



Legislative Hearing Handout

February 13, 2024

Background

Assembly Bill 32 (Núñez, 2006) authorized market-based mechanisms, but never explicitly outlined a cap-and-trade program. That came later through the California Air Resources Board's (CARB) 2008 Scoping Plan process and subsequent rulemakings.

The AB 32 Environmental Justice Advisory Committee (EJAC) expressed concerns then that the cap-and-trade program as implemented by CARB would not sufficiently reduce emissions, and that it may risk increasing emissions in environmental justice communities. Namely, the ability to trade or purchase emissions credits that are a fraction of the cost of actual emissions reductions fails to create sufficient cost incentive, meaning those facilities will continue to produce greenhouse gasses as well as harmful co-pollutants that are detrimental to public health.

These concerns led to robust debate when the Legislature considered SB 32 (Pavley, 2016), which extended the emissions reduction target to 2030. The Legislature decided to link passage of SB 32 to AB 197 (E. Garcia, 2016), which - among other things - directed CARB to prioritize direct emissions reductions measures over market-based mechanisms like cap-and-trade.

Academic research published soon after those bills were signed into law proved that the environmental justice community's concerns about cap-and-trade were well founded. A September 2016 analysis of the program found that regulated facilities that emit the highest levels of both greenhouse gasses and particulate matter tend to be located in neighborhoods with higher proportions of residents of color and residents living in poverty, suggesting that further emissions reductions at those facilities could benefit public health and environmental equity.¹ The report further found that in-state greenhouse gas emissions had increased on average since the creation of the cap-and-trade program - an increase that was seen disproportionately in low income communities and communities of color - and that many high-polluting companies used out-of-state "offset" credits to meet their compliance obligations.²

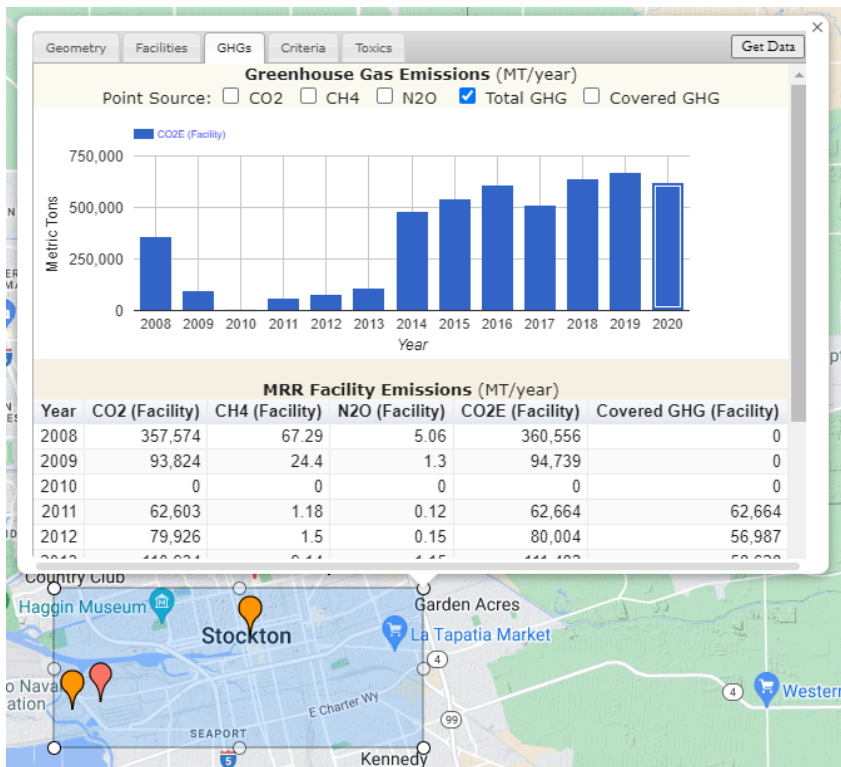
¹ Cushing, Lara et al. "A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program." September 2016. Accessed at <https://dornsife.usc.edu/eri/publications/preliminary-environmental-equity-assessment-cap-and-trade/>

² Note that this analysis was confronted by a 2020 NBER working paper by Danae Hernández-Cortés and Kyle C. Meng titled "Do Environmental Markets Cause Environmental Injustice? Evidence from California's Carbon Market." That paper was critiqued at length by Michael Ash and Manuel Pastor in a working paper titled "Not So Clear: Revisiting the Impacts of Cap-and-Trade on Environmental Justice," available at: <https://peri.umass.edu/economists/michael-ash/item/1740-not-so-clear-revisiting-the-impacts-of-cap-and-trade-on-environmental-justice>

To address those concerns, in 2017 the Legislature proposed companion legislation to the cap-and-trade extension: AB 617 (C. Garcia, 2017). This bill created the Community Air Protection Program, which targets overburdened communities with technical support, additional monitoring, and/or emissions reductions plans. The program is implemented by CARB and local air districts. This program, however, has many gaps. For example, there is a lack of enforcement for the new Best Available Control Technology (BACT) and Best Available Retrofit Control Technology (BARCT) requirements, and much of the money distributed thus far has gone to polluting industries or staffing at air districts - not to the communities most impacted by ongoing pollution.

