

DOCKETED

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**Central California
Asthma Collaborative**

Just Transition for Asthma Prevention

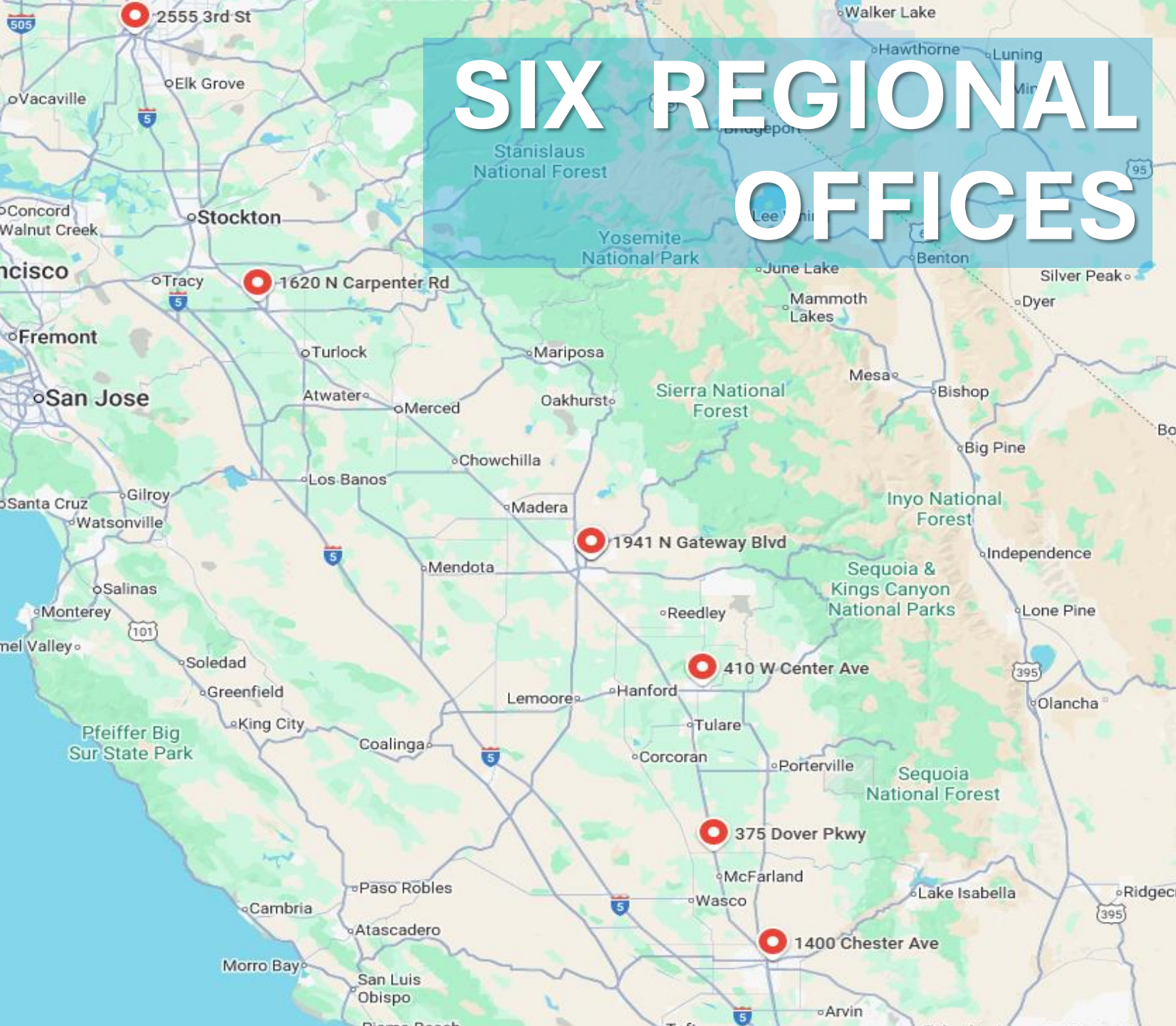
Member Presentation
Disadvantaged Communities Advisory Group
May 16, 2025

Organizational Profile

- Founded in 2011, incorporated as 501(c)3 in 2013
- **Vision:** Healthy, resilient communities where all people can breathe clean air and thrive.
- **Mission:** Advancing health equity and environmental justice by empowering Central California communities through services, research, advocacy, and data-driven solutions to reduce the burden of asthma.
- Staff: 60+ Full-time Employees

SIX REGIONAL OFFICES

- **Sacramento**
- **Modesto**
- **Fresno**
- **Visalia**
- **Delano**
- **Bakersfield**





Central California Asthma Collaborative

Climate Equity & Environmental Justice

Energy

- Building Decarb
- Just Transition from Fossil Fuels

Air

- Community Air Monitoring (SJVAir)
- Community-led Clean Air Plans

Transportation

- EV Equity
- Freight and Goods Movement Pollution

Community Health

Asthma Remediation

- CARES: Comprehensive Asthma Remediation & Education Services (serving 13 CA Counties)

