



2017 PLAN

SPARE THE AIR - COOL THE CLIMATE

Response to Public Comments



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

APRIL 2017

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Master Responses

Public Comments on the Draft 2017 Plan: Spare the Air, Cool the Climate

Master Response 1

The limits in the proposed rule (12-16) that grew out of control measure SS11 were derived through a methodology recommended by Communities for a Better Environment (CBE) and associated organizations. The Board of Directors directed staff to evaluate the CBE proposal and prepare it for their consideration. Air District Staff has analyzed Rule 12-16 and found the limits in the rule to have been set at a level consistent with the current production capacity of the refineries as a group. Certain refineries may be more constrained than the group. Compliance would be demonstrated through the annual emissions inventory process. The impacts of the rule are uncertain and depend on whether the consumption of transportation fuels declines, as predicted by the Air Resources Board (ARB), or increases as it has been doing since 2012.

Master Response 2

The Air District has regulatory authority over stationary sources of air pollutants. There are over forty control measures in the draft 2017 Plan that consider new regulations or amendments to existing regulations of stationary sources. There are also several measures that seek to explore additional regulatory authority over sources not traditionally regulated by the Air District. We welcome the public's suggestions for specific new rules or amendments to existing Air District rules.

Master Response 3:

The GHG forecasts in Figure 3-9 of the 2017 Plan are conservative. They do not reflect the reductions anticipated from many of the Plan's control measures which are not quantified due to uncertainties. We hope to achieve the 2020 target, but it is possible we may fall short. A major reason that the Bay Area may not achieve the GHG reduction target for 2020 is that the Bay Area economy has grown at a faster rate than the rest of the state in recent years. This is especially true in terms of job growth. Economic growth impacts emissions from key sectors including stationary (industrial) sources, buildings, energy, and transportation. It should also be noted that it is difficult to predict exactly how State policies will impact Bay Area emissions since we do not yet know how future emission reductions from State programs such as Cap & Trade will be distributed across the state. A more detailed discussion of the GHG emission reductions needed to meet the 2020 target in the Bay Area, in comparison to meeting the target for the state as a whole, is provided on page 38 of the Greenhouse Gas Emission Estimates and Draft Forecasts document:

http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017clean-air-plan/ghg_emissions_and_forecasts_draft.pdf?la=en

Master Response 4

MTC is the transportation planning, financing and coordinating agency for the nine-county San Francisco Bay Area. Together with the local and county transportation planning agencies, specific transportation projects are planned and programmed via Plan Bay Area, the region's long-range transportation plan. The Clean Air Plan reflects transportation projects that are programmed for funding in Plan Bay Area, as well as additional Air District policies and programs to reduce transportation emissions. The Air District has some limited funding to provide incentives for clean trucks, vehicles and EV infrastructure. The Air District will continue to look for additional funding opportunities and is open to additional projects and efforts that reduce driving and can accelerate the transition of the vehicle fleet into majority near-zero and zero-emission vehicles. The Air District further supports low- and zero-emission transportation via the Commuter Benefits Program, Spare the Air, policy guidance to cities and counties, and more.

Master Response 5

The Air District agrees that emission reduction from fossil-fuel-based heaters, furnaces and other appliances are feasible and necessary. The Air District has previously provided financial assistance for the replacement of wood-burning stove or fireplaces with cleaner devices, including electric heat pumps. As noted in the implementation actions of BL2, the Air District will explore (1) potential rulemaking options for both residential and commercial fossil-fuel-based space and water heater systems and (2) incentives for property owners to replace fossil-fuel powered furnaces, water heaters and other appliances with zero-carbon alternatives. In addition, this measure calls for providing information about these cleaner technologies to building owners and tenants, working with local jurisdictions to include low- and zero-carbon technologies in green building ordinances, and updating Air District guidance to recommend the installation of these clean devices in local plans, CEQA mitigations and other local programs.

Master Response 6

Several comments request that the Air District replace the terms "consider" and "evaluate" with "propose" or "amendment" in relation to potential rules or regulations identified in the implementation actions of various control measures. The 85 control measures included in the draft 2017 Plan have received a preliminary analysis to determine if there is sufficient information to merit including the regulatory concepts and/or emission reduction strategies in the 2017 Plan. Some of the implementation actions associated with a control measure call for the Air District to "consider" or "evaluate" potential strategies to reduce emissions through Air District regulatory actions. At the plan level stage of control measure development, it is not possible to say with certainty if the regulatory concept outlined in the control measure will result in a "proposed" new rule or an "amendment" to an existing rule. A more detailed rulemaking process consistent with requirements in the California Health and Safety Code and Air District policies is required before a regulatory concept in a 2017 Plan control measure would result in a new "proposed" rule or an "amendment" to an existing rule.

Master Response 7

Control measures SS12 has been updated and no longer allows carbon intensity to increase. SS12 would ensure no increases in carbon intensity and therefore would discourage the adoption of heavy and sour crudes such as those from the Canadian tar sands. SS12 also no longer depends on the structure of the Low Carbon Fuel Standard. Carbon intensity limits for each refinery would be expressed on a simple barrel basis, or carbon dioxide equivalent per barrel of crude oil processed (CO₂e/barrel). These carbon intensity calculations must account for all emissions generated by the refining process, including those associated with imported power or purchased hydrogen. The carbon intensity limit would be set at a level that is consistent with the expected benefits of implementing cost-effective energy efficiency measures that the refineries identified in the 2011 energy audits required by the Air Resources Board (ARB). This effort would constitute a first step in the Basin-wide Combustion Strategy (See SS18), which ultimately seeks to reduce emissions of greenhouse gas, criteria air pollutant and toxic emissions from stationary combustion sources throughout the Air District.

Commenter	Organization/ Location	Comment	Air District Response
Anonymous - Open house		Encourage/require use of recycled products in order to build the market for recycled products	The draft plan and several of the measures in the plan address efforts to encourage the use of recycled products.
Barbara Rhine	350 Bay Area	Inspiring plan but no mention of capping refinery emissions, which is an essential component	See Master Response 1
John Anderson	350 San Francisco	We need a “sustainable” label, similar to “organic”	Comment noted.
John Anderson	350 San Francisco	Could carbon farming include non-ag areas, like private yards, golf courses?	A wide variety of soils and lands can store carbon or contribute to "carbon farming." This Plan's first priorities will be engaging managers of larger tracts of lands, such as farms and forests, to increase carbon sequestration and decrease carbon emissions.
John Anderson	350 San Francisco	Wetlands will need to be built up to avoid loss w/ sea level rise; is there an opportunity for sequestration in wetlands	Sea-level rise, and it's impact is discussed in the plan and individual control measures.
John Anderson	350 San Francisco	Would be useful to quantify the amount of compost that could be generated if Bay Area communities go to 100 organic matter composted	Comment noted.
Anonymous - Open house	350.org	Subsidize electric car chargers	The Air District has incentive funding available for electric vehicle charging.
Anonymous - Open house	350.org	Subsidize fuel switching	Air District incentive funds support electric vehicles, biofuels, and other alternative fuels. Air District staff will consider this recommendation as we move forward to implement the CAP's control measures.
Holtzman & Stromberg	350.org	1/8, How and Where We Travel, 3rd bullet: “Remaining Diesel fuels will need to come from renewable sources”	This change has been made.
Holtzman & Stromberg	350.org	1/10, Promote Zero-Emission Vehicles and Renewable Fuels (cont.): “The shift toward electrification of the transportation sector will require significant public and private investment, as well as new technology to improve battery efficiency and to develop renewable forms of diesel and other liquid fuels where still necessary.”	The edit has been made in Chapter 1
Holtzman & Stromberg	350.org	3/16, Figure 3-6: The 2010 Plan shows that Transportation accounted for 36% of the 2009 CO2e inventory. The 2017 Plan shows Transportation CO2e emissions as 40% of the 2015 inventory. What explains the difference?	Transportation has been the largest source of GHG emissions in all iterations of the Bay Area GHG inventory. However, the percentage has fluctuated slightly, in the range of 36% to 40%. This variation is due to the fact that emission factors and activity data are updated on a regular basis, for the transportation sector, as well as all the other sectors that are included in the Figure 3-6 pie chart.
Holtzman & Stromberg	350.org	3/17: Figure 3-7 shows that approximately 27.6% of total Bay Area GHG emissions come from passenger cars and trucks, comprising about 15 million vehicles. Meanwhile, Figure 3-8 shows that approximately 16% of total Bay Area GHG emissions come from oil refineries, which number only five. There is clearly a much lower bar for achieving emissions reductions from stationary sources like refineries than there is from engaging with the owners and manufacturers of 15 million different vehicles, and achieving maximal reductions in emissions from stationary sources should be a top priority for Plan implementation.	Air District staff believes these are not mutually exclusive objectives. Emission reductions can and should be achieved from the use of transportation fuels, as well as their production.
Holtzman & Stromberg	350.org	Take more actions to promote telecommuting, including more proactive education efforts. The Bay Area is the birthplace of telecommuting and has a booming economy of technology companies. Where better to pioneer clean air teleworking?	Air District staff will consider how telecommuting could be further incorporated into the Air District's Spare the Air Campaign.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	<p>a. Amend Rule 14-1 Bay Area Commuter Benefits Program as follows: 14-1-301 Commuter Benefit Options: No later than six (6) months after adoption of this rule by the District Board of Directors and Concurrence by the MTC Commission, whichever is later, each employer subject to this rule Must offer, either directly or through a TMA as defined in Section 14-1-212, at least [cut: one] <u>two</u> of the following commuter benefit options to all covered employees.</p> <p>In the three years since Rule 14-1 was adopted, many employers are already stepping up to offer improved commuter benefits for their employees, and there is general awareness (and dismay) about the Bay Area's abysmal traffic congestion. Unfortunately most employers have opted to only to offer employees the opportunity to avoid paying taxes on their commute costs, as provided by 14-1-301.1. It's time to expect more. It is reasonable for employers subject to Rule 14-1 to either offer an employer-paid benefit for transit costs or employer-provided transit. We can't clean the air, protect the climate, improve the quality of life for commuters, and improve worker productivity unless all do their part</p>	The provisions of the Commuter Benefit Program (Regulation 14-1) are tightly defined in Section 65081 of the CA Health & Safety Code. Increasing the requirements of the program to mandate that employers provide a paid transit benefit to employees would require a change in State law. The Air District has no plans to seek a change in the enabling legislation at this time. The Air District will continue to work with MTC to assure that the Commuter Benefits program is as effective as possible.
Holtzman & Stromberg	350.org	<p>b. Offer coordination and technical assistance to connect businesses and shuttle providers. Help shuttle providers form combined services that cover more than one building or location. The cost of constructing and operating buses is less than that of trains in most areas.</p>	These services are provided through 511.org
Holtzman & Stromberg	350.org	<p>c. Link the award of Transportation Funds for Clean Air grants to localities adopting BAAQMD-identified best practices for:</p> <ol style="list-style-type: none"> 1. Transportation Demand Management policies for new development 2. Transit benefits ordinances, and 3. Parking policies 	The statutory authority for the TFCA and requirements of the program are set forth in California Health and Safety Code Sections 44241 and 44242 and the Board of Directors establishes policies for the program's implementation. Air District staff will investigate opportunities for incentives for local programs via the TCFA program, based upon state requirements on eligible projects (i.e. planning and education projects are not eligible for TFCA funds).
Holtzman & Stromberg	350.org	TR3-TR5: These are listed as funding-only measures. We suggest the opportunity to facilitate best practices on local and regional transit. How can the Air District partner with MTC, CalTrans, cities and counties, and other stakeholders to promote climate- and health-friendly bus and rail service that is efficient and accessible?	There are ample resources available regarding "best practices" on local and regional transit service and operations, including transit-oriented development, which improves access to transit and ridership. MTC, regional and local transit providers have access to these resources, and in many instances have authored best practices, and/or have provided funding for the development of such practices.
Holtzman & Stromberg	350.org	TR3-TR5: We suggest working with MTC and North Bay transit providers to provide east-west transit service in the North Bay as one productive measure.	See Master Response 4
Holtzman & Stromberg	350.org	TR6: This is listed as a funding-only measure. Can the Air District partner with MTC, CalTrans, cities and counties, and other stakeholders to further reduce emissions from freeway operations? For example, policies could be enacted to ensure road maintenance projects that reliably cause traffic buildups are conducted in low-smog conditions where feasible.	Plan Bay Area dedicates 87 percent of all available funds to keeping the existing transportation network, including transit and freeways, in working order, which reflects a bigger commitment to maintenance and management than any other major California metro area. MTC's "Fix It First" program is dedicated to working with local cities and counties to maximize their local transportation dollars on local street repairs and maintenance.
Holtzman & Stromberg	350.org	TR7: Increase funding of the Bikeways, Roads, Lanes and Paths program.	See Master Response 4
Holtzman & Stromberg	350.org	TR7: Increase the measure's focus on providing secure bicycle parking at transit stations and stops.	See Master Response 4; TR 9 also addresses bicycle parking
Holtzman & Stromberg	350.org	TR8: Continue and expand funding for introducing electric car sharing into underserved communities.	See Master Response 4