These issues are further highlighted by the actual emissions trends in target communities. For example, in South Stockton, a designated AB 617 community, GHG emissions have climbed **significantly** since AB 32 became law. There has also been a significant rise in particulate matter, as well as other harmful criteria air pollutants like nitrogen oxides (NOx).³ It is important to note that these are just large point source emissions - not emissions from small emitters or transportation.

Image 1: Total GHG Emissions Trends in Stockton's AB 617 Community



³ Screenshots from CARB's Pollution Mapping Tool on February 1, 2024. Accessed at: <https://www.arb.ca.gov/carbapps/pollution-map/>

Image 2: PM 10 and PM 2.5 Trends in Stockton's AB 617 Community

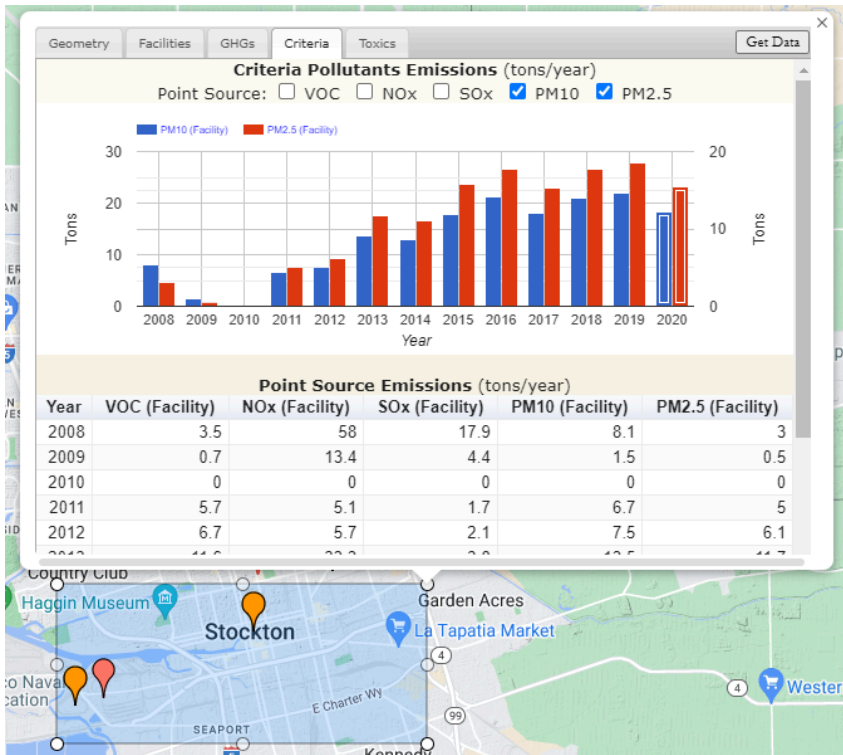
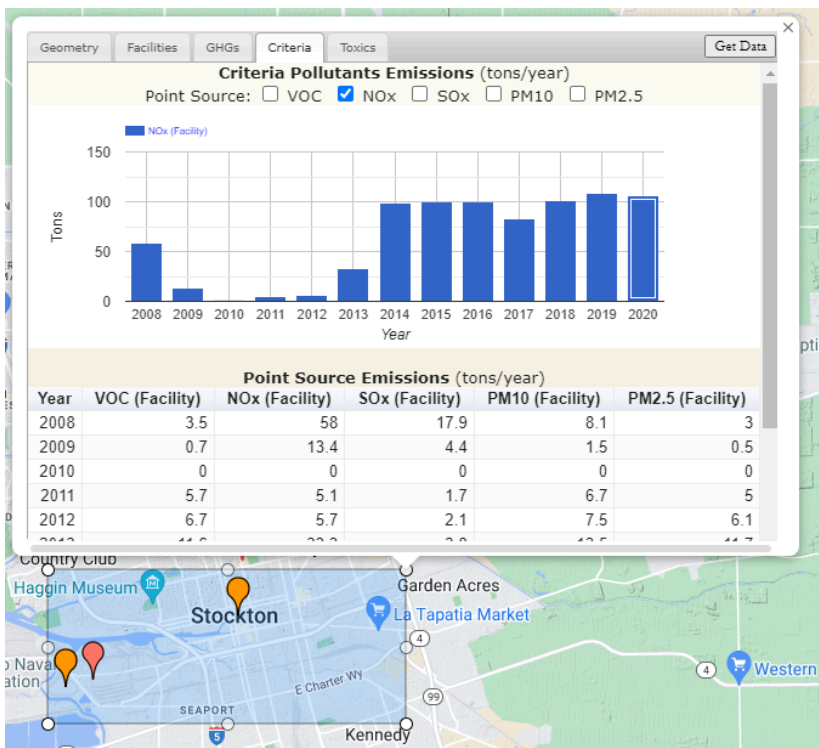