ECM

- Enhanced Care Management

Research

Epidemiologic

- CHAPS
- CEVICA
- SPHERE
- EARS
- BRIDGE
- CHAPS-STACK
- BTW

Non- Epi

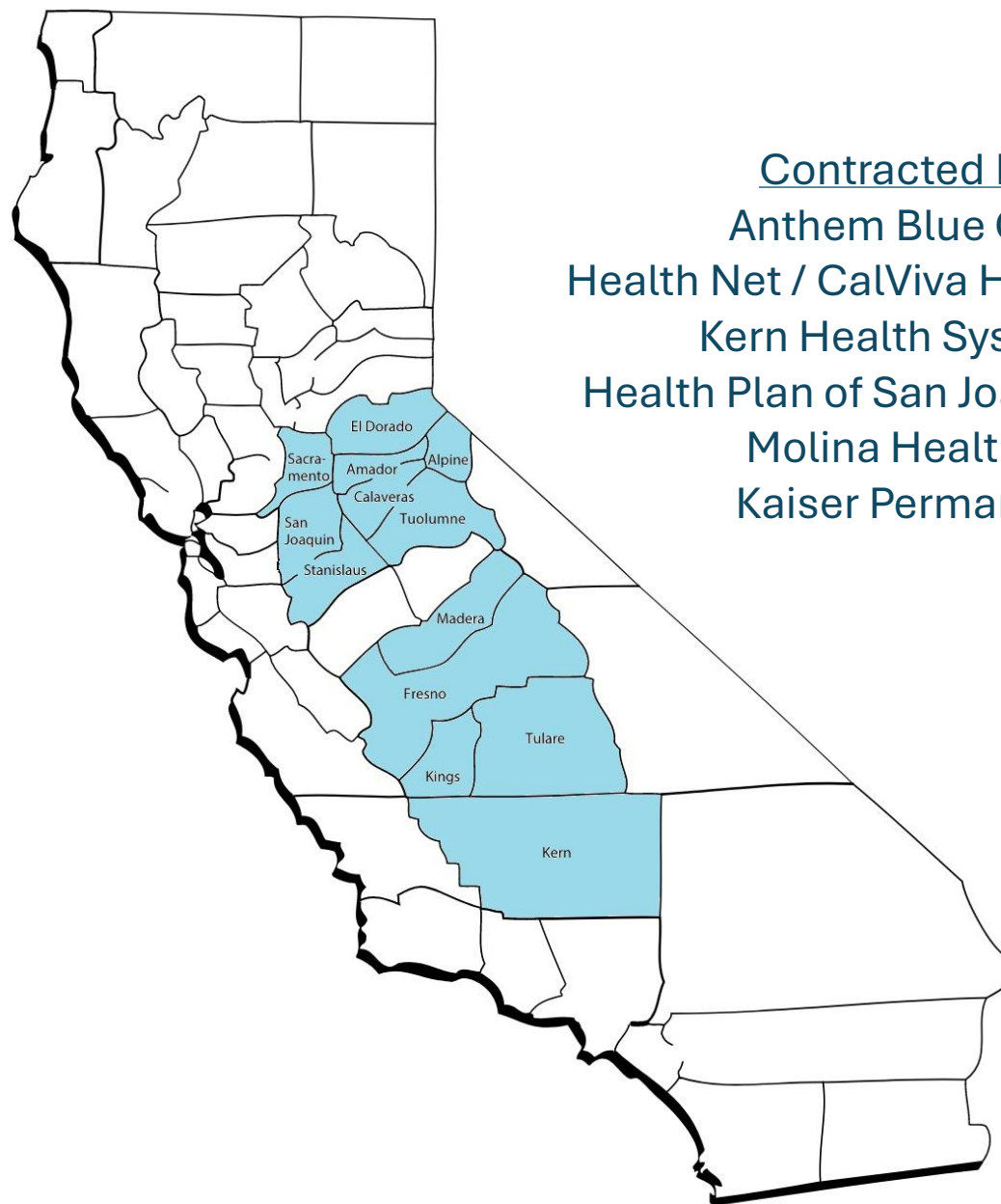
- SUMMATION
- PROTECT
- PROPANE
- PANEL
- RESPECT



CARES

Comprehensive Asthma Remediation
and Education Services

**CCAC is contracted with six
Medi-Cal Managed Care Plans
(MCP) to provide Asthma
Preventive Services (APS) and
Asthma Remediation Community
Support (AR CS) in 13 counties
from Kern to Sacramento.**



Contracted MCPs

Anthem Blue Cross
Health Net / CalViva Health
Kern Health Systems
Health Plan of San Joaquin
Molina Healthcare
Kaiser Permanente