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	a) Include/expand idling strategies as part of smart driving or a stand-alone program.	“Prohibiting or limiting idling is included in TR12 as a Smart Driving strategy. In addition, TR10: Land Use Strategies has been edited to reflect that prohibiting or limiting idling are included in the Air District's Planning Healthy Place. In Planning Healthy Places, one can find information on the location of communities and places throughout the region that are estimated to have elevated levels of fine particulates and/or toxic air contaminants. These areas are shown via web-based, interactive maps. Best practices are also in Planning Healthy Places, including ones to prevent and/or reduce idling. Best practices can be implemented by local governments and developers to reduce health risks from air pollution in locations that experience elevated air pollution levels.”
Holtzman & Stromberg	350.org	b) Create a program to provide school districts with signs for school districts regarding anti-idling laws and fines.	“Prohibiting or limiting idling is included in TR12 as a Smart Driving strategy. In addition, TR10: Land Use Strategies has been edited to reflect that prohibiting or limiting idling are included in the Air District's Planning Healthy Place. In Planning Healthy Places, one can find information on the location of communities and places throughout the region that are estimated to have elevated levels of fine particulates and/or toxic air contaminants. These areas are shown via web-based, interactive maps. Best practices are also in Planning Healthy Places, including ones to prevent and/or reduce idling. Best practices can be implemented by local governments and developers to reduce health risks from air pollution in locations that experience elevated air pollution levels.”
Holtzman & Stromberg	350.org	c) Pilot a program to allow for trained citizen enforcement of anti-idling laws, based on a program under consideration by New York City.	“Prohibiting or limiting idling is included in TR12 as a Smart Driving strategy. In addition, TR10: Land Use Strategies has been edited to reflect that prohibiting or limiting idling are included in the Air District's Planning Healthy Place. In Planning Healthy Places, one can find information on the location of communities and places throughout the region that are estimated to have elevated levels of fine particulates and/or toxic air contaminants. These areas are shown via web-based, interactive maps. Best practices are also in Planning Healthy Places, including ones to prevent and/or reduce idling. Best practices can be implemented by local governments and developers to reduce health risks from air pollution in locations that experience elevated air pollution levels.”
Holtzman & Stromberg	350.org	a) Increase funding for the vehicle buyback program and “Plus Up” program and provide incentives towards purchase of zero-emission vehicles. Regional clear air funds should exclusively go towards zero-emission vehicles. Funding a transition technology like plug-in hybrid vehicles that still combust fossil fuels and emit PM, GHGs, and other pollutants does not make sense when zero-emission technology exists.	The Air District in recent years has increased funding for EV charging infrastructure.
Holtzman & Stromberg	350.org	b) Increase funding for both workplace charging and public on-street charging, using grants or a revolving fund. (TR14)	See Master Response 4
Holtzman & Stromberg	350.org	5/12: “ Consider <u>Propose</u> a rule that sets . . .” (TR16)	See Master Response 6
Holtzman & Stromberg	350.org	The Air District should link up with the international effort to limit aviation emissions. We may be able to pilot metropolitan-scale solutions for the international community.	Air District staff will look for opportunities to collaborate on reducing air craft emissions.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	We would like to ensure that the level of incentive funding in this measure (TR19) is directly correlated with the amount of emissions reduction the new vehicles achieve.	Emission reductions achieved are the largest determinant in Air District funding decisions.
Holtzman & Stromberg	350.org	This (TR20) is listed as a funding-only measure. We recommend working as well with the state and with Port Commissions in the region to strengthen rules surrounding emissions of ships while at port.	The Air District does not have regulatory authority over ship-related emissions. Marine diesel engines were first regulated by the U.S Environmental Protection Agency in 2004. Incentives are used to attract cleaner ships to port, and are also used to increase the use of shorepower while at berth. Shore power is the provision of electrical power to a ship at berth while its main and auxiliary engines are shut down. In addition, Air District staff works with state and port officials on emission reduction programs.
Holtzman & Stromberg	350.org	We would like to ensure that the level of incentive funding in this measure(TR22) is directly correlated with the amount of emissions reduction the new engines achieve.	Emission reductions achieved are the largest determinant in Air District funding decisions.
Holtzman & Stromberg	350.org	<p>This is listed as a funding-only measure. With regard to gas-powered leaf blowers and similar devices, in light of the fact that some cities have banned them for years and their disproportionately large emissions profiles, incentive funding is insufficient. This control measure needs to be a regulation banning the sale of gas-powered leaf blowers and similar devices in the Bay Area.</p> <p>TR-100, ¶14 states: "Electric powered equipment has begun to gain market share, particularly with lawnmowers, chainsaws, leaf blowers and other small equipment used by homeowners." The region has passed the point where incentive funding makes sense. Sale of gas-powered items listed above needs to be phased out. How exactly will climate targets be reached if actions like this one are not taken?</p> <p>If a cleaner technology is achieved in practice, it becomes mandatory for everyone. That's how the air gets cleaner. This should be no different. We propose setting a four-year timeline for banning gas-powered versions of this equipment, along with an education/compliance campaign to get it implemented. The Air District knows how to get this done very well. TR23 should be added to the 2017 Regulatory Schedule.</p>	The small gasoline engines on lawn and garden equipment are not regulated by the Air District. These engines are regulated by ARB, with the first regulations being adopted in 1995. The newest, most stringent regulations becoming effective with the MY 2008 equipment. Incentives are used by the Air District to accelerate the adoption of newer land and garden equipment, the Air District has funded the replacement of thousands of older equipment.
Holtzman & Stromberg	350.org	ES/2, Goals and Objectives: We suggest that this section be edited to include reducing emissions of fine particulate matter and reducing exposure to toxic air contaminants as explicit goals and objectives of the Plan. This is particularly critical for PM, since other sections of the Plan state that: (1) PM2.5 poses the most serious threat to public health in the Bay Area and (2) Bay Area PM2.5 and PM10 emissions exceed state standards.	A new sentence has been added to make it clear that reducing emissions of fine PM and toxic air contaminants are included as key Goals & Objectives in the Plan.
Holtzman & Stromberg	350.org	<p>ES/2, Goals and Objectives, ¶1 references: "a long-term effort to reduce GHG emissions by 2030." That's only 13 years from now. We'd argue this is not such a long-term effort anymore, nor should it be viewed like one.</p> <p>Given the last Clean Air Plan was released in 2010, we could expect just one more iteration of Air District planning between the release of this 2017 Plan and the critical 2030 goal that looms so staggeringly on Figure 3-9. In that context, a more emergent, immediate-term perspective and more aggressive action now seem warranted.</p> <p>Additionally, we are not on track to meet even the short-term 2020 GHG goal in the Bay Area—now just three years away. Any and all Plan language suggesting that the hard decisions and serious actions don't need to be taken until some future time will not be helpful for achieving the region's necessary climate goals or the Plan's vision for 2050.</p>	We agree that it essential to reduce GHG emissions here and now, and the Plan makes that very clear. But that said, protecting the climate and transitioning to new energy sources will require a sustained and long-term effort. When we talk about the need for a long-term effort, that in no way implies that we can afford to defer action today.
Holtzman & Stromberg	350.org	ES/4, Particulate matter: This section says that "the Bay Area currently meets national and state standards for both daily and annual average levels of PM2.5," however Table 2-2 (2/6) indicates that the Bay Area is not in attainment of the state's annual PM2.5 standard. One of these is incorrect.	Staff revised the text in the Executive Summary and in Chapter 2 to clarify the region's attainment status in relation to State and national PM standards.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	<p>ES/5, The 2017 Control Strategy, ¶1 says: “The proposed control strategy is designed to complement efforts to improve air quality and protect the climate that are being implemented by partner agencies at the state, regional and local scale” (emphasis ours). In most cases, however—mobile sources being the obvious exception—the buck stops here at the Air District, not somewhere else.</p> <p>The first line of California Health & Safety Section §39002 states: “Local and regional authorities have the primary responsibility for control of air pollution from all sources other than vehicular sources.” That includes stationary and “area” sources, and the language could not be clearer. The proposed control strategy needs to lead, focus, and drive efforts elsewhere, not complement them.</p>	<p>We agree that it is important for the Air District to provide leadership and take direct action to reduce GHG emissions. However, the Air District cannot solve climate change on its own. Therefore, the Air District’s climate protect program must be part of a collaborative effort by a wide range of partners, including other government agencies, business and industry, community and environmental organizations, other institutions, as well as Bay Area residents.</p>
Holtzman & Stromberg	350.org	<p>ES/5, The 2017 Control Strategy, 2nd bullet: “Reduce emissions of “super-GHGs” such as methane, black carbon and fluorinated gases <u>from all key sources</u>.” This change should be pushed through to the analogous locations on 1/18, 5/2, and 5/35.</p>	<p>Staff has added the phrase as suggested.</p>
Holtzman & Stromberg	350.org	<p>ES/5, Stationary Sources: The Stationary Source Strategy includes (1) improving combustion efficiency at the largest sources, (2) reducing methane emissions, and (3) reducing TAC emissions; however, there is no specific goal of reducing GHG and PM emissions, despite those causing the greatest social and public health costs to the region. There’s also no mention here of the need to reduce the use of combustion for heat and power, i.e., decarbonization. Improving efficiency will not necessarily reduce PM and GHG emissions if it is not an explicit goal.</p> <p>Meanwhile, there are ample opportunities to decarbonize operations at Bay Area facilities—indeed, the brewing and server farm sectors have already taken significant steps. In the foreseeable future, energy storage capacity will obviate the need for back-up generators, which have been permitted by the thousands by the Air District. The Air District should consider prohibiting the installation of diesel back-up generators, and move toward phasing out the use of natural gas-powered back-up generators from non-critical operations.</p> <p>It is within the Air District’s purview to prohibit the sale of gas-powered appliances and other fossil fuel-using devices when there are proven alternatives. The first page of the Plan’s Executive Summary states: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Further on in Chapter 1, the Plan asserts that it is based on the “all feasible measures approach” to attaining the ozone standard. Reducing fossil fuel combustion—by more means than just efficiency improvements—is already a feasible means of reducing ozone precursors at many stationary sources, as well as PM, TAC and GHG emissions, and this should be included as a core of the Stationary Source control strategy.</p> <p>Air District staff across all divisions are the most deeply knowledgeable experts in Bay Area stationary source processes and emissions. Engineering staff expertise in particular should be leveraged for more than just permitting and fee collection; it should, rather, be put to work researching feasible alternatives to combustion that have already been achieved in practice around the world, as well as investigating best practices to increase combustion efficiency. With the above comments in mind, we recommend: 1. The Stationary Source Strategy should explicitly include decarbonization and reducing combustion as a way to reduce all pollutants, but particularly PM and GHGs. 2. The Stationary Source Strategy should include mid-sized and smaller sources in the near term, not just the largest ones. Combustion reduction solutions for small and mid-sized sources may be more readily available and quicker to</p>	<p>Comment noted. Emissions from back-up generators will be addressed in Stationary Source measure 32 (draft rule 11-18). Options for phasing out diesel-fueled back-up generators will be considered as part of the rule-making process. In addition, the Air District is establishing a Technology Implementation Office, which is intended to support and expand innovative zero emission technologies.</p>
Holtzman & Stromberg	350.org	<p>ES/5, Stationary Sources, 1st bullet: “Decrease emissions of GHGs and criteria air pollutants through a region-wide strategy <u>to reduce combustion</u> and improve combustion efficiency at industrial facilities, beginning with the three largest sources of emissions: oil refineries, power plants and cements plants.”</p>	<p>Staff has added the phrase as suggested.</p>

