Regional Workshop and CEQA Scoping Meeting

South Coast Air Quality Management District

May 25, 2022

South Coast AQMD Jurisdiction
# Regional Workshop and CEQA Scoping Meetings

<table>
<thead>
<tr>
<th>Meeting Information</th>
<th>Meeting 1: Entire South Coast AQMD Jurisdiction</th>
<th>Meeting 2: Entire South Coast AQMD Jurisdiction</th>
<th>Meeting 3: Coachella Valley Meeting*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Wednesday, May 25, 2022</td>
<td>Wednesday, May 25, 2022</td>
<td>Thursday, May 26, 2022</td>
</tr>
<tr>
<td>Time</td>
<td>1:00 p.m.</td>
<td>6:00 p.m.</td>
<td>6:00 p.m.</td>
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*Will cover entire South Coast AQMD jurisdiction and additionally highlight Coachella Valley*
Local air pollution control agency
- Largest of the 35 local air agencies in CA and in the U.S.
  - 10,743 square miles
  - 17 million residents

Key Responsibilities
- Regulate emissions from stationary sources
- Develop and implement plans to meet air quality standards
- Permit and inspect 28,400 affected businesses
- Administer over $200 million of incentive funding annually
## 2020 Top 10 Causes of Death

<table>
<thead>
<tr>
<th>Cause</th>
<th>World Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischaemic Heart Disease</td>
<td>6,755,954</td>
</tr>
<tr>
<td>Stroke</td>
<td>5,463,915</td>
</tr>
<tr>
<td>Lower Respiratory Infections</td>
<td>3,050,943</td>
</tr>
<tr>
<td>Chronic Obstructive Pulmonary (Lung) Disease</td>
<td>2,986,236</td>
</tr>
<tr>
<td>Diarrhoeal Diseases</td>
<td>2,647,915</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>1,737,922</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>1,378,852</td>
</tr>
<tr>
<td>Preterm Birth Complications</td>
<td>1,358,066</td>
</tr>
<tr>
<td>Trachea, Bronchus, Lung Cancers</td>
<td>1,205,688</td>
</tr>
<tr>
<td>Road Injury</td>
<td>1,167,008</td>
</tr>
</tbody>
</table>

Air pollution is the largest cause of unavoidable premature death.

Air pollution affects the diseases causing death.

Citation: [https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death](https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates/ghe-leading-causes-of-death)
What is Ozone

Ozone forms in the atmosphere in the presence of sunlight

Modified from https://www.pca.state.mn.us/air/ozone
Health Impacts of Ozone

- Ozone precursor pollutants also increase PM2.5 pollution
- PM2.5 can cause premature death in addition to other serious health effects
Our Challenge

Our region has historically suffered from some of the worst air quality in the United States

- Worst ozone (smog) in the country
- Among the worst fine particulate matter (PM$_{2.5}$)

We have made significant progress, but still suffer from poor air quality

- Worst ozone (smog) in the country
- Among the worst fine particulate matter (PM$_{2.5}$)
U.S. EPA sets air quality standards for pollutants considered harmful to public health and the environment

The standards are reviewed approximately every 5 years

The latest standard was for 8-hour ozone standard set in 2015

Areas do not meet the standard must develop a plan to meet the standard by specific timeline

If the standard is not met by the due date, federal sanctions and draconian federal regulations kick in

* NAAQS cover ozone, particulate matter, lead, carbon monoxide, sulfur dioxide, and nitrogen dioxide
Air Quality Management Plans (AQMPs)

- AQMP is a blueprint for how the region will meet national ambient air quality standards
- AQMP is also required under California Health & Safety Code since 1979
- South Coast Air Basin is classified as “extreme” nonattainment area for the 2015 8-hour ozone standard
- 2022 AQMP addresses control strategy to meet the ozone standard by 2037*

*Other air quality standards are not part of this plan
2022 AQMP Process

Public Process/Feedback

South Coast AQMD Control Measure

SCAG Regional Transportation Plan

AQMP

U.S. EPA

CARB Control Measures
Overall air quality has dramatically improved.