Lifetime Asthma Prevalence Rates (All ages) 2021-22

California

15.2%

County

Asthma Prevalence Rate

Alpine, Amador, Calaveras, Tuolumne*

24.4%

Kings

16%

Fresno

20.4%

Madera

15%

Kern

16.8%

El Dorado

15.2%

Stanislaus

18.1%

Sacramento

18.8%

San Joaquin

16.2%

Tulare

12%

**Alpine, Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne counties are combined due to small populations*

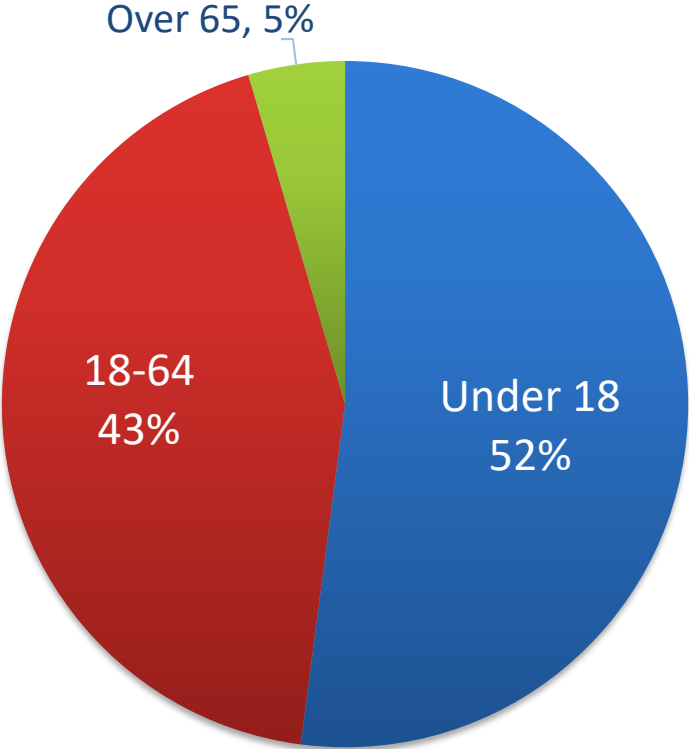
Asthma Remediation

- Addresses indoor air pollution, irritants, allergens and other asthma triggers.
- Educates patients and families about climate risks and potential adaptation strategies that support resilience.
- Provides tangible resources such as room air filtration, HEPA vacuum cleaners, HVAC filters or evaporative cooler upgrades, integrated pest management and minor home repairs, including replacement of non-functioning range hoods.
- Ensures patients and families understand their chronic disease and how both the indoor and outdoor environment can impact it on a daily basis.
- Identifies and supports behavioral changes that reduce outdoor air pollution and

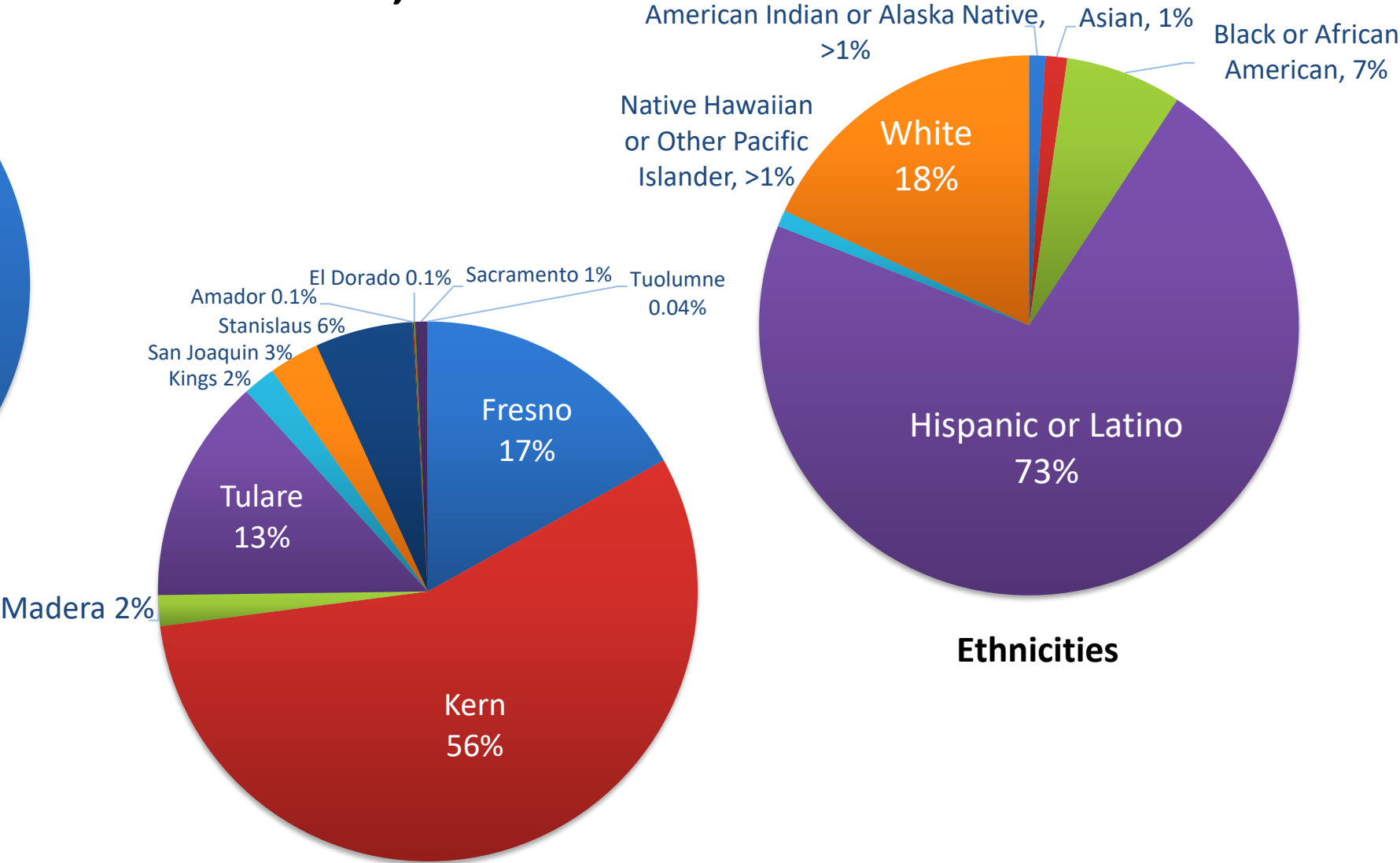


MCP MEMBERS ENROLLED IN CARES (2023-25)