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	ES/6, The Air District’s Tools and Resources: In addition to Rulemaking, Funding, Best Practices, Outreach & Education, and Advocacy, the Air District’s authority under the California Environmental Quality Act (CEQA) should be included as a tool the Air District can use actively. Like the permit program, CEQA is a critical regulatory vehicle to: (1) mitigate emission increases due to population and economic growth and (2) highlight, promote, and even require the use of emerging strategies for reducing emissions. CEQA is a particularly important tool for mitigating emissions in the building and transportation sectors as part of land use planning, but is also relevant for large stationary source projects. The Air District’s use of the CEQA process for mitigation is mentioned in later chapters, but should also be included explicitly in the list of tools and resources in the Executive Summary, Table 5-13, etc.	Staff has revised the text in the Executive Summary to address this comment.
Holtzman & Stromberg	350.org	ES/6, What the 2017 Plan Will Accomplish: a) It would be helpful to show the link between which policy tools—Rulemaking, Funding, Best Practices, Outreach & Education, Advocacy, and CEQA (per our comment above)—will be used to achieve each of the key priorities and key control strategy elements for the three high-priority sectors (Stationary Sources, Transportation, and Buildings), similarly to the way ARB shows them in the Scoping Plan (on pp. ES 4-5 and in Table II-1 Proposed Scoping Plan Scenario, pp. 34-35, of that document). We would like to see a table summarizing the emission reductions forecast for each sector, based on the detailed information in Appendix H, coupled with a short description of the policy tool(s) that will achieve the reductions for that sector and the amount of reductions expected from the use of each policy tool in that sector.	The Executive Summary provides a brief overview of the Plan. Chapter 5 provides a much more detailed description of the policies and actions that the Air District will pursue to reduce emissions from each of the economic sectors. Table 5-13 summarizes the primary tools that will be used to implement the specific control measures. The estimated GHG emission reductions by sector are shown in Figure 5-1.
Holtzman & Stromberg	350.org	b) When we see the emissions reductions that are estimated to result from this large, multifaceted, and impressive Plan all the way through to 2030—the midrange climate goal from which a huge gulf of achievement still separates us—we of course want to know: are these reductions significant? How do they square with Figure 3-9? These things are what need to be communicated to the public, not a tons per day figure. We request these emissions reductions be expressed in a form that makes them more meaningful to the public. We suggest the format used in Chapter 2, Footnote 9 (i.e., “decrease an average of X% per year, with an overall reduction of Y% over that period”). Our calculations show that the comprehensive suite of control measures in the Plan will, by 2030, reduce daily ROG emissions by 4.6%, daily NOx emissions by 2.9%, daily PM2.5 emissions by 6%, and yearly GHG emissions by 5% (100-year GWP) or 5.8% (20-year GWP). We would like to see those estimated reductions fleshed out and expressed in a format such as that suggested above. Looking just at the GHG numbers vis-à-vis Figure 3-9, it seems very clear that this Plan—representing a comprehensive view of Air District action over perhaps half of the time remaining for action before we reach the state’s midrange climate target—leaves us vastly, vastly short of where we need to be. Perilously short. We understand that the emissions reductions estimated are deliberately conservative, as the Plan seems unable to estimate the emissions reductions from many of the control measures in Appendix H; however, it appears that we are well outside the ballpark of anything that is going to get us down that dotted line on Figure 3-9. Does this control strategy really encompass “all feasible measures”?	The Plan describes a vision for year 2050 and a comprehensive, multi-pollutant control strategy to protect public health and protect the climate. The Air District is committed to using the full set of tools and resources at its disposal to implement the control strategy and reduce emissions from all key sources and economic sectors. This Plan should be seen as an important contribution to the overall effort to protect the climate. However, it should be emphasized that the authority and resources of the Air District are finite, and that the Air District cannot solve the climate change issue strictly on its own. It also should be emphasized that additional actions- at all levels of government - will be needed to achieve long-term GHG reduction goals.
Holtzman & Stromberg	350.org	1/1, Introduction, ¶2: “If left unchecked, climate change will have major impacts on the region’s natural systems, water <u>and food</u> supply, economy and infrastructure.” Please also push through to the analogous location on 3/2, ¶1.	Comment noted.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	1/2, Goals and Objectives of the 2017 Plan: Since the Bay Area is not in attainment with California’s PM2.5 and PM10 standards, the Plan should include numeric baseline emissions and estimated emission reduction objectives for these pollutants that would assure attainment. This is of particular importance because the Air District acknowledges that PM pollution poses the number one health threat to Bay Area residents. The Plan should clarify whether or not the California Health and Safety Code imposes any planning requirements in response to non-attainment of PM standards. If the state does not, the Air District needs to rise to the challenge on its own because of the demonstrated impact on health and mortality posed by PM emissions.	The Air District has been making steady progress in reducing emissions and ambient concentrations of particulate matter, as discussed in Chapter 2. The Air District is in compliance with all State and federal PM planning requirements. The plan proposes measures that will further reduce PM emissions.
Holtzman & Stromberg	350.org	1/2, Protect Air Quality and Health at the Regional and Local Scale: The Plan states on ES/4 and elsewhere that PM is found to have negative health impacts at levels even below current standards; therefore, another bullet needs to be added here, e.g., “Where feasible, reduce health-harming pollutants below state and national standards.”	To protect public health, the Air District will continue its efforts to reduce emissions of key air pollutants. As noted in Chapter 2, it is especially important to further reduce emissions of fine PM, since no safe level of exposure has yet been identified.
Holtzman & Stromberg	350.org	1/3, Updating the Bay Area’s State Ozone Plan: The Plan states that “reducing emissions of ozone precursors by 5 percent per year is not achievable,” so the Air District is using an “all feasible measures” approach. The public needs a clearer understanding of how much progress toward attainment a 5% reduction per year would represent, and how that compares to the reductions this Plan will accomplish. To that end, the Plan should state the numeric baseline emissions of ozone precursors (2015 or 2016) and the estimated ROG and NOx emission reductions that would assure attainment of the federal and California ozone standards, as well as the numeric reductions over time to be achieved by this Plan.	The approach suggested in this comment would be applicable in the case of a plan prepared for purposes of a State Implementation Plan (SIP) submittal, prepared pursuant to the national Clean Air Action. However, this Plan responds to the ozone planning requirements defined in the California Health & Safety Code. As such, the Plan proposes a control strategy that includes "all feasible" control measures.
Holtzman & Stromberg	350.org	1/3, Goals and Objectives of the 2017 Plan, 3rd bullet: This undersells the achievement of your Regional Climate Protection Strategy. We suggest, e.g., “Lead the Bay Area toward its 2030 and 2050 climate targets through a comprehensive, multi-sectoral climate protection strategy utilizing the full toolkit of Air District capacity and authority.”	Comment noted.
Holtzman & Stromberg	350.org	1/4, Protecting the Climate, ¶1: With respect, the Air District’s work for “more than a decade to reduce GHG emissions and protect the climate” has not yet wrought a significant amount of GHG reduction toward the 2020 goal, according to Figure 3-9. We would appreciate a qualifier to this effect be appended to this first sentence.	The Air District has been working to reduce GHG emissions and protect the climate for more than a decade, as stated in the Plan. We stand by this statement.
Holtzman & Stromberg	350.org	1/4, Protecting the Climate, ¶5: In addition to transportation infrastructure and power distribution systems, we suggest that heavy industrial facilities should be highlighted as at risk as well. Please push through to the analogous location on 3/7, ¶1	It is true that industrial facilities, as well as many other types of physical assets, may be affected by sea level rise or other impacts of climate change. However, for the purpose of this discussion, we are focusing on those elements of public infrastructure that are most clearly threatened by sea level rise.
Holtzman & Stromberg	350.org	1/7, Where We Live and Work, 1st bullet: “Buildings will need to be energy efficient and powered, <u>cooled and heated</u> by clean energy”	The text has been revised as suggested.
Holtzman & Stromberg	350.org	1/7, Where We Live and Work, 2nd bullet: “Wood burning and fossil fuel combustion will need to have been eliminated”	The text already includes a section, immediately after the bullet on wood-burning, that is titled: “Eliminate the Use of Fossil Fuels in Buildings”.
Holtzman & Stromberg	350.org	1/7, Eliminate the Use of Fossil Fuels in Buildings, 4th bullet: We do not support language as permissive as “Biogas can be used as a replacement.” All references to biogas need to make clear that it will be used only as created by agricultural/husbandry/wastewater processes in which we are already engaged, and only where logistically necessary (i.e., in applications that cannot be electrified) or where it can be utilized on-site to offset energy load.	As the Air District moves forward to implement the Plan, we will evaluate the appropriate role for biogas as a replacement for fossil fuels. In implementing the control strategy, the District will focus on promoting the alternative fuel or power source that is most effective in reducing GHG emissions for a given source or application.
Holtzman & Stromberg	350.org	1/8, Eliminate the Use of Fossil Fuels in Buildings (cont.): “Because it will be very difficult to achieve near-zero carbon emissions from existing buildings, all new construction should be zero-net carbon <u>or carbon-negative</u> .”	The text has been revised as suggested.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	1/10, What We Produce, 2nd bullet: “ Increased Access to clean energy for people of all income levels”	The text has been revised as suggested.
Holtzman & Stromberg	350.org	1/10, What We Produce, 3rd bullet: “ Significant <u>Nearly complete</u> fuel-switching from fossil fuels to electricity”	The text has been revised as suggested.
Holtzman & Stromberg	350.org	1/10, Switch from Fossil Fuels to Electricity: Suggest combining this with “100 Percent Renewable Power Supply.”	Comment noted.
Holtzman & Stromberg	350.org	1/10, Oil Companies/Refineries Will Transform: “By 2050 Bay Area industries will be need to be powered by renewable electricity <u>wherever feasible, with renewable fuels making up the difference and biofuels</u> , the carbon-intensity of products manufactured in the region will need to be greatly reduced, and a significant percentage of the light-duty vehicle fleet will be hybrid electric or fully battery-powered.”	The text has been revised as suggested.
Holtzman & Stromberg	350.org	1/11, 100 Percent Renewable Power Supply: “However, with directed investment, continued research and development of battery and other technologies, and supportive policy interventions such as carbon pricing, the Bay Area could <u>will</u> have carbon-free electricity by 2050. <u>Community choice programs are on the way to making this a reality.</u> ”	Comment noted.
Holtzman & Stromberg	350.org	1/11, What We Consume: This only includes food consumption as an example. We would recommend that a second example be added. Given their increased salience in the Bay Area consumption inventory versus the national inventory, we would suggest goods or services.	The vision focuses on opportunities to reduce GHG emissions from the food sector to provide one example of how the consumption-based GHG inventory can help to inform our public education efforts. The Air District will provide additional examples to help Bay Area residents reduce their GHG footprint as we move forward with our public education efforts.
Holtzman & Stromberg	350.org	1/12, What We Consume, 1st bullet: In order for Bay Area residents to reduce their consumption of carbon-intensive foods, they will need accurate information about the carbon impact of their food in just the way nutritional information is listed. How will that be provisioned? The goal should also be to reduce the overall carbon intensity of the food supply, including that from transport, packaging, distribution, etc. We support putting the burden on producers before consumers. Most consumers simply inhabit the system with which they’re presented. Suggest, e.g., “Food producers/vendors will reduce the carbon intensity of the food supply and provide information on the carbon impact of their goods, enabling Bay Area residents to reduce their consumption of carbon-intensive foods.” These changes should be pushed through on the analogous bullet on ES/4.	We agree on the need to reduce the carbon intensity of the food sector throughout the supply chain. This will require working with both producers and consumers. Consumers can influence production and packaging techniques through their purchasing decisions.
Holtzman & Stromberg	350.org	1/12, Low-GHG Diet: This section seems overly long and specific; while food represents 19% of Bay Area GHG emissions by consumption vs. 18% nationally, this section is longer than, e.g., the equivalent section on switching from fossil fuels to electricity, which would reduce emissions far more. It also neglects to mention the huge GHG burden of the transport, packaging, and distribution of the food to the consumer.	Since food accounts for a significant portion of the GHG footprint in average household, Air District staff believes that it makes sense to highlight the potential to reduce GHG emissions from the food sector. The text has been revised as suggested, we have added additional discussion of emissions from the transportation emissions related to food distribution.
Holtzman & Stromberg	350.org	1/13, Putting Organic Materials to Productive Use: “Many farms also generate vegetative material as a by-product of food production. In current practices, some of this material is left in place to decay, some is sent to landfills, and some is burned— <u>all</u> resulting in GHG emissions. This waste material can <u>instead</u> be redirected to create compost for use as a soil amendment in agricultural and rangelands, augmenting the carbon sequestration abilities of these lands.”	Comment noted.
Holtzman & Stromberg	350.org	1/14, Putting a Price on Carbon, ¶12: “The revenues from a carbon tax could be used to fully offset costs for low-income households, as well as to fund clean energy or clean vehicle projects in low-income communities, actions that lower GHG emissions for all of us.”	Comment noted.
Holtzman & Stromberg	350.org	1/18, Reduce Super-GHGs: Please add wastewater systems to the list of methane sources in the last sentence. Please also push this through to 3/12, Methane.	The text has been revised as suggested.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	1/19, Decarbonize the Energy System: “This requires a two-pronged effort to reduce the carbon intensity of electricity, in combination with switching from natural gas to electricity to power, <u>heat and cool</u> our buildings; and replacing gasoline and diesel-powered vehicles with zero-emissions cars and trucks powered by clean electricity or other renewable fuels.”	The text has been revised as suggested.
Holtzman & Stromberg	350.org	2/2, Linking Air Pollution to Public Health, ¶2: This text references the air quality improvements described in Appendix C. The modeling data in Figure C-2 illustrates that PM2.5 and GHGs are responsible for almost all of the health and social costs from Bay Area air pollution. It also shows that there are huge public health benefits to reducing combustion of fossil fuels, even ignoring the climate protection benefits entirely. Do the control measures in the Plan reflect that reality? Are you going after all the biggest gains and synergies in public health and climate protection? Are you doing everything in your power and authority to reduce and eliminate quantifiable health and social costs from wood burning, diesel and gasoline engines, natural gas combustion, and petroleum refining in our communities’ air shed?	The Plan defines a comprehensive, multi-pollutant control strategy to further reduce emissions of the most important pollutants, including PM and GHGs, and proposes measures to address the key sources of these pollutants.
Holtzman & Stromberg	350.org	2/4, Table 2-1, PM2.5: It is worth noting that wood burning, diesel engines, gasoline engines, burning natural gas, commercial cooking, mobile sources, landfills, livestock, wastewater treatment, refineries, and ships are all sources of both fine PM, which causes the vast majority of pollution-related health costs in the Bay Area, and GHGs, which endanger a stable and healthy future for the region. Thus, binding regulations to reduce emissions—including with future effective dates—must be utilized on these sources as soon as possible, wherever possible.	The Plan does include a comprehensive control strategy - including, where appropriate, regulatory measures - to reduce emissions of PM and GHGs, as well as other pollutants that endanger public health and/or the climate.
Holtzman & Stromberg	350.org	2/7, Technical and Analytical Tools: We suggest that the Air District add an approach to include an evaluation of how the elimination of fossil fuel and wood combustion over time and across all sectors would impact emissions of criteria air pollutants, TACs, GHGs, and super-GHGs; how those reductions would impact progress toward attainment of the ozone and PM standards; and, using the Multi-Pollutant Evaluation Method, what associated health outcomes/benefits the region could expect. We would like to see an analysis of different combustion reduction timeline scenarios across sectors comparing readiness to deploy, feasibility, cost, health outcomes, etc. This could be a very useful tool for long-range strategy development.	The Air District will consider this suggestion as we move forward to develop a basin-wide combustion strategy as described in stationary source measure SS18.
Holtzman & Stromberg	350.org	2/7, Air Quality Monitoring Network: We suggest that the Air District investigate possible technologies it can use to upgrade its air monitoring infrastructure. In order to achieve the goal of “eliminating disparities in exposure to air pollution between communities,” the Air District must be able to track with high resolution how pollution moves throughout the region. There are several technologies to consider, but we highlight one here: hyperspectral imaging. For each pixel of an area that a hyperspectral imaging camera photographs, it records a full spectrum of visible or infrared light. This is useful because different chemicals have different spectral fingerprints. The camera could be trained on a refinery to monitor the chemicals coming out of an exhaust valve and observe how those plumes of chemicals diffuse through the area. We believe that this and other imaging and sensing technologies could benefit the Air District's mission and are worth of investigation.	The Air District is currently investigating the use of hyperspectral imaging for the purpose of identifying methane leaks, and may make use of this technology in the future.
Holtzman & Stromberg	350.org	2/10, Profiles of Key Pollutants: The Plan should include an explicit discussion correlating emission data, monitoring data, and modeling results to show the estimated ROG, NOx and PM emission reductions needed in order to attain the ozone and PM standards.	Emissions data and monitoring data for ozone precursors and PM are provided in Chapter 2. Results of the Air District's air quality modeling for these pollutants are described in Appendix D. The 2017 Plan was prepared pursuant to state planning requirements to identify "all feasible measures", and thus, does not specify emission reductions needed to attain air quality standards.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	2/14-15, Figures 2-4/2-5: Both figures should include lines forecasting the emission reductions that will result from implementing the 2017 Plan, additional lines showing possible reductions from ARB’s contemplated motor vehicle emission standards, and indicate the emissions reduction goals needed to attain the standards.	As staff implements the Plan and develops more complete emission reduction estimates for the proposed control measures, we will revise the emissions inventory and the projected emissions for future years.
Holtzman & Stromberg	350.org	2/15, Particulate Matter: Figures analogous to Figures 2-4 and 2-5 should be added showing annual average PM2.5 and PM10 emissions trends for 1990-2030. The figures should include lines forecasting expected PM emission reductions resulting from this Plan and measures implemented by ARB, and indicate the emission reduction goal needed to attain the PM standards.	As noted in the Plan, the Air District has been working hard to reduce PM emissions over the past several decades. PM concentrations have been reduced substantially, and the Bay Area is close to meeting all state and national standards for fine PM. PM emission trend data is provided in the District’s May 2014 emission inventory. Air District staff is currently updating the PM inventory based upon the same emission projection assumptions used for the GHG projections in the 2017 Plan. The updated PM emission trend data will be provided in a revised version of the emissions inventory that will be released later this year.
Holtzman & Stromberg	350.org	2/21, ¶1: Combustion, combustion, combustion. Once again, the same offender is the culprit. Reduce combustion and you improve PM, GHG, TAC, and ozone all at once. That is a true multi-pollutant approach. Is this Plan doing everything technically feasible to get us to the Plan’s Vision for 2050?	Air District staff agrees that decreasing combustion of fossil fuels is essential to reduce emissions of air pollutants and climate pollutants. Reducing fossil fuel combustion is a key element of the control strategy. To that end, the Plan includes a basin-wide combustion strategy, as described in measure SS18, and many other measures to reduce combustion.
Holtzman & Stromberg	350.org	2/21, ¶2: TAC exposure impact is valued based on cancer risk, however the Plan states that neurological damage, hormone disruption, developmental defects, and other permanent injuries may also result from TAC exposure. How are these additional negative health impacts/costs valued? If they are not fully integrated into cost models, are the TAC risk estimates not severely underrepresenting the potential harm from exposure, and thus are the health benefits of reducing them not even higher?	The information presented on toxic air contaminants focuses on cancer risk because analysis by Air District staff indicates that cancer is the greatest health risk from air toxics in the Bay Area. Staff agrees, however, that there will also be non-cancer related health benefits from reduced toxic emissions.
Holtzman & Stromberg	350.org	2/22, ¶1: We hope that the data in Figure 2-10 is being acted upon by ARB and MTC. The contribution of construction equipment to TAC exposure risk is ludicrously high and is clearly a locus for immediate action. Much of this equipment must be diesel-powered to be so dirty—how can the Air District help engender a move towards new technologies?	The Air District is working to reduce emissions from construction equipment and other off-road mobile sources through its grant and incentives programs, as described in Chapter 4 of the Plan, as well as via the mitigation measures in the District's CEQA guidelines and planning recommendations in <i>Planning Healthy Places</i> .
Holtzman & Stromberg	350.org	2/25, ¶2: You mention that we are currently in attainment for national standards, but need to also mention here that we are not yet attaining state standards, in addition to the “no safe threshold of exposure” comments.	Text has been revised to more clearly describe the Bay Area attainment status in regard to the State PM2.5 standard.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	<p>3/15, The Importance of Reducing Super-GHGs: We see that the Plan “places a high priority on measures to reduce emissions of super-GHGs,” while considering effective policies to reduce CO2 emissions a “long term” proposition. While we concur with the importance of reducing super-GHGs whenever and wherever possible, it is this Plan—coming just three years before the state’s first climate goal, only 13 years before the midrange goal—that must do a meaningful amount to “develop and implement effective policies to reduce CO2 emissions over the long term.” The real work of reducing combustion cannot be pushed further into the future while action on ARB’s SLCP Strategy is double-counted as Plan action.</p> <p>Chapters 2 and 3 of the Plan are full of the horrific damages caused by fossil fuel combustion for power, heating, and driving on both public health and the climate (and through the climate, public health again). Chapter 2 and Appendix C show the vastly disproportionate impact to public health caused by fine PM emissions, while Chapter 3 catalogues the dystopia that awaits us if we do not rectify our greenhouse gas imbalance very rapidly. Combustion of fossil fuels connects these two central foci of the Plan and, indeed, the Air District’s mission, and the Plan’s highest priority should be to develop and implement the strategies and regulations that are required to protect public health and the climate all in one, by reducing combustion.</p> <p>Eliminating a unit of combustion not only prevents criteria pollutants and GHGs from being released, but also protects residents from dozens or hundreds of combustion co-pollutants, most of which the Air District will never have the time, resources, or personnel to characterize, let alone to monitor or control. Reductions in fine PM, TACs, GHGs, and other co-pollutants will result in economic benefits worth hundreds of millions of dollars per year by reducing health care costs, improving productivity, reducing lost work and school days, and reducing necessary future expenditures on climate adaptation and disaster response.</p>	<p>The climate protection strategy described in the Plan calls for a concerted effort to reduce emissions of super-GHGs in the near-term, combined with a comprehensive effort to eliminate fossil fuel combustion. We agree that it is essential to move aggressively to reduce CO2 emissions now, but the elimination of fossil fuels will require a sustained, long-term effort and cannot be accomplished overnight.</p>
Holtzman & Stromberg	350.org	<p>3/18, Table 3-2: The 2017 Plan shows that the oil refinery sector CO2e emissions were 14.4 MMT. The 2010 Plan shows refinery emissions in 2009 were 15.3 MMT, about a 1 MMT reduction from 2009 to 2015. What was the cause of this reduction? Is this reduction expected to be sustained?</p>	<p>Refinery emissions fluctuate from year to year. Since refinery emissions account for two-thirds of emissions from stationary sources, Figure 3-9 provides our best current estimate as to the long trend in GHG emissions from refineries. The Air District Board of Directors is considering various options for regulatory measures to further reduce GHG emissions from Bay Area refineries.</p>
Holtzman & Stromberg	350.org	<p>3/19, Historical and Projected Bay Area GHG Emission Trends:</p> <p>a. We strongly believe this section needs to detail more clearly the emission trends in each sector and reductions to come in each sector from state requirements already in place. Estimates for these already exist. The 2010 Clean Air Plan states that 2009 CO2e emissions were 98.7 MMT; it includes Table 2-12, which shows 2005 and 2009 emissions and forecasts for 2012, 2015, and 2020. The 2017 Plan states 2015 CO2e emissions were 89.8 MMT, but does not explain how the 9% emission reduction since 2009 was achieved. We suggest the inclusion of a discussion of the sources of the reductions from 2009 to 2015 and whether these reductions will be sustained. We additionally suggest a companion table to Figure 3-9 (similar to Table 2-12 in the 2010 Clean Air Plan) containing, for each sector, the level of emissions every five years from 1990 to 2015, the emissions forecast from 2015 to 2050, and the Air District’s projections of emissions reductions expected from state requirements, i.e., “taking into account state policies and regulations already adopted, as well as those that are likely to be adopted and implemented over the next 10 to 15 years.” This information will highlight gaps in achievement and important opportunities for Air District action to meet the region’s climate goals.</p>	<p>Figure 3-9 provides the Air District's historical and projected trend in Bay Area GHG emissions. A variety of factors and policies have contributed to the downward trend in GHG emissions since 2010, including more stringent fuel economy standards for motor vehicles, the low carbon fuel standard, the renewable portfolio standard in the energy sector, etc. As we move forward, the Air District will continue to refine its GHG emissions projections based upon the latest activity and demographic data, revisions to emission factors, better estimates of the emission reductions from control measures in this Plan, and new policies or measures at the State level that may be added to the statewide Scoping Plan or related documents.</p>

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	b. Please also include discussion highlighting why state programs will not bring the Bay Area's 2020 GHG emissions to 1990 levels.	A major reason that the Bay Area may not achieve the GHG reduction target for 2020 is that the Bay Area economy has grown at a faster rate than the rest of the state in recent years. This is especially true in terms of job growth. Economic growth impacts emissions from key sectors including stationary (industrial) sources, buildings, energy, and transportation. It should also be noted that it is difficult to predict exactly how State policies will impact Bay Area emissions since we do not yet know how future emission reductions from State programs such as Cap & Trade will be distributed across the state. A more detailed discussion of the GHG emission reductions needed to meet the 2020 target in the Bay Area, in comparison to meeting the target for the state as a whole, is provided on page 38 of the <i>Greenhouse Gas Emission Estimates and Draft Forecasts</i> document: http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/ghg_emissions_and_forecasts_draft.pdf?la=en
Holtzman & Stromberg	350.org	3/19, Figure 3-9: a. Figure 3-9 is our lodestar. Figure 3-9 is the whole banana. Figure 3-9 makes eminently clear that extremely steep, unceasing, year-on-year reductions of GHGs are necessary, beginning immediately in order to have any hope of meeting the interim or long-term targets.	Comment noted.
Holtzman & Stromberg	350.org	b. What is the slope of the dotted line? That is, how many MMT of CO2 must be reduced each year from the region's current position in order to reach, and then keep pace with, the dotted line as it travels downward?	Detailed GHG emissions inventory data, including projected emissions by sector and by year, are available on the Emission Inventory page on the Air District website. Interested parties can access this data to see how the projected emissions compare to the 2030 and 2050 GHG reduction targets. More information is provided on the Air District's GHG inventory here: http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/ghg_emissions_and_forecasts_draft.pdf?la=en
Holtzman & Stromberg	350.org	c. Given that our calculations show just a 5-5.8% reduction in annual GHG emissions by 2030 as a result of this Plan's control measures, how does this Plan compare with the yearly reductions that are mathematically necessary beginning immediately?	As shown in Figure 3-9, major reductions in GHG emissions will be needed to achieve the 2030 and 2050 GHG reduction targets in the Bay Area. The control strategy defined in the Plan will help reduce GHG emissions, but the Air District cannot reach these targets on its own. In addition, emission reductions are not quantified for certain measures, and thus the emission reduction estimates are conservative. Achieving the GHG reduction targets will require a comprehensive collaborative effort by government agencies at the state, regional, and local level, as well as the full range of stakeholders. This effort will require a combination of regulatory measures, changes in where we live and work and how we travel, technological innovation, consumer choices, etc.
Holtzman & Stromberg	350.org	d. Figure 3-9 shows that GHGs have continued to increase in the Bay Area since the adoption of the 2010 Clean Air Plan, and Appendix F shows that many of its control measures are carried forward in pretty much the same condition in the current Plan. To be clear, this kind of action on the 2017 Plan will not get the region to the 2030 or 2050 goals.	Since the draft Plan was released in early January, the strip chart in Figure 3-9 has been refined by Air District staff to reflect the latest activity data and emission factors. The revised strip chart shows a modest decrease in GHG emissions since 2010.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	e. How does your control strategy impact Figure 3-9? This is an extremely critical piece of the entire Plan, and it is missing. The public and your Board need to see this! In addition to adding that information to Figure 3-9, we suggest that a figure or figures be added to show the expected GHG emission reductions in each sector resulting from the Plan.	The control measures in the Plan are estimated to reduce GHG emissions by 4.4 MMT by 2030. As noted in Chapter 5, this is a conservative estimate, due to the fact that we have not estimated the emissions reductions for some of the measures. Also, the projection in the strip chart does not take into account GHG reductions that may occur in response to additional measures that may be adopted by the State, or emission reductions from local climate action plans and programs. Achieving the GHG reduction targets will require a comprehensive collaborative effort by government agencies at the state, regional, and local level, as well as the full range of stakeholders. A more detailed discussion of the GHG emission reductions needed to meet the GHG targets is provided in the Greenhouse Gas Emission Estimates and Draft Forecasts document.
Holtzman & Stromberg	350.org	3/20, Stationary Sources: We categorically reject the assertion that “Bay Area and California refineries are expected to export more product to consumers outside of California in future years to offset the expected decrease in demand by in-state consumers.” Such a scenario baldly privileges oil company profits over serious local health impacts, which themselves amount to staggering economic costs. All of this, of course, runs entirely counter to the mission of the Air District and the intent of the State of California to reduce gasoline consumption over time. It is not incumbent on communities that adjoin refineries and other stationary sources to internalize the ugly externalities of multinational commodity trade. Rather, it is incumbent on the Air District to protect the health and safety of the communities under its jurisdiction to the maximum extent feasible.	The Air District agrees that it is important to reduce emissions from Bay Area refineries and to reduce demand for fossil fuels, as is clearly stated many places throughout the Plan. The comment cited by 350.org as excerpted is taken out of context. When read in its entirety, the text in question makes it clear that Air District staff are merely surmising that the PATHWAYS model output is based upon an assumption that refineries will maintain their production level and ship more gasoline and diesel outside the region if Bay Area demand for gas and diesel decline. Air District staff has revised the text slightly to make it more clear that we are not endorsing the assumption that is apparently embedded in the PATHWAYS projection.
Holtzman & Stromberg	350.org	3/20, Energy: The 2030 RPS figure should be 50%, based on SB 350.	The revised version of the strip chart in Figure 3-9 does reflect the updated RPS target of 50% by 2030.
Holtzman & Stromberg	350.org	3/20, Buildings: These base assumptions seem unusually liberal for the Air District, when factoring in suburban building. It seems like actual reductions from this sector under business-as-usual will be even lower. What is the basis for these projections?	The assumptions used to project future emissions from the buildings sector are indeed ambitious. They were developed through a collaboration with Lawrence Berkeley National Laboratory, and take into account major reductions attributed to recently adopted legislation such as SB 350. Details on the assumptions can be found here: http://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/ghg_emissions_and_forecasts_draft.pdf?la=en
Holtzman & Stromberg	350.org	3/20, Agriculture and Waste: A 75% diversion rate for the whole Bay Area in just three years seems incredibly unlikely. It seems like actual reductions from this sector under business-as-usual will be even lower. What is the basis for these projections? Are they realistic?	The assumption that the Bay Area will achieve a waste diversion rate of 75% by 2020 is consistent with the statewide target established by AB 341 (2011).
Holtzman & Stromberg	350.org	3/22, Figure 3-10: It would be good to note somewhere on this figure, for the purposes of orienting one to the Y-axis, that pre-industrial CO2 concentrations were around 270 ppm.	In response to this suggestion, staff added text in the introductory section of Chapter 3 to briefly discuss the rapid increase in global CO2 levels in recent decades.
Holtzman & Stromberg	350.org	3/25, Consumption-Based GHG Emissions Inventory: Figure 3-14 shows the Bay Area’s consumption-based GHG inventory, with detail in six overall categories. It would be helpful to see the data presented in at least a couple of additional ways, for example: (1) similar figures showing the consumption category breakdowns for each of the nine Bay Area counties within the Air District and (2) similar figures showing broadly what the average consumption category breakdowns look like in the different geographic areas that are generally red, yellow, or green on Figure 3-12.	Detailed findings from the consumption-based GHG inventory are available on the Air District website. See: http://www.baaqmd.gov/research-and-data/emission-inventory/consumption-based-ghg-emissions-inventory

