New or Redevelopment Facility-Based Mobile Source Measures



South Coast AQMD

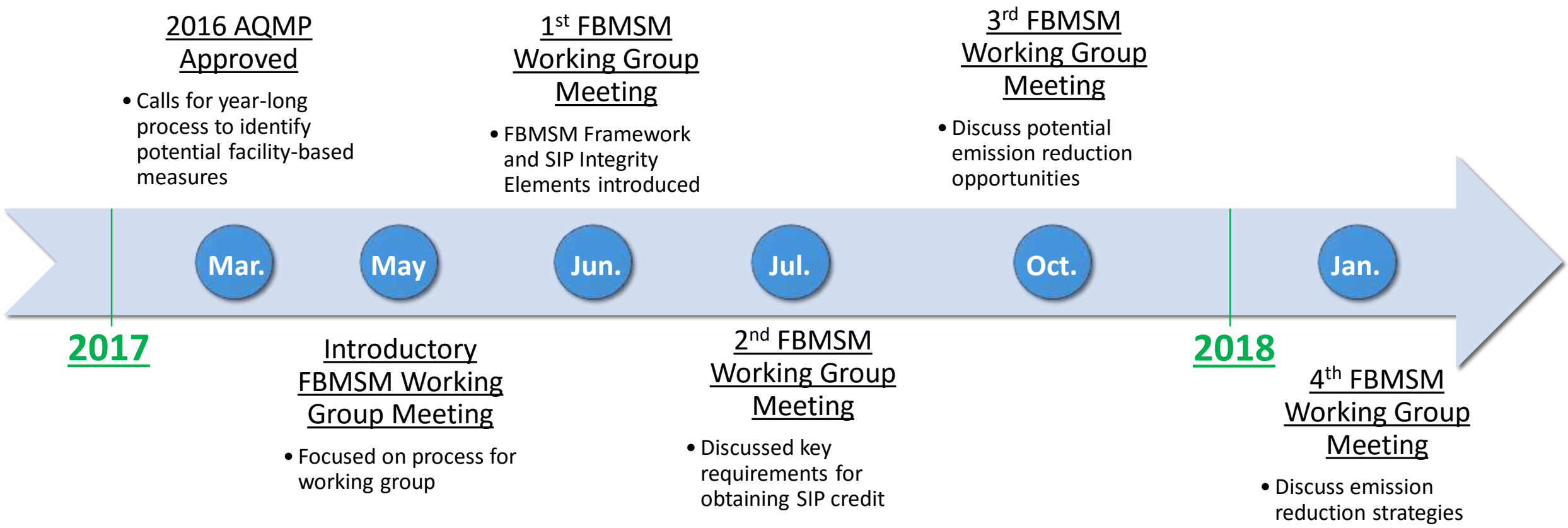
4th Working Group Meeting
January 16, 2018

FBMSM

Agenda

- Background
- New Development and Redevelopment Emissions Inventory
- Emission Reduction Opportunities
- Emission Reduction Strategies
- Next Steps

