



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT



**West Oakland
Environmental
Indicators Project**
know which way the wind blows

WOCAP Steering Committee

November 2, 2022

Welcome!

- Name, Affiliation/Organization
- Please sign in/add comments in the sheet:
 - [November 2, 2021 Sign In Sheet in chat](#)

Owning Our Air - West Oakland AB 617 Steering Committee Meeting

Wednesday, November 2, 2022 - 6:00 pm to 8:00 p.m.

6:00 p.m. Roll call and welcome from WOEIP (10 mins; 6:00-6:10 PM)- Co-Leads Leadership

6:10 p.m. Co-Leads Report Back (25 mins; 6:10-6:35 PM)

- Report back on EPA administrators visit- Janet McCabe, Deputy Administrator/Martha Guzman, Region 9 Executive Director- BB
- Tracking Tool update- NMT
- West Oakland Link update- MMG

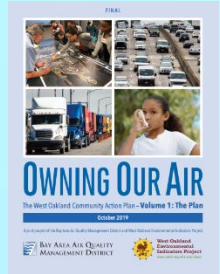
6:35 p.m. Implementation Project Update (30 mins; 6:35-7:05 PM)

- Residential Building Electrification Project Update
Shayna Hirshfield-Gold, Climate Program Manager, City of Oakland; & Mark Hall, Revalue.io

7:05 p.m. Community Engagement Update (45 mins; 7:05-7:50 PM)

- Health Equity 1-pager
- Toxic Tour Update
- Citizen's Science Proposal
 - Precedent project- BAAQMD study on Truck Traffic
 - Potential project- hyper local health impacts in West Oakland

7:50 p.m. Next Steps / Announcements / Adjourn (30 mins; 7:50-8:00 PM)





