



AGENDA: 20

Spare the Air – Cool the Climate ***A Blueprint for Clean Air and Climate*** ***Protection in the Bay Area***

Board of Directors

April 19, 2017

Henry Hilken
Director of Planning and Climate Protection



Critical Challenges

Climate Change

- The greatest common global challenge
- The biggest threat to our environment, economy, health and quality of life

Health Inequities

- Equal access to healthy air is a fundamental right that still eludes many Bay Area residents

This Plan focuses on strategies that will help us meet both of these challenges



The Air District's Response

We're launching a critical region-wide effort

- We are committed to providing leadership and taking aggressive action
- We have designed a Plan that enables the Air District to support and accelerate the efforts of other critical actors:

Local governments

Technology innovators

Community & advocacy orgs.

Households

Business & industry

Research/Academia

State Agencies/ARB

Individuals

- We hold ourselves accountable
 - We are responsible for implementing this Plan
 - Staff will report to the Board on our progress annually



What Is This Plan?

Multi-pollutant plan to update 2010 Clean Air Plan

A comprehensive strategy of 85 measures to:

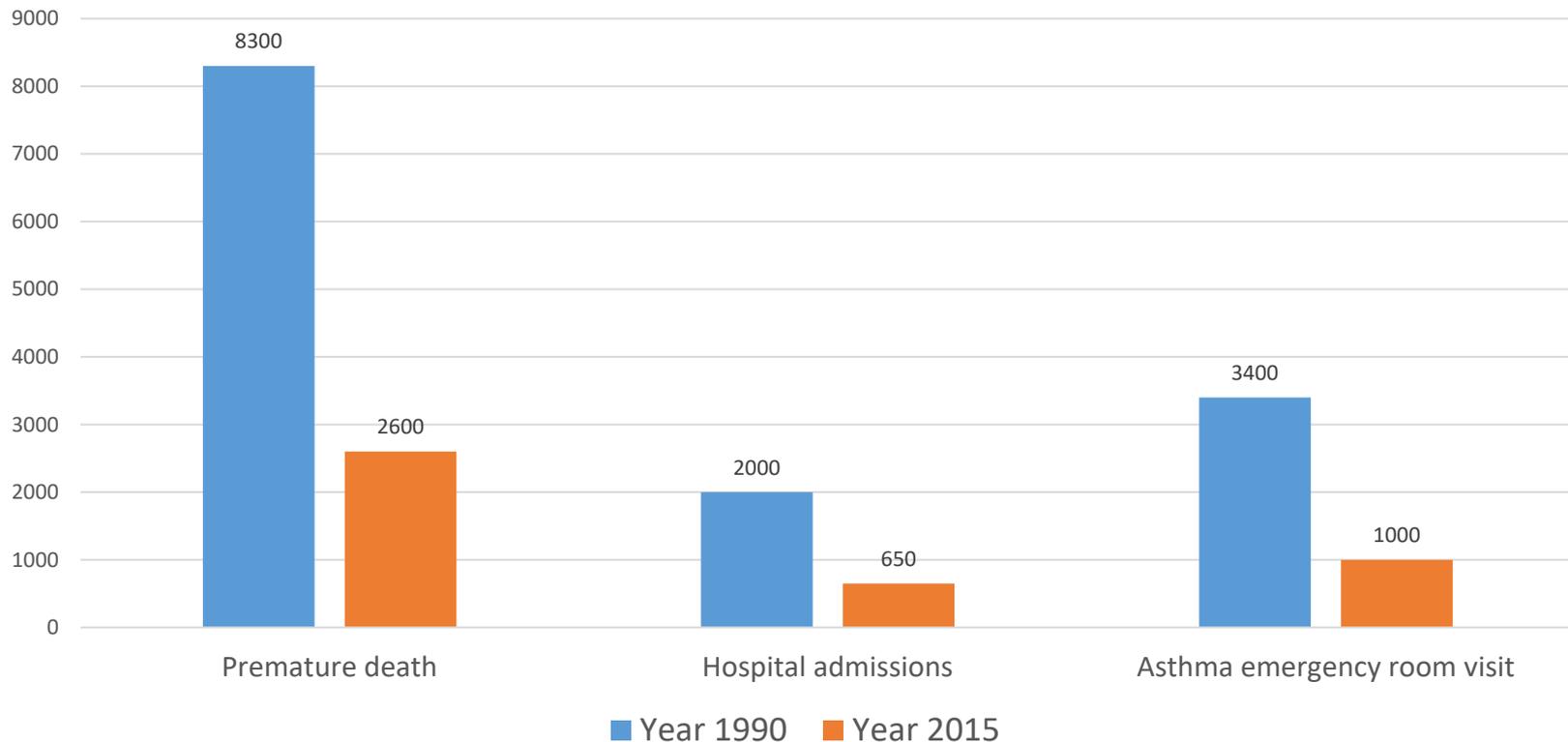
- reduce ozone and fine particles throughout the region
- reduce air toxics in impacted communities
- reduce GHGs toward long-range targets
 - 40% below 1990 levels by 2030
 - 80% below 1990 levels by 2050