Image 3: NOx Emissions Trends in Stockton's AB 617 Community



AB 617 in South Stockton

Stockton sits along the San Joaquin river, adjacent to the Sacramento–San Joaquin delta, a vital ecosystem that is the largest freshwater tidal estuary on the west coast.⁴ Stockton made headlines during the 2009–2010 financial crisis for becoming the first major metropolitan city in the United States to declare bankruptcy. Once the largest population of Filipinos outside the Philippines, Stockton is one of the nation’s most ethnically diverse cities.⁵ Highway 4, the “crosstown freeway” was constructed, despite fierce opposition, to facilitate traffic in and out of the Port of Stockton (POS). It destroyed the heart of the ethnic enclaves of Little Manila and Barrio del Chivo.⁶ The POS houses and attracts multiple significant sources of air pollution, from ocean-going vessels; off-road equipment; and adjacent stationary sources such as the biomass plant DTE Stockton, Schuff Steel, and Kinder Morgan, to name just a few.⁷ Air toxics come from human-made sources and can cause cancer, birth defects, brain damage, and other serious health impacts. Particle pollution from diesel-powered equipment such as trucks is known to cause cancer, and much of South Stockton is in the 99th percentile for diesel particle pollution exposure.⁸ The cumulative health impacts caused by freight and goods movement have been well documented at large California ports such as the Port of Oakland and the Los Angeles/Long Beach port complex, particularly for those in close proximity to port operations, rail yards, and/or heavily trafficked roadways.⁹

In 2019, South Stockton was selected for the Community Air Protection Program established by Assembly Bill 617 (C. Garcia), which is meant to take a local, community-based approach to addressing deeply rooted, dangerous levels of air pollution in some of California’s most overburdened neighborhoods. The planning process, led by the San Joaquin Valley Air District with support from CARB, focused primarily on distribution of incentive funds, despite repeated requests for alert systems tied to the air monitors deployed as part of the program, and for attention to the enhanced enforcement provisions of AB 617. Subsequently, when a majority of Community Steering Committee (CSC) members voted down a proposal for \$5 million of incentives for the Port of Stockton - due to a range of concerns, including that funds would subsidize port expansion and that some of the equipment proposed was not appropriate for the types of vessels operating at the port, per CARB staff - the San Joaquin Valley Air District punitively removed the funds from the budget, rather than allowing those dollars to be distributed to other measures prioritized by community members such as urban greening, electric vehicle charging infrastructure, indoor air filtration, and home weatherization and electrification. CARB asserts that CSCs are only advisory, and that once CARB distributed AB 617 incentive funds to the district, they could not require that the money be spent in South Stockton. While the process and program itself have been fraught, numerous other advocacy efforts led by community-based organizations have borne fruit in

⁴ Selby, William. 2019. *Rediscovering the Golden State*, 4th ed. Hoboken: Wiley.

⁵ McPhilips, Deidre. 2020. *How Racially and Ethnically Diverse Is Your City?* U.S. News & World Report. January 22. Available at: <https://www.usnews.com/news/cities/articles/2020-01-22/measuring-racial-and-ethnic-diversity-in-americas-cities> (accessed on 11 December 2022).

⁶ Bohulano Mabalon, Dawn. 2013. *Little Manila Is in the Heart: The Making of the Filipina/o American Community in Stockton, California*. Durham: Duke University Press.

⁷ California Air Resources Board. 2022. Pollution Mapping Tool. Available at: <https://ww2.arb.ca.gov/resources/carb-pollution-mapping-tool> (accessed on 7 July 2023).

⁸ Office of Environmental Health Hazard Assessment. 2021. *CalEnviroScreen 4.0*; State of California, October 20. Available online: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40> (accessed on 7 November 2022).