High ozone in recent years were due to adverse meteorology. Continued emission reductions will improve ozone.
Key Pollutants for Ozone Attainment

- NOx reduction is key to attain ozone standards
- No path to meet ozone standards through VOC reductions without substantial NOx reductions
- VOC reductions
  - Can reduce PM and can also reduce ozone at high NOx levels
  - Much less effective for reducing ozone at the low NOx levels needed

![Basin Total NOx Emissions](Draft 2022 AQMP Summer Planning)

- 2018: 347 tons per day
- 2037: 220 tons per day

![Basin Total VOC Emissions](Draft 2022 AQMP Summer Planning)

- 2018: 417 tons per day
- 2037: 389 tons per day

*Carrying Capacity is maximum allowable NOx emissions to attain a standard*
Sources of NOx Emissions in 2018 vs. 2037

This ozone standard requires shifting focus beyond on-road and more to off-road sources.

These are Business-As-Usual (baseline) inventory, which reflects implementation of adopted regulations and programs.

<table>
<thead>
<tr>
<th>Year</th>
<th>On-Road</th>
<th>Off-Road</th>
<th>Area</th>
<th>Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018 NOx</td>
<td>46%</td>
<td>7%</td>
<td>7%</td>
<td>40%</td>
</tr>
<tr>
<td>2037 NOx</td>
<td>54%</td>
<td>10%</td>
<td>8%</td>
<td>28%</td>
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</table>

347 tons per day vs. 220 tons per day.
NOx Reductions Needed for Attainment

Basin Total NOx Emissions in Tons Per Day

Total Reductions from 2018 to Attainment

Carrying Capacity is approximately 63 tons per day

- Heavy-Duty Diesel Trucks
- Medium-Duty & Heavy-Duty Gas Trucks
- Buses
- Cars/Light-Duty Trucks/SUVs/Motorcycles
- Off-Road Equipment and Vehicles
- Locomotives
- Aircraft
- Ocean Going Vessels
- Commercial Harbor Craft
- Recreational Boats
- Residential Fuel Combustion
- Industrial/Commercial Fuel Combustion
- Larger Industrial Facilities
- Other Stationary

2018 Carrying Capacity is approximately 63 tons per day

2037 Basin Total NOx Emissions in Tons Per Day
NOx Emissions and Reduction Goals

2016 AQMP emissions inventory for 2012 to 2031, and Draft 2022 AQMP emissions inventory for 2037.
Is Attaining the Ozone Standard in 15 Years Possible?

- We have already made incredible progress
- Will be difficult
- Cannot be achieved alone
- Will be expensive with existing technologies
- Will require reliance on emerging advanced technologies
Innovative Approaches Needed

Traditional approach relies on additional tailpipe/exhaust stack controls, new engines technology, or fuel improvements tailored to individual use cases.

These traditional approaches on already highly controlled sources cannot achieve additional ≈71% reduction and must be bypassed wherever possible.
Key Considerations on a Zero Emissions Approach

- What does the pathway look like through time?

- Which fuels for which applications?

- How can this be made most affordable?
  - Ensures adoption at scale, and available equitably
## Overview of Draft South Coast AQMD Stationary and Area Source Control Strategy

<table>
<thead>
<tr>
<th>NOx Control Measures</th>
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<tbody>
<tr>
<td>Co-Benefits from Greenhouse Gas Reductions</td>
</tr>
<tr>
<td>Limited Strategic VOC Measures</td>
</tr>
<tr>
<td>Other Measures</td>
</tr>
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20
Draft Stationary and Area Sources
NOx Control Measures

Residential Combustion
- R-CMB-01: Residential Water Heating
- R-CMB-02: Residential Space Heating
- R-CMB-03: Residential Cooking
- R-CMB-04: Residential Other Combustion Sources