N=6,000



Age Groups



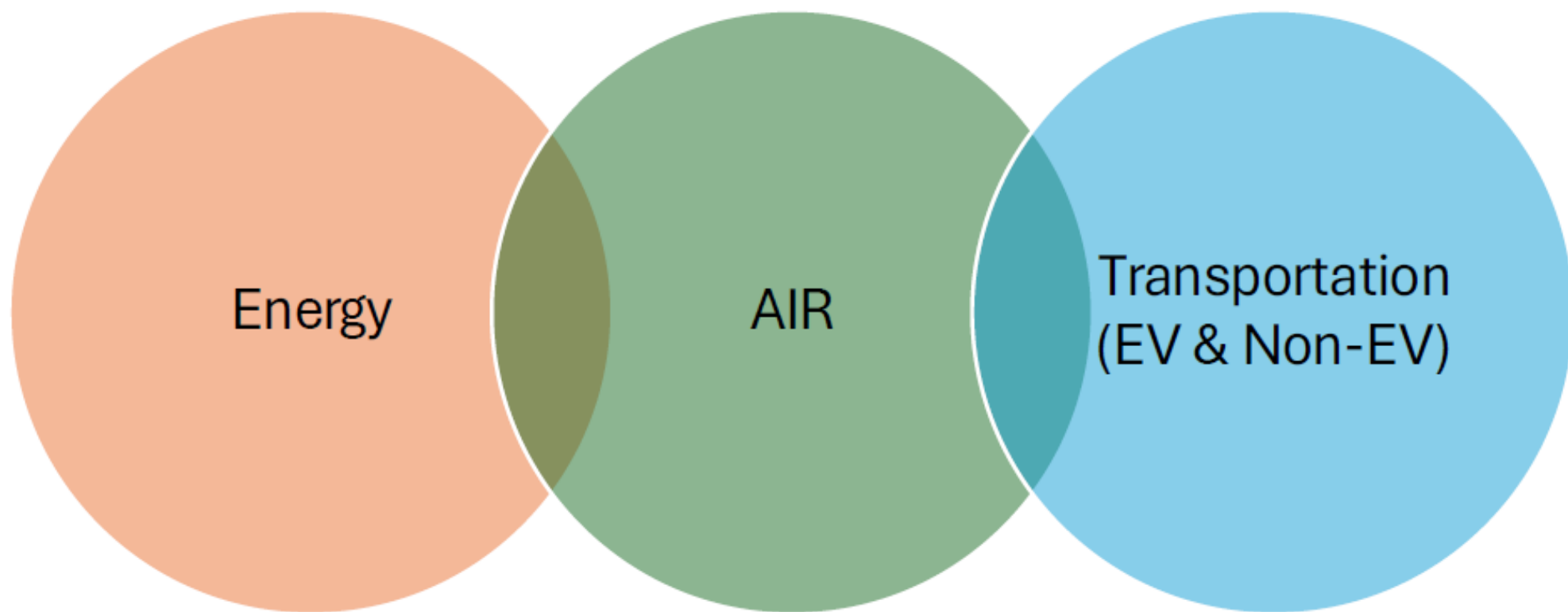
Counties

Home Conditions Data Collected in Home Assessments

- Own or Rent
- Rangehood Status
 - Existing, Working or Broken
 - Vented or Non-vented
- HVAC Status
 - Working or Broken
 - Window Unit or Evaporative Cooler (Swamp Cooler)
- Stove type
 - Gas or Electric



Climate Equity Environmental Justice (CEEJ) Update





AIR

Community Air Engagement

1. Establish and Support Community Steering Communities
2. Provide Technical Assistance- Community Emissions Reduction Plan Development with grassroots partners:
 - Stanislaus County - VIP
 - Madera/Fairmead - MCCJ
 - Delano - CRPE
 - Lost Hills - Clean Water Action
 - Los Banos/Livingston – Valley Onward*
 - Terra Bella – CCEJN*
 - Avenal/Kettleman City*
3. Layering on climate and energy priorities



