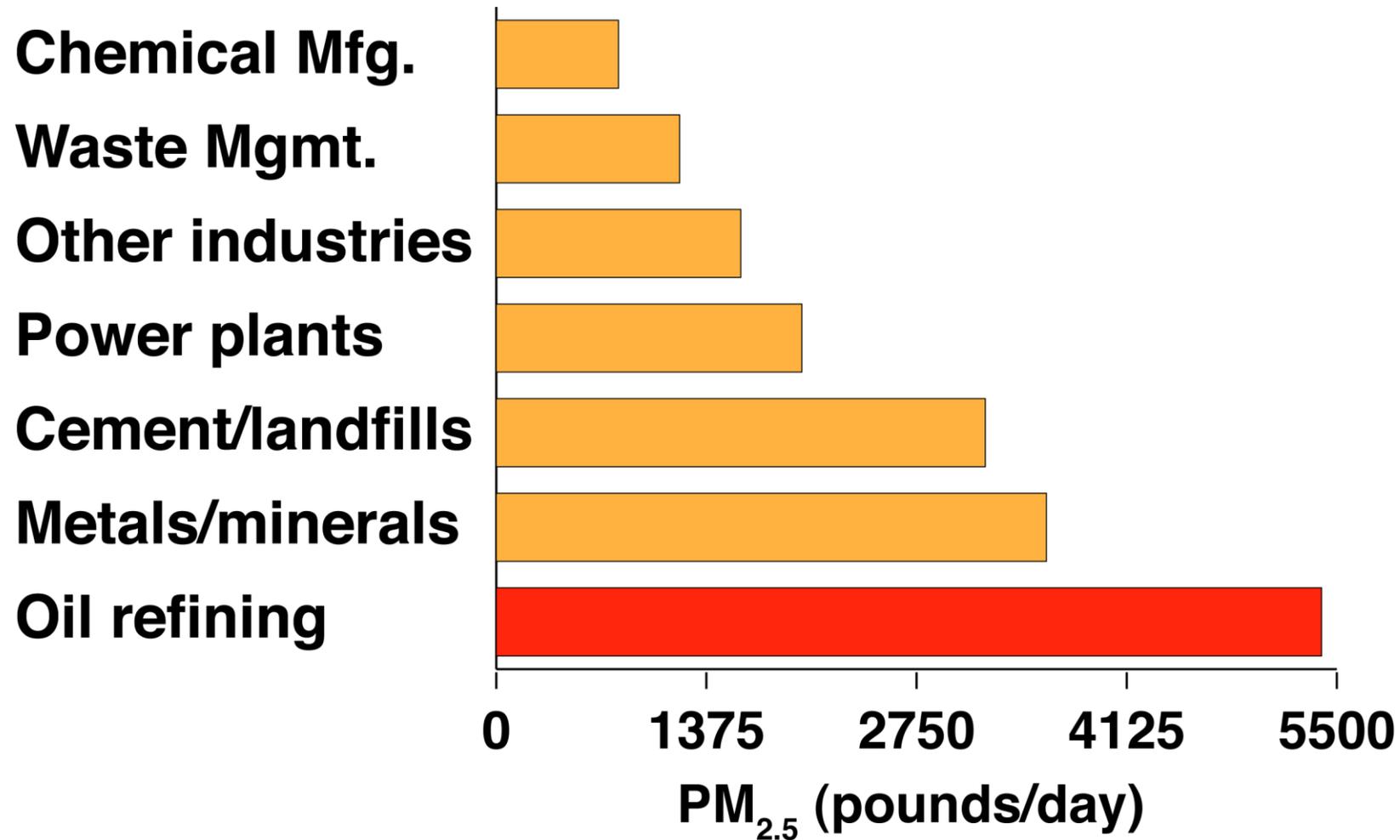


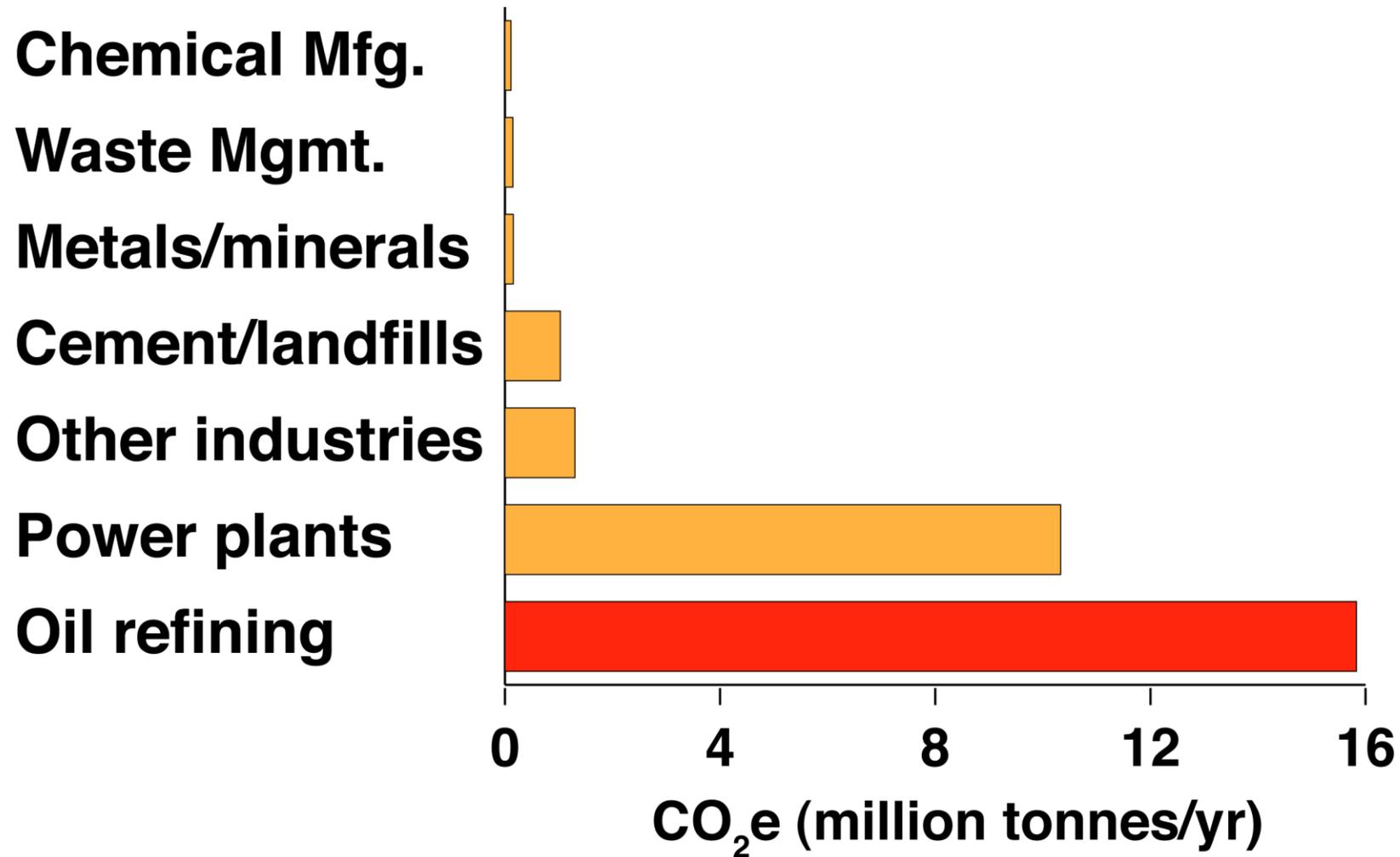


PROYECTO SOBRE ADAPTACIÓN Y RESISTENCIA A CAMBIOS CLIMÁTICOS