Commercial Combustion
- C-CMB-01: Commercial Water Heating
- C-CMB-02: Commercial Space Heating
- C-CMB-03: Commercial Cooking
- C-CMB-04: Small Internal Combustion Engines (Non-permitted)
- C-CMB-05: Small Commercial Miscellaneous Combustion Equipment (Non-permitted)

Large Combustion (e.g., Industrial)
- L-CMB-01: NOx RECLAIM (formerly CMB-05)
- L-CMB-02: Large Boilers and Process Heaters
- L-CMB-03: Large Internal Combustion Engines (Prime Engines)
- L-CMB-04: Large Internal Combustion Engines (Emergency Standby Engines)
- L-CMB-05: Large Turbines
- L-CMB-06: Electric Generating Facilities
- L-CMB-07: Petroleum Refineries
- L-CMB-08: Landfills and POTWs
- L-CMB-09: Incinerators
- L-CMB-10: Miscellaneous Combustion
### State and Local Policies for Residential and Commercial Buildings

<table>
<thead>
<tr>
<th><strong>California Energy Commission (CEC) Title 24 (2022 Code)</strong></th>
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<tbody>
<tr>
<td>• Electric ready measures from 2023 onward for single family, multi-family, and commercial new buildings</td>
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<table>
<thead>
<tr>
<th><strong>California Air Resource Board (CARB) Draft 2022 SIP Strategy</strong></th>
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<tr>
<td>• Proposed Zero-Emission Standard for Space and Water Heaters at the point of sale in 2030</td>
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<table>
<thead>
<tr>
<th><strong>Bay Area AQMD</strong></th>
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<tbody>
<tr>
<td>• Rulemaking for zero NOx emissions standard for space and water heating units with a proposed compliance date of 2027 to 2031</td>
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<thead>
<tr>
<th><strong>City of Berkeley</strong></th>
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<tr>
<td>• All electric new buildings of all types, effective January 1, 2020</td>
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<tr>
<td>• A plan adopted to electrify existing buildings with a phased approach in 2021 -2045</td>
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<table>
<thead>
<tr>
<th><strong>Over 50 cities/counties in California</strong></th>
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<tbody>
<tr>
<td>• Adopted building codes supporting all-electric new constructions (mostly Northern CA)</td>
</tr>
</tbody>
</table>
South Coast AQMD Approach for Residential and Commercial Building Measures

1. Coordinating with local and state agencies to build upon existing programs

2. Phasing in requirements for zero emission water/space heating and cooking through a regulatory approach

3. Allowing near-zero and other lower NOx technologies as a transitional alternative if installing a zero emission unit is determined to be infeasible

4. Utilizing incentives to accelerate the adoption of zero emission units and address inequities
Proposed Method of Control and Implementation

Regulatory Approach

- Require zero NOx emissions; allow lower NOx technology when not be feasible
- Amend or develop rules reflecting updated Best Available Retrofit Control Technology

Incentive Approach

- Focus on disadvantaged communities
- Encourage early deployment of zero emission requirement
Strategic VOC Control

- While NOx is primary pollutant of concern for attainment, some VOC reductions can still improve air quality
  - Early reductions in VOCs can reduce ozone
  - VOC reductions contribute to reduction in fine PM
  - Many VOCs are also toxics
Overview of Draft South Coast AQMD Mobile Source Control Strategy
Key Considerations for a Zero Emissions Approach

- **Indirect Source Rules**
  - **Ports** – New ISR in development
  - **Railyards** – New ISR in development for new railyards, followed immediately by existing railyards
  - **Warehouses** – Enforcement and quantification of existing rule, and periodic re-evaluation to determine if amendments are necessary

- **Voluntary Agreements (MOUs)**
  - **Airports** – Extension/expansion of existing MOUs with major airports