This Plan lays out a Bold Vision for a future Bay Area with a thriving economy, truly equitable access to healthy air, and a healthy, secure environment

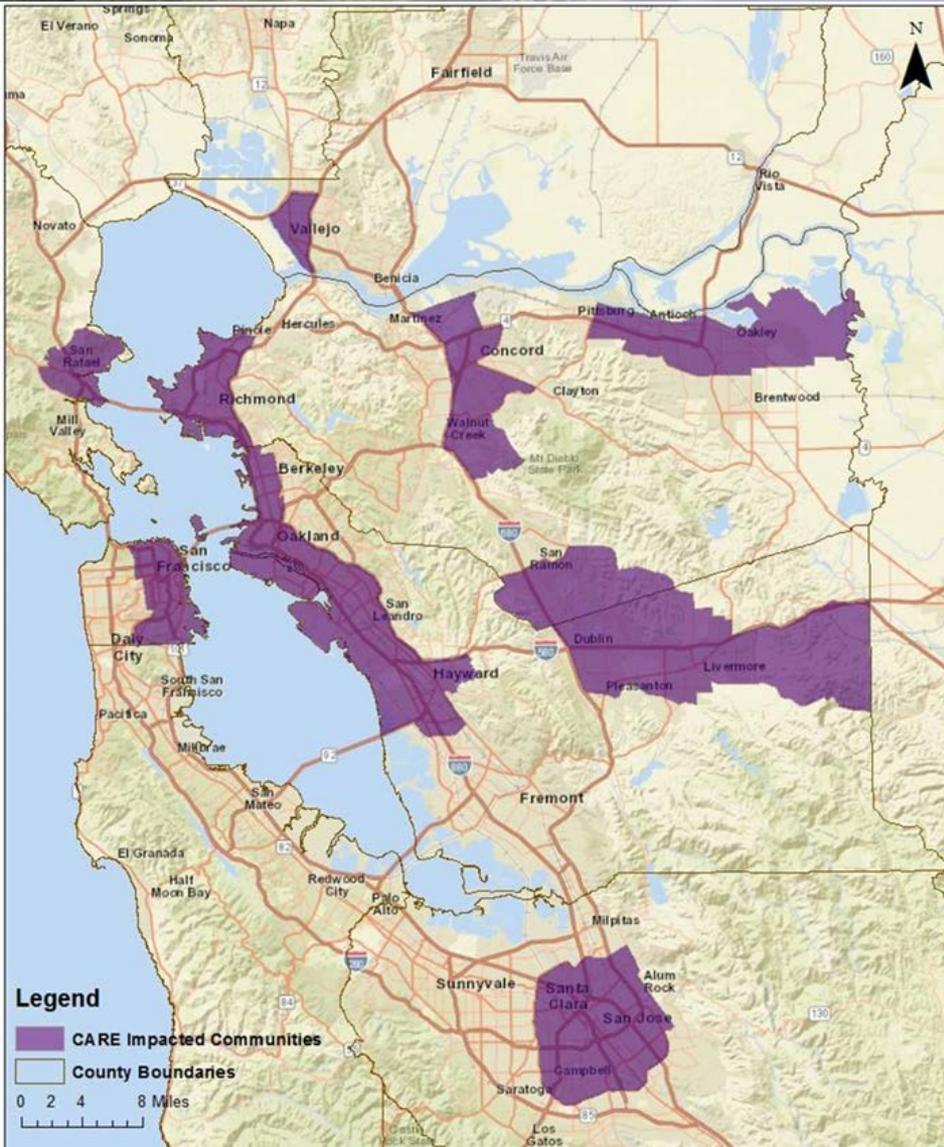
Better Air Quality → Public Health Benefits

