

Local Energy Resources Network



Meeting 29
April 9, 2024

*Featuring a Presentation & Input
Opportunity from the CARB
Research Team*



Welcome!

Purpose

Interactive 1-hour meetings designed to be a regular space where local governments - and those who work with them - can help each other learn about (and possibly inform) available opportunities to advance their energy and climate goals.

TODAY'S AGENDA

- Opportunity Roundtable
- Opportunity Spotlight - CEC
- Featured Presentation and Breakouts: CARB Research Team
- BPC Workshop - SLECC at CCEC
- Optional: Extended 15 minutes for Bonus Breakouts



Opportunity Roundtable

Need/Have Board

View all Opportunities

Policy Drives Investment



Agencies Scope/ Design Assistance Programs & Gather Input



Applicants Apply to Funding Solicitation

State

- FY 21-22 Budget (\$15B climate resilience)
- FY 22-23 Budget (\$38.8B climate change)
- Cap and Trade auction revenue allocations (~\$19B raised since 2013)
- FY 23-24 Budget
- State agency proceedings (e.g. *CPUC microgrid, CEC IEPR, *CARB Scoping Plan)
- 9th circuit panel of judges denied petition for an en banc rehearing of Berkeley's gas ordinance.
- CA Priority Climate Action Plan

Federal

- Infrastructure Investment and Jobs Act (IIJA) (2021) = \$47B in climate resilience funding
- FY 22-23 Budget (\$44.9B climate change)
- Inflation Reduction Act (IRA) (2022)
- Biden's Proposed FY 23-24 Budget (\$52.2B climate change)

Funding

- CEC: EPIC Grid-Supportive Transportation Electrification Grants - due April 12
- DOE: Solutions for Lasting, Viable Energy Infrastructure Technologies (SOLVE IT) Prize (\$5M) - due April 12
- CEC: Geothermal Grants - due May 3
- CEC: Power Electronics for Zero-Emission Residential Resilience - April 19
- OPR: Extreme Heat and Community Resilience Program - due April 23 (if completed pre-application form)
- DOE: Clean Transportation Research, Development, Demonstration, & Deployment - concept papers due May 2
- FTA: Low or No Emission and Grants for Buses and Bus Facilities Competitive Programs - (\$1.5B) - due April 25
- DOE: ECEBG Formula Grants and Voucher - due April 30
- DOE: Buildings Energy Efficiency Frontiers & Innovation Technologies (BENEFIT) - CP due Dec 18 - due April 30
- DOE: Technology Integration (\$15M) : Concept papers due March 12; applications due April 30
- CEC: Local Government Building Decarbonization Challenge (\$4M) - due May 20
- OPR: Adaptation Planning Grants Round 2 (\$9.5M) - due May 20 (if completed pre-application form)
- DOE: Upskill Prize for the Solar Manufacturing Workforce (\$5M) - due May 21
- DOE: Communities Sparking Investment in Transformative Energy (C-SITE) (\$18M) - due May 31
- CEC: Community Energy Reliability and Resilience (CERRI) Program - due July 12
- EPA: Environmental and Climate Justice Community Change Grants - Nov 21, 2024. EPN app guide.
- IRS: Consumer clean energy tax credits live! DOE: Low-Income Communities Bonus Credit (rolling applications)

Other Assistance

- CivicWell: Host a CivicSpark Fellow: applications due June 7
- SCE: Transportation Electrification (TE) Advisory Services
- DOE: Clean Energy to Communities (C2C) - Peer Learning Cohorts due Apr 30, NREL In-Depth Partnerships due June 14, Expert Match
- EESI: Fact Sheet: IRA Direct Pay (Tax Credits), Congressional Progressive Caucus Direct Pay Office Hours/Toolkit



Spotlight



Decarbonization Incentives Specialist
California Energy Commission
Vanessa Durant



California Energy Commission

Energy Efficiency and Conservation Block Grant (EECBG)

Vanessa Durant, Decarbonization Incentives Specialist

April 9, 2024



Energy Efficiency and Conservation Block Grant (EECBG) Program

- **EECBG goals**
 - Reduce carbon emissions
 - Reduce energy use
 - Improve energy efficiency
 - Increase community investment
 - Increase workforce development
- **Justice40**
 - Goal to have 40% of the benefits of certain federal investments flow to disadvantaged communities



Energy Efficiency and Conservation Block Grant (EECBG) Program

- **IIJA (Infrastructure Investment and Jobs Act, 2021)**
 - \$550 million to EECBG
- **California formula allocation: \$4.5 million**
 - DOE used state & local feedback and previous formulas to allocate funds
- **Federal requirement:** Minimum of 60% of CA allocation must go to local governments that were not eligible to receive a formula direct grant



Local Government Building Decarbonization Challenge

- **Applications due May 20**

<https://www.energy.ca.gov/solicitations/2024-03/gfo-23-403-local-government-building-decarbonization-challenge>

- **Local governments** – individual or group of jurisdictions

- **Planning projects only**

- No construction projects to avoid CEQA & NEPA
- Building decarbonization measures
- Statewide goal: decarbonization by 2045



Local Government Building Decarbonization Challenge

Project activities:

- Community Building Decarbonization Plan
- Municipal Buildings Decarbonization Plan
- Improvement of Municipal Programs and Processes
- Codes, Ordinances, and Voluntary Measures Development
- Workforce Development Planning and Activities



Local Government Building Decarbonization Challenge

- **Federal requirement:** Minimum of 60% of CA allocation must go to local governments not eligible to receive a direct formula grant
 - Remaining funds will be available to all jurisdictions
- **Federal requirement:** Grant agreements must be signed within 180-days of award



Local Government Building Decarbonization Challenge

- **Award amounts:** \$250,000 - \$400,000 for individual or group applicants
- Solicitation released: March 15
- Pre-Application Workshop: March 22
- Deadline to submit questions: April 2
- **Distribution of Questions/Answers: April 23**
- **Application deadline: May 20**
- Awards granted: Fall 2024

<https://www.energy.ca.gov/solicitations/2024-03/gfo-23-403-local-government-building-decarbonization-challenge>



GFO-23-403 - Local Government Building Decarbonization Challenge

FUNDING

[Solicitations](#)

[Awards](#)

[Funding Resources](#)

[Funding Workshops](#)

[Grants Ombudsman](#)

SOLICITATION TYPE

Grant Funding Opportunity

SOLICITATION NUMBER

GFO-23-403

SOLICITATION STATUS

Active

DIVISION

[Efficiency](#)

RELEASE DATE

March 15, 2024

SUBMISSION DEADLINE

May 20, 2024, 11:59 pm

QUESTIONS DEADLINE

April 02, 2024, 5:00 pm

SOLICITATION CONTACT

Please contact the Energy Commission agreement officer within the solicitation manual.



Thank you

- Applications due: May 20

- Solicitation webpage:

<https://www.energy.ca.gov/solicitations/2024-03/gfo-23-403-local-government-building-decarbonization-challenge>

- Program webpage:

<https://www.energy.ca.gov/programs-and-topics/programs/local-government-building-decarbonization-challenge-program>

- Subscription topics:

- Decarbonization Topics
- Efficiency Topics
- Energy Efficiency Financing
- Energy Efficiency Program for Existing Buildings
- <https://public.govdelivery.com/accounts/CNRA/signup/>



Featured Presentation



Air Pollution Specialist
CARB's Research Division
Deidre Zoll



Air Pollution Specialist
CARB's Research Division
Jose Lopez



Setting Research Priorities for the Next 5 Years

April 9, 2024

Today's Agenda

- CARB's Research Program
 - Summary of our research drivers and current research focus
 - Health
 - Climate
 - Air Quality
 - Mobile Sources
 - Sustainable Communities
- Discussion
 - Break-out sessions

CARB Priorities

Air Quality Standards



Environmental Justice



Climate Change



Mobile Sources



Sustainable Communities



How CARB works with federal and local air quality agencies

FEDERAL



US EPA

Sets & enforces national air quality standards.
Regulates interstate transportation.



TRAINS



PLANES



SHIPS

STATE



CALIFORNIA AIR RESOURCES BOARD

Regulates mobile sources of air pollution,
greenhouse gases & consumer products.



CARS



TRUCKS



BUSES

LOCAL



Local Air Districts

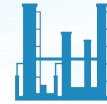
Regulates stationary & local
sources of air pollution.



FIREPLACES



FACTORIES



REFINERIES



POWER PLANTS

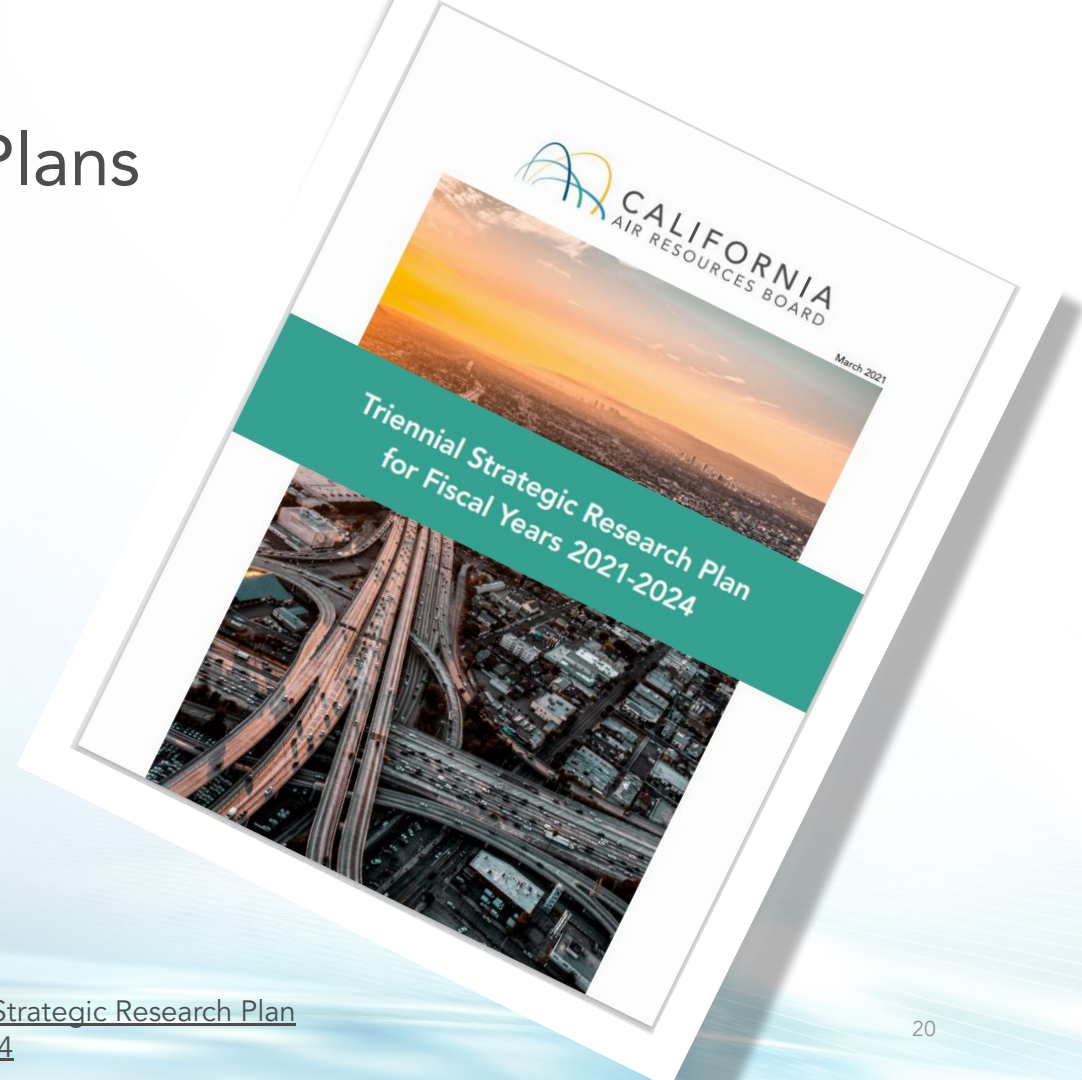
CARB Research Program

- Legislatively mandated research program
- Sound science to support CARB programs
- Oversee in-house, contracted, and collaborative research efforts



Strategic Research Plans

- Public process
- Strategic priorities
- Project selection
- Racial equity and environmental justice
- 5 Year Plan – 2025-2030



Research Areas of Focus



Research Area and Mission	Policy Drivers	Examples of Current Research
Air Quality – Reducing air pollution statewide	SIPs, Attainment, AB 617	Sources and formation; new tools/methods; emission factors
Health – Protecting public health	Beneficial regulations	Health impacts; indoor air; air pollution; disparate impacts
Climate – Decreasing GHGs	Scoping Plan, AB 32	Natural and working lands; Short lived climate pollutants; GHG inventory; community needs
Mobile Sources – Lowering vehicle emissions	SB 44, EO N-79-20, ACC II, ACT, SORE, etc.	Advanced technologies; non-exhaust sources; Electric vehicles; high emitters
Sustainable Communities – Greener cities and vehicles	SB 375, AB 32, Scoping Plan	Changes in vehicle miles traveled; Infill; Building decarbonization; Zero emission vehicles; Equitable access to solutions

Sustainable Communities Research Areas of Focus

- Anti-displacement strategies
- Factors impacting changes in vehicle miles traveled
- Impacts of affordable infill housing
- Integrated frameworks – climate, air quality and transportation
- Building decarbonization
- Zero emission vehicles
- Equitable access to all proposed solutions

Today's Goals

- We want to hear from you
- Research priorities in these areas for the next 5 years
 - Research gaps
 - Research questions
 - Emerging topics
 - Community concerns
- Break-out rooms
 - 15 minutes each round, provide feedback chat and verbal comments
 - Opportunity to attend two break-out rooms
- Offline opportunities
 - Survey

Breakout Group Questions

- What long-term (5-10 year) concerns emerge in your work around sustainable community strategies?
- What research questions should be asked in the next 5 years to address the most pressing concerns in sustainable communities within CARB's purview?

Breakout Group Questions

- What long-term (5-10 year) concerns emerge in your work around climate mitigation and health?
- What research questions should be asked in the next 5 years to address the most pressing concerns in climate mitigation and health within CARB's purview?

Breakout Group Jamboard

- <https://jamboard.google.com/d/1wQq-ICWa7OTzQRAS3omVPXQyWWTjyaJ1muiPIRG6KA/edit?usp=sharing>

Next Steps

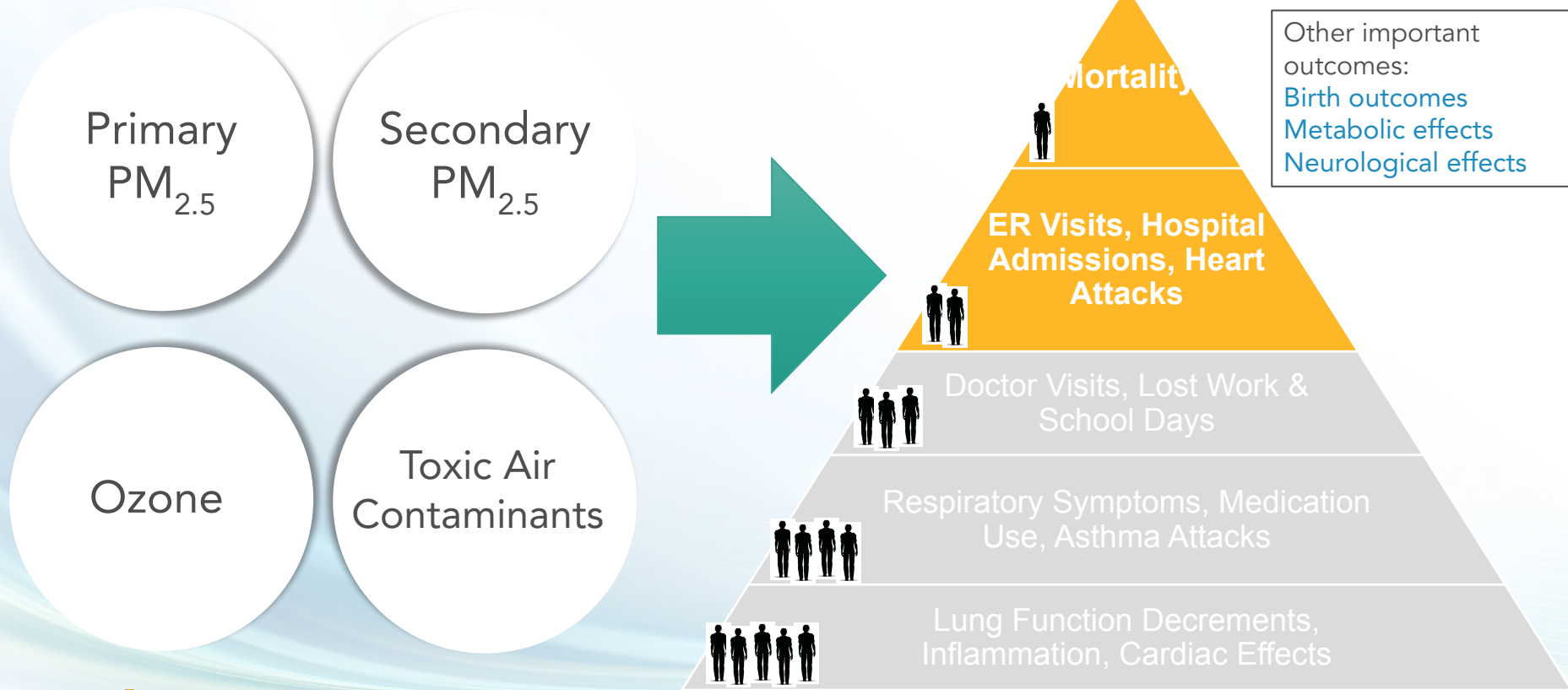
- Aggregate what we heard today
- Integrate into our future research needs
- Add responses collected through the comment/concept survey
 - Closes on April 16
- <https://ww2.arb.ca.gov/our-work/programs/research-planning/research-comment-portal>
- Proposed research initiatives presented in August 2024
- Full Draft Plan available in December 2024-January 2025
- Submit comments through public docket
- Tune into Board hearing on Plan January-March 2025

Extra Slides

Health Research Needs and Drivers

- CARB's Mission
 - Protect public health
- National Ambient Air Quality Standards (NAAQS)
 - Health based
- Regulatory health benefits analysis
- Inform the public
- Toxics health risk assessment
- Health impacts of climate change and mitigation

Air Pollution and Health Impacts



Health Research Areas of Focus

- Health analysis
- Indoor air quality
- Impact of air pollution on different health outcomes
- Impacts of short-term exposures to smoke
- Health impacts in over-burdened communities
- Exposure disparities and environmental justice
- Multiple climate stressors and health
- Toxics

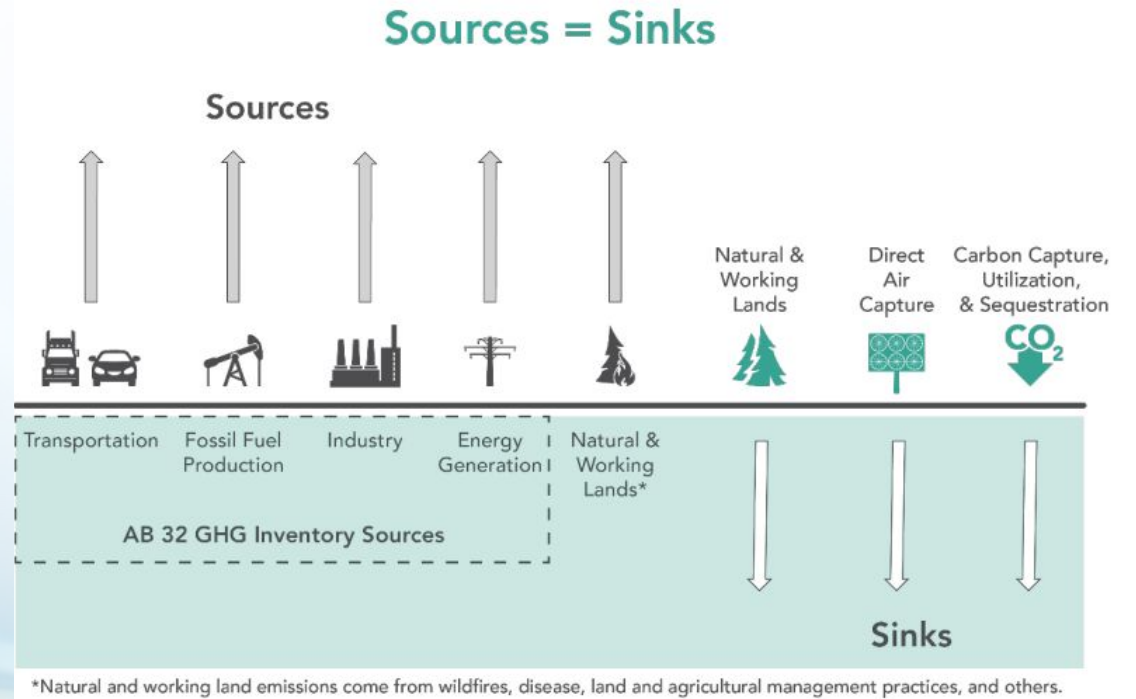
Climate Research Drivers

- Program Drivers
 - AB 32 – CARB lead agency
 - [2022 Scoping Plan for Achieving Carbon Neutrality](#)

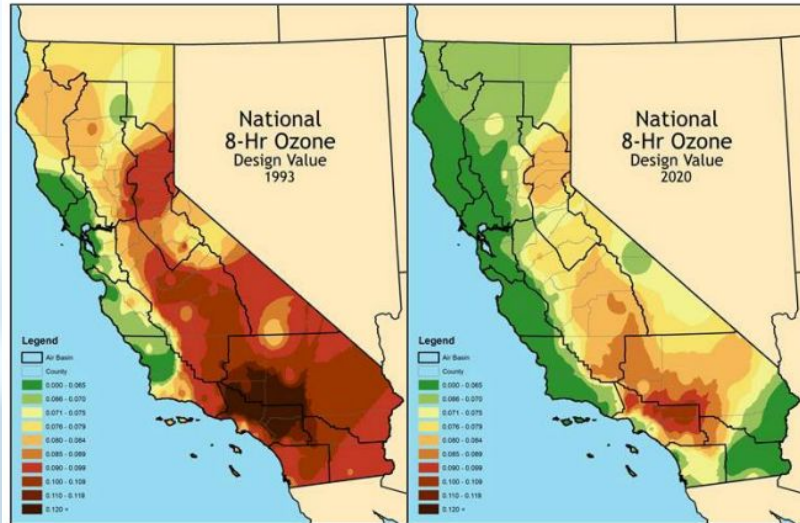


Climate Research Areas of Focus

- Natural and working lands
- Methane and short-lived climate pollutants
- Supporting our GHG inventory needs
- Equity impacts and community needs
- Co-pollutants and health implications



Air Quality Research Drivers



Ozone air quality progress in CA (Fig 1 – 2022 SIP)

Air Quality Targets

- 2025
 - Attainment year for ozone and PM_{2.5} (2023/2025)
 - Identify toxics in communities
 - Improve tools to guide decisions for the Air Toxics Program
- 2030
 - Attainment year for 12 $\mu\text{g}/\text{m}^3$ PM_{2.5}
- 2032
 - 75 ppb 8-hr ozone standard
 - Obtain lasting emissions reduction in AB 617 communities
 - Reduce toxics of major concern
- 2037
 - 70 ppb 8-hr ozone standard

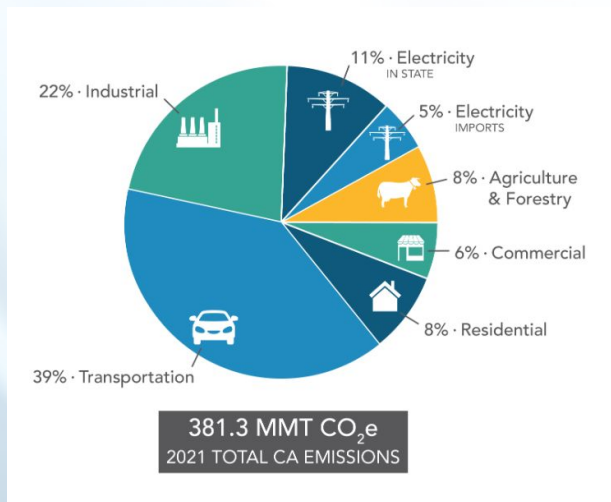
Air Quality Research Areas of Focus

- Sources and formation of air pollution in different regions
- New tools and methods for air quality monitoring
- Emission factors from previously uncharacterized sources
- Impacts from climate change on air quality

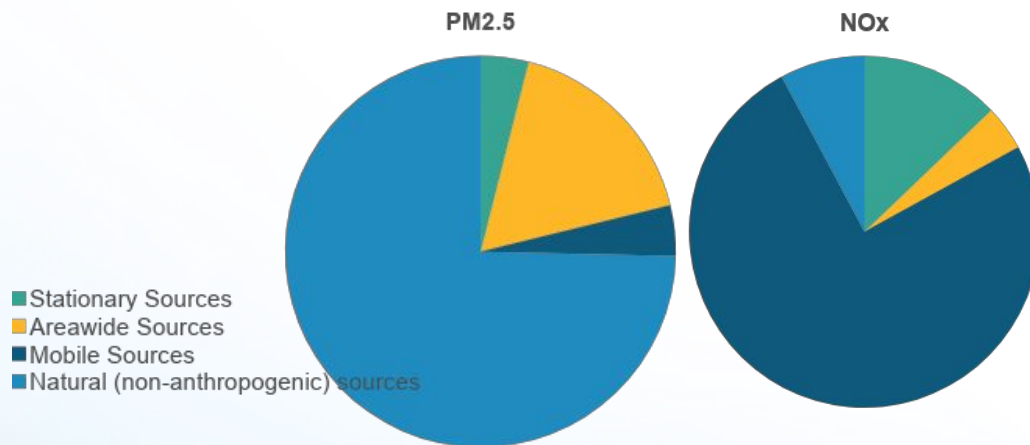


Ozone non-attainment areas – 2022 SIP Strategy

Mobile Source Research Drivers



[Current California GHG Emission Inventory Data | California Air Resources Board](#)



[Statewide Emissions | California Air Resources Board](#)

Mobile Sources Research Areas of Focus

- Low NOx vehicle testing
- Advanced sensor technology and monitoring
- Non-exhaust emission sources
- Advanced technologies
- Electric vehicle energy efficiency
- Continuing impacts from high emitters, especially in environmental justice communities

Sustainable Communities Research Drivers

MPO	Targets Beginning October 1, 2018	
	2020	2035
MTC/ABAG	-10%	-19%
SACOG	-7%	-19%
SANDAG	-15%	-19%
SCAG	-8%	-19%
Fresno COG	-6%	-13%
Kern COG	-9%	-15%
Kings CAG	-5%	-13%
Madera CTC	-10%	-16%
Merced CAG	-10%	-14%
San Joaquin COG	-12%	-16%
Stanislaus COG	-12%	-16%
Tulare CAG	-13%	-16%
AMBAG	-3%	-6%
Butte CAG	-6%	-7%
San Luis Obispo COG	-3%	-11%
Santa Barbara CAG	-13%	-17%
Shasta RTA	-4%	-4%
Tahoe MPO	-8%	-5%

Regional Plan Targets | California Air Resources Board



Sustainable Community Strategies

- Infill
- Affordable housing
- Transit oriented housing
- Transit
- Active transportation

Metrics

- VMT reductions
- GHG by region
- Mode shift
- Housing units and types added
- Accessibility
- Housing costs
- Transportation investments



Audience Q&A

Please add your questions in the chat or raise your hand

BPC Workshop

Topic: Discussion



EARLY BIRD REGISTRATION
OPEN NOW!

15TH ANNUAL CCEC FORUM

Margaritaville Resort
Palm Springs, CA



June 25-26

Save the Date

***State and Local Energy and Climate Coordination
(SLECC) at the CCEC Forum***

June 25 | 9 - 11am

*Please share your thoughts on topics via [this very
brief form](#)*

Local Energy Resources Network



What's Next?

- Bonus Breakouts up next!
- Next meeting **May 14th, 2024**
 - **Featuring DOE SCEP**
- No June meeting!
- Share [invitation](#) with others



Optional: Bonus Breakouts

Thanks for joining us!

This is a space for informal discussion among the LERN network. Feel free to:

- Offer an announcement, success story, or opportunity
- Share a need for information, collaborators, or advice
- Raise a suggested topic or speaker for future LERNS

If you need an in-depth discussion, you can pitch a specific bonus breakout topic and invite others to join you (today or we can plan ahead for next month)



CCEC Serves Local Needs



wEEkly Update



CURRENTS Quarterly



Webinars



Annual Forum



Active Funding Opportunities



Funding Program Database



Technical Assistance



Technical Assistance Directory



Local Government Roundtables



Best Practice Database



Interviews and Case Studies