- **Unique consideration for facility-based measures**
  - Quantified SIP credit likely not possible at time of AQMP and rule adoption. Credit obtainable as measure is implemented.
  - Potential scope of measures are limited as many sources that visit these facilities are primarily regulated federally or internationally
Emissions Growth Management

- **New and re-development projects**
  - Potential for regulatory (e.g., ISR) or non-regulatory approach

- **General Conformity (federal projects)**
  - Proposing to move away from current ‘set-aside’ / first come-first served approach through future rulemaking
  - Example approach: High Speed Rail (Burbank-LA)
    - Project mitigates own emissions first, then contributes to mitigation fund to address remaining emissions in community

- **Clean Construction Policy**
  - Develop uniform model program that local agencies can use to require cleanest construction equipment available
  - Could include uniform air quality mitigation fund for CEQA projects if all feasible mitigation already implemented
Incentive Programs

- Replace Your Ride
- Small Off-Road Equipment Exchange
- Truck Trade Up
- Passenger Locomotives

Focus: Take credit for, and seek to expand, existing successful programs

- Existing Incentive Programs
- Pacific Rim Initiative for Maritime Emission Reductions
- Mobile Source Emission Reduction Credits

Reg. XVI
Draft 2022 AQMP will include CARB measures* for the following categories:

- Area sources (2 Measures)
- On-Road Vehicles (3 Measures)
- Off-Road Vehicles and Equipment (7 Measures)
- CARB’s measures for federally and internationally regulated sources (1 Measure)
- Federally and internationally regulated sources that required federal action (5 Measures)

Limited reductions from the 2016 SIP Strategy are included in the attainment demonstration.

* Reductions from mobile sources include CARB 2016 and 2022 State Strategy
2022 State SIP Strategy Measures – South Coast Reductions

Total Reductions in 2037 (tpd):
- NOx 72.9
- ROG 13.5

- On-Road Heavy-Duty Vehicles: 6.2 NOx tpd, 2.6 ROG tpd
- Off-Road Equipment: 12.9 NOx tpd, 1.8 ROG tpd
- Zero Emission Space and Water Heaters: 5.8 NOx tpd, 8.8 ROG tpd
- In-Use Locomotives: 12.7 NOx tpd, 0.3 ROG tpd
- Fed/Intl Sources: 35.3 NOx tpd, 0.3 ROG tpd
Summary of Potential Approach to Reducing NOx by Major Source Category

Reducing emissions from federal sources is critical

*Some incentives also anticipated for area sources, but not yet defined
Federal and International Sources

- Approximately 1/3 of the 2037 baseline emissions inventory is regulated primarily under federal and international jurisdiction, with limited authority for CARB/South Coast AQMD
  - Ships, aircraft, locomotives, preempted off-road equipment, selected heavy duty trucks
- Cannot require federal government to reduce emissions, even from federal sources
- Cannot meet the standard without significant reductions from these sources
Results of Draft Control Strategy

2037 South Coast NOx Emissions with CARB & South Coast AQMD Draft Measures and Federal Actions

- Defined Measures are specific control measures with estimated reductions
- Black Box measures include varying levels of definition and certainty
- Federal action cannot be assigned in AQMP, therefore Black Box remains same size

- Defined Measures: 90 tons per day
- Black Box Measures: 67 tons per day
- Remaining: 63 tons per day
Other Key Issues

- Coachella Valley
- Emission reductions in adjacent air basins can affect South Coast carrying capacity
- Cost-effectiveness and affordability
Public Input and Outreach

‘Standard’ Comprehensive

- AQMP Advisory Group
- Working Group Meetings
- Public Workshops

Written Comments

State Agencies
- CARB
- Energy Comm.
- GoBIIZ etc.