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	3/28, Bay Area residents have a key role to play: We are only supportive of this consumer pressuring/shaming campaign after substantial rulemaking to reduce combustion pollutants and super-GHGs is underway and the Air District is truly doing all that it can do. The Air District needs to lead by example, not just prescribe metropolitan behavior change. Real emission reductions from sources subject to Air District rulemaking cannot be hampered or delayed.	To achieve the 2030 and 2050 GHG reduction targets, we need to reduce emissions from all sources and sectors. The Air District will use all its tools, including regulatory measures, grants and incentives, supporting local governments and public education, to implement the control strategy described in the Plan. However, Bay Area-wide household and individual behavior change will ultimately play a critical part in achieving the 2030 and 2050 GHG reduction goals. Staff believes it would be irresponsible for the Air District to only use its regulatory authority in addressing GHG emissions given the enormity of this challenge.
Holtzman & Stromberg	350.org	3/29, Food is a major source of GHG emissions: “Bay Area residents can also reduce their GHG footprint by decreasing consumption of processed foods, meat and dairy products, and food imported over long distances. Eating less meat and dairy would also provide public health benefits for many people. <insert footnote here to study of your choice>”	The text has been revised as suggested.
Holtzman & Stromberg	350.org	3/29, We still have a long way to go: The Plan states, “It will be a major challenge to achieve emission reductions of this magnitude, while maintaining the standard of living to which we are accustomed.” Yet the Plan neglects to mention that if we do not make the emission reductions described, that standard of living is all but guaranteed to evaporate. This point needs to be made very clear. The choice to take climate action is taken not instead of maintaining our society’s standard of living, but rather in an explicit attempt to preserve it.	Comment noted.
Holtzman & Stromberg	350.org	3/29, Summary: “Although these impacts are expected to intensify in the future and negatively affect air quality and public health in the Bay Area, aggressive near-term efforts to reduce emissions of super-GHGs—including methane, black carbon and F-gases—as well as to reduce combustion of fossil fuel for power, heating/cooling, and transportation can help decrease the speed and severity of climate change over the next several decades.”	The text has been revised as suggested.
Holtzman & Stromberg	350.org	5/1, Climate and Air Pollution Control Strategy, 3rd bullet: “ Serve as a climate protection strategy <u>Safeguard the region’s future</u> by reducing emissions of greenhouse gases (GHGs) across the full range of economic sectors”	Comment noted.
Holtzman & Stromberg	350.org	5/2, Control Strategy by Economic Sector: Since the Air District has identified Stationary Sources, Transportation, and Buildings & Energy as key focus areas, we suggest that ongoing stakeholder groups for each of them be set up to work with District staff to further discuss and develop specific strategies to achieve the short, medium, and long-range emission reductions necessary, as well as help scope out education and partnership campaigns.	Staff will consider this suggestion as we move forward to implement the Plan.
Holtzman & Stromberg	350.org	“The Air District has developed a Refinery Emissions Reduction Strategy to reduce criteria air pollutant emissions by 20 percent from oil refineries and to reduce exposure, described in more detail in Chapter 4.” Exposure to what? By how much? If you are mentioning the RERS here, it needs to have a minimum level of detail.	The text in Chapter 5/3 has been amended to read as follows: The Air District has developed a Refinery Emissions Reduction Strategy to reduce criteria air pollutant emissions by 20 percent from oil refineries and to reduce exposure to toxic air contaminants in order to reduce health risks to local communities by 20 percent.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	<p>“In addition, three of the proposed control measures in the Plan support and expand the climate component of the Refinery Strategy work by requiring improved refinery emissions inventories, fence line monitoring and feedstock data (SS10), and by limiting GHG emissions from these facilities (SS11 and SS12).”</p> <p>The inclusion of SS11 in the Plan strikes us as disingenuous and somewhat alarming. SS11 is clearly instantiated in Regulation 12-16, on which we and many other stakeholders have been involved in working for years, and against which the executive staff and legal counsel of the Air District have fervently opined for years, to the point of unprecedentedly hand-picking an Advisory Council guaranteed to issue a report disapproving of the regulation and bringing ARB leaders in multiple times to strike jurisdictional fear in the Board of Directors and the Advisory Council. If staff is actively advocating against a measure, the Air District cannot also include it to inflate the comprehensiveness of its planning efforts. The inclusion of this measure greatly alarms us vis-à-vis what it represents about the genuine dedication the Air District has to do what is necessary to achieve its policy goals. If there are any other elements of the control strategy with the same lack of epistemological certainty as SS11, this Plan is worth only the paper on which it’s printed. We would ask that any measures Air District staff is actively opposing be removed from the control strategy.</p>	<p>SS11 is included in this Plan because proposed Rule 12-16 is in the rule making process currently and will be presented to the Board of Directors for consideration. The 2017 Plan and Draft Environmental Impact Report do not include any estimates of emission reductions or claim any other co-benefits from this measure that could enhance the appearance and acceptability of the 2017 Plan.</p>
Holtzman & Stromberg	350.org	<p>The characterization of SS12 as “limiting GHG emissions” is totally inaccurate, as the description of the control measure clearly states that “(e)mission reductions are not expected from this measure” and, to the contrary, that “facility GHG emissions may still increase.” If it is going to be mentioned in the text, it needs to be reformulated to accurately reflect the effects of its implementation.</p>	<p>SS12 would prevent increases in carbon dioxide (CO2) from Bay Area refineries by “limiting” the carbon intensity at each refinery to the carbon intensity occurring at “current production levels.” Therefore, if a refinery increased its carbon intensity (and therefore GHG emissions) above that set at current production levels the refinery would have to offset that increase in GHG emissions. Without SS12 the refinery would be able to increase its GHG emissions while remaining at the same production levels. In this case SS12 would then “limit” GHG emissions from increasing above an established baseline determined by current production levels when the rule was adopted.</p>
Holtzman & Stromberg	350.org	<p>5/4, Stationary Sources, ¶1: This section nearly omits, and greatly underrepresents, the importance of reducing combustion of fossil fuels for achieving both public health and climate protection benefits. Super-GHGs are important, but there needs to be far more balance in the Plan’s priorities. Eliminating combustion in a feasible and responsible manner will take many tiered actions over an extended period of time. Air District action must push that process along in parallel with quick action on super-GHGs. The longer the glide path for business as usual, the less private and social economic disruption will be expected to occur. The Air District is not doing industry any favors with respect to their business planning by delaying meaningful action on combustion (including regulatory actions with future effective dates).</p>	<p>The importance of reducing fossil fuels for protecting public health and the climate is discussed in the Executive Summary, “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Similar references are made in Chapters 1, 2 and 3 related to eliminating fossil fuel to achieve public health and climate goals.</p>
Holtzman & Stromberg	350.org	<p>5/4, Table 5-1: We ask that you consider where Bay Area refining will need to be in 2030 and 2050 for the region to meet its climate targets. Do SS1-SS12 ensure that those emissions are being reduced in a commensurate fashion through 2030? If not, how do you plan to achieve those reductions?</p>	<p>The 2017 Plan does not identify all the state, federal and regional actions needed to meet 2030 or 2050 climate stabilization goals. SS1-SS12 (as well as SS16-SS18) represent the most practicable control measures available in the near term to reduce GHG emissions from refinery sources. Additional strategies will need to be identified in future clean air plans to continue progress toward achieving these long range climate goals.</p>
Holtzman & Stromberg	350.org	<p>SS4: 5/5: “Review the results of refinery flare monitoring . . . in the Bay Area to and identify amendments that may will make the rules more effective at reducing emissions.”</p>	<p>Review of the data is necessary to determine if any additional amendments are feasible and warranted. It would be misleading for the Air District to pre-determine that amendments are justified without the appropriate analysis indicating additional emission reductions are possible.</p>
Holtzman & Stromberg	350.org	<p>a) 5/5: The Air District must take decisive action. You do not need a plan/strategy to simply “consider” something. In that vein: “Consider amendments to Amend Air District Rule 9-1 to achieve the lowest . . .”</p>	<p>See Master Response 6</p>

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	b) The Regulatory Context and Background for SS5 demonstrates there is no question that an SO2 limit of 10 ppm at sulfur recovery units is achieved in practice. The two Bay Area units needing the deepest reductions to comply with 10 ppm are so old, they could easily be considered well past their design lives. Surely the multi-year avoided costs of either not replacing or controlling them better long ago indicate that this control measure should presume a baseline emission reduction to 10 ppm. The only consideration at stake here is whether an even lower limit of 5 ppm should be established.	These comments will be provided to Air District staff responsible for analyzing potential amendments to Rule 9-1.
Holtzman & Stromberg	350.org	a) SS-14, Implementation Actions: We propose changing Implementation Actions for SS5 to read: <ul style="list-style-type: none"> · “Consider amendments to Rule 9-1, Sulfur Dioxide to achieve an SO2 limit of 10 ppm the lowest SO2 emission feasible through increased efficiency of sulfur recovery units and improved tail gas treatment (i.e., an SO2 limit of 10 ppm)., or · Consider amendments to Rule 9-1 to achieve the lowest SO2 emission feasible through installation of wet caustic scrubbers (i.e., an SO2 limit of 5 ppm).,” and · Review cost effectiveness and incremental cost effectiveness of controls required to achieve the SO2 limits of 5 ppm and 10 ppm.” 	We will take this recommendation into account when doing the engineering work to develop the rule that implements this control measure. Since that engineering work and stakeholder consultation are not complete, it would be premature to set specific targets for emission rates. We will consult with 350.org regarding their opinions on this matter early in the rule development process.
Holtzman & Stromberg	350.org	5/5: “Consider amendments to Amend Rule 9-1 that would to reduce the sulfur limits . . .”	See Master Response 6
Holtzman & Stromberg	350.org	a) Please clarify if all sources subject to the South Coast Air Quality Management District limit of 0.14 pounds of SO2 per ton of acid produced (10 ppmv) are able to comply. If not, please explain the basis for the Air District’s proposed limit of 0.2 pounds per ton of acid produced, a level that is 43% higher than the South Coast limit. Merely citing ten year-old permit requirements from jurisdictions that may or may not be as rigorous as we expect in the Bay Area is not sufficient. Also, please provide an estimate of the expected reductions in secondary PM2.5 emissions expected in Table H-1, were the limit set at 0.14 or 0.2 pounds per ton of acid produced.	We will consider the requirements of the South Coast rule and whether these limits would be feasible for sources in the Bay Area. Since the engineering on this rule is not complete, it's premature to state what the limits in the rule would be. Regarding the expected reduction of secondary PM2.5, that's a difficult calculation to make at this time because it depends on several factors including humidity, background ammonia levels, wind speed and direction and other confounding parameters. The Air District is not confident that we could quantify the secondary PM2.5 benefits of this rule with sufficient accuracy at this time.
Holtzman & Stromberg	350.org	b) Please include mention of PM throughout all sections of the Plan where SS7 is mentioned and associated pollutants are noted (e.g., Table 5-1 and other places).	It is anticipated that SS7 will also reduce secondary PM2.5 formation from the reduction of SO2. However, since specific information on the air pollution control equipment is not available, and in order to provide a conservative analysis, no PM emission reductions were estimated and/or discussed in the control measure or the 2017 Plan.
Holtzman & Stromberg	350.org	c) The Implementation Action language should assert that a limit will be established, not merely considered. A limit of 0.2 pounds of SO2 per ton of acid produce is well documented to have been achieved in practice for at least the past ten years. If sources are complying with the South Coast requirement, the lower limit of 0.14 pounds should be established. Air District Regulation 9-1 hasn’t been amended since 1995, over twenty years ago. It’s long past the time where such equivocal language as “consider amendments to Rule 9-1” is a remotely acceptable stance. This is especially true because it is also a PM2.5 reduction measure, and the Air District has long established that fine PM is the most serious health threat to Bay Area residents.	We will consider the requirements of the South Coast rule and whether these limits would be feasible for sources in the Bay Area. Since the engineering on this rule is not complete, it's premature to determine the final standards in the rule.
Holtzman & Stromberg	350.org	d) Please make the following change on 5/5 and SS-20, Implementation Actions: “Consider amendments to Amend Rule 9-1 that would to limit SO2 emissions . . .”	See Master Response 6