Co-Leads Report Back

EPA Visit



Janet McCabe
Deputy Administrator

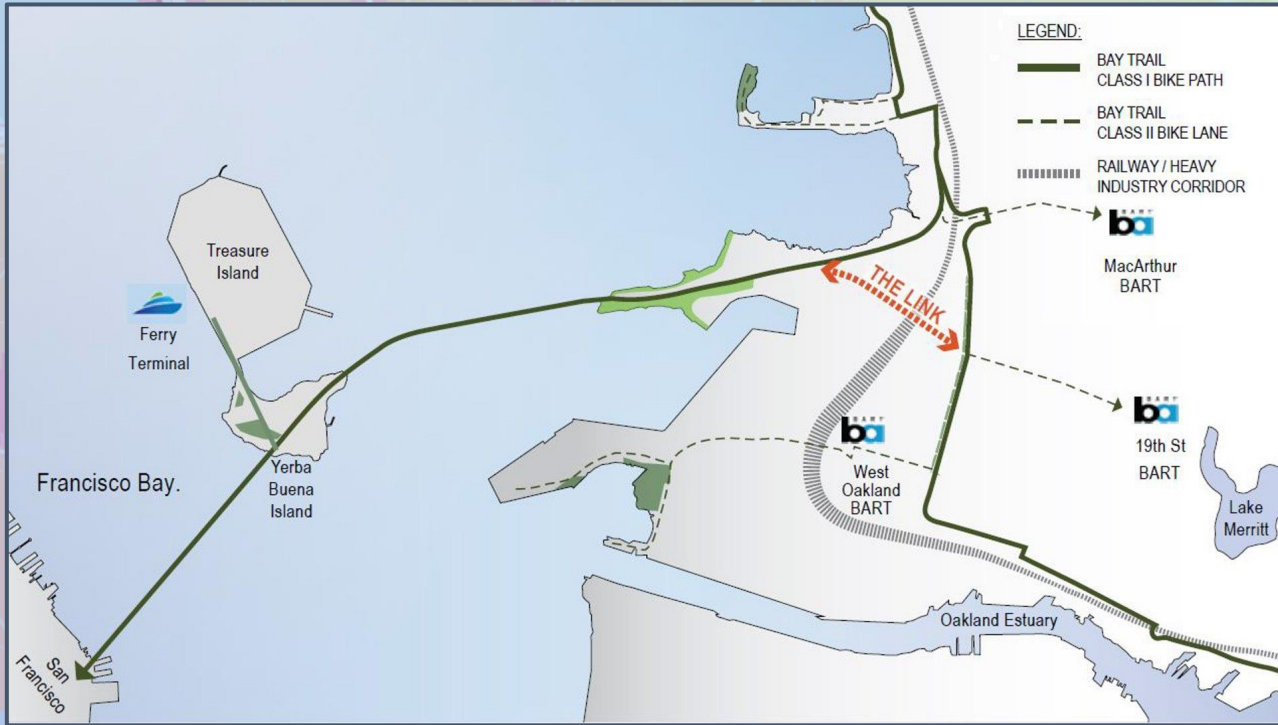


Martha Guzman
Region 9 Executive Director

Tracking Tool Update



West Oakland Link Update



Childhood
% of new cas

10

20

580

123

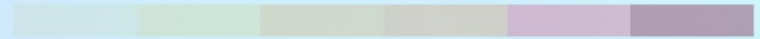
Implementation Project Report Back

Residential Building Electrification Project Update

Shayna Hirshfield-Gold, Climate Program Manager, City of Oakland

Mark Hall, Founder & CEO, Revalue.io

% of new cases from air pollution



10

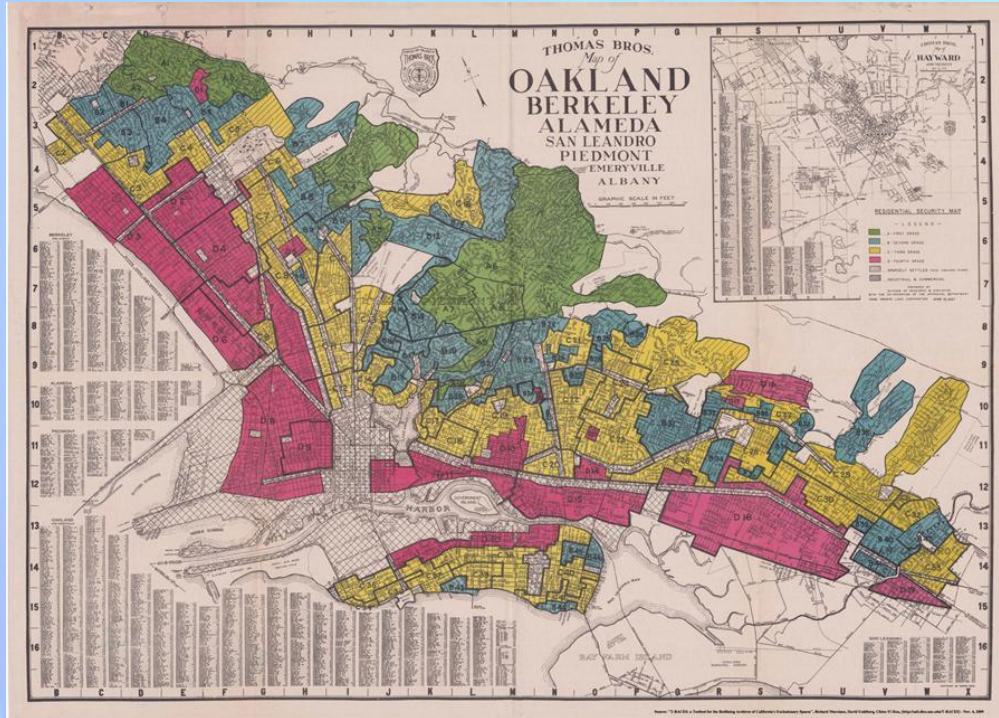
20

30

40

50

Building Electrification is a Matter of Justice

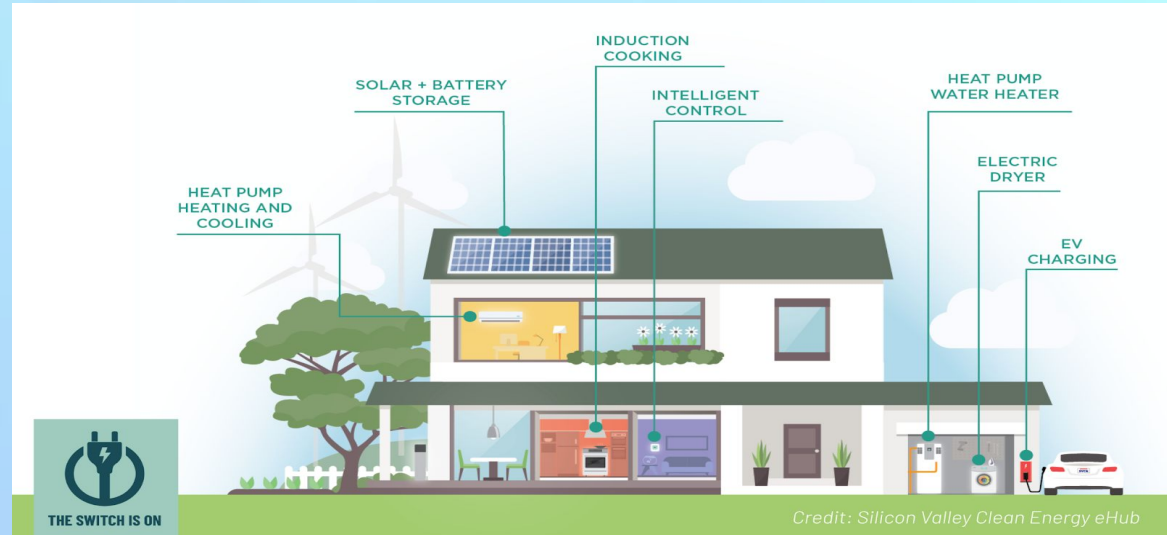


Why Building Electrification?



What is holistic electrification?

- Transition from gas appliances to 100% electric power +
- Energy efficiency +
- Removing mold & related hazards +
- Improved indoor air quality and comfort +
- Energy resilience



Food for Thought

- What is a healthy home to you?
- Has anyone in your home or family suffered breathing issues?
- Have you ever wondered “Is that mold dangerous?”



Green & Healthy Homes Overview



Search

Language +

Residents +

Businesses +

About EBCE +

RESIDENTIAL PROGRAMS

Upgrade your home's efficiency & comfort

The Health-e Home program helps make energy-efficient upgrades and whole home electrification accessible for low- to moderate-income households with affordable financing options and \$0 down.

APPLY TODAY ▶



<https://ebce.org/health-e-home/>



Community Impact 1: Dogtown Duplex



- Heat pump, insulation, lighting, smart electrical panel
- Oakland native, duplex rented for affordable housing.
- Stacked rebates, incentives and social impact financing to deliver affordable project with energy saving benefits
- Employed local minority, woman owned contracting firm + apprentices from Cypress Mandela.



Community Impact 2: NCLT Peace Gardens



- Electrification retrofit complete with induction stoves, mini split heat pumps, and solar panels in 5-unit low income cooperative housing