Background – Previous FBMSM Activities

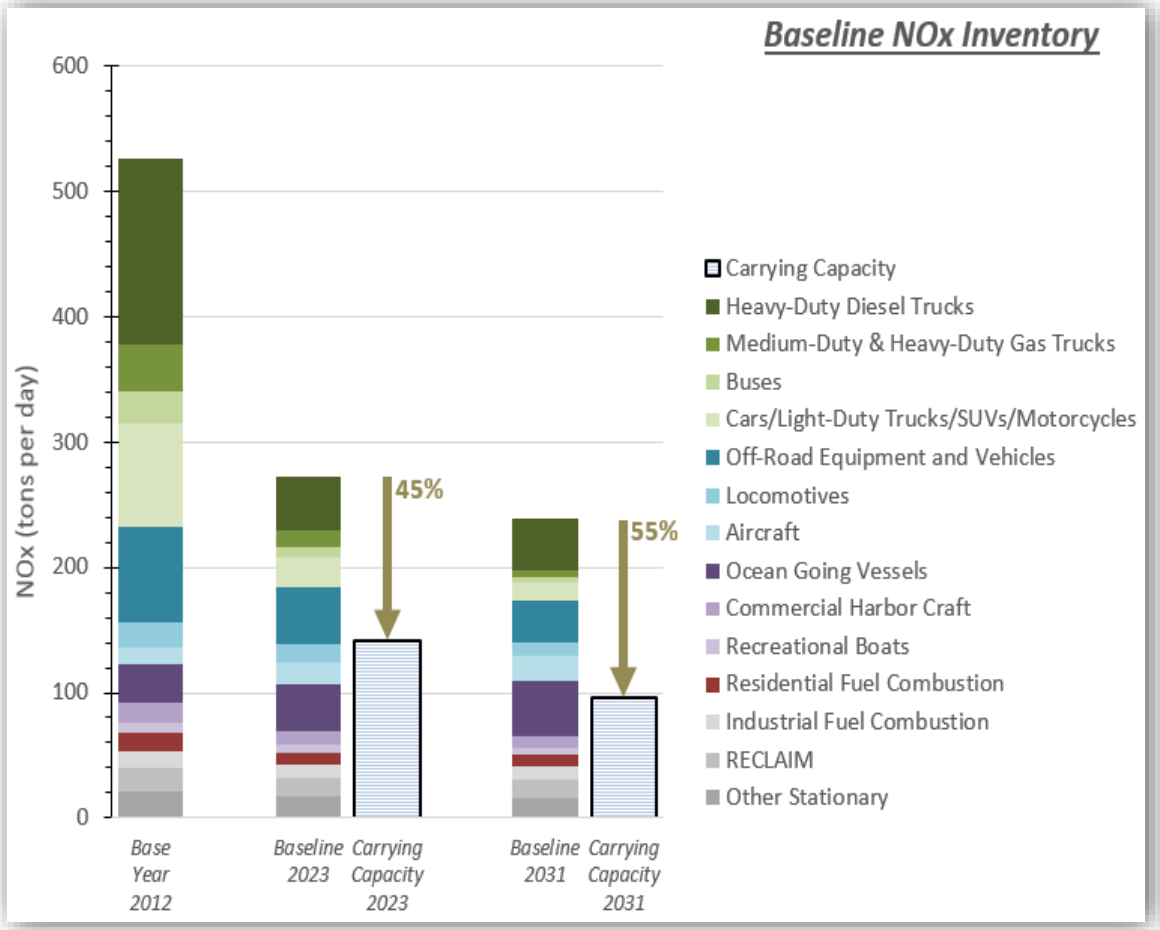


Background

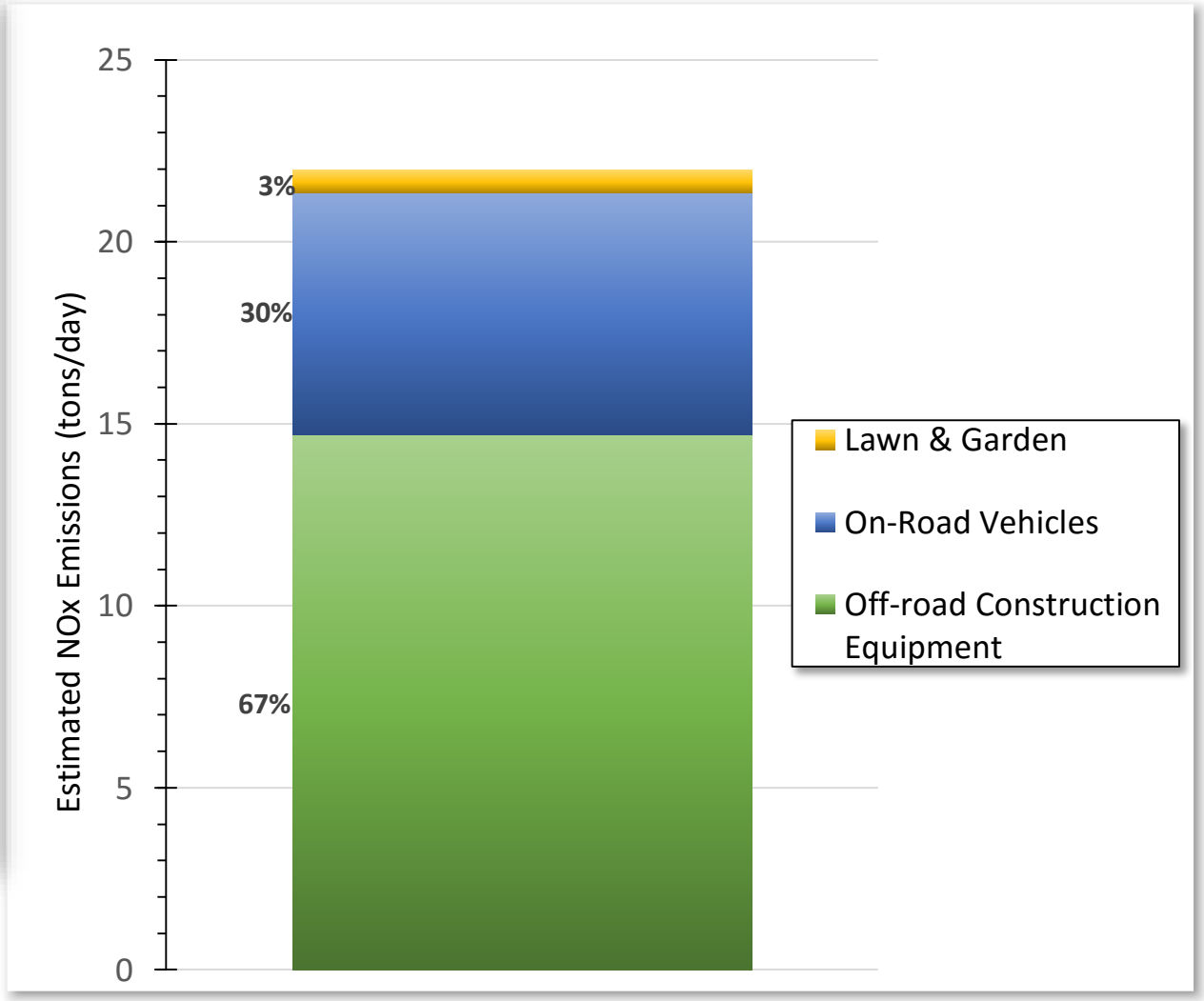
Key mobile emission sources attributed to new and redevelopment projects:

- On-road Mobile Sources
  - Passenger Cars and Trucks, Delivery Vehicles, etc.
- Off-road Construction Equipment
  - Tractors, Loaders, Backhoes, Scrappers, etc.

Total South Coast SIP NOx Inventory



Estimated 2023 NOx Emissions from New Development and Redevelopment Projects



Opportunities for Emission Reductions

- Many promising emission reduction strategies are already included in some projects
  - Examples: Climate Action Plans, Clean Construction Policies, CEQA mitigation, net-zero development, etc.
  - It is difficult to assess the potential for prospective SIP credit for many of these strategies, or they are already included in the baseline inventory
- Additional strategies are needed to meet attainment goals
- Proposed measures on following slides take into account previous work in FBMSM working groups and SCAQMD staff experience with reviewing CEQA documents for new projects