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	a) Trying to shoehorn Enhanced NSR Enforcement for Changes in Crude Slate into the definition of Alter under 2-1-233 is misguided, unnecessary, and could create confusion. By its very nature, a change in crude slate results in a change in emissions, and already meets the descriptions in 2-1-233 and 2-1-234 of a “physical change, change in the method of operation, or other similar change at an existing source that may affect air pollutant emissions.” Thus, a change in crude slate is already subject to Rule 2-1-233 or 2-1-234 as currently written. The fact that the Air District has not recognized this for refinery crude formulations before now is an oversight that needs to be corrected. The change needed is in Air District permitting procedure, not the language of 2-1-233 or 2-1-234.	Together with the crude slate reporting required under Rule 12-15, this clarification to the permitting rules will enable the Air District to put new procedures in place to ensure modifications in crude slate do not result in emissions increases in excess of permitted limits.
Holtzman & Stromberg	350.org	b) A more appropriate first-stage approach to SS9 would be for Air District engineering staff to expand the number of material codes for the refining process to include expected crude slate formulations and conservative estimates for Emission Factors associated with each of those crude slates. New emission factors can be added as new crude slate formulations are proposed for use. The identification of changes in upstream inputs, process-specific calculations, and resultant emission factors is all standard practice for how the Air District calculates and tracks emissions via the permitting process.	Staff does not believe the suggested approach would be more efficient or less labor intensive than what is being proposed.
Holtzman & Stromberg	350.org	c) In order for “Enhanced NSR Enforcement for Changes in Crude Slate” to have meaning going forward (i.e., to be able to determine whether a change in crude slate formulation triggers review as an alteration or a modification), baseline crude slate formulations need to be established for each refinery and expressed as reasonable permit limits based on historical operating assumptions. This would be accomplished through adoption and implementation of Rule 12-16.	Staff intends to set baseline crude slate windows through the information required under Rule 12-15, approved in 2016.
Holtzman & Stromberg	350.org	a) The Plan states that the Refinery Emissions Reduction Strategy “ensures that refineries are taking the strongest feasible steps to reduce emissions and minimize their health impacts on neighboring residents and the region as a whole.” SS11 is both eminently feasible and fundamentally reasonable: If you’re heading north, and you need to go south, the first sensible thing to do would be to stop going in the wrong direction.	See Master Response 1
Holtzman & Stromberg	350.org	b) SS11 will prevent GHG emissions from refineries from increasing. SS12 will not; it allows GHG emissions from refineries to rise, even while the Plan asserts they must be lowered. The RERS is supposed to reduce emissions from refineries, but if the Air District is not ready to do that here, these facilities must at least be forced to stop making our collective problem deeper and more difficult to address successfully. We strongly support SS11.	See Master Response 1
Holtzman & Stromberg	350.org	a) The title of the measure on SS-12 and elsewhere needs to be revised to remove the word “Limit,” as the description of the control measure clearly states that “facility GHG emissions may still increase.”	The control measure has been updated and the new measure is more restrictive. Under the new control measure, the carbon intensity of each refinery would be limited to its carbon intensity during the baseline period.
Holtzman & Stromberg	350.org	b) To that end, we believe we are well past the point where the Air District’s climate planning should include measures which state “GHG emissions may still increase.” Does the baseline carbon intensity figure for each facility that is proposed by this control measure decline (rapidly) over time like the dotted line in Figure 3-9? If not, why not? Given that carbon intensity “limits” can be exceeded, it seems this measure leaves refineries perfectly free to pollute all they want, including free to pollute local communities in the Air District to generate product for export. The region needs real GHG emission reductions, including from refineries.	This measure would decrease carbon intensity and baseline emissions by requiring implementation of cost-effective emissions reductions measures. The revised measure does not allow for carbon intensity limits to be exceeded. The Air District will look for additional opportunities to further reduce GHG emissions from the refineries, consistent with the approaches taken by ARB to implement statewide emission reduction goals.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	c) We don't believe it is accurate to state (Regulatory Context and Background) that "(t)he emission profiles, and resulting climate and health impacts, of these new sources of crude oil are not well understood." There are assays for both diluted bitumen and Bakken crude that are used to calculate emissions from transporting and processing these crudes. Air District and refinery industry engineers do this sort of calculation as a matter of course. The reason refineries are adding hydrogen capacity is precisely because they understand the increased emissions resulting from processing tar sands, and they are gearing up to pre-clean it. The emissions from the hydrogen plants are also well understood.	Emission changes resulting from crude slate changes can vary depending on refinery design, installed controls, product slates and a number of other factors. In general, though, the Air District agrees that heavier, more sour crudes are more energy intensive to process and that crude from the Bakken area can lead to higher emissions of volatile organic compounds and hydrogen sulfide.
Holtzman & Stromberg	350.org	d) This control measure would allow refiners to increase their carbon intensity by purchasing allowances in the Low Carbon Fuel Standard (LCFS) pollution trading market. This accounting scheme does not ensure local reductions of PM, GHGs, and TACs, shirking the Air District's core mission to protect public health and climate—and perpetuating the refining industry's own shirking, the externalization of its costs as damages to public health and climate borne by all of us. The purpose of a carbon intensity rule should be to hold the line or decrease carbon intensity at refineries, not pretend to set a limit then provide a means to avoid the limit and allow more tar sands to be processed.	Control measure SS12 has been updated and no longer allows carbon intensity to increase.
Holtzman & Stromberg	350.org	e) The offset scheme would allow increased biofuel production to offset increased carbon intensity from processing tar sands. The lifecycle improvement from the use of biofuels is not well understood, so errors or purposeful misrepresentations can easily be made. There's no reason for the Air District to incentivize biofuel production in this way, when we know transportation must be electrified to the fullest extent possible, and when the Bay Area is already showing significant leadership in the transition to electrified transportation.	Control measure SS12 has been updated and no longer allows carbon intensity to increase.
Holtzman & Stromberg	350.org	f) The Air District's Board of Directors passed a Resolution opposing the Canadian Tar Sands project. It would be hypocritical to adopt a GHG reduction rule that incentivizes tar sands processing.	Control measure SS12 has been updated and no longer allows carbon intensity to increase. This control measure would ensure no increases in carbon intensity and therefore would discourage the adoption of heavy and sour crudes such as those from the Canadian tar sands.
Holtzman & Stromberg	350.org	g) As you must know, the LCFS exempts all emissions associated with refined fuels that are exported for use outside the state from its allowance purchase requirements—and Bay Area refineries already increase exports when statewide demand for fuels declines, a trend which the Plan states as a fact to be accepted will likely increase over time as regional demand declines. Thus, this measure would encourage each refiner to gain a competitive advantage by refining cheaper, higher-carbon oil and further increasing production for export. That would increase emissions from higher-carbon refining for export and shift tailpipe emissions elsewhere as more refined fuels are exported. The higher-carbon refining for export also would worsen disparate localized health impacts and environmental injustice. Refinery GHG and particulate emissions are strongly correlated, and low-income communities of color already are disproportionately burdened by refinery emissions of this toxic GHG co-pollutant. Therefore, the design of this measure is fatally flawed. If you're heading north, and you need to go south, the first sensible thing to do would be to stop going in the wrong direction. This measure does not even ensure that our emissions stop increasing. Meanwhile, the economic benefits to reducing PM and GHG are staggering, even by your conservative valuation. SS12 needs to require a direct emissions control approach instead of pollution trading or it should be dropped.	Control measure SS12 has been modified and no longer depends on the structure of the LCFS. It will limit carbon intensity and will not allow it to increase.
Holtzman & Stromberg	350.org	a) 5/6: "In addition, consider amending Rule 8-37 to limit emissions. . ."	See Master Response 6
Holtzman & Stromberg	350.org	b) SS-35, Federal: This section needs to be updated to reflect the severe changes to the federal regulatory environment on methane (and across the board).	This change was made.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	c) SS-36, State: Additionally, this section needs an update. It currently states that most aspects of ARB's oil and gas rule will come into effect on January 1, 2017, which has now passed. What is the current status of ARB's methane rule?	This change was made.
Holtzman & Stromberg	350.org	d) SS-37, Implementation Actions, ¶1: "The Air District will also consider propose amending Rule 8-37 to ensure it properly addresses local needs . . ."	The Air District will only "propose" an amendment to a Rule if after a comprehensive review conducted during the public rulemaking process it is determined that there are feasible and cost effective control strategies identified to justify the amendment.
Holtzman & Stromberg	350.org	e) It is inexcusable, knowing what we know now, to regulate natural gas and crude oil production, processing, and storage and not regulate methane. This exemption should have been removed many years ago and should be done without any further delay. Air District compliance and enforcement staff has long been aware of the vast amount of leaking from Bay Area gas wells and the potential fire and explosive hazards that represents. The time to clean up these dangerous and climate-destroying operations is long overdue. The 2010 Clean Air Plan pointed this out, and the exemption for methane was removed from Regulation 2; however, methane exemptions were left intact in virtually all the Regulation 8 rules. SSM 4 from the 2010 Plan promised to "reconsider" the methane exemption in Rule 8-37 and control excess emissions. This action never happened. In fact, Rule 8-37 hasn't been amended in 27 years. Air District staff understand very well how to control venting and leaks, so there is no reason to hold back on amending Rule 8-37, and every reason to act quickly. It is highly likely compromises will be made in state rulemaking that needn't restrict local action. To be clear, there is no reason to delay the commitment to amend Rule 8-37.	The current Rule Development Schedule (Page 5/39) anticipates rulemaking will begin in 2018 on Rule 8-37, based on existing Air District resources.
Holtzman & Stromberg	350.org	f) The first order of business under this control measure appears to be waiting for ARB to complete its oil and gas rule, followed by a gap analysis to determine further Air District action that will be necessary. Meanwhile, methane continues to be vented to the atmosphere. Waiting for ARB to progress further is not a control measure and is only acceptable if a backstop comes online very rapidly, as spelled out in SS16 (Regulation 8-2).	The current Rule Development Schedule (Page 5/39) anticipates rulemaking will begin in 2018 on Rule 8-37, based on existing Air District resources.
Holtzman & Stromberg	350.org	g) We do not seek duplicative regulation; at the same time, redundancies are common when dealing with issues of public safety and welfare and are a far better outcome than falling short on such matters! Regulation of deadly air pollutants is no different. The Air District, not ARB, has primary responsibility for protecting public health and climate in the region. You can and should lead action in this area, not just follow behind.	The current Rule Development Schedule (Page 5/39) anticipates rulemaking will begin in 2018 on Rule 8-37, based on existing Air District resources.
Holtzman & Stromberg	350.org	h) The emissions reductions listed for this measure seem to arise wholly from those strategies in ARB's rule—which should be counted as state actions and not regional actions. The emissions reduction estimates omit any mention of reductions achieved through amending Regulation 8-37.	The Air District rule amendment will cover many more sources than the state rule, since most of the oil and gas wells in the Bay Area will be exempt from ARB's rule based on their production. Most of the emissions reductions estimated in this control measure are due to the amendment of Rule 8-37.
Holtzman & Stromberg	350.org	i) We ask that you consider what status oil and natural gas production, processing, and storage operations in the Bay Area will need to have in 2030 and 2050 for the region to meet its climate targets. Does SS13 ensure that those emissions are being reduced in a commensurate fashion through 2030? If not, how do you plan to achieve those reductions in the region?	The 2017 Plan does not identify all of the state and regional strategies necessary to meet 2030 and 2050 climate goals. Future updates to the 2017 Plan will help identify additional strategies that will be needed.
Holtzman & Stromberg	350.org	a) 5/6: "Estimate the magnitude and approximate composition of the fugitive emissions from Bay Area capped wells. and rapidly Establish emission limits for methane. . ."	The current Rule Development Schedule (Page 5/39) anticipates rulemaking will begin in 2020 on SS14 based on existing Air District resources.
Holtzman & Stromberg	350.org	b) SS-40, Brief Summary: "This control measure seeks to . . . gas wells, and to explore propose rulemaking to address these emissions."	The text in the 2017 Plan already reflects the edits recommended in this comment.
Holtzman & Stromberg	350.org	c) SS-41, Implementation Actions, 3rd bullet: "Consider Propose rulemaking for these facilities . . ."	See Master Response 6

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	d) The first order of business under this control measure appears to be engagement with DOGGR (good luck!) and research activities, followed by emissions inventorying, before finally rulemaking can be considered. Meanwhile, methane continues to be vented to the atmosphere. Given the miniscule cost of a well plug versus the staggering cost to public health of TAC and GHG emissions from these sources, rulemaking must be frontloaded. We support your plan of action on this measure only if a backstop comes online very rapidly, as spelled out in SS16 (Regulation 8-2).	The current Rule Development Schedule (Page 5/39) anticipates rulemaking will begin in 2020 on SS14, based on existing Air District resources.
Holtzman & Stromberg	350.org	e) We do not seek duplicative regulation; at the same time, redundancies are common when dealing with issues of public safety and welfare and are a far better outcome than falling short on such matters! Regulation of deadly air pollutants is no different. The Air District, not ARB or DOGGR, has primary responsibility for protecting public health and climate in the region. You can and should lead action in this area, not just follow behind.	The current Rule Development Schedule (Page 5/39) anticipates rulemaking will begin in 2020 on SS14, based on existing Air District resources.
Holtzman & Stromberg	350.org	a) The first order of business under this control measure appears to be waiting for CPUC to complete its lengthy SB 1371 regulatory process, followed by a gap analysis to determine further Air District action that may be necessary. Meanwhile, methane continues to be vented to the atmosphere. Waiting for CPUC proceedings to transpire is not a control measure and is only acceptable if a backstop comes online very rapidly, as spelled out in SS16 (Regulation 8-2).	Rulemaking for SS15 and SS16 is anticipated to begin in 2018 based on current Air District resources.
Holtzman & Stromberg	350.org	b) We also have grave concerns regarding the robustness of CPUC's eventual regulation in this area, given the infamously unduly cozy relationship the agency has with the party that owns 90% of the gas pipeline in the Air District.	Comment acknowledged.
Holtzman & Stromberg	350.org	c) "Phase 2" of the potential Air District program in this area calls for an audit of the pipeline system. In the case of PG&E, however—who owns the preponderance of pipeline in the region—we already know they were unable to provide federal and state regulators with basic information on a surprising portion of their pipeline network following the San Bruno pipeline explosion. We would hope this audit would utilize the extensive record in that proceeding and not spend critical time duplicating the same data set.	Comment acknowledged. This comment will be forwarded to Air District staff responsible for developing SS15.
Holtzman & Stromberg	350.org	d) We do not seek duplicative regulation; at the same time, redundancies are common when dealing with issues of public safety and welfare and are a far better outcome than falling short on such matters! Regulation of deadly air pollutants is no different. The Air District, not ARB, CEC, CPUC, CUPA, or PHMSA has primary responsibility for protecting public health and climate in the region. You can and should lead action in this area, not just follow behind.	Rulemaking for SS15 is anticipated to begin in 2018 based on existing Air District resources.
Holtzman & Stromberg	350.org	e) Where will the natural gas distribution system in the Bay Area need to be in 2030 and 2050 for the region to meet its climate targets? Does SS15 ensure those emissions are being reduced in a commensurate fashion through 2030? If not, how do you plan to achieve those reductions in the region? Rulemaking needs to be added to this control measure to ensure GHG reductions from natural gas distribution systems that are not covered by SS13.	Staff will perform a gap analysis to determine if any significant sources of methane leaks in the natural gas production and distribution systems have been omitted by these two control measures. Regarding, where does the natural gas distribution system "need to be in 2030 and 2050," that will be considered in future plans as the Air District considers the impact of reduced natural gas consumption on the distribution network.
Holtzman & Stromberg	350.org	a) 5/6: This control measure needs to be expanded upon and separated into its component parts here and in Volume 2 to ensure a lack of duplicative actions or double-counting. The public is much more interested in seeing forward-looking control measures in the Plan that are focused on basin-wide emission reductions than they are in seeing the Air District enumerate regulatory actions that you're already taking or have already taken; however, the action as presented is too expansive to be actionable. It is unclear precisely what additional actions are included in this control measure, as it mentions actions already taking place under SS13-SS15, WA1-WA2, WR1, and AG2-AG4, among others.	The Air District agrees that more clarity is needed with respect to goals and priorities for methane reductions and more accuracy is needed in estimating the benefits of methane reduction measures. This improved clarity and quantification will be addressed in the drafting of the methane strategy.
Holtzman & Stromberg	350.org	b) SS-49, Regulatory Context and Background, ¶12: This section needs to be updated to reflect the severe changes to the federal regulatory environment on methane (and across the board).	This change was made.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	c) SS-50, Regulatory Context and Background, ¶13: ARB’s methane reduction goals may be 40-45 percent below current levels by 2030, but we may need to reduce methane emissions more in the region if, e.g., we are behind our emission reduction targets for CO2.	Subsequent updates to the 2017 Plan may identify the level of emission reductions needed by economic sector to meet 2030 and 2050 goals.
Holtzman & Stromberg	350.org	d) It is good to see action on SS16 prioritized for 2017, as we recognize the importance of acting quickly to mitigate super-GHGs. With this in mind, we find the Implementation Action commitments overly cautious. Rather than “consider amending Regulation 8-2 to prohibit significant leaks of methane throughout the Air District,” a first priority should be a commitment (not a consideration) to amend Regulation 8-2 to prohibit significant methane leaks and to delete this exemption, since “best modern practices” have been proven inadequate: 8-2-110 Exemption, Natural Gas: Emissions from any operations consisting entirely of natural gas, provided best modern practices are used, are exempt from this Rule.	See Master Response 6
Holtzman & Stromberg	350.org	e) Furthermore, the Air District should commit to (not consider) removing the methane exemption from all existing rules. The 2010 Clean Air Plan already made the case for doing this, as does the 2017 Plan.	See Master Response 6
Holtzman & Stromberg	350.org	f) SS-51, Prohibit Significant Methane Leaks: “To prevent this potential scenario, the Air District will consider propose rule amendments to Rule 8-2 . . .”	See Master Response 6
Holtzman & Stromberg	350.org	g) SS-51, Natural Gas and Oil Production: “In addition to collaborating with ARB staff on their oil and gas rule, the Air District will consider propose amending its existing rule . . .”	See Master Response 6
Holtzman & Stromberg	350.org	h) SS-52, Composting and Anaerobic Facilities: “The Air District will consider propose a rule requiring best practices . . .”	See Master Response 6
Holtzman & Stromberg	350.org	i) SS-52, Publicly Owned Treatment Works: “The Air District will seek . . . at POTWs in order to inform potential rulemaking to address these potent greenhouse gases.”	See Master Response 6
Holtzman & Stromberg	350.org	j) SS-52, Remove Methane from Relevant Rules: “Air District staff will examine emissions and other relevant data to determine if where removing the exemption from these rules would result in methane emissions reduction, and then make those changes.”	See Master Response 6
Holtzman & Stromberg	350.org	k) SS-52, Implementation Actions, 2nd bullet: “consider amending Regulation 8-2 . . .”	See Master Response 6
Holtzman & Stromberg	350.org	l) SS-53, Implementation Actions, 2nd bullet: “consider removing remove the methane exemption . . .”	See Master Response 6
Holtzman & Stromberg	350.org	m) It is totally flabbergasting that the Air District has continued to fail to regulate methane in 49 out of 53 rules in Regulation 8, despite clear knowledge for an entire generation of its destructive power. Needless to say, a much more proactive approach from the Air District will be necessary to achieve the region’s climate targets. This blanket exemption should have been removed many years ago and should be done without any further delay!	Rulemaking for SS16 is anticipated to begin in 2017 based on existing Air District resources.
Holtzman & Stromberg	350.org	a) We suggest this measure’s title be changed to “Permit Review for GHGs.”	Thank you for the suggestion.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	<p>b) The Air District’s Climate Protection Program dates back to 2005. In all this time, the Air District’s only permit-related regulatory action has been to:</p> <ul style="list-style-type: none"> · Establish a BACT threshold in Regulation 2-2 for new and modified sources so high that it will never be triggered (75,000 tons per year), and · Amend Regulation 2-1 to exempt all other new and modified sources of GHG emissions from any permit review at all: <p>2-1-319 Source Expressly Subject to Permitting Requirements: Notwithstanding any exemption contained in Section 2-1-103 or Sections 2-1-114 through 2-1-128, any source meeting any of the following criteria shall be subject to the requirements of Section 2-1-302:</p> <p>319.1 The emission rate of any regulated air pollutant (except greenhouse gases) from the source is greater than 5 tons per year, after abatement.</p> <p>We find this simply astounding. The Air District’s lack of serious action aimed at stationary sources for so many years has much to do with the founding of 350 Bay Area and was the specific prompt for the creation of its Bay Climate Action Plan campaign.</p>	<p>This comment implies that the only meaningful GHG reduction activities the Air District can take are regulatory in nature. Since 2005, much of the Air District’s program to reduce GHG emissions has targeted large emissions sources such as transportation (through grants and incentives), building energy use (through work with local governments), and land use changes (in 2010 the Air District became the first in the nation to adopt thresholds of significance for GHGs under CEQA). The comment erroneously states that the Air District’s only permit-related regulatory action has been to establish a BACT threshold in Regulation 2-2, and to amend Regulation 2-1 to provide exemptions to GHGs. In 2008 the Air District became the first in the nation to adopt a fee through its permitting program (Regulation 3, Schedule T) on the emission of GHGs. The comment further implies that the exclusion for GHGs in Regulation 2-1, section 319.1 is an intention to exclude GHGs from regulation. Rather, the 319.1 exclusion is due to the vastly different nature of GHG emissions to those of other regulated pollutants – GHGs are emitted in much greater quantities than other regulated pollutants per unit of fuel burned, thus the 5-ton emission limit in section 319.1 does not feasibly apply to GHGs. To put into context, according to the Air Resources Board, the average California household emits 9.6 tons of GHGs each year.</p>
Holtzman & Stromberg	350.org	<p>c) At last, 12 years since the Climate Protection Program was created, the Air District will set a meaningful BACT threshold for GHG emissions. We propose that the threshold be set at 500 pounds per day.</p>	<p>The Air District will consider a range of levels for the BACT threshold. The final number will be determined through the rule development process.</p>
Holtzman & Stromberg	350.org	<p>d) We absolutely expect this Plan to incorporate a commitment to delete the GHG exemption in Regulation 2-1-319.1 and set an appropriate threshold for when GHG emissions from new and modified sources will become subject to permit requirements. We propose that threshold be set at 2,500 tons per year.</p>	<p>This comment will be considered when developing the draft updates to Rule 2-1.</p>
Holtzman & Stromberg	350.org	<p>e) In addition to removing the GHG exemption from Regulation 2-1 and setting a lower BACT threshold for GHGs, Regulation 2-2 should be overhauled to provide a complete framework to regulate GHG emissions from new and modified sources. Here are brief examples of program improvements needed:</p> <ol style="list-style-type: none"> 1. A GHG emission threshold to determine when a new or modified source requires permit evaluation 2. A no-net GHG emissions increase program that assures impacted communities are not burdened with increased emissions, and 3. A regulatory requirement to require review of clean energy alternatives to proposed new and modified sources and abatement devices. 	<p>This comment will be considered when developing the draft updates to Rule 2-1.</p>
Holtzman & Stromberg	350.org	<p>a) 5/6: This control measure needs to be expanded upon and separated into its component parts here and in Volume 2 to ensure a lack of duplicative actions or double-counting. The public is much more interested in seeing forward-looking control measures in the Plan that are focused on basin-wide emission reductions than they are in seeing the Air District enumerate regulatory actions that you’re already taking or have already taken.</p>	<p>Due to the nature of the implementation actions identified in SS18, there will most likely be multiple separate public rulemaking processes, which should minimize the chance of duplicative actions or double-counting.</p>