Individual Stakeholder Meetings

Additional Critical

Federal Agencies
- EPA
- Dept. of Energy
- Dept. of Transp.
- Council Env. Qual. etc.
Supporting Documents

The Draft AQMP and all supporting documents are available on the 2022 AQMP website:

http://www.aqmd.gov/2022AQMP
Submission of Documents or Comments

Please address questions, comments, documents, or other relevant information to:

Internet Submission:  https://forms.office.com/g/PV2q42uBjy

Email:  AQMPteam@aqmd.gov

Sang-Mi Lee, Ph.D.
Planning & Rules Manager
South Coast AQMD
21865 Copley Drive
Diamond Bar, CA 91765

Telephone:  (909) 396-3169

Responses to comments received by June 21, 2022
Next Steps

Submission to U.S. EPA
Late Fall (18 months after submission for EPA to act on the Plan)

CARB Public Hearing
Late Fall

South Coast AQMD Public Hearing
October 7, 2022

South Coast AQMD Regional Public Hearings
Summer

Release Revised Draft AQMP
Summer
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- Interested Parties
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Download for Android in Google Play

Point your iPhone camera here to download!

https://www.aqmd.gov/nav/online-services/smartphone
South Coast AQMD Resources for Reporting Air Quality Concerns

South Coast AQMD Telephone Hotline
1-800-CUT-SMOG
(1-800-288-7664)

South Coast AQMD Website
https://www.aqmd.gov/home/air-quality/complaints

South Coast AQMD Smartphone Application
Available on Apple and Android app stores
Notice of Preparation/Initial Study for the 2022 AQMP Draft Program Environmental Impact Report

Regional Workshop and CEQA Scoping Meeting
• 2022 AQMP is a project subject to CEQA (State law) which requires evaluation of 18 environmental topic areas

• Decision to prepare a Program Environmental Impact Report (EIR) because 2022 AQMP contains a series of actions that can be characterized as one large project in connection with the issuance of rules, regulations, plans, or other general criteria required to govern the conduct of a continuing program
CEQA Scoping Meeting

- Public Workshops serve as CEQA Scoping Meetings
  - Held during Notice of Preparation/Initial Study (NOP/IS) comment period
- Required for projects with potentially significant environmental impacts
- Opportunity for the public, other agencies, and interested parties to find out more about proposed project and to provide suggestions on:
  - Scope of the CEQA analysis
  - Additional Topics to Evaluate in Draft Program EIR
  - Mitigation Ideas
  - Project Alternatives
- CEQA Scoping comments will be considered when preparing Draft Program EIR
Overview of CEQA Process

**NOP/IS**
- Notifies the public that a Draft Program EIR is being prepared which evaluates 18 environmental topic areas and identifies potentially significant environmental topics to be further evaluated
- Released for 32-day comment period from May 13, 2022 to June 14, 2022
- Provides 1st opportunity to submit comments

**Draft Program EIR**
- Responds to comments on NOP/IS
- Analyzes potentially significant environmental topic areas
- Recaps conclusion of environmental topic areas with no impact or less than significant impacts
- Identifies mitigation measures for significant impacts
- Analyzes project alternatives
- To be released for 45-day comment period and provides 2nd Opportunity to submit comments

**Final Program EIR**
- Includes updates to proposed project, as applicable
- Includes all comments received on Draft Program EIR and provides responses to those comments
- Includes NOP/IS and comments/responses

**Final Program EIR Certification**
- Governing Board considers the Final Program EIR for certification
- Adopt Mitigation Monitoring and Reporting Plan (if required)
- Adopt Findings and Statement of Overriding Considerations for significant impacts, if any
NOP/IS Analysis

• Evaluated all control measures and incentive programs identified in the 2022 AQMP for potential environmental impacts
• Chapter 1 provides background information and project description
• Chapter 2 identifies and analyzes environmental topics/impacts
• All 18 environmental topics were evaluated and potentially significant topics will be further analyzed in forthcoming Draft Program EIR:

<table>
<thead>
<tr>
<th>Topic Areas with Potentially Significant Impacts</th>
<th>Topic Areas with No Impacts or Less than Significant Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Air Quality and Greenhouse Gases</td>
<td>• Aesthetics</td>
</tr>
<tr>
<td>• Energy</td>
<td>• Agriculture and Forestry Resources</td>
</tr>
<tr>
<td>• Hazards and Hazardous Materials</td>
<td>• Biological Resources</td>
</tr>
<tr>
<td>• Hydrology and Water Quality</td>
<td>• Cultural and Tribal Cultural Resources</td>
</tr>
<tr>
<td>• Noise</td>
<td>• Geology and Soils</td>
</tr>
<tr>
<td>• Solid and Hazardous Waste</td>
<td>• Land Use and Planning</td>
</tr>
</tbody>
</table>
<pre><code>                                                             | • Mineral Resources                                        |
                                                             | • Population and Housing                                   |
                                                             | • Public Services                                          |
                                                             | • Recreation                                               |
                                                             | • Transportation                                           |
                                                             | • Wildfire                                                 |
</code></pre>
Availability of NOP/IS

• Notice of Preparation of a Draft Program EIR and the Initial Study (NOP/IS) was released for 32-day public review and comment period on May 13, 2022
• Comment period closes at 5:00 p.m. on June 14, 2022
• NOP/IS is available online at: https://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2022/2022-aqmp-nopis.pdf
• Hardcopies are available at the in-person meeting venue on the workshop date and at South Coast AQMD Headquarters, or by calling (909) 396-2039
Opportunity to Comment on NOP/IS

Please direct questions and comments on the CEQA analysis in the NOP/IS to:

Kevin Ni
Planning, Rule Development, and Implementation / CEQA Section

Email: kni@aqmd.gov
Fax: (909) 396-3982

South Coast AQMD
21865 Copley Drive
Diamond Bar, CA 91765

Comments received relative to the CEQA analysis in the NOP/IS and their responses will be included in the Draft Program EIR, upon its release
Status of the Draft Program EIR

• Draft Program EIR – anticipated release July 2022 and will include comments and responses received during CEQA Scoping Meetings and on the NOP/IS

• 45-day public review & comment period

• Upon release, it will be available at South Coast AQMD’s Public Information Center & CEQA Webpage http://www.aqmd.gov/home/library/documents-support-material/lead-agency-scaqmd-projects
CEQA Team Contact Information

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Overview of Socioeconomic Impact Assessment

Regional Workshop and CEQA Scoping Meeting
Purpose of Socioeconomic Scoping

- **Transparency:**
  - Collect input on key socioeconomic issues and potential alternatives
  - Discuss draft outline and each planned component of the 2022 AQMP Socioeconomic Report

- **Continuous stakeholder involvement via public process:**
  - Scientific, Technical & Modeling Peer Review (STMPR) Advisory Group
    - 2 meetings covered socioeconomic topics: November 2021 and March 2022
    - Upcoming: preliminary costs and health benefits to be discussed at May 31st meeting
  - 3 scoping sessions in regional public workshops
  - More to be announced/scheduled
Background and Commitments

- AQMP Socioeconomic Report:
  - Socioeconomic impact assessment for AQMP conducted since 1991
    - To better inform the public and policymakers
    - Not legally required (unlike for rules)
  - 2016 Report incorporated more than a dozen key recommendations from the 2014 independent review by Abt Associates

- Commitments for the 2022 Report:
  - Continue to incorporate Abt recommendations
  - Minimum 60-day review period for Draft Report (June release)
  - Minimum 30-day review period for Draft Final Report (September release)
Draft Outline of AQMP Socioeconomic Report

- Non-technical executive summary
- Report:
  - Introduction
  - Incremental costs and cost-effectiveness
  - Quantified public health benefits and other non-quantified benefits
  - Projected macroeconomic impacts
  - Sub-county distribution of costs, benefits, and job impacts
  - Environmental justice analysis
  - Conclusion and future enhancements
- Technical appendices
- Responses to comments
What Will be Quantified?