⁹ Hricko, Andrea. 2008. Global Trade Comes Home: Community Impacts of Goods Movement. *Environmental Health Perspectives* 116.2: A78–A81.

South Stockton, including through the development of a collaborative project for community engaged enforcement of diesel truck rules with CARB's Enforcement Division, CVAQ, and local partner Little Manila Rising.¹⁰

However, any progress on emissions programs has been undercut by the continued siting and/or expansion of sources of pollution in this already overburdened community. Along with ongoing expansion at the port - including a proposed wood pellet storage and export terminal as well as a hydrogen production and distribution facility - there are proposals in South Stockton for several warehouses and a carbon capture and sequestration project at the biomass plant DTE Stockton, all of which have significant potential to increase air pollution and related impacts to health and quality of life.

Tragically, South Stockton's experience is not unique. 18 years after AB 32 and 7 years after AB 617, environmental justice communities are still waiting for the basic protections and emissions reductions we were promised.

Our Asks

The Central Valley Air Quality Coalition (CVAQ) asserts that market-based mechanisms like cap-and-trade are **not** the most justice-centered, effective ways to reduce emissions in California. However, since the program has been operational for over a decade, we recognize that replacing cap-and-trade with more direct emissions reduction measures is unlikely. Therefore, we would appreciate the committee's consideration of the following points:

- 1. CARB needs legislative authority to reform the cap-and-trade program:** While the cap-and-trade program was originally designed by CARB through regulation, later reauthorization legislation provided very specific direction that CARB staff believe has removed their discretion over future program changes. Legislation will be needed to ensure CARB staff makes the changes necessary to make the program as stringent as it needs to be. The AB 32 Environmental Justice Advisory Committee has provided the following recommendations:
 - a. CARB must prioritize direct emissions reductions. This means reducing the projected emissions that we expect to come from cap-and-trade so that CARB is required to implement more direct emissions reduction measures to meet the legal emissions targets. In the 2017 Scoping Plan, CARB projected that cap-and-trade would account for almost half of the emissions reductions needed to reach the 2030 target, despite providing no evidence to substantiate that claim. By overestimating reductions from cap-and-trade, CARB relieves itself of its legal obligation to identify further measures to ensure we stay on track for meeting emissions targets. Direct emissions measures that CARB should explore could include, but are not limited to:
 - i. Stronger vehicle standards,
 - ii. Accelerated clean energy targets under the Renewable Portfolio Standard,
 - iii. Reduced pesticide use,

¹⁰ Garoupa, Catherine, Nahui Gonzalez Millan, Bianette Perez, Taylor Williams, and Todd Sax. 2023. "Co-Powering Solutions to Truck Pollution in South Stockton" *Social Sciences* 12, no. 8: 440. <https://doi.org/10.3390/socsci12080440>

- iv. Managed decline of fossil fuel extraction and production, and
 - v. Investments in whole home retrofits that would decrease fossil fuel use and electricity over time.
- b. CARB should strengthen data reporting to ensure timely tracking of emissions changes: Currently CARB only reports on outcomes from the cap-and-trade program every three years, which aligns with the compliance cycle built into the program. The Legislature should direct CARB to provide annual updates during compliance cycles; three years is simply too long to wait to know if we're still on track with our emissions targets.
- c. CARB should eliminate free allowances: When the cap-and-trade program began, CARB included free allowance allocations as a way to gradually phase in the program, and to prevent leakage within specific sectors that could relocate out of state. In 2017, however, when the Brown Administration negotiated the extension of the program until 2030, a deal was struck to eliminate the phasedown of those free allowance allocations, and to keep them higher than early analyses deemed was necessary.
- i. If free allowances are not eliminated, CARB should commit to evaluate the impact of free allowance allocations on facility emissions within disadvantaged communities, and should return to the prior leakage analysis conducted in early rulemakings to ensure allocations are based on data of leakage risk - and not simply on politics.
- d. CARB should eliminate offsets: There is ample research that raises serious questions about the validity and permanency of offset projects. To continue to subsidize those dubious "reductions" in a manner that allows continued emissions in communities in California is unacceptable. CARB should also evaluate ways to correct course on credits that have already been used for compliance that were sourced from projects that have demonstrated they are not delivering the reductions assumed. CARB should also continue to prohibit international credits to be valid for compliance, such as those generated under the Tropical Forest Standard or the Reducing Emissions from Deforestation and forest Degradation (REDD+) program.
- i. If this recommendation is not accepted by CARB, then staff should correct their definition of "direct environmental benefits" that makes absolutely no distinction between credits generated by projects that provide a direct benefit and those that do not; the current definition utilized by CARB allows practically any credit to qualify as providing a direct environmental benefit to California air and water, which flies in the face of the logic used to inform the definition in AB 398 (E. Garcia, 2017). Proper application of the intent of "direct environmental benefits" ensures communities negatively impacted by co-pollutants in their air or water are not continually (or further) harmed by the continued emissions allowed by the use of offset credits for compliance purposes.
- e. CARB should restrict trading in disadvantaged communities ("no trade zones"): Continuing to accept allowances in lieu of emissions reductions, particularly in regions like the San Joaquin Valley that are out of compliance with decades-old clean air standards, should be out of the question. Facilities in and directly adjacent to disadvantaged communities, in communities that are out of compliance with clean air standards, and in other overburdened communities should not be allowed to trade allowances or use offset credits,