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	b) The technologies for electrifying the buildings and transportation sectors are already being deployed; the primary obstacle to get on track maximizing GHG reductions from these sectors is a lack of political will. It is generally understood that decarbonizing industry will take longer, however. This isn't merely a matter of finding add-on controls, as has been much of the focus of air pollution control for decades, nor is it solely a matter of finding clean replacement technologies. In many instances, it will require re-engineering efforts and the rebuilding of portions of our industrial infrastructure. The Basin-Wide Combustion Strategy Implementation Actions should include education and collaboration components focused on different operational and source-type sectors. We encourage the Air District to hold community forums for operators, researchers, and interested members of the public to inform all parties about the Air District's deep de-carbonization goals and encourage working partnerships to find solutions, including incentive funding, assistance from our educational institutions, and increasing regulatory action. All stakeholders need to be involved in this effort.	There will be public outreach and community meetings associated with all potential rulemaking associated with SS18. This will include identifying potential partnerships and any opportunities for incentive funding, if applicable.
Holtzman & Stromberg	350.org	c) SS-60, Regulatory Context and Background, ¶12: "The second phase would involve developing . . . through increased efficiency and regular use of BACT to substitute electric applications for combustion wherever feasible."	These edits to the text are not necessary as future rulemaking would identify BACT for the source category being regulated, including the identification of control technology (if any) utilizing electric applications.
Holtzman & Stromberg	350.org	d) SS-61, Phase 2: "Combustion sources will be evaluated in order to identify cost-effective and technically feasible efficiency and technology improvements that would result in GHG and criteria emission reductions. These evaluations . . . and 2) the energy efficiency and new technological opportunities available for each source-type."	It is anticipated that evaluating new "energy efficiency" opportunities would include the evaluation of potentially new "technologies".
Holtzman & Stromberg	350.org	e) SS-61, Implementation Actions, 2nd bullet: "promote energy efficiency and technological improvements . . ."	It is anticipated that evaluating new "energy efficiency" opportunities would include the evaluation of potentially new "technologies".
Holtzman & Stromberg	350.org	f) SS-61, Implementation Actions, 4th bullet: "prioritize the evaluation . . . and the energy efficiency and new technological opportunities for each source-type"	It is anticipated that evaluating new "energy efficiency" opportunities would include the evaluation of potentially new "technologies".
Holtzman & Stromberg	350.org	g) This measure would, among other things, set CO2/barrel limits on each refinery's emissions. That of course requires a reliable and transparently verifiable CO2/barrel measurement. Yet the emissions/barrel refined products metric suggested in the description of this measure cannot be verified, established as an emission limit, or enforced based on publicly reported data at this time. The Air District has not reported publicly on any refiner's product volumes and, indeed, has said that it cannot do so due to confidentiality concerns. Thus, it is very unlikely that you could verify, establish, and enforce reliable and effective limits on GHG emissions per gallon of refined product. On the other hand, the emissions/barrel oil refined metric that the Air District has proposed in discussions of Regulation 13-1 has been shown in publicly reported data to be a reliable metric for refinery emissions associated with changes in oil quality. Therefore, SS18 should be revised to include limits based on refinery emissions per barrel of oil refined.	Staff recognizes the need for the limits in Rule 13-1 to be as transparent as possible.
Holtzman & Stromberg	350.org	h) Increasing combustion efficiency is great; however, given the advanced nature of the climate crisis and the gulf separating our society from its climate targets, we need to be thinking about how we are going to phase out most sources of combustion in the next 30 years. This rule does not even take a stab at envisioning that. Where will fossil fuel combustion in the Bay Area need to be in 2030 and 2050 for the region to meet its climate targets? Does SS18 ensure those emissions are being reduced in a commensurate fashion through 2030? If not, how do you plan to achieve those reductions in the region?	The 2017 Plan lays out the process to identify the best available control measures available now to reduce GHG emissions. This may include gaining more efficiency with combustion sources today, and in the future transitioning over to non-combustion technologies. SS18 will ensure that we move this process of identifying lower emission and technically feasible control technologies forward as they become available.
Holtzman & Stromberg	350.org	i) To that end, we urge the Air District to add a Stationary Source Control Measure to specifically identify and mandate decarbonized abatement to the fullest extent possible. This has been presented as SSSX1, at the end of the Stationary Source Control Measures in our comments.	This is an interesting idea and the relevant control measures have been modified to include it.
Holtzman & Stromberg	350.org	j) We also suggest promoting clean energy generation at stationary sources wherever feasible through permitting requirements and CEQA mitigation guidance to reduce or offset fossil fuel combustion.	Requiring clean energy generation at facilities would be one possible GHG reduction strategy considered in future rulemaking associated with SS18.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	a) 5/7: "Amend Rule 9-13 to impose a standard for SO2 consistent with . . . detached plumes, and consider propose amendments to the rule to reduce GHG emissions."	See Master Response 6
Holtzman & Stromberg	350.org	b) The Bay Area's only cement manufacturing plant is one of the region's ten largest industrial sources of GHGs. The Plan tiptoes into the subject of partial fuel switching from petroleum coke to, maybe, 10% biomass, but sets no actual standard, and doesn't project any GHG reductions from such an effort. There is already existing research demonstrating the feasibility of using bio-waste for fuel at cement manufacturing plants. This is one discrete industrial sector where fuel switching is actually ready to be tried.	The feasibility of fuel switching associated with Rule 9-13 will be evaluated during the rulemaking process expected to begin in 2018 based on current Air District resources.
Holtzman & Stromberg	350.org	c) We urge the Air District to actually set a path for GHG reductions from cement manufacturing. At minimum, state explicitly that the Air District will develop a new rule based on existing studies that would set a percent waste biofuel requirement with a future effective date, or even a series of future effective dates with increasing fuel switching requirements. This is a tangible opportunity for the Bay Area to show real climate protection leadership.	The Air District agrees that GHG reductions from cement manufacturing are likely feasible. However, it is premature to state what the results of the rulemaking process will be.
Holtzman & Stromberg	350.org	SS20: 5/7: "Consider reducing Reduce public exposure to toxic air contaminants . . ."	This edit has been made to the text on page 5/7.
Holtzman & Stromberg	350.org	a) Stationary gas turbines are GHG sources; why are GHGs not targeted in this measure? Is reducing NOx from GHG sources without concurrently reducing GHG a good use of a multi-pollutant strategy and Air District resources? Will this source category be covered under SS18 rulemaking?	The Air District will consider GHG impacts when developing rules to limit NOx from gas turbines and attempt to reduce both where possible. Gas turbines will also be included under the basin-wide combustion strategy.
Holtzman & Stromberg	350.org	b) What technology will need to be active instead of stationary gas turbines by 2030 and 2050 for the region to meet its climate targets? How do you plan to engender that technological change in the region?	The Air District is currently creating a new Technology Implementation Office section to identify, encourage and promote the development and implementation of technological changes for all sources of emissions, including stationary sources.
Holtzman & Stromberg	350.org	a) If LAER emission levels for landfill gas flares are achieved in practice around the country, there shouldn't be much of a question that those emission levels should be mandatory for Bay Area landfill gas flares. We note that no technical issues or impediments are identified for this new rule. A technology both achieved in practice and applied uniformly for a source category should be considered RACT.	Rulemaking for SS23 is currently scheduled for 2020 based on current Air District resources. The feasibility of the control strategy will be evaluated in more detail during the rulemaking process than the preliminary review provided during the development of this control measure for the 2017 Plan.
Holtzman & Stromberg	350.org	b) If not included under this control measure, we want to ensure that regulation of GHG emissions from all biogas and non-refinery flares are included in WA1 and WA2.	Any rule development undertaken for WA1 and WA2 that included the potential use of bio-gas flares would include an evaluation of LAER for these facilities.
Holtzman & Stromberg	350.org	a) 5/8: "Reduce NOx emission limits on new and replacement central furnace installations. Explore potential Propose Air District rulemaking options regarding the sale of to eliminate the use of fossil fuel-based space and water heating systems for both residential and commercial use over time."	See Master Response 6
Holtzman & Stromberg	350.org	b) What will need to be happening with residential and commercial furnaces in 2030 and 2050 to ensure the region meets its climate targets? These devices will need to be phased out. Rulemaking options must be considered that reduce and eliminate the use of fossil fuel-based space and water heating over time. Given an average product life of 20 years, it's critical to start sending the market signal now for sources like these. Clean space heating technologies are already being installed in new and existing Bay Area homes. In the context of aiming to 2050 or even 2030, it is not too soon to contemplate the day when the sale of fossil fuel furnaces could be prohibited.	The inclusion of this control measure and its eventual implementation send the signal that natural gas furnaces need to be phased out. The Vision outlined in the 2017 Plan envisions a Bay Area without these combustion sources.
Holtzman & Stromberg	350.org	c) The Air District can use its authority under CEQA to propose GHG mitigation for new buildings to include requiring that a certain percentage of units in new developments use clean energy for space heating. This would help move the needle toward clean heating becoming standard practice.	Only lead agencies for CEQA projects can "require" the inclusion of mitigation measures on a project. The Air District will recommend in CEQA comment letters that projects should consider electric space heating in-lieu of natural gas.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	Please prioritize black carbon in this and all subsequent PM control measures, wherever possible. As both a source of fine PM and a super-GHG, reducing black carbon will have the greatest benefits in the short term for public health and the climate.	This comment will be provided to all Air District staff developing rules or implementing a control measure in the 2017 Plan.
Holtzman & Stromberg	350.org	a) 5/8: "Reduce emissions of DPM and black carbon from BUGs through Draft Rule 11-18, resulting in reduced health risks to impacted individuals, and in climate protection benefits. Propose Air District rulemaking options to eliminate the use of fossil fuel-based BUGs over time."	The availability of non fossil-fuel based BUGs and the feasibility and cost-effectiveness of requiring them will be considered during rulemaking for 11-18.
Holtzman & Stromberg	350.org	b) What will need to be happening with diesel backup generators in 2030 and 2050 to ensure the region meets its climate targets? These devices will need to be phased out. Rulemaking options must be considered that reduce and eliminate the use of fossil fuel-based backup generators over time.	The Vision articulated in the 2017 Plan anticipates the decarbonization of all industry sectors, including BUGs.
Holtzman & Stromberg	350.org	c) Gas-powered BUGs should be substituted for diesel models to reduce PM, BC, and TAC until electric alternatives reach practical feasibility. The trend is already moving away from installing new diesel generators to installing gas-powered ones instead. This is because improvements to gas generator design have obviated the need for diesel fuel, as well as the fact that particulate controls on diesel BUGs are unreliable and degrade over time. There is at least one Bay Area business that applied for, and was actually issued, permits to install bypass valves to avoid even using the installed particulate control, in blatant violation of conditions established in the same permit. Diesel BUGs are problematic and virtually unnecessary in 2017. It is time to ban them altogether, unless there is a proven use that cannot be served by a gas-powered generator.	This information will be provided to Air District staff responsible for evaluating potential amendments to Rule 11-18.
Holtzman & Stromberg	350.org	d) There is a disturbing trend in which Bay Area residents are installing BUGs. Certainly there is no reason for these to be diesel-powered, and reasonable people could question whether they should be permitted at all. Installation of diesel-powered BUGs at residences should be banned, and the Air District should publicly address the question of whether they should be permitted at all.	The Air District will consider rulemaking to address residential BUGs. We agree that diesel-fired residential BUGs are a concern.
Holtzman & Stromberg	350.org	5/8: " Consider <u>Propose</u> PM limits . . ."	See Master Response 6
Holtzman & Stromberg	350.org	5/8: " Consider <u>Propose</u> further limits . . ."	See Master Response 6
Holtzman & Stromberg	350.org	5/9: " Consider <u>Propose</u> applying the Air District's . . ."	See Master Response 6
Holtzman & Stromberg	350.org	SSX1 (Proposed) Decarbonize Abatement Devices and BACT Determinations: a) The Basin-Wide Combustion Strategy set out in SS18 does not address combustion-based control devices. We urge the Air District to add this Stationary Source Control Measure to specifically identify and mandate decarbonized abatement to the fullest extent possible.	This is an interesting idea and the relevant control measures have been modified to include it.
Holtzman & Stromberg	350.org	b) An excellent candidate for immediate action is the replacement of thermal oxidizers with catalytic oxidizers. We know there are operations that cannot be controlled by catalytic oxidation; however, many sources currently using thermal oxidizers could be abated without combustion.	This is an interesting idea and the relevant control measures have been modified to include it.
Holtzman & Stromberg	350.org	c) The BACT Handbook should be updated to mandate fossil-free options where they are feasible and cost-effective, and/or available and used in practice.	This is an interesting idea and the relevant control measures have been modified to include it.
Holtzman & Stromberg	350.org	d) The Air District should develop RACT Rules to require replacement of existing fossil fuel-using abatement devices with alternatives, to the extent they are already achieved in practice.	This is an interesting idea and the relevant control measures have been modified to include it.
Holtzman & Stromberg	350.org	e) SSX1 should be added to the 2018 Regulatory Schedule.	The Air District does not propose to add measure SSX1 as a new discrete measure to the control strategy at this time.
Holtzman & Stromberg	350.org	5/16, Energy, 7th bullet: "Support the development of bioenergy to displace electricity generated from fossil fuels for applications where renewable electricity is unsuitable."	The text has been revised as suggested.
Holtzman & Stromberg	350.org	5/16, Energy, 8th bullet: "Expedite Air District permitting for new renewable energy, biofuel, and high-efficiency combined heat and power (CHP) facilities, <u>as well as for biofuel facilities where necessary.</u> "	The text has been revised as suggested.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	a) 5/16: This control measure needs to be expanded and separated into its component parts here and in Volume 2 to ensure a lack of duplicative actions or double-counting.	The proposed measure EN1 describes a variety of potential actions to reduce emissions from the energy sector. Air District staff will further refine these actions as we move forward to implement the measure.
Holtzman & Stromberg	350.org	b) EN-2, Regulatory Context and Background: With the launch of PCE and SVCE, the formation of CalCCA, and a lot of action on CPUC proceedings, your section on CCAs needs an update.	The Air District is tracking the development of CCAs in the Bay Area.
Holtzman & Stromberg	350.org	c) Implementation Actions, 1st bullet: What actions does this implementation action actually result in? What does this mean? How specifically will engaging with load-serving entities maximize the amount of renewable electricity in the Bay Area?	The details of the implementation actions in measure EN1 will be further defined as the Air District moves forward to implement this measure.
Holtzman & Stromberg	350.org	d) Implementation Actions, 2nd bullet: It is a bit late to be providing start-up funding for CCAs in the region, given that most are already operational, but not too late: Contra Costa County could certainly use the promise of this funding immediately! The CCA development process there is at a critical phase, as county supervisors decide whether to pursue their own local program in the county or to join another, either MCE or Alameda County's incipient program. A lack of start-up funding, financing options, and institutional capacity are all major obstacles to development and launch of many CCA programs, and Contra Costa's is no exception. We urge Air District staff to reach out immediately upon receipt of this comment to discuss potential facilitation and funding roles the Air District might be able to play for Contra Costa County's CCA development. We would also note Solano County, the cities of Napa County, and San Jose as other remaining targets for Air District intervention. Financing assistance may continue to be useful for newly operational programs for some time after launch until they reach full operational strength.	The Air District has been active in supporting Community Choice Energy (CCE) programs, as described in Chapter 4 of the Plan. We will continue these efforts going forward.
Holtzman & Stromberg	350.org	e) Implementation Actions, 3rd bullet: We do not support language as permissive as "Support the development of bioenergy to displace electricity generated from fossil fuels." The fossil fuel industry will attempt to transition to other, lower-carbon fuels and to maintain that market as long as possible, despite the necessity and feasibility of electrification and extensive decarbonization. We are also wary of overly incentivizing the combustion of biomass—thus incentivizing the preservation, rather than reduction, of biomass sources—when we could be reducing waste over time through efficiency, biomimicry, and technological improvement, and instead be using renewable electricity for those applications. We believe the listed stakeholders are all reasonable ones with which to discuss the use of biomass. <i>In general, however, all references to bioenergy need to make clear that it will be used only where logistically necessary (i.e., for applications that cannot yet be electrified), where it can be utilized on-site to offset energy load, or as created by ongoing operations of other processes.</i> The language in the draft Plan is too permissive and open-ended.	Air District staff takes note of the cautions expressed in this comment, and will consider these concerns as the Air District moves forward to implement this measure.
Holtzman & Stromberg	350.org	f) Implementation Actions, 3rd bullet: "Support the development of bioenergy to displace electricity generated from fossil fuels, <u>for necessary applications and/or where sources are already present</u> . Track and participate . . . and waste management <u>agencies</u> to increase use of <u>existing</u> biomass in electricity production <u>and on-site load reduction</u> . The Air District's role may . . . technologies and applications, expedite <u>alter</u> Air District permitting of biofuel facilities . . ."	Air District staff takes note of the need to be clear about the appropriate role of bioenergy and will consider this comment as we move forward to implement this measure.
Holtzman & Stromberg	350.org	g) Implementation Actions, 4th bullet: "Expedite Air District permitting for new, large-scale renewable energy generation facilities, biofuel facilities, and high-efficiency CHP facilities, as well as for biofuel facilities where necessary."	Air District staff takes note of the need to be clear about the appropriate role of bioenergy and will consider this comment as we move forward to implement this measure.
Holtzman & Stromberg	350.org	h) Implementation Actions, 5th bullet: " Explore developing <u>Develop</u> grant and/or incentive programs . . ."	Grant and/or incentive programs require the availability of funding. Staff will investigate potential funding sources for incentives to help implement this measure.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	i) The control measure seems exclusively focused currently on power plants; we suggest the control measure be expanded to include the possibility of requiring renewable electric generation at permitted sources to offset on-site GHG emissions, as well as the use of on-site renewable electric generation in CEQA mitigation guidance.	Air District staff will consider this suggestion as we move forward to implement the control measures.
Holtzman & Stromberg	350.org	j) We also encourage the control measure to be expanded to include advocacy efforts on behalf of community choice programs in regulatory (CPUC, CEC) and legislative settings. The model of Community Choice Energy has been attacked in some way in each of the last few legislative sessions, and the future of the model has been seriously impacted by multiple CPUC decisions in the last few years. The need for advocacy in these forums is ongoing.	The Air District will continue to advocate to defend and expand Community Choice Energy programs.
Holtzman & Stromberg	350.org	This control measure needs to be expanded and broken down into more actionable items. Energy efficiency programs exist from the local to the federal level, and all are administered differently. We suggest that the Air District could play a broader role on energy efficiency than that envisioned here, similar to the clearinghouse and coordination role that you played on Climate Action Plans with the cities and counties in the region.	Air District staff will consider this as we move forward to implement Control Measure EN-2.
Holtzman & Stromberg	350.org	a) The Air District appears to have listed several useful actions and organizations that would identify the means to support energy efficiency and solar improvements in various building sectors. You may also wish to partner with Lawrence Berkeley National Laboratory (LBNL) through their High Performance Buildings for High Tech Industries program to improve the energy efficiency of Data Centers, Labs and Clean Rooms.	Staff will consider this suggestion as we move forward to implement measure BL1. The Air District has a long history of working with Lawrence Berkeley National Laboratory (LBNL) and may pursue future collaborations in the future.
Holtzman & Stromberg	350.org	b) The Air District may also wish to explore the possible application of LBNL’s “ENERGY STAR Guides for Energy and Plant Managers.”	Comment noted.
Holtzman & Stromberg	350.org	a) This control measure needs to be expanded and separated into its component parts. We suggest as examples of additional feasible actions a rule or model ordinance involving distributed generation at commercial/industrial sites and a rule or model ordinance for zero-net energy or carbon-negative buildings.	Staff will consider these suggestions as we move forward to implement this measure.
Holtzman & Stromberg	350.org	b) 5/19: Explore potential <u>Propose</u> Air District rulemaking options regarding the sale to eliminate the use of fossil fuel-based space and water heating systems for both residential and commercial use. Explore <u>Provide</u> incentives for property owners. . .”	The proposed actions will require further analysis to determine the best way to implement these actions.
Holtzman & Stromberg	350.org	c) We recommend the Air District look at the possibility of incentive funding the installation or change out of fossil-based space and water heaters with heat pumps and solar water heaters in commercial and multi-family developments. We also recommend consideration of incentive funding for the replacement of other old electricity-based appliances such as refrigerators with new energy-efficient appliances. The funding would complement other utility and tax rebates in these sectors as well as for single-family homes.	Staff will consider these suggestions as we move forward to implement this measure.
Holtzman & Stromberg	350.org	d) The Air District may also consider the 2009 “Mayor’s Task Force on Existing Commercial Buildings – Final Report for the City and County of San Francisco” as a model for addressing the reduction of energy use in commercial buildings. It includes recommendations for an ordinance to require ENERGY STAR benchmarking beyond the 2007 California Assembly Bill 1103 and an energy audit of every commercial building in San Francisco. Since the report was completed, the recommended ordinance, “Existing Commercial Building Energy Performance Ordinance,” was unanimously passed by the city’s Board of Supervisors and signed by Mayor Lee in February of 2011.	Staff will consider the San Francisco report and ordinance as we move forward to implement this measure.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	<p>e) In addition to recognizing the importance of reducing operating energy, steps should be included to reduce the embodied energy of materials and equipment. As operational energy goes down, the significance of energy embodied in materials increases. Currently, over a building's whole life, embodied energy accounts for roughly 20% of a building's total GHG footprint. However, in the first 20 years of a building's life, this can be 50% or more. In addition, as we approach zero-net operating energy, these numbers increase, eventually reaching 100%. Low-carbon materials provide net GHG emissions reductions now, when GHG emissions reductions are most effective and are needed most because of the delayed impact of GHGs and the self-reinforcing loops that GHGs trigger. Low-carbon construction can reduce the embodied energy of a typical building by 30 to 50%, with 20% achieved through simple substitutions. Rapidly renewable plant materials, wood, earth, and stone are the primary low-carbon construction materials. Use of rapidly renewable plants and wood products can actually sequester atmospheric carbon and could be assembled to create a carbon-negative house. Metal and plastics in general have a very high carbon footprint and should be avoided where possible. Concrete, while lower in embodied energy per pound, is used in such great quantities that its global warming impact tends to dwarf that of other materials used in construction. Where concrete is necessary, materials with a global warming potential 30% or more below standard mixes, as established by the NRMCA, should be specified.</p>	Comment noted. We will look for ways to promote the use of low-carbon materials and techniques in the effort to reduce GHG emissions from the building sector.
Holtzman & Stromberg	350.org	<p>f) Equally troubling is the high global warming potential of several commonly used insulation materials. Because of the chemicals commonly used to expand the foam, extruded polystyrene and closed cell spray polyurethane have an extremely high lifetime global warming potential. In a 2010 study by Buildinggreen.com ("Avoiding the Global Warming Impact of Insulation," by Alex Wilson, Environmental Building News, Vol 19.6), the payback from using extruded polystyrene and closed-cell spray polyurethane foam as an additional insulation layer on the outside of a 2 x 6 framed and insulated house was a minimum of 30 years for a house in a very cold climate like Boston. With less than half of the heating and cooling loads of Boston, the payback time in Berkeley for a similar house would be a lot longer. Another study by Passive House researcher Rolf Jacobson shows payback periods of 20+ years from using these high global warming potential insulations to meet Passive House energy efficiency goals. ("Comparing 8 Cold Climate PH Houses," by Mary James, Home Energy Magazine, Oct. 2014) By limiting the global warming potential of insulation materials to 0.05/sq. ft./R, highly insulated buildings will generally pay back the added carbon footprint of this extra insulation in five years at most. The only insulations that currently don't meet this standard are extruded polystyrene and closed-cell spray polyurethane. Manufacturers are developing safer alternative methods of expanding the foam.</p>	We will take this information into account as we move forward to implement this measure.
Holtzman & Stromberg	350.org	<p>g) Finally, while heat pumps are essential to decarbonizing buildings, emphasis should be put on supporting heat pumps that rely on refrigerants with a low global warming potential. The most commonly used refrigerants, R134a and R410a, have a very high global warming potential (GWP) of 1430 and 2100, respectively, over a 100-year time period (IPCC 2007). While it is not known what the rate of leakage is for refrigerants, they can lower the environmental and GHG benefits of specific heat pump models. There are heat pumps, such as the Sanden heat pump water heater, that use CO2 as a refrigerant, which is preferable from both a climate and public health perspective.</p>	We will take this information into account as we move forward to implement this measure.
Holtzman & Stromberg	350.org	<p>We support Air District incentive funding of energy-efficient pilot projects for both commercial and residential buildings.</p>	Comment noted.
Holtzman & Stromberg	350.org	<p>Given its focus on both parking structures and residential and commercial rooftops, we strongly recommend integrating a renewable electric generation component into this measure.</p>	Air District staff will consider this suggestion as we move forward to implement measure BL4.