- Employed local minority women owned firm with apprentices from Cypress Mandela
- Stacked rebates, incentives, social impact and forgivable loan funds to make project feasible for LMI residents and ownership group



Building Electrification Community Engagement & Training

- **Electrification 101** - The “what,” “why,” and “how” of equitable electrification
- **Share resources** for energy efficiency & electrification
- **Understand needs & concerns**
- **Share workforce linkages**

www.oaklandca.gov/projects/building-electrification



Feedback on Community Trainings & Engagement

- Ideal audience(s)
- Location possibilities
- Ways / places to invite WO residents
- Format / length
- Other suggestions



Overall Questions & Suggestions

?



Induction Stove Campaign

- Builds on existing induction cooktop loaner programs (Aaron Reaven, EBCE)
- **Program design ideas**
 - **Saturation:** e.g. 1,000 induction cooktops installed in 1 or 2 years?
 - **Pilot Project:** e.g. Cooktops in all residential units of an OHA building
- **Measuring health impacts-** E.g. Collaboration with HEAC/GHHI/Kaiser - bundling health impact savings to fund electrification
- **Potential program linkages-** (Revalue.io/GHHI, J40 partners, Green the Church, Interfaith Power and Light, etc.)
- **Workforce development linkage-** leverage Revalue.io/BlocPower and other local contractors (Quick Start)
- **Funding ideas-** (CARB? PG&E? EBCE?), aggregated group buy



WOCAP

COMMUNITY ENGAGEMENT UPDATE

- HEALTH EQUITY 1-PAGER
- TOXIC TOUR UPDATE
- CITIZEN'S SCIENCE PROPOSAL

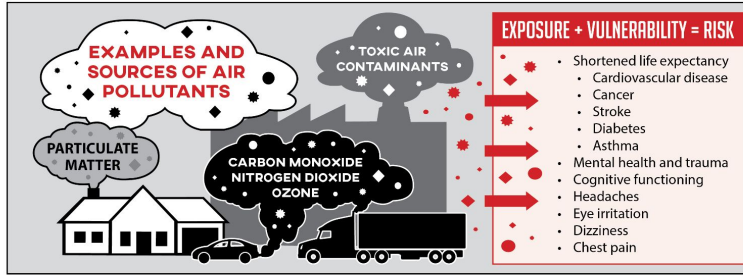


West Oakland
Environmental
Indicators
Project



Lower-income communities of color like West Oakland face many challenges and obstacles to creating thriving neighborhoods. Poor health outcomes are high on the list of these challenges, and contributing to this *disparity* is poor air quality. The WOCAP provides a road map to better air quality and it's stakeholders continue to be at the forefront of this struggle.