  - Excludes regulatory measures for on-road mobile sources associated with this source since they are mostly covered by CARB

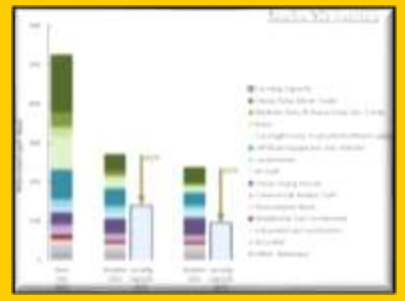
Key Considerations for Emission Reduction Mechanisms

Regulation

- Must be feasible based on cost, availability of technology, etc.
- Should avoid significant administrative or cost burdens
- Should not hinder available incentives

MOU

- Includes mutually agreeable emission reduction target
- Procedure to make-up shortfalls required in case target not met to be SIP creditable



Inventory Adjustment

- Requires demonstrated history of behavior (e.g., VMT reductions)
- Records of behavior must be available to be SIP creditable

Facilitating Measures

- Example: Infrastructure projects (e.g., vehicle charging, bike lanes, etc.)
- Generally not SIP creditable but critical to facilitate emission reductions

Incentives

- Availability of technology
- Funding commitment
- Must demonstrate that incentivized activity meets 'integrity elements' to be SIP creditable