Commenter	Organization/ Location	Comment	Air District Response
Holtzman & Stromberg	350.org	AG4: SS16 states that methane regulation would be included in AG4, thus GHGs should be added under pollutants affected.	In regards to quantifying methane reductions for AG4, the action in the control measure is to “further investigate the number and size of confined animal facilities (CAFs) in operation in the Bay Area, and quantify the ammonia and methane emission reduction potential for this industry.” At this juncture, it is unclear as to what best practices, or rule, would be feasible, given the number and size of CAF facilities in the Bay Area. Because the rule or potential best practice is uncertain, the quantification of potential emission reductions would be too speculative.
Holtzman & Stromberg	350.org	5/24: Propose amendments to <u>Amend</u> Air District Rule 8-34 to increase stringency . . .”	See Master Response 6
Holtzman & Stromberg	350.org	a) 5/25: “Initiate a process to better understand and quantify GHG emissions at POTWs. Explore <u>Engage in</u> rulemaking to reduce GHGs . . .”	Comment noted.
Holtzman & Stromberg	350.org	b) We suggest as additional opportunities for action under this measure a rule or set of best practices on energy efficiency upgrades for water distribution and treatment systems and a rule or model ordinance covering renewable generation on public infrastructure.	Air District staff will consider this suggestion as we move forward to implement measure WR1.
Holtzman & Stromberg	350.org	5/27, Black Carbon, ¶1: The text states that “BC emissions are projected to increase beyond 2020 as . . . the number of diesel engines in service grows.” This prediction is incompatible with Air District success. In order to protect public health and meet the region’s climate targets, diesel engines will need to be eliminated wherever feasible.	The full text of the section on black carbon describes the measures that the Air District will pursue to further reduce emissions of PM and from diesel engines.
Holtzman & Stromberg	350.org	The black carbon-related elements of this control measure are not listed. Please include them. We also suggest splitting this measure into separate measures on methane, black carbon, and refrigerants.	The control measure description for measure SL1 does in fact include a specific list of implementation actions to reduce black carbon emissions, as well as methane and f-gases.
Holtzman & Stromberg	350.org	5/31, Protecting Public Health, ¶4: Expected emission reductions from the Plan should be stated as “at least X tons per day,” etc., given that so many measures do not have emissions gains calculated for them. <i>This should be pushed through to ES/6.</i>	This is an important point. There are many factors that make calculating emission reductions from various control measures difficult, and in some cases impossible, at this time. Emissions reductions and dollar values should be assumed to be extremely conservative.
Holtzman & Stromberg	350.org	5/34, Protecting the Climate, ¶3: Because so many control measures do not have emission reductions calculated for them, and because health costs from pollution are substantially undervalued by the MPEM, the economic value of the benefits from the Plan’s control strategy will be significantly higher than the estimated value. “Using a social cost of \$62 . . . the anticipated GHG reductions from the 2017 Plan control strategy will have a value of approximately at <u>least \$275 million per year . . .</u> ”	This is an important point. There are many factors that make calculating emission reductions from various control measures difficult, and in some cases impossible, at this time. Emissions reductions and dollar values should be assumed to be extremely conservative.
Holtzman & Stromberg	350.org	5/35, Protecting the Climate, ¶3: Given that the estimated emission reductions achieved by the Plan’s control strategy by 2030 are far, far short of what is needed for the region to meet its climate targets, we reject as false the statement that “(t)he control strategy described in the 2017 Plan should serve as a solid foundation to guide our efforts to reduce emissions of air pollutants and GHGs over the next five to ten years.” In ten years, it will be 2027, with the state’s interim climate goal just around the corner. Will the Air District be poised to meet or exceed that goal for the Bay Area?	The Plan proposes a comprehensive strategy to reduce emissions of the full set of climate pollutants from all emission sources. In conjunction with actions at the State and local level, the Plan will set the Bay Area on a path to make significant progress towards the 2030 and 2050 GHG reduction targets.
Holtzman & Stromberg	350.org	5/37, Reduce Demand for Fossil Fuels, ¶1: Making combustion more efficient is great, but we also need to be reducing it.	We agree with this statement.
Holtzman & Stromberg	350.org	5/37, Reduce Demand for Fossil Fuels, ¶2: This is wholly inaccurate. The description of SS12 clearly states that “(e)mission reductions are not expected from this measure” and, to the contrary, that “facility GHG emissions may still increase.”	Staff revised the text to more accurately describe the way that SS12 would affect emissions from oil refining.

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Holtzman & Stromberg	350.org	5/38, Table 5-12: a) We would like to see TR23 to the 2017 Regulatory Schedule and SSX1 added to the 2018 Regulatory Schedule.	As noted in the "Regulatory Context" section of measure TR23, the Air Resources Board is considering regulatory measures to reduce emissions from lawn & garden equipment. To complement ARB's regulatory effort, the Air District will focus on providing incentives to replace existing equipment with zero-emission models. The Air District does not propose to add measure SSX1 as a new discrete measure to the control strategy at this time.
Holtzman & Stromberg	350.org	b) SS12, SS39, TR1, TR2, AG4, WA3, WR1, and SL1 all include rulemaking as an implementation tool and include GHG as one of the pollutants reduced, however No action are included in the rule development schedule listed here. Is this an oversight or are these "paper projects"? Given that the entire control strategy falls far short of the emissions reductions the region needs, we cannot see portions of it fall through the cracks.	SS12 has been added to the rule development schedule in Table 5-12. SS39 includes an implementation action to require enhanced AQ monitoring by oil refineries; however, as described in measure SS10, this requirement will be implemented via Rule 12-15, which was adopted in April 2016. Neither TR1, TR2, AG4 nor WA3 include implementation actions that require rule-making. WR1 does include an implementation action to explore rule-making to reduce GHG emissions from water treatment, but no decision to pursue a rule has been made as yet. SL1 includes an implementation action to amend Reg 8-34 to reduce emissions from landfills. However this will be accomplished by means of measure WA1, which is included in the rule-making schedule for 2018.
Holtzman & Stromberg	350.org	B/1, Public Outreach: One of staff's goals to guide public outreach was to "inform a wide range of stakeholders and members of the public about the . . . plan," however, the report says the Air District used as primary outreach mechanisms "the 2017 Plan website; notices sent to the plan e-mail list serve; and Plan public workshops, open houses, (and) community meetings." It is unclear to us how the Air District would reach a wide range of members of the public if outreach primarily relied on resources that were already connected to the Plan. In truth, we do not believe there has been a substantial amount of broad outreach and education about the Plan or the Regional Climate Protection Strategy to the vast majority of the public or to stakeholders who are not already engaged with the Air District. The Air District already has a strong connection with the public through the Spare the Air campaign. We think this connection—and even the Spare the Air campaign itself—have been underutilized as outreach tools in spreading the word about the Plan beyond already engaged Air District stakeholders to the average Joe and Jade.	In addition to the outreach efforts described in Appendix B, Air District staff informed the community about the Plan and solicited comment by asking Board members to send information to their constituents, issuing a news release about "Spare the Air, Cool the Climate" that led to stories in the East Bay Times and other news outlets, creating and distributing a video on the Plan, issuing news releases about Open Air Forum each time we opened a new topic on the Plan, posting open house flyers in multiple languages in key community spaces (libraries, community centers, senior centers) of the cities we visited, and making presentations about the Plan to each of the District's nine Spare the Air Resource Teams which are composed of members from community-based organizations, local businesses, government agencies, and elected officials. Staff will also work to spread the word about the Plan once it is adopted. The implementation phase will require ongoing outreach and education about the plan, as well as engagement and partnerships to achieve our goals.
Holtzman & Stromberg	350.org	B/2, Outreach to multilingual communities: Engaging impacted communities and multilingual communities in particular was also an important goal for staff's outreach on the Plan, and we are curious what the extent and outcome of those efforts were. Certainly, we believe that simply posting open house information in multiple languages on the low-profile 2017 Plan website and having materials available in a few languages at open houses (should anyone who speaks one happen to come to the event) falls short of outreach or engagement with those communities per se.	The Air District is working to improve its outreach and engagement with Limited English Proficiency (LEP) communities. Air District staff presented information about the Plan in Spanish to a group of monolingual families in the Monument Corridor community of Contra Costa County in February. We also presented information about the Plan to the North Richmond Municipal Advisory Council, an impacted community. Staff sent information about the plan to Bay Area Environmental Justice organizations. We are actively pursuing opportunities to conduct listening sessions in LEP communities not only to hear concerns, but also to inform communities about key Air District initiatives, including the Plan.