To support data-based intervention, the WOCAP created the **Health Equity Advisory Committee (HEAC)** to provide technical support for the efforts of the WOCAP including making data and research recommendations. The HEAC also advises on potential health benefits, co-benefits and equity benefits of specific WOCAP strategies. The HEAC includes representatives of the West Oakland community, local and regional agencies, health care stakeholders, and academic researchers.



PARTICULATE MATTER (PM)

is very small liquid and solid particles that float in the air, and come from a host of mobile and stationary sources, causing serious health problems. PMs are higher in West Oakland than other wealthier neighborhoods.

PARTICULATE MATTER SIZE COMPARISON

PM10 < 10 μm (microns) (0.01 mm/0.000394 in)

PM2.5 < 2.5 μm (microns) (0.0025 mm/0.0000984 in)

HUMAN HAIR
50-70 μm (microns)

1 Particulate matter enters the body through the nose and mouth when we breathe

The impacts of air pollution can be seen in immediate and acute symptoms like chest pain, coughing and eye irritation, but long-term and cumulative exposure to air pollutants lead to chronic and even fatal conditions. Cumulative impacts are the total burden from environmental stressors that affect the health, and quality of life over an extended period of time, including indirect economic, social and mental effects.

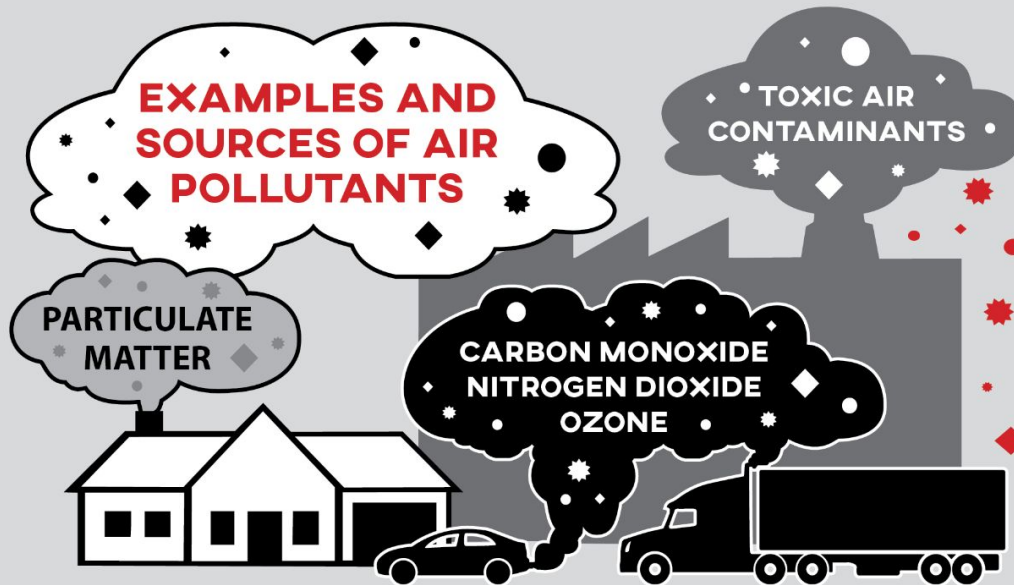


HOW PARTICULATE MATTER ENTERS THE BODY

The body eliminates most larger particles but smaller particles like PM2.5 continue to the lungs

PM2.5 particles can penetrate deep into the lungs and heart, causing serious health consequences including cardiovascular and heart diseases.

EXAMPLES AND SOURCES OF AIR POLLUTANTS



EXPOSURE + VULNERABILITY = RISK

- Shortened life expectancy
 - Cardiovascular disease
 - Cancer
 - Stroke
 - Diabetes
 - Asthma
- Mental health and trauma
- Cognitive functioning
- Headaches
- Eye irritation
- Dizziness
- Chest pain

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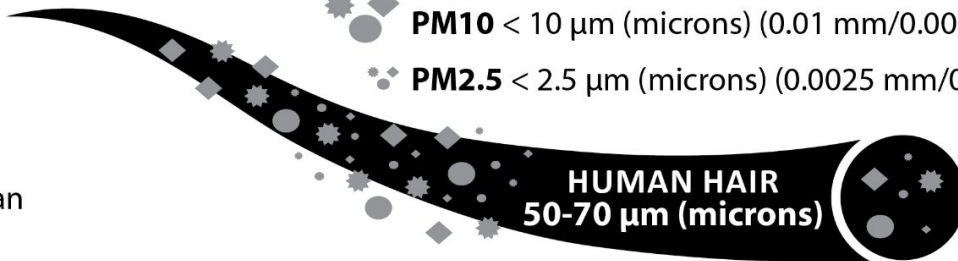
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HOW PARTICULATE MATTER ENTERS THE BODY

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3 PM2.5 particles can penetrate deep into the lungs and heart, causing serious health consequences including cardiovascular and heart diseases.