- Key health effects have been reduced more than three-fold since 1990
- Better air quality has increased average Bay Area life expectancy by ~ one year

Estimated Annual Cases from Air Pollution in Bay Area



Healthy Air for All Bay Area Residents



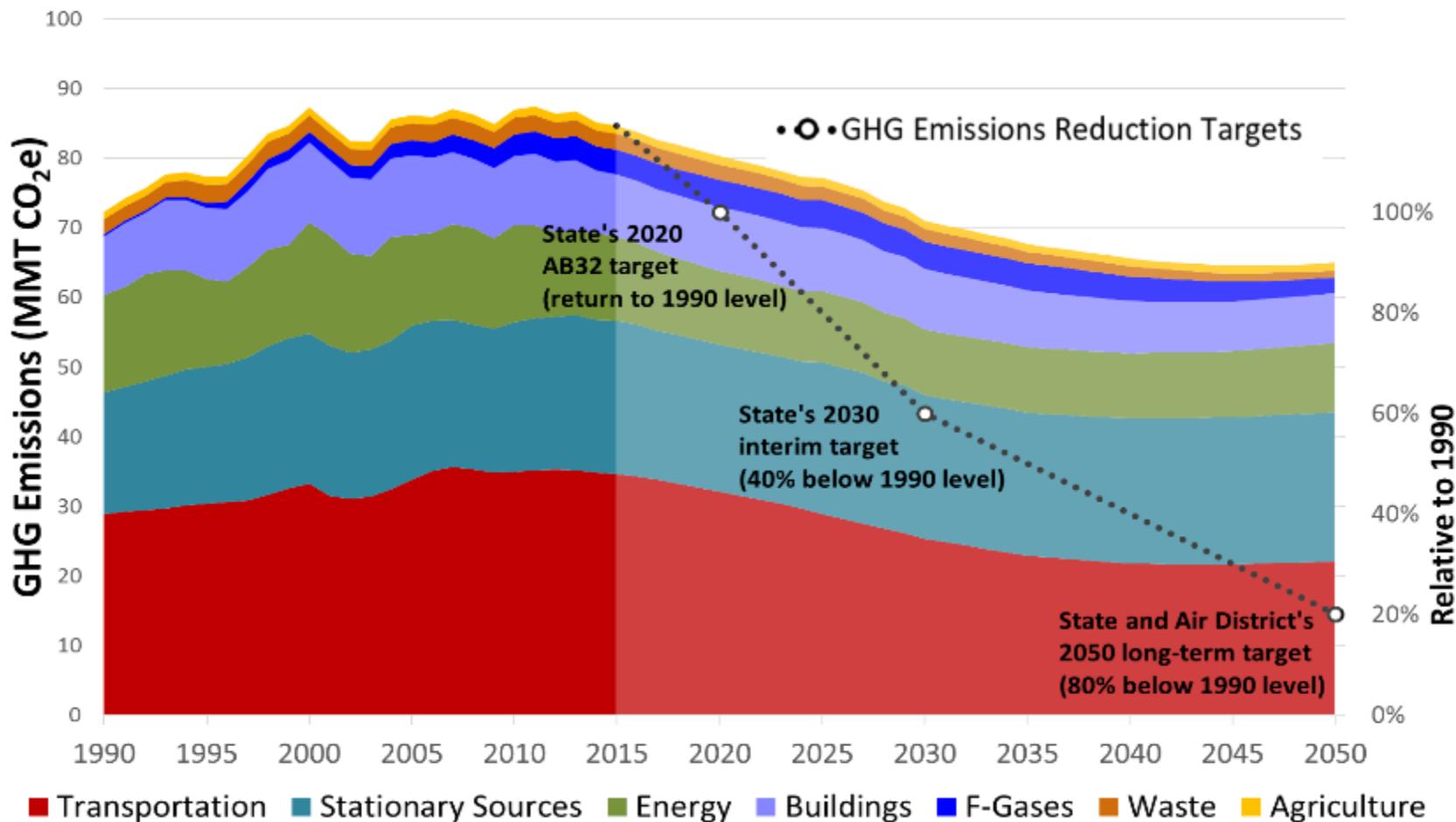
CARE Program identifies Bay Area communities most impacted by air pollution