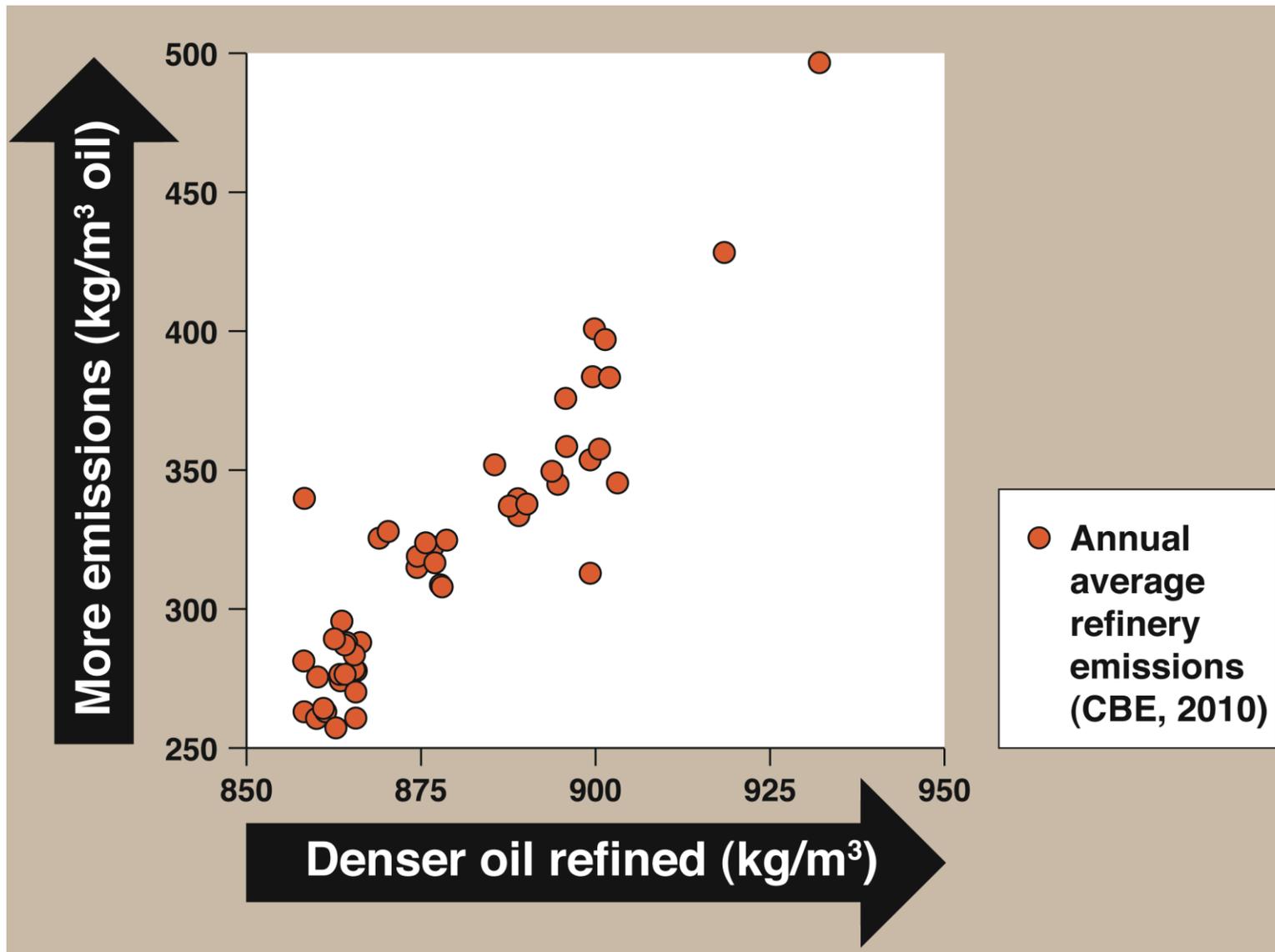
Oil refining is the biggest industrial air polluter in the Air District's jurisdiction for particulate matter air pollution.

Data from Bay Area Air District; analysis by CBE



Oil refining is the biggest industrial air polluter in the Bay Area Air District's jurisdiction for greenhouse gases (CO₂e).