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Holtzman & Stromberg	350.org	Appendix F, Implementation Status of 2010 Control Measures: The 2010 Plan proposed 45 robust control measures, however the emissions reduction benefits from them are unclear. Figure 3-9 shows that GHG emissions in the Bay Area have increased since the adoption of the 2010 Plan, and Figure 2-13 suggests no particular impact on PM10 or PM2.5 from the control strategy. In addition, seven of the 18 stationary source control measures adopted, a full 39%, were never implemented and are simply carried forward into the 2017 Plan, seven years later. It goes without saying that forward-thinking action will be required to bring us to our region to its interim and long-term climate policy goals, and implementation of the current Plan will have to happen with implacable regularity and robustness. This Plan cannot be implemented like the last one was.	Staff agrees that it will require a concerted effort on the part of the Air District and its partners to implement the ambitious control strategy described in the 2017 Plan.
Holtzman & Stromberg	350.org	Appendix G, Evaluation of Control Measures: We found this procedural information interesting and appreciate its provision and the comprehensive search for feasible measures. We would like to highlight, however, that it appears approximately ¾ of the measures considered for inclusion in the Plan’s control strategy were existing ideas—in some cases, long-existing ideas: 216 from recently adopted plans and 64 from the 2010 Clean Air Plan process, out of 366 reviewed. If the Air District hopes, as stated in the Plan, to lead the state and the nation towards the Vision for 2050 by providing a metropolitan-scale model for others to follow, it will of course need to keep thinking big and will by definition need to do more than implement existing ideas at some point. Of the 86 remaining measures reviewed, which were new ideas, we are very disappointed to see that only 17 measures were suggested by Air District staff, among the best poised people in the world to be able to propose novel, innovative, and effective measures to reduce GHGs, fine PM, and other pollutants.	As explained in Appendix G, the vast majority of potential measures reviewed are in fact incorporated in the proposed control strategy. Of the 366 measures reviewed, only 49 were deemed infeasible. All the rest are either already being implemented by the Air District, are proposed as new measures in the current plan, or included as further study measures that require additional analysis.
Holtzman & Stromberg	350.org	Appendix H, Emission Impacts of Control Strategy: We appreciate the incredible difficulty and art involved in estimating emissions reductions from these control measures, but with so many blank spaces, the cumulative effect of this shortcoming ends up underselling the Plan considerably in terms of the economic, health, and social benefits it will create. Providing a conservative estimate is one thing; making no attempt to offer even a ballpark estimate is another. When the individual variations from the true value of emission reductions are as gargantuan as a value of zero for decarbonizing the Bay Area’s entire energy supply, it threatens to make any estimation of reductions from the Plan—and any comparison between control measures vis-à-vis their relative priority for implementation—a meaningless exercise. Could some of the impacts of these control measures not be expressed in a range, where multiple scenarios are modeled? For example, since many of the impacts of the control measures are expressed in terms of 2030, scenarios projected for EN1 might be “region goes 100% renewable by 2030,” “region goes 50% renewable by 2030,” etc.	As the Air District moves forward to implement the control measures in the Plan, staff will continue working to develop emission reduction estimates for those measures for which emissions cannot currently be estimated, as well as tracking qualitative metrics for implementation.
Sylvia Hurdle	Alameda Resident	Thanks for the opportunity to comment on the Clean Air plan: Spare the Air--Cool the Climate. I am grateful that steps are being taken towards trying to reduce greenhouse gases. However, I question whether there are enough teeth in the bill, say, to reduce Bay Area GHG to 1990 levels, or whether there are enough regulations to significantly change current practices. In particular, we need more regulation on petroleum refineries to discourage processing extreme fuels like tar sands. Electric is the way to go--ESPECIALLY in CA that is so sun rich and has such solar potential.	See Master Response 2
Kevin Slauson	Alameda Resident	I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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John Ota	Alameda Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Sylvia Hurdle	Alameda Resident	We need to promote energy efficient appliances that do not rely on fossil fuels. For example, there are Japanese-produced electric hot water heaters (all the rage in Australia) that are 4 times as efficient as gas and even cost less to operate than gas, but 5 contractors we talked to about our remodel, who are fairly ecologically savvy, did not know about them. We are actually spending money to educate them about such things when we should be getting a rebate for using them! I encourage you to put more teeth in this bill to make REAL change.	See Master Response 5
Jonathan Knight	Albany Resident	I appreciate the chance to comment on the Draft 2017 Clean Air Plan, and support the plan's call for aggressive action. That said, my understanding is that the plan could indeed be more aggressive. In particular, I would support amendments that make it more difficult for stationary sources to exceed emissions limits. While financial incentives are important, the plan have enough teeth to ensure we can make rapid progress on reducing regional carbon intensity.	See Master Response 2
	Albany Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
	Albany Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions.	See Master Response 2
Margaret Hasselman	Albany Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Jenny Bard	American Lung Association	Coordinate with the California Air Resources Board to track local emissions of criteria air pollutants, toxics, and greenhouse gases in support of the ARB Cap and Trade Adaptive Management Program	We coordinate our work with CARB on an ongoing basis, and we have new emissions disaggregation and reporting responsibilities under AB 197 that will help to support the local tracking and planning that you are proposing.
Jenny Bard	American Lung Association	Pursue additional limits on emissions and carbon intensity in the refinery sector, including the proposed facility wide refinery climate impacts limit	See Master Response 7
Jenny Bard	American Lung Association	Pursue additional limits on emissions in the refinery sector, including the proposed facility wide refinery limits	See Master Response 7
Jenny Bard	American Lung Association	Work with local jurisdictions to accelerate electric vehicle adoption and infrastructure, community outreach and education.	The Air District will continue its various funding and other programs to encourage early adoption of electric vehicles.
Jenny Bard	American Lung Association	Support the Sustainable Freight Plan that accelerates widespread electrification of the freight sector and capping reductions at freight facilities that draw significant diesel emissions burdens to local communities.	The Air District will continue its various funding and other programs to accelerate electrification of the freight sector, and will seek other opportunities to support the sustainable Freight Action Plan.

Commenter	Organization/ Location	Comment	Air District Response
Jenny Bard	American Lung Association	Support proposed methane control measures, including capped wells, natural gas distribution and the development of a Basin Wide Methane Strategy	Comment noted.
Jenny Bard	American Lung Association	Work closely with local jurisdictions to pursue the elimination of residential wood burning as a key step to reduce climate and local air quality impacts and promote the most efficient electric heating technologies in new construction and remodels.	The Air District is working aggressively to shift home heating away from wood burning, and we collaborate with local jurisdictions in this effort.
Matt McWright	Atherton Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
David William	BACWA	The Draft Plan calls for developing a region-wide strategy to improve fossil fuel combustion efficiency and eventually reduce fossil fuel combustion at industrial facilities, beginning with the three largest sources: oil refineries, power plants, and cement plants. Most POTWs in the Bay Area produce a low carbon, renewable fuel (digester gas) from the anaerobic digestion of sludge that can be used onsite for renewable electricity production or used at industrial facilities to offset fossil fuel (natural gas) combustion. BACWA would like to work with BAAQMD staff in the development of this strategy to identify opportunities where POTWs can support the air district achieve its goal to limit the combustion of fossil fuels by replacing it with a low carbon, renewable digester gas.	Staff looks forward to partnering with POTWs as we implement this measure.
David William	BACWA	Digester gas produced at POTWs is a low carbon renewable fuel that can be processed into transportation fuel to offset fossil fuel use in trucks and heavy-duty vehicles. Some BACWA members have already considered this as part of their planning efforts and can provide information on the economic and market feasibility of these types of projects. BACWA encourages BAAQMD staff to consider this as an option for the beneficial use of digester gas at POTWs.	Staff will consider this option as we move forward in implementing this measure.
David William	BACWA	We ask that BAAQMD carefully consider funding projects at POTWs that not only have the potential to divert food waste from landfills and reduce the associated methane, but generate renewable resources that further offset dependence on fossil fuels and support the overall decarbonization of the Bay Area energy and fuel system.	As we implement the Green Waste Diversion control measure and/or as funds become available for green waste diversion, we will certainly consider projects that also generate renewables.
David William	BACWA	The Draft Plan calls for overall reduction in methane emissions from landfills, and oil and natural gas production and distribution...by capturing and beneficially using the digester gas (primarily methane) at POTWs, BACWA members are in a unique position to support this measure as well. As many POTWs have excess capacity in their existing anaerobic digesters, they are in a position to accept diverted organic waste (i.e., food waste) from landfills and co-digest it with sludge to generate even more digester gas. BAAQMD has very ambitious goals for the diversion of organics from their landfills, calling for 100 percent diversion by 2035. The only way to accomplish this within that time period and at a cost effective rate, is to consider the use of existing infrastructure (anaerobic digesters at POTWs) located in the hearts of Bay Area communities that can both process the material and generate renewable useful byproducts (digester gas and biosolids). BACWA strongly recommends including POTWs in the discussions of and development of solutions to this control measure.	Staff looks forward to partnering with POTWs as we implement this measure.
David William	BACWA	BACWA very much looks forward to partnering with BAAQMD staff in (the implementation) process to address GHGs at POTWs.	Staff looks forward to partnering with BACWA as we implement this measure.

Commenter	Organization/ Location	Comment	Air District Response
David William	BACWA	BACWA supports the efforts to reduce emissions of toxic air contaminants (TACs). BAAQMD staff is already in the process of adopting more stringent limits and methods for evaluating toxic risks at existing and new facilities. BACWA is involved in the rule-making process, providing information on the planning challenges and economic impacts to POTWs. Unfortunately, the response times and potential cost requirements of projects necessary to comply with the proposed Rule 11-18 are unreasonable in order to get the required approval from their elected boards and public stakeholders. Additionally, the proposed rule is challenging the potential to divert organics from landfills to POTWs (making use of existing infrastructure) and generate more digester gas for beneficial use, since the increase of digester gas implies an increase in a potential source of TACs if combusted. There are various ways to avoid an increase in TAC emissions with the increase in digester gas, via air pollution control devices or incorporating an alternative use (i.e., transportation fuel). BACWA strongly recommends that BAAQMD carefully consider the comments submitted December 2nd, as well as the information provided in the March 9th workshop that BACWA held with BAAQMD staff focused on POTW impacts.	Air District staff will certainly review and consider comments on Rule 11-18 submitted December 2nd and the information provided in March.
Marisa de Belloy	Belvedere Tiburon Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Kathy Kerridge	Benicians for a Safe and Healthy Community	Backyard/community food producing gardens should be a strategy. A permaculture garden uses compost they have produced – cutting down on waste. They grow their own food, no transportation GHGs and they use grey water and rooftop harvesting, which saves water and therefore GHGs	This Plan includes measures to address food as contributing to the Bay Area's climate footprint. Some measures will engage agricultural practice to reduce emissions, and some will work to increase composting and healthy soils. We will continue to look for opportunities to decrease the greenhouse gas impacts of our food chains.
Emilie Anna Reaves	Berkeley Resident	Support sufficiently sustainable and well-funded incentive dollars for energy-efficiency pilot projects for commercial and residential buildings in low-income and disadvantaged communities, identifying the right public-private partnerships to leverage market-based solutions.	During the implementation of our Plan, we will pursue multiple efforts to decarbonize buildings, including in disadvantaged communities. Four measures in the Buildings section of our Plan describe specific actions that we will take in pursuit of what you are proposing.
Sheila Thorne	Berkeley Resident	SS12 needs modifying. The offset scheme as now written would allow more biofuel production to offset increased carbon intensity from processing tar sands, which is not acceptable. The Plan should cap or decrease refinery carbon intensity.	See Master Response 7
Cate Leger	Berkeley Resident	The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to “offset” the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7
Cate Leger	Berkeley Resident	The purpose of a carbon intensity rule for SS12 should be to hold the line or decrease carbon intensity at refineries, not pretend to set a limit, then immediately provide a means to avoid the limit and allow more tar sands to be processed.	See Master Response 7
Ziv Tzvieli	Berkeley Resident	Also, the Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to “offset” the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible and the thousands of Californians living in the shadow of the refineries need clean air too.	See Master Response 7. Also, to achieve the GHG reduction targets, we will need to reduce emissions from motor vehicles as well as oil refineries. By decreasing demand for gasoline and diesel, measures to reduce motor vehicle travel and promote electric vehicles can also lead to reduced emissions from refineries.

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Rose Schewis	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Emilie Anna Reaves	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Andrew Cockbell	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Lena Wolf	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Cate Leger	Berkeley Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions.	See Master Response 2
Carolyn Stern	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Rose Schweig	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Chrysa Caulfield	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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Jonathan Eden	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Wendy Stock	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Carol Rothman	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Nora Lyman	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Sophia Lehmann	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Ziv Tzvieli	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Valerie Love	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Alma Prins	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2

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Robert Citron	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Iris Greenberg-smith	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Iris Greenberg-smith	Berkeley Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions.	See Master Response 2
Diana Bohn	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Ellen Franzen	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Ellen Franzen	Berkeley Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions. Frankly, I disagree with the current president about regulations hurting business. We have regulations because businesses often act only in their own interests, not in the interests of the community at large. I strongly favor regulations that will reduce greenhouse gases. Although I think we are probably beyond fixing without experiencing serious environmental damage, I think we may be able to limit some damage if we regulate to reduce greenhouse gases. As a new owner of a Chevy Bolt, I also strongly urge you not to let carbon intensity limits be exceeded.	See Master Response 2
Loring Dales	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Lee Bishop	Berkeley Resident	I am concerned about the lack of enforceable rules requiring greenhouse gas reductions. I am also concerned that the plan does not reduce bay area emissions to 1990 levels by 2020. I think moving forward we need a discussion about that.	See Master Response 2 and Master Response 3

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Sharon Carew	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Andrea Kean	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Rhoda Slanger	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Nasira Abdul-Aleem	Berkeley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Anonymous - Open house	Berkeley Resident	How institutions invest affects air quality, if they support fossil fuel burning	Fossil fuel divestment is a movement that has been gaining momentum in certain institutions. While we do not have the ability to affect people's investment portfolios through our regulatory authorities, we support innovative strategies in the discourse of climate change mitigation.
Cate Leger	Berkeley Resident	The Plan shows (in Figure 3-9) that California's climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action.	See Master Response 3
Lee Bishop	Berkeley Resident	I am also very concerned about emissions due to land use changes. I think we should only support bioenergy where those land use changes have already taken place and only where necessary. I think we should move toward electrical wherever possible.	The Air District's distinction between natural and working lands reflects the differentiation of lands that you are advocating. One intention of our Plan is to work with land managers to maintain or even increase the carbon content of soils. We also believe that electrification and use of renewable energy resources is one of the best pathways toward decarbonization of the Bay Area.
Sharon Carew	Berkeley Resident	I recently heard that leaf blowers are detrimental to air quality and to the health of people who use them. Can we encourage going back to rakes and brooms to sweep leaves.	We encourage any practical replacement of equipment that emits pollution with equipment that does not. TR23 outlines efforts to reduce emissions from lawn and garden equipment.
Sharon Carew	Berkeley Resident	I also feel very strongly that public transportation must be affordable, plentiful, and reliable. Why not put billboards up asking people to ditch their car 1 or 2 days a week and take Bart or the bus.	We agree that public transportation is a key to a thriving, healthy Bay Area. Many of our transportation measures attempt to raise public awareness of the benefits of taking shared transit and to make our transit systems better.

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Marg Hall	Berkeley Resident	Thanks for your work but please make this a stronger document. I have a compromised respiratory system. Clean air is essential to my own health and that of millions of my neighbors. It is our precious commons-- education alone won't protect us. We need better protection from polluters. I also support any efforts to promote transitions from fossil fuel based heating systems to cleaner alternatives. This aspect of green building is under-developed. We live in an area where properly designed and scaled solar thermal or PV can meet our heating needs. Please find ways to incentivize the development and utilization of this technology.	See Master Response 5
Emilie Anna Reaves	Berkeley Resident	Support electrification of public fleets within the state's transportation sector, as well as access to affordable electric vehicles for traditionally marginalized communities.	To further accelerate the purchase and lease of zero-emission and plug-in hybrid vehicles in the Bay Area, in 2013 the Air District, in partnership with MTC and ABAG, developed the Bay Area Plug-In Electric Vehicle (PEV) Readiness Plan. This plan is guiding the actions of the Air District, MTC and ABAG, as well as other regional public and private partners, in developing financial incentives for the purchase and lease of PEVs, locating charging locations at worksites and public areas, and developing local planning and building code best practices to ensure PEVs are well integrated into the region. The plan also includes a siting analysis, which seeks to guide and coordinate future PEV charging infrastructure-siting efforts based on anticipated or projected demand for PEVs. In the 2017 Plan, the Air District, in partnership with MTC, commits to implement the goals of the Bay Area PEV Readiness Plan. Both the Air District and MTC will commit regional clean air funds toward qualifying vehicle purchases and infrastructure development subsidies.
S Nelson	Bethel Island Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Tina Ann	Bollinas	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Alexis Goldstein	Brooklyn, NY Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Bill Martin	CA Geothermal Heat Pump Association	Thanks for including mention of geo heat pumps in plan per comments on draft control measures.	Comment noted.

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Dr. Crystal Reul-Chan	CalRecycle	In addition to our previous comments addressing the emission reduction trade-offs of N2O, we are also the technical manager for a project with UC Berkeley through the 4th California Climate Change Assessment regarding further quantifying GHG emissions and other co-benefits from the composting process and GHG emissions reductions from the application of compost to various working lands throughout the state. This project is scheduled to be completed by the end of the year, and we are happy to share those results with the BAAQMD.	We look forward to seeing your results. Air District staff, including the new Technology Implementation Office, will explore the emerging technologies raised in this comment.
Dr. Crystal Reul-Chan	CalRecycle	We encourage BAAQMD to incorporate the use of compost into the “technical and research assistance, policy support and incentive funding to local governments and regional agencies” (USEPA, 1997) as you pursue the sequestration of carbon in wetlands. Compost will help restore needed water absorption capacity and increase organic matter content in wetlands, helping San Francisco Bay neighboring communities adapt to increases in rising sea levels. CalRecycle can assist BAAQMD in creating guidance in this area.	Staff welcomes working with CalRecycle on further exploring this issue as we move forward with implementing this control measure.
Dr. Crystal Reul-Chan	CalRecycle	<i>BAAQMD suggests that digestate leads to an increase in methane in landfills in this section of the CAP 2017: “As noted in the background section, materials and byproducts of the anaerobic digestion process must be properly integrated into other waste management processes. Leachate and wet (or heavily inoculated) end products can cause pockets of methane to form in landfills or may overwhelm wastewater treatment control systems. A holistic approach to composting and anaerobic digestion regulations will ensure that emissions are not diverted to other operations rather than ultimately controlled. Should the adoption of best management practices prove to be too costly, more organic material may end up being trucked outside of the Air District. This would result in increases in emissions of methane from the landfills and combustion emissions associated with truck traffic.”</i> We could not find any supporting references as suggested in the CAP 2017 for this, and would like to be involved in discussing research into this topic, and options for the proper management of digestate.	Staff welcomes working with CalRecycle on further exploring this issue as we move forward with implementing this control measure.
Dr. Crystal Reul-Chan	CalRecycle	CalRecycle is supportive of environmental regulations for the health and safety of Californians and the environment. We hope to work collaboratively to accomplish air quality and waste diversion goals that are supportive of air and water quality, especially the long-term reduction of GHGs, and potentially the reduction of the ground-level ozone forming pre-cursors, NOx and VOCs . CalRecycle staff suggests a holistic approach to the regulation of these growing (compost) and newer (anaerobic digestion) means of processing green waste materials.	This suggestion will be considered as we move forward, including with any rule development effort.
Dr. Crystal Reul-Chan	CalRecycle	Page 5-23 of plan states, “In addition to reducing GHG emissions, composting organic waste, rather than sending it to landfills, provides other benefits. Applying compost to gardens and urban landscapes reduces the need for artificial fertilizers and pesticides.” CalRecycle is seeking funding to study further quantification of two of these additional benefits related to reducing ground-level ozone formation (smog)	We support CalRecycle in these efforts.
Dr. Crystal Reul-Chan	CalRecycle	We caution against assuming that “waste that is diverted from a landfill with a high gas capture rate and sent to a compost facility could result in an increase in VOCs,” and encourage BAAQMD to incorporate our comments from WA1 into this draft control measure, and to follow and participate in our research on this issue.	Staff is eager to learn more about