and should instead be required to demonstrate facility-level reductions on par with the declining cap. This would protect the most impacted communities from co-pollutants. We reject the notion that AB 617 (C. Garcia, 2017) will deliver the needed reductions; after five years of program implementation, the program has still failed to generate significant air quality improvements, along with many other process and substance-related problems. The Community Air Protection Program is not a sufficient substitute for coordinated state protections for communities overburdened by air pollution.

- f. CARB should adopt the recommendations of the Independent Market Advisory Committee (IEMAC): If earlier recommendations are not adopted, we urge you to consider and adopt the recommendations of the IEMAC in their recently submitted letter related to offset availability. We also hope CARB will adopt the IEMAC's recommendations on raising the allowance price floor and reducing the supply of new allowances to keep the system as stringent as possible. Again, earlier CARB rulemakings included robust analyses of allowance credits, and even led the agency to retire allowances in response to the ongoing effect of the 2008 recession to ensure the system was stringent enough to drive needed emissions reductions. Please return to that level of academic analysis to inform system design.

2. The Legislature must take steps to keep the promise of AB 617: AB 617 was passed as companion legislation to the 2017 extension of the cap-and-trade program and created the Community Air Protection Program, but it has so far failed to deliver emissions reductions in overburdened communities. At the time, legislators dubbed AB 617 a “down payment” to environmental justice communities, and committed to following up on the program to ensure meaningful emissions reductions happened as quickly as possible. Seven years later - and those emissions reductions have largely not been realized. We have a much more robust analysis of AB 617 implementation in the San Joaquin Valley we would be glad to share; here are just a couple of examples of recommendations the Legislature should consider as part of any conversation about continuing cap-and-trade:

- a. Require timely metrics for “community emissions reduction programs” (CERPs) under AB 617 that are enforceable by CARB. Oversight should include examination of how air districts spend available financial resources, and whether they are proactively enforcing existing regulations and laws intended to protect communities. Enforcement metrics should include implementation of updated BACT/BARCT requirements as identified by CARB, combined with reviews of existing stationary source permits, site inspections, and source testing at the dirtiest facilities and those with a history of violations.
- b. Strengthen requirements for local land use decisions to align with the goal of reducing emissions in overburdened communities, like those identified in Climate Action and Adaptation Plans. These requirements should build on the precedent established by SB 1000 (Leyva, 2016), and could include, but not be limited to, rezoning overburdened communities to prevent additional or expanded sources of pollution.

3. The Legislature must consider that reauthorization of cap-and-trade also reauthorizes the Low Carbon Fuel Standard: The same statute that authorizes cap-and-trade also authorizes the

Low Carbon Fuel Standard, another market-based mechanism that has largely escaped legislative oversight or direction. This program has several challenges, including but not limited to:

- a. Lack of public transparency and oversight (*see SB 709 by Senator Allen, which attempted to address this issue as it pertains to dairy biogas*),
- b. Lack of mechanisms to ensure that the “additionality” mandate of AB 32¹¹ is met, and
- c. A similar lack of demonstrated emissions reductions seen in cap-and-trade.

In fact, it can be argued that the Low Carbon Fuel Standard provides a strong incentive for increased pollution in environmental justice communities, which we see play out in the dairy digester program as well as the forthcoming proposed hydrogen projects. If the Legislature decides to reauthorize cap-and-trade, it should also consider providing additional direction to CARB on the Low Carbon Fuel Standard.

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¹¹ AB 32 instated an “additionality” requirement for market-based mechanisms when it said the following in Health and Safety Code Section 38562(d): “Any regulation adopted by the state board pursuant to this part or Part 5 (commencing with Section 38570) shall ensure all of the following: (1) The greenhouse gas emissions are real, permanent, quantifiable, verifiable, and enforceable by the state board. (2) For regulations pursuant to Part 5 (commencing with section 38570), the reduction is in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur.”