Data from California Air Resources Board; analysis by CBE

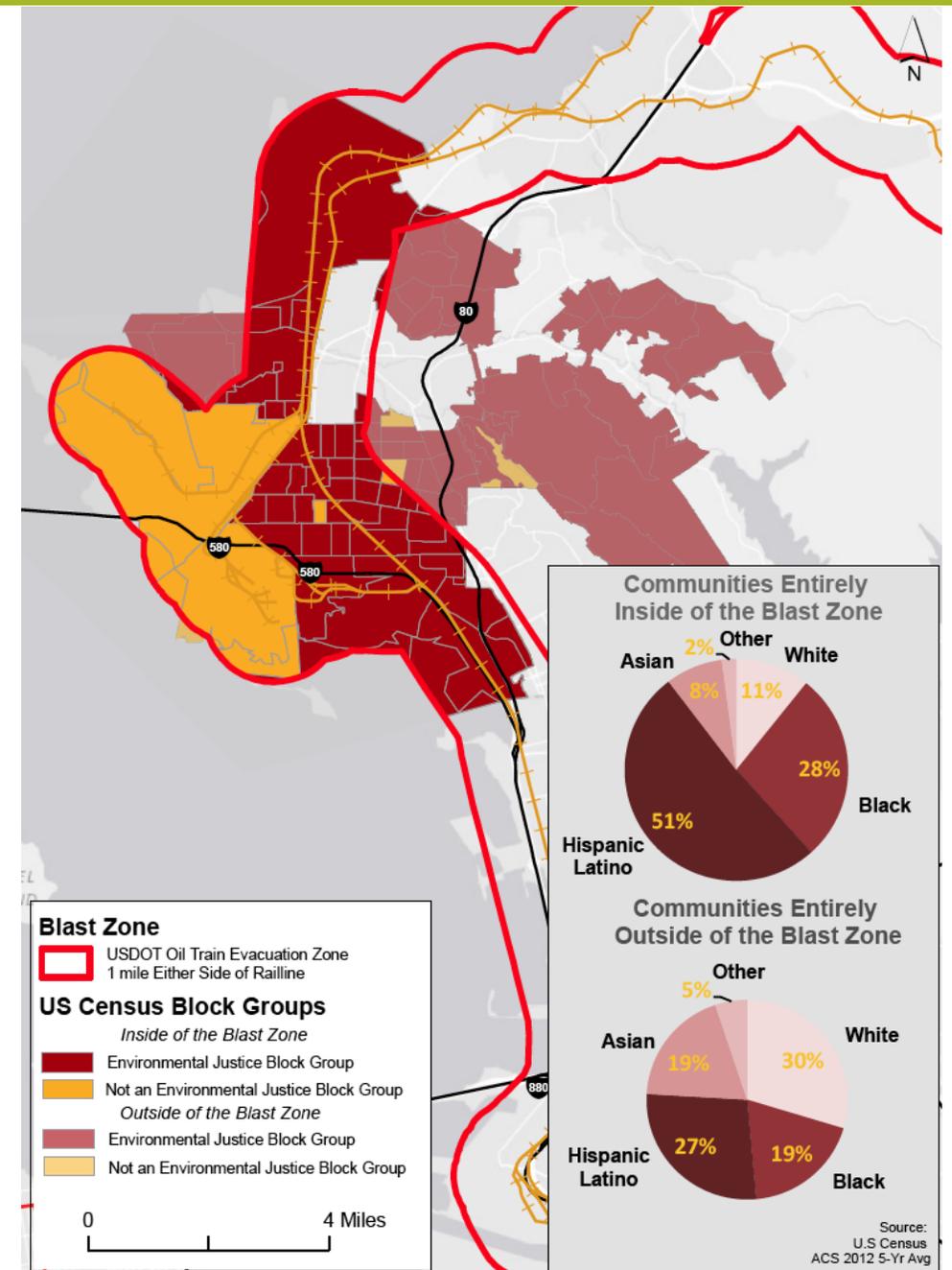


Refining worse quality oil increases refinery combustion emissions. Example: GHG (CO₂)

Crude injustice:

89% of all people who live in the oil train blast zone in Richmond are people of color.

This map and these data are from "Crude Injustice on the Rails," a 2015 report by Communities for a Better Environment (CBE) and STAND (formerly ForestEthics).





Switching to higher sulfur crude corroded this Richmond refinery pipe 400% faster, until it failed catastrophically...

Data from CBE's peer reviewed scientific work.



...on August 6, 2012. Air pollution from the fire when the corroded pipe failed sent 15,000 people to the hospital.