Potential Emission Reduction Strategies-On-Road Mobile Sources

Already Proposed Emission Reduction Strategies

- Regulation
- Incentives ✓
- Facilitating ✓ Measures
- MOU
- Inventory ✓ Adjustment

Potential Additional Emission Reduction Strategies

- Regulation
- Incentives ✓
- Facilitating ✓ Measures
- MOU
- Inventory Adjustment

Facilitating Measures

- SB 350 Transportation Electrification activities for charging infrastructure
- Local government Climate Action Plans

Incentives

- New funding for ZE passenger vehicles
- CEQA mitigation funds

Inventory Adjustment

- Rideshare programs beyond existing regulatory requirements
- Land use strategies to reduce VMT

Incentives

- Potential new CEQA air quality mitigation fund

Facilitating Measures

- Continue to work with CEC/PUC and utilities to expand charging infrastructure
- Support local activities that result in net zero NOx emissions

Potential Emission Reduction Strategies-Lawn & Garden

Already Proposed Emission Reduction Strategies

- Regulation ✓
- Incentives ✓
- Facilitating Measures
- MOU
- Inventory Adjustment

Potential Additional Emission Reduction Strategies

- Regulation
- Incentives
- Facilitating ✓ Measures
- MOU
- Inventory ✓ Adjustment

Regulation

- Proposed amendments to CARB Small Off-Road Emissions regulation

Incentives

- AQMP Control Measure MOB-11, Extended Lawn Mower Exchange Program

Facilitating Measures

- Update SCAQMD CEQA handbook and include guidance encouraging net-zero developments and ZE lawn and garden equipment

Inventory Adjustment

- Work with local jurisdictions to encourage greater adoption of ZE lawn and garden equipment

Potential Emission Reduction Strategies-Off-Road Construction Equipment

Already Proposed Emission Reduction Strategies

- Regulation ✓
- Incentives ✓
- Facilitating Measures
- MOU
- Inventory ✓ Adjustment

Potential Additional Emission Reduction Strategies

- Regulation ✓
- Incentives ✓
- Facilitating Measures
- MOU
- Inventory Adjustment

Incentives

- New funding for off-road equipment, including extension of SOON provision for construction equipment

Inventory Adjustment

- Clean construction policies
- Worksite emission reduction strategies, such as new grading assistance and fleet optimization software

Regulation

- Proposed CARB Low Emission Diesel regulation (e.g., fuels)

Incentives

- Potential new CEQA air quality fund for projects to contribute to for regional NOx mitigation

Regulation

- Potential new Fleet Certification + ISR for construction equipment (next slide)

ISR Concept – Two Components

Fleet Component

- Voluntary certification program
- Construction fleet could voluntarily certify that their construction activity in the air basin is XX% cleaner than state requirements
- Construction fleets that don't certify are assumed to only comply with state-wide requirements (e.g., Tier 4i by 2023)
- Voluntary certification program would begin sometime between 2020-2023

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Project Component

- Indirect Source Rule
- Projects would be required to ensure that construction fleets serving their development are YY% cleaner than the state-wide requirements on average
- Projects must record on-site construction equipment and the fleet it belongs to
- Project average based on fleet certification levels
- Full implementation would begin by 2023

Expected Benefits of ISR Concept

- Voluntary for construction fleets
- Participating construction fleets would be eligible for incentive funding
- Fleet certification program would not interfere with other off-road equipment regulations
- Fleet certification program would be available for other programs (e.g., CEQA and other FBMSM)
- Projects would not be required to track construction emission level compliance
  - Example: Construction fleets assigned to project could vary in emission levels (i.e., any % above state requirement) as long as the average of all fleets serving the project meet the ISR requirement
- Project ISR requirement could be supported by substantiating studies (e.g., cost-effectiveness, availability of incentives, feasibility, air quality needs, etc.), and could be modified as conditions change
- ISR could include mitigation fee or other options

Next Steps

- Report to Mobile Source Committee on February 16, 2018
- Present proposed emission reduction strategies to the Governing Board on March 2, 2018 and seek further direction

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Discussion Period

- Question 1: What are some operational considerations for fleets with the proposed fleet certification program?
- Question 2: Are there incentives besides directly paying to offset the higher cost of cleaner equipment that should be considered for construction equipment?
- Question 3: What additional or replacement strategies should SCAQMD consider and why would they be better?