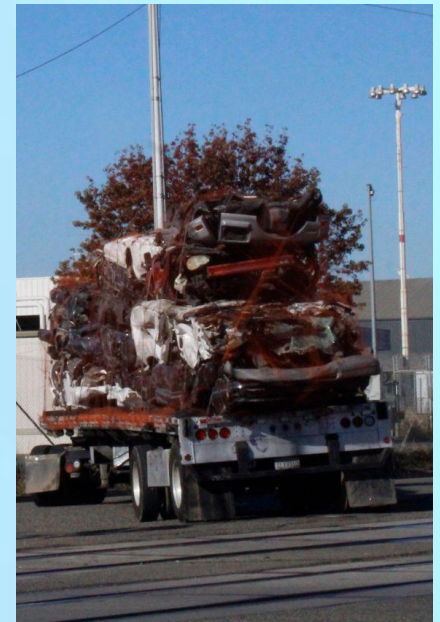
West Oakland faces a host of poor health outcomes relative to surrounding neighborhoods as a result of racist and discriminatory policies and practices throughout history and continuing today.

Generate a map that depicts multiple additional indicators i.e. mortality/life expectancy, chronic disease...

The Whys:

Why are these disparate health impacts present?

- Historical and persistent institutional racism
- Policy, programmatic and planning decisions



HOW CAN OAKLAND RESIDENTS REDUCE EXPOSURE TO POOR AIR QUALITY?

- Civic engagement
Attend neighborhood meetings and ask city, county, and other government officials what they are doing to support residents
- Air filters, induction stoves...
- ...



WOCAP Toxic Tour



- **4-6 tours per year (quarterly or bi-monthly)**
 - ? day of the week
 - Days for agencies and school tours
 - Weekends for all
- **Mode of transportation-** Bus
- **Size of tour-** 30-50 people, 10-12 stops
- **Content and Documentation**
 - Curated content
 - Audio/video recording
 - Pre-recorded content
 - Site-based citizen science
 - Event-based
 - Youth tour guides
- **Begin and end with kick-off or orientation and refreshments/lunch**
 - WOEIP
 - City Slickers
 - Prescott School
- **Fee structure**
 - Free
 - Sliding scale
 - Donations
- **Funding opportunities**
 - Financial support- grants, corporate, individuals
 - Materials and services

Citizen Science

- **Common Sense**
 - Developed mobile sensing technologies that help communities gather and analyze environmental data
www.communitysensing.org
 - [YouTube Link](#) of Common Sense Mobile Air Quality Sensors



Handheld Device



Vehicular Platform



Citizen Science

- [BAAQMD West Oakland Truck Survey](#)

Survey by WO residents of surface streets and estimated traffic volumes, routes, and speeds of medium heavy duty and heavy heavy duty trucks along surface streets and freeways in West Oakland

- [West Oakland Air Quality Project \(WOAQ\)](#)

WOEIP partnership with Intel to create a citizen science program that helped community members understand the science behind air pollution and how to use data to advocate for real-world, systems-level change.

- [Oakland North Article](#)



Citizen Science

- **Clearing the Air- Reducing Diesel Pollution in West Oakland**
 - WOEIP Report by the Pacific Institute in conjunction with the Coalition for West Oakland Revitalization and in partnership with WO residents to design and conduct a neighborhood study of diesel trucks.
 - Ten WO residents trained to be truck observers
 - Residents conducted truck counts on 5 neighborhood streets on 3 days, and observed idling for two full 24-hour periods at the Port of Oakland.
 - Indoor measurements used an Aethalometer- measured minute-by-minute reading black carbon particles in the air
 - **Citizen Science video- <https://youtu.be/GbGITLLEMMg>**

WOMEN OF THE
BLACK PANTHER PARTY

SERVE THE
BODY
AND
SOUL

Next Steps/ Announcements

WE'VE COME TOO FAR
TO TURN BACK NOW
ALL POWER TO
THE PEOPLE!

LOVE IS AN
EXPRESSION
OF POWER
WE CAN USE TO
TRANSFORM
OUR WORLD



Adjourn



Blue sign with text, likely a parking or accessibility notice.

RESERVED PARKING ONLY

RESERVED PARKING ONLY