Example - April 23, 2001- Tosco Refinery explosion & fire, Carson (East Side of Wilmington) – another coker fire

Refinery fires, explosions, flaring happen regularly in SoCal (not just northern California)

**9/25/2009 - TESORO WILMINGTON COKER
FIRE REQUIRED OVER 200 FIREFIGHTERS
TO PUT IT OUT. SCHOOL CHILDREN AND
NEIGHBORS WERE ADVISED TO STAY
INDOORS.**

Wilmington:
Refineries, Ports, Oil Drilling, Railways, Freeways, Diesel Trucking & more



Cumulative Impacts:

- Refineries (5)
- Ports of LA and Long Beach
- Diesel trucks
- Oil drilling
- I-110 & 710 Freeways
- Auto Body Shops
- Recycling Facilities
- Alameda Corridor (railway)

*Centralized drilling came to Warren Oil in Wilmington around 2007
(with 540 wells planned over 12 years)*

Neighbors described this as “a living hell”

**“It’s been different since the Warren site
came to the neighborhood”**



“A lot of allergies, breathing
problem, headaches, chronic
problems, lack of sleep”

“Get a weird taste in
my mouth, difficulty
in bad traffic,
breathing, there’s a
breeze” of dust, the
house is full of
dust, must close the
windows in the house
24/7”

“Mainly health
problems—sleeping.
House always has
dust and oily

“Every morning
lots of black film all
over the cars”

“I know my blood pressure is
just on edge, I just have to
leave. This can’t go on much
longer.”

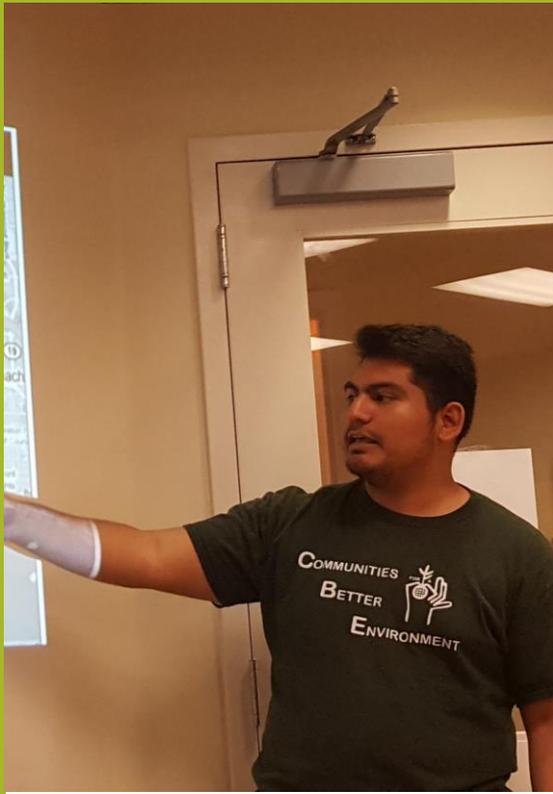


Photo credit: Diana Alexander Diaz

Engaging Residents

CBE has held workshops, trainings and events highlighting the impacts of climate change on the communities of Richmond and Wilmington

We have done the following:

- Climate Adaptation and Resiliency Enhancement (CARE) Project Advisory meeting
- CARE Workshops
- CARE Events
 - Love Your Home event on resiliency at the RYSE Youth Center in Richmond

Helping residents create and realize their vision

- Under the CARE Project we are creating a CARE Manual
- The CARE Manual provides a roadmap to resiliency for residents in Richmond and Wilmington and background necessary to navigate the planning process locally. (Our Transformative Organizing model will be featured as part of this manual)
- We are addressing four issue areas:
 - Extreme Heat
 - Sea-Level Rise
 - Healthcare Services
 - Energy (Renewable Energy Access)



What have we learned?

Residents want:

- Access to services and assets
 - Transportation to medical appointments
 - Cooling Centers
 - Community Education
- Access to information
 - Updates on emergency planning (especially for flooding, tsunamis, heatwaves, and industrial disasters)
 - Availability of information in other languages
- Funding resources for low-hanging adaptation projects
 - Maintenance of trees
 - Flood protection
 - Home Weatherization
 - Cooling Centers
- And more...



Photo credit: Diana Alexander Diaz

From Local to Regional to Statewide

CBE has engaged in local and regional efforts around adaptation and resiliency, and we are taking strides to have more of a Statewide impact.

When it comes to adaptation, we must address the vulnerabilities of communities on the frontlines of climate change and industrial impacts.

Take Home Message:

When assessing vulnerabilities, we have to include frontline communities in the conversation to ensure that recommendations and projects are effective as well as representative of the communities.