• Plan costs & public health benefits:
  • Measures with quantified emission reductions ready to be committed into State Implementation Plan (SIP)
  • Measures with TBD/NYQ emission reductions: preliminary costs may be discussed separately
  • Infrastructure costs resulting from transition to near-zero and zero-emission will be quantified to the extent possible

• Regional job and other macroeconomic impacts:
  • Impacts associated with quantified costs & public health benefits for measures directly affecting residents and economic sectors in the South Coast AQMD region
  • Any secondary regional impacts from measures anticipated to directly affect out-of-region/state entities will be modeled to the extent possible
Incremental Costs of the Plan

- Costs by control measure
  - For measures with committed emission reductions
- Costs by affected industry
  - For small businesses, to the extent data is available
  - Identifying costs most likely incurred by out-of-region/state entities
- Costs incurred over time
  - Tied to anticipated implementation period of each measure
- Cost effectiveness by control measure
  - Discounted cash flow (DCF)
  - Levelized cash flow (LCF)

* All costs will be converted and expressed in 2021 dollars.
Cost-Effectiveness Calculation Methods

- **DCF:** \[ \text{Upfront Costs} + \text{Present Value of Annual O&M Costs Incurred over Equipment Life} \]
  \[ \text{Annual Emission Reductions} \times \text{Years of Equipment Life} \]

- **LCF:** \[ \text{Amortized Upfront Costs} + \text{Annual O&M Costs} \]
  \[ \text{Annual Emission Reductions} \]

**What’s in the numerator? A home-buying analogy:**

**DCF:** Today’s home price + money set aside today in a fixed interest rate account to pay for annual costs for utilities, maintenance, etc.

**LCF:** Annual fixed-rate mortgage payment with zero down payment + annual costs for utilities, maintenance, etc. at any given future year
Public Health and Other Benefits

- Modeled changes in PM2.5 and ozone concentrations
- Estimated changes in health incidence due to changes in health risk
  - Mortality risk: changes in number of premature deaths
  - Morbidity risk: changes in hospital admissions, ER visits, missing work/school days, etc.
- Monetized public health benefits
- Sensitivity tests of key inputs and assumptions
- Qualitative discussion of visibility, material, and agriculture benefits

* Monetized benefits will be converted and expressed in 2021 dollars
Regional Jobs and Macroeconomic Impacts

- Job impacts due to incremental costs
- Job impacts due to quantified public health benefits
- Net job impacts and its distribution
  - By industry sector
  - By occupational earnings group
- Competitiveness impacts by industry sector
  - Value-added
  - Cost of production (for those who cannot pass through costs)
  - Delivered prices (for those who can pass through costs)
  - Imports and exports
Varied Policy Impacts within South Coast

- Variations by 21 sub-county regions
  - Sub-regional distribution of costs
  - Sub-regional distribution of public health benefits
  - Sub-regional distribution of projected net job impacts

- Environmental justice (EJ) analysis
  - EJ screening:
    - SB 535 definition
    - Sensitivity tests with alternative EJ definitions
  - EJ impacts of 2022 AQMP
    - Health benefits: EJ vs. non-EJ communities
    - Adapting income inequality indices to assess changes in health risk inequality
Staff Contacts

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Open Discussion

- Although it is a different format, staff will take the time to listen to all stakeholder comments
  - Please use the “raise hand” feature to speak:
    - Click on the 🙋 button
    - Dial *9
- When it is your turn to speak, your name will be announced and, if participating virtually, the meeting host will unmute you
- Please state your name and who you are representing
- In addition to this workshop, staff is available for individual meetings
2022 DRAFT AIR QUALITY MANAGEMENT PLAN

Regional Workshop and CEQA Scoping Meeting

Thank You For Attending