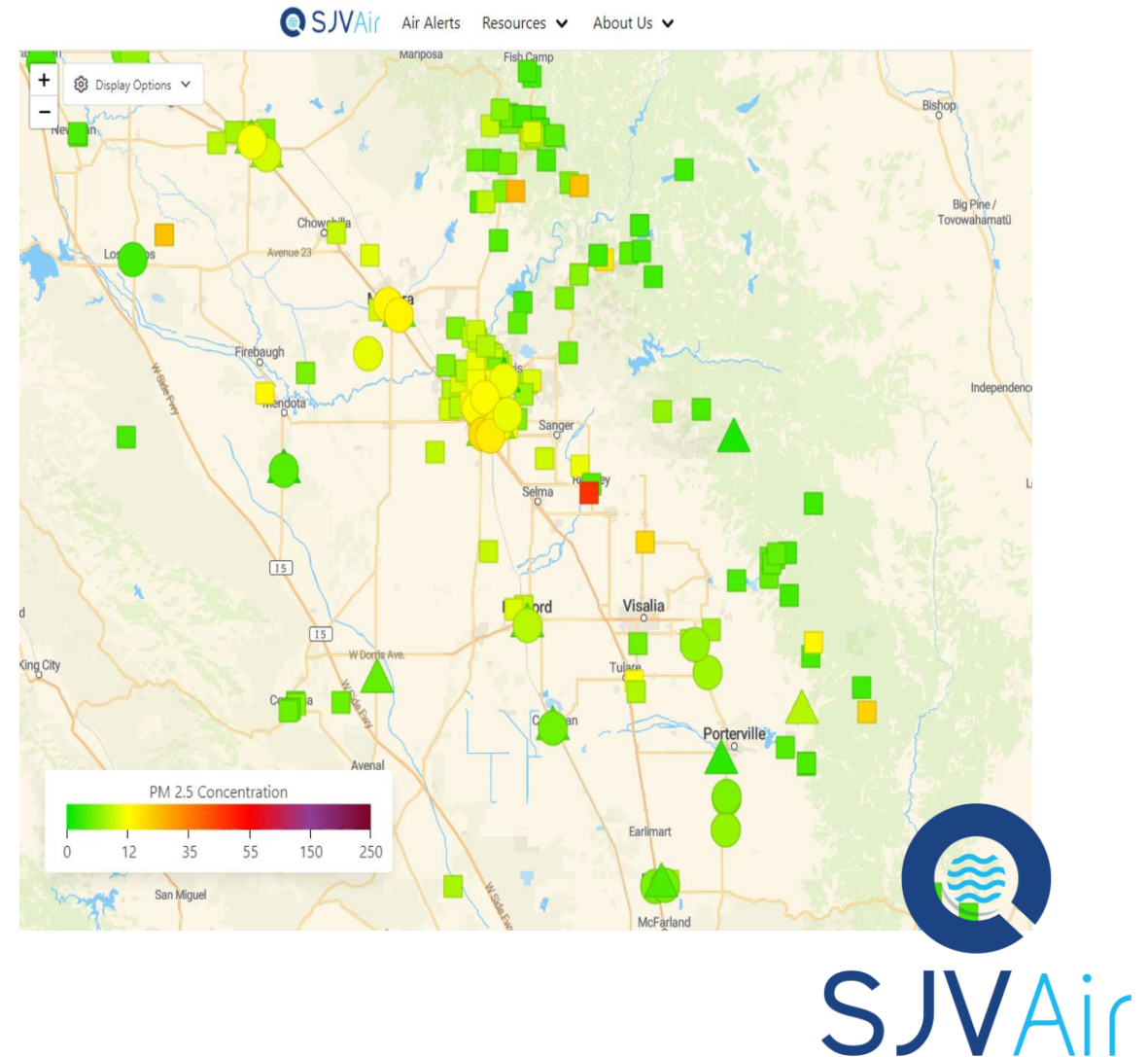
CCAC
Central California
Asthma Collaborative

