable, Permanent and Enforceable

- Surplus
  - Not be required by any federal, State or local rule/regulation/legal mandates/air quality program/consent decree for the course of project life;
  - Emission reductions are “surplus” only for the remaining useful life of equipment being replaced.
- Quantifiable
  - Reliably measured or determined, as well as replicated;
  - A validated database, project life, usage, emission reduction equations, and emission factor.
- Permanent
  - Require the old equipment be destroyed and the destruction is verified to ensure baseline equipment is not reused;
- Enforceable
  - Independently verifiable and practically enforceable consistent with U.S. EPA guidance;
  - Program violations are defined;
  - Those liable can be identified;
  - District or U.S. EPA may apply penalties and secure corrective action where applicable; and
  - Citizens have access to all emissions-related information obtained from participating sources.

Proposed Incentive Program Guidelines – General Criteria (cont.)

5. Emission Reduction Technologies Certification

	Carl Moyer	Proposed SCAQMD Stationary
Technology Verification	• Certified or verified by ARB • Certified or verified to Federal Standards as applicable	• Certified or verified by SCAQMD or State Agency • Certified or verified to Federal Standards as applicable • Case-by-case analysis approval

Proposed Incentive Program Guidelines – Administration

1. Procedures for Solicitation of Projects and Applications
2. Application Review (Criteria: TBD)
3. Administrative Cost Recovery
4. Annual Reporting
   Similar to Carl Moyer with potential modifications
5. Audit of Projects
   Similar to Carl Moyer
   - 5% of active projects or 20 active projects (whichever is less)
6. Nonperforming Projects
   Similar to Carl Moyer
   - Monitor nonperformance
   - Nonperformance procedures
   - Withholding of Funds

Next Step

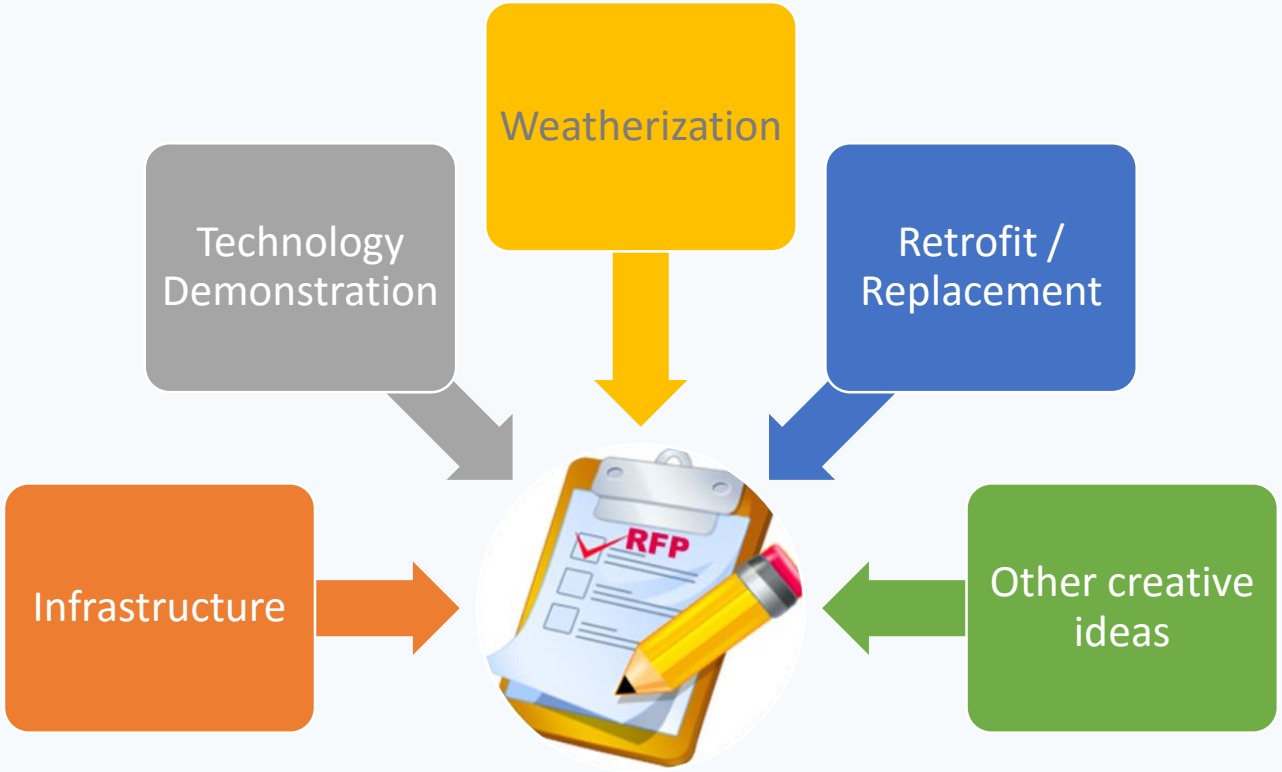
- Working Group to submit comments by January 12, 2018
- Next Working Group scheduled in late January (tentative)
- Develop draft incentive program guidelines
  - Provide cost effectiveness calculation protocols

Parallel Effort: Request for Proposal

- Pilot program for emission reduction projects that include stationary sources
- Existing Special Revenue Funds
  - 11 Mitigation Project Funds
  - 3 Settlement Project Funds
  - 1 Incentive Program Fund
- Proposing broad-based RFP for incentive projects that provide NOx, PM, and VOC emission reductions
- To be considered by the Governing Board on Jan 5, 2018

Total ~$61 Million

RFP Potential Projects



Emission reductions generated through incentive projects may be credited towards SIP (AQMP) commitments.

Potential Incentive Projects for Stationary Sources

CMB-01

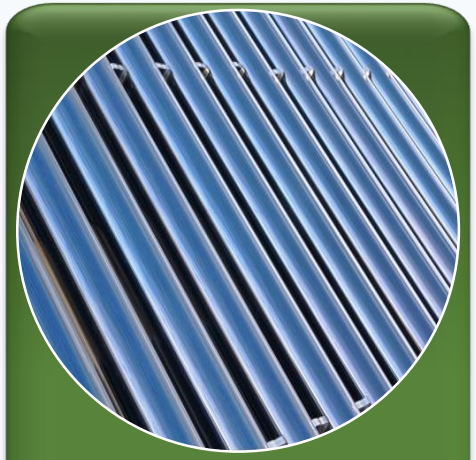
Replace older equipment with zero and near-zero emission technologies

CMB-02

Replace older commercial and residential appliances with zero and near-zero emission appliances

CMB-04

Replace older restaurant burners and residential cooking appliances with zero and near-zero emission technologies



ECC-03

Improve residential and commercial building energy efficiency

BCM-01

Replace older commercial under-fired char broilers with add-on control equipment

Potential Incentive Projects for Mobile Sources

School Bus

Lawn & Garden Equipment

Locomotive

Heavy-duty Truck

Award Evaluation Criteria

Project Evaluation Criteria	
✓ Aids in achievement of SCAQMD's regional air quality goals (e.g., emission reduction, new technology, and infrastructure projects)	35
✓ Experience and expertise to complete the project	20
✓ Effective use of funds (e.g., cost effectiveness and/ or funding partnerships)	15
✓ Co-benefits (e.g., control/mitigation of toxics or GHGs)	10
✓ EJ Area benefits	10
✓ Job creation within the jurisdiction of the SCAQMD	5
✓ Community/government support	5
Total	100

Tentative Schedule for the RFP