Regionally: *reduce ozone and PM emissions* to assure long-term compliance with air quality standards

Locally: *eliminate disparities* in local exposure to air pollution

Climate Challenge in the Bay Area

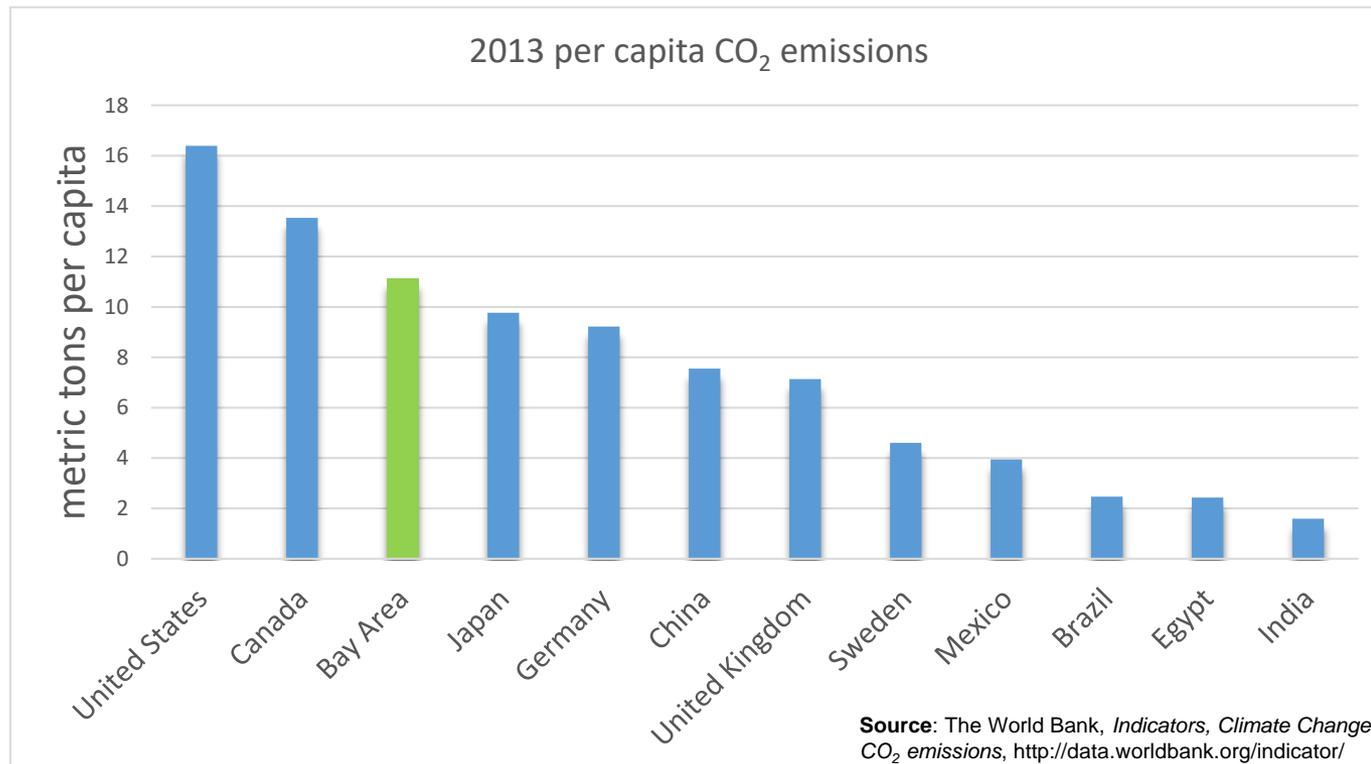
Bay Area GHG Projections to 2050 with Key State Programs