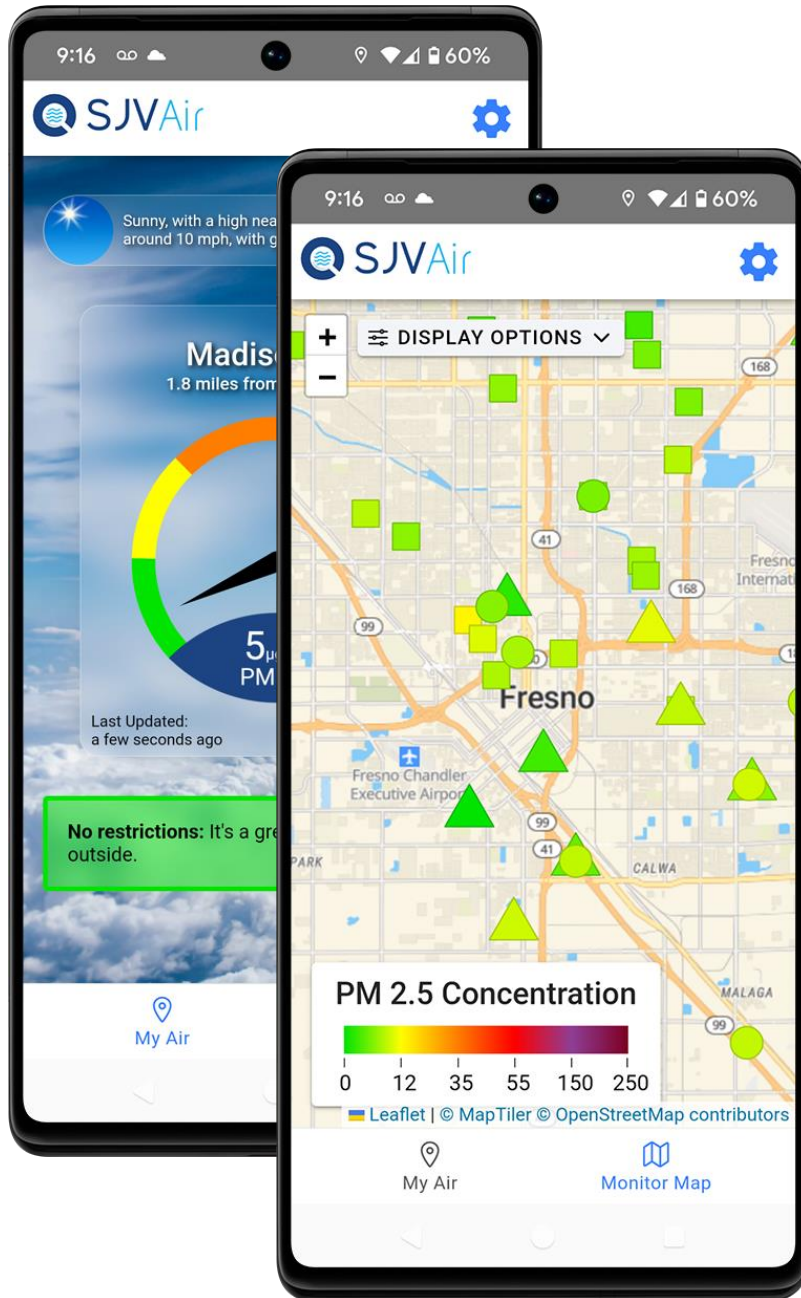
SJVAir Monitoring Network

SJVAir is a network of over 400 low-cost air quality monitors and 6 high-performance regulatory grade monitors providing real-time PM_{2.5} data to disadvantaged communities across the San Joaquin Valley.

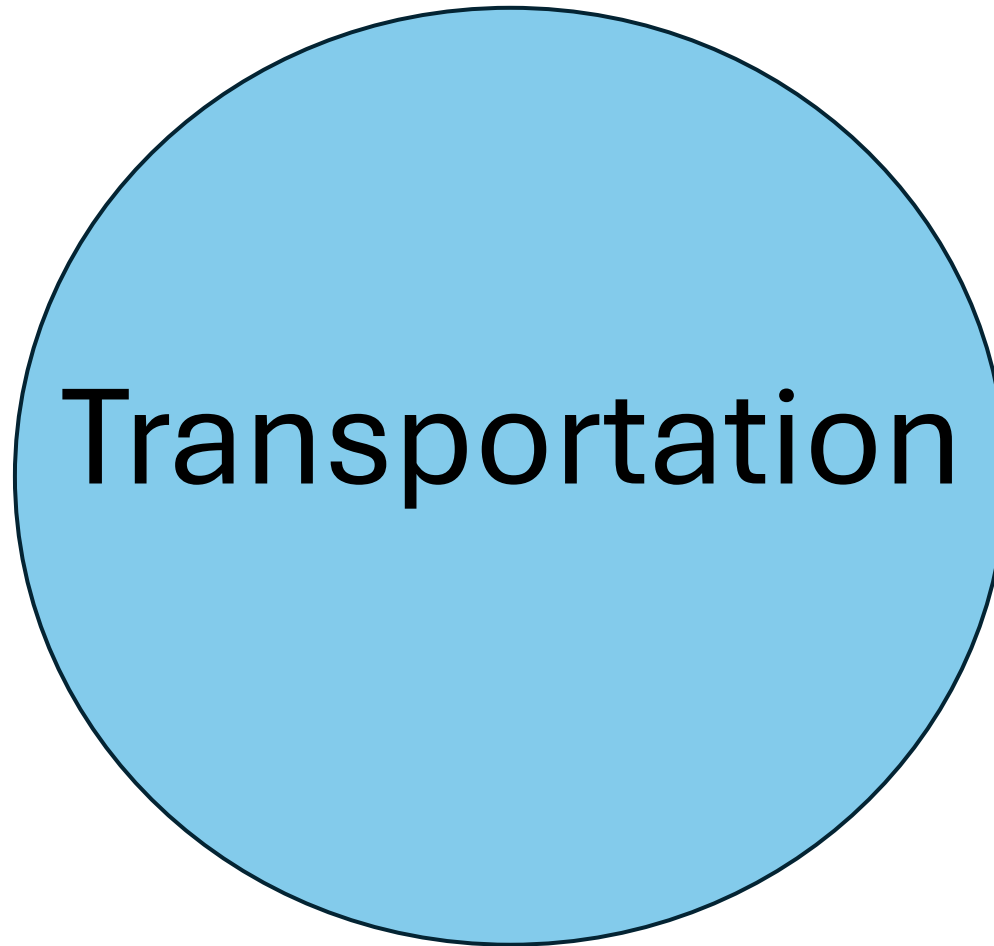
SJVAir collaborates with the California Air Resources Board and San Joaquin Valley Air Pollution Control District to colocate (calibrate) low-cost PM monitors with regulatory PM_{2.5} monitors across the San Joaquin Valley.

SJVAir is now available in an Apple and Android app, on the website. Working to develop more data analysis tools for the public.





Get the app!
sjvair.com/app



Transportation

EV Equity Program

Access to Clean Transportation

- CCAC's Electric Vehicle (EV) Equity team specializes in assisting new populations in qualifying for California's low-income EV incentive programs.
- Increasing the number of electric vehicles operating in a neighborhood has immediate real air pollution and health benefits.
- “At the zip code level, for every additional 20 Zero Emission Vehicles per 1,000 people, there was a 3.2% drop in the rate of asthma-related emergency visits and a small suggestive reduction in NO2 levels.” 2023 study by University of Southern California
- CCAC leading Hub and Spoke outreach and application assistance model in 42 Counties



Clean Freight

- Clean Freight Leadership Institute (Study Group)
- Zero Emissions Policy work at state and federal level
 - Congressional Review Acts to revoke California waivers



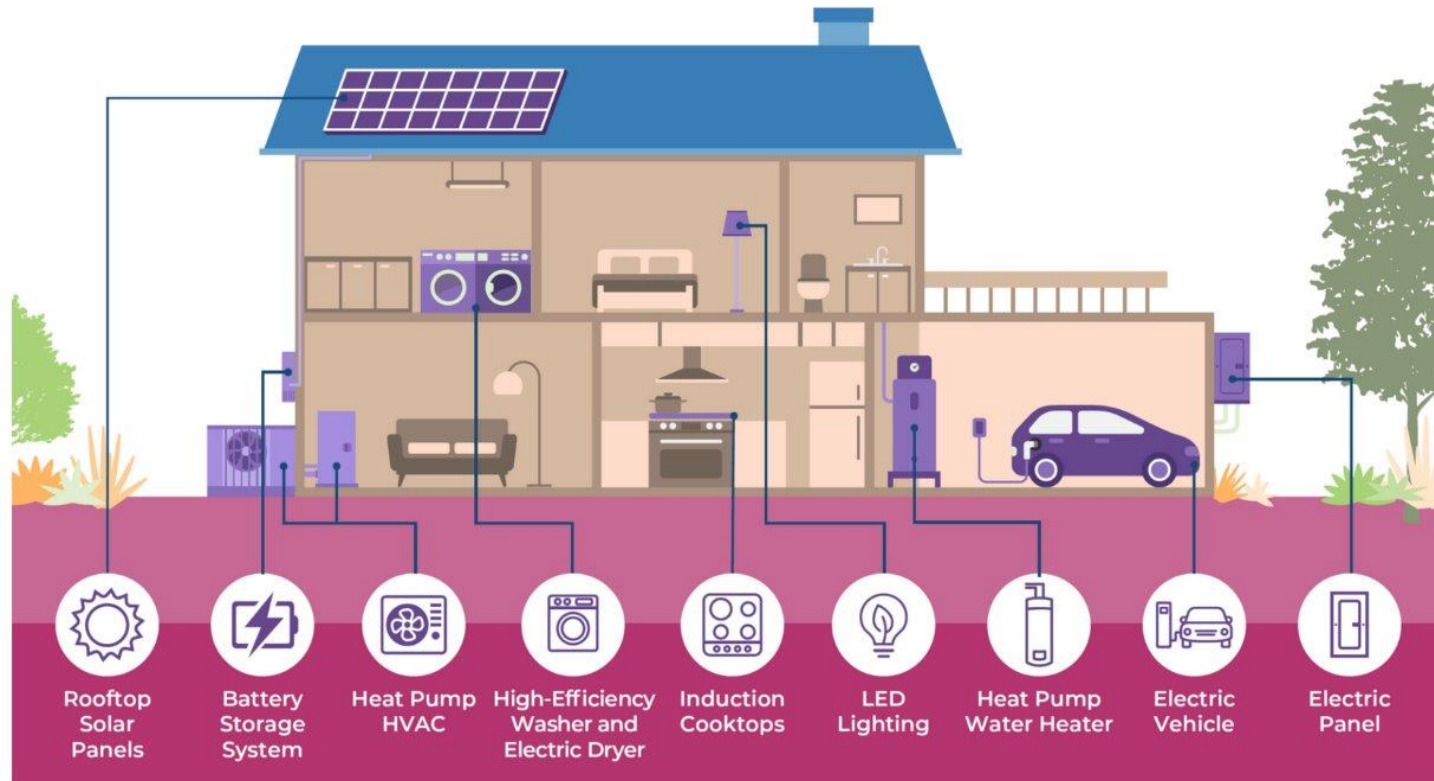


ENERGY

Building Decarbonization



**BUILDING ENERGY
EQUITY & POWER**



What is a whole home retrofit?

1. Replacing all fossil fuel burning appliances with electric
2. Rooftop solar with battery storage to save on electric bills
3. Energy efficiency, Weatherization, Mold/Asbestos removal, Roof Repairs

Photo Credit: City of Palo Alto Utilities

Energy Leadership Institute

"A Just Transition for Asthma Prevention"

- Four "Train-the-Trainer" workshops in 2024
 - Climate Literacy
 - Energy Landscape
 - Climate & Energy Decision-Making at the Local, State & Federal Levels
 - Putting it All Together: Leadership in Climate & Energy Decision-Making
- 21 Organizations Across the San Joaquin Valley participated
 - The primary goal was to prepare more leaders for climate & energy related advocacy
 - Build capacity and establish a support network for energy advocacy
 - Identify Community Priorities
 - Ongoing engagement in each community – ensure climate and energy programs are accessible

** Initial funding by a Cycle 1- Equity, Engagement, and Education (EEE) Grant from the CPUC Equity and Access Grant Program of the External Affairs Division, supplemented with other funding.*



Environmental Health Research Division





Indoor Air Quality Associated with Electric Heating and Cooking

A collaboration with Berkeley Air Monitoring Group (BAMG)