Bay Area Action is Important

The Bay Area is....

- The 21st-largest economy in the world
- The US metropolitan region with the most purchasing power
- A major global contributor to climate change
- A leader whose example is followed



A Bold Vision for 2050

- ✓ Reduce GHG emissions over 80%
- ✓ Eliminate disparities in health risk from air pollution



Power supply is nearly 100% renewable



Buildings are fossil-fuel free

Transportation is based on EVs and renewable diesel



Organics are put to use



Half of all trips are via transit, biking or walking



Oil companies become part of the solution





How Does This Plan Get Us There?

It sets us on a path to 2050 by laying out specific actions the Air District will take over the next 3-5 years

Using all available tools: rules, grants & incentives, partnerships, local gov't collaboration, community engagement, research

Priorities in the Plan:

- Reduce emissions of criteria pollutants and toxic air contaminants from all sources
- Reduce emissions of “super-GHGs” such as methane
- Reduce fossil fuel combustion
- Improve efficiency/reduce demand for fossil fuels
- Decarbonize the energy system/increase renewable energy



Getting There: The Control Strategy

- A near-term strategy for reducing criteria pollutants, air toxics and GHGs
- 85 distinct measures to reduce emissions...

Across all economic sectors:

Stationary Sources (40)

Transportation (23)

Energy (2)

Buildings (4)

Super-GHGs (3)

Waste (4)

Water (2)

Agriculture (4)

Natural & Working Lands (3)

Using many different tools*:

Rule-making (49)

Funding (28)

Model Policies (28)

Outreach/Ed (23)

Advocacy (14)

**Some measures use multiple tools*



Getting There: The Control Strategy

Near-term Priority:

Limit GHGs, criteria pollutants and toxics from refineries and other large stationary sources

Innovation:

Develop region-wide rule-making approach to reduce risk and emissions from many sources comprehensively

CM #	2017 Control Measures
SS 20	Toxics Risk Cap (Rule 11-18)
SS 11	Refinery Emissions Cap (Rule 12-16)
SS 31, 35, 36, 37	Particulate Matter (Rule 6, 6-1, 6-6, 6-7, 6-8)
SS 13	Oil and Gas Production (Rule 8-37)
SS 12	Refinery Carbon Intensity Limits (Reg. 13-1)
SS 9, 17	GHG BACT and Crude Slate in Permits (Rule 2-1, 2-2)
SS 16	Basin-Wide Methane Strategy

CM #	2018 Control Measures
SS 5, 6, 7	Refinery Sulfur Emissions (Rule 9-1)
SS 22	Stationary Gas Turbines (Rule 9-9)
SS 19	Portland Cement (Rule 9-13)
SS 1	Fluid Catalytic Cracking in Refineries (Rule 6-5 Phase 2)
SS 15	Natural Gas Processing and Distribution
SS 40	Odors
WA 1, 2	Landfills and Composting Operations



Getting There: The Control Strategy

Support local gov't efforts to achieve low carbon buildings, renewable energy, trip reduction and zero waste goals through:

- \$4.5 million grant program in FY2017/18 budget
 - *Focus on innovation, replicability, co-benefits and leadership*
- Technology Implementation Office
- Support for Community Choice Energy programs
- Guidance, model ordinances, best practices, tools, networking
- Model Solar Ordinance project





Getting There: The Control Strategy

Aggressively target largest source of GHG, ozone precursor and PM emissions: TRANSPORTATION

- Continue to incentivize electric vehicles (EVs) & EV infrastructure
 - \$17+ million awarded since 2010 for on-road vehicles and charging
 - \$42 million awarded since 2010 for off-road electrification (CalTrain, shore power)
 - \$5 million currently available through the 2017 *Charge!* Program
 - Bay Area goals: 110,000 EVs by 2020, 247,000 EVs by 2025
- Continue to reduce diesel and black carbon emissions
 - ~\$150 million awarded since 2012 to reduce emissions from trucks, school buses, marine vessels, locomotives and off-road equipment
- Work with MTC/ABAG/local governments to reduce VMT
 - Collaborate in developing *Plan Bay Area*
 - Continue funding for shuttle, rideshare and bike programs
 - Support development of strong local climate action plans

What This Plan Achieves

Pollutant	Tons ¹ Reduced	Annual Health Cost Savings	Equivalent Cars Removed
GHGs ²	5.6 million/yr	\$350 million	1,000,000
Ozone (ROG, NOx)	20/day	\$736 million	2,000,000
PM _{2.5}	3/day		

¹ GHGs are in metric tons/year

² Based on 20-year GWP

Intangible, priceless benefits:

- Provide leadership
- Launch a region-wide discussion
- Stimulate engagement from all corners of the region
- Inspire hope in a challenging time

A Community Plan

This is a Plan “of the Community”:

- Hundreds of individual experts and stakeholders have participated in development of this plan
- Demonstrated community buy-in and support
- Widespread public agency participation: MTC, ABAG, BARC, BCDC, local governments, state and federal agencies

It will take widespread collaboration and participation from the entire Bay Area community to make this Plan successful!





Public Comment on the Draft Plan

370 individuals and organizations submitted comments that reflect excitement for the Plan and its Vision:

- Emphasis on the urgency of the goals and need for aggressive action
- Implementation suggestions: act quickly; ideas for partners; thoughts on prioritization and specific actions
- Ideas on how to maximize emission reductions from control measures
- Importance of coordinating with state, regional and local agencies

The image shows a scenic view of the Golden Gate Bridge in San Francisco, California. The bridge's iconic orange-red towers and suspension cables are prominent against a clear blue sky. In the foreground, there's a body of water, likely the San Francisco Bay, and some greenery and buildings on the shore. The overall scene is bright and clear.

Changes to the Plan

- Add \$4.5 million climate protection grant program and Technology Implementation Office
- Emphasize health and economic benefits of the Plan
- Make the Plan more accessible, understandable and actionable to the public
- Highlight importance of partnerships and collaborations with public agencies and stakeholders (including BARC)
- Update GHG emissions forecast
- Update control measure descriptions
- Acknowledge need to address economic transition issues such as workforce development

An Unprecedented Journey

Road to 2050



We are embarking on an unprecedented journey to lead the Bay Area to a better future

Every household, business, organization and individual has tremendous power to make a difference



Bay Area Leadership

We have all the elements of success:

- Support at the State level
- Dedicated elected officials
- The most committed populace
- A culture of innovation
- A progressive business community
- A vast network of dedicated community organizations



**Our Plan provides the blueprint for the first steps
in this journey**



Recommended Action

Staff recommends that the Board of Directors:

1. Certify the *Final Program Environmental Impact Report*;
2. Adopt the *Findings and Statement of Overriding Considerations set forth in the Final EIR*
 - *All feasible mitigation measures and project alternatives have been evaluated,*
 - *The air quality and climate benefits of the 2017 Plan outweigh the significant water supply impacts, and;*
3. Adopt the proposed 2017 Clean Air Plan entitled *Spare the Air, Cool the Climate*.