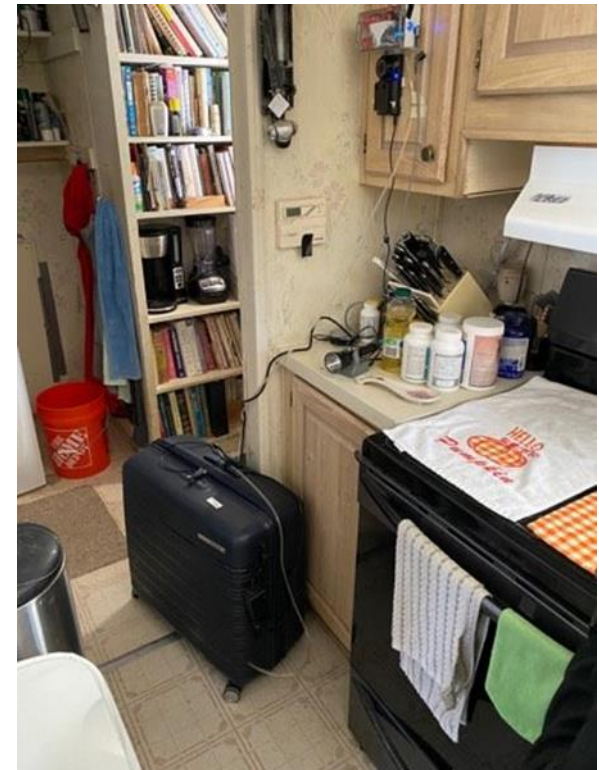
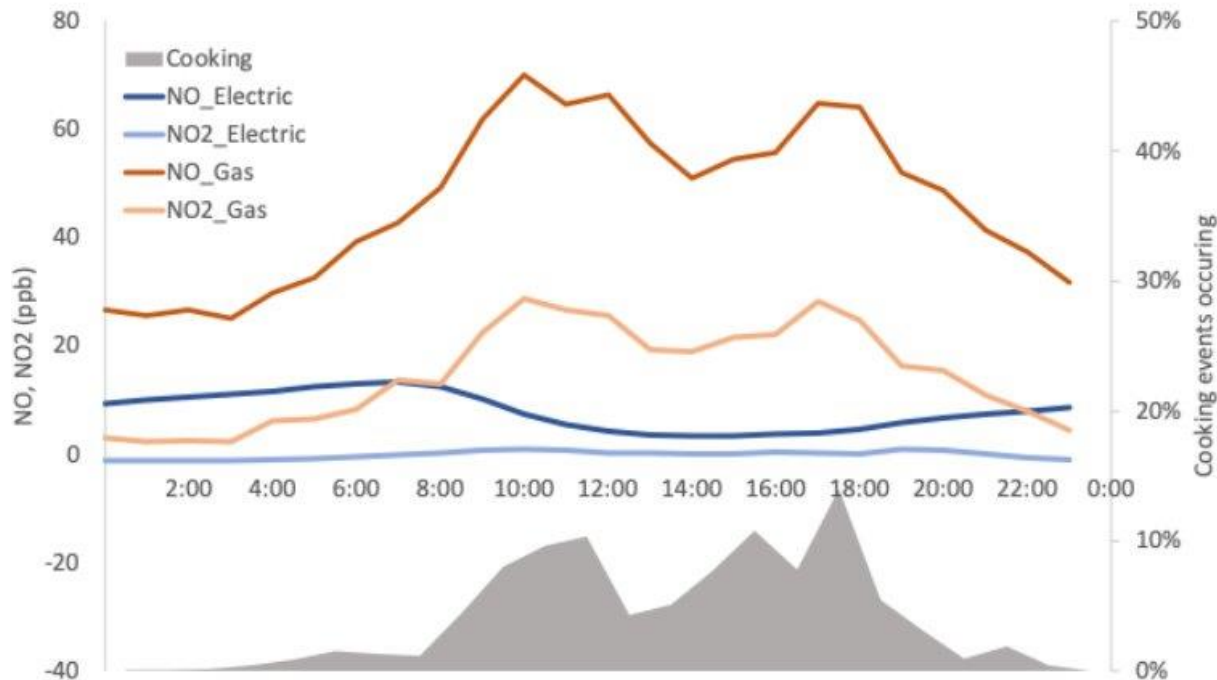
Healthy Homes Project

- Cross-sectional study of 139 homes (72 intervention/electrification 67 control/propane) in four SJV Pilot communities
- Quantify effects of **electric cooking and heating appliances** on **indoor air quality** compared to homes that utilize propane or wood/biomass for heating and/or cooking



Findings

- Data from the first 84 homes indicate significantly reduced NO₂ levels in electric (1.6 ppb) compared to gas stove homes (12.9 ppb). NO_x levels mirrored this trend.



Cooking & Electrification Improvements in Children with Asthma Study (CEVICA)

A collaboration between LBNL, UCSF, CCAC, AEA and UCLA



RCT assessing indoor air quality and respiratory health in homes with gas vs electric stoves

- Recruit, enroll and randomize 120 homes of children with asthma (CARES) in Fresno and Bakersfield
- Baseline: measure IAQ and child's lung health (spirometry, FeNO and asthma symptoms)
- Intervention1: replace gas stoves with electric induction range in intervention group (50% of homes)
- Post-intervention1 (case/control): measure IAQ and child's lung health (spirometry, FeNO and asthma symptoms)
- Intervention2: replace gas stoves with electric induction range in remaining half of homes (remaining homes - controls)
- Post-intervention2 (pre/post): measure IAQ and child's lung health (spirometry, FeNO and asthma symptoms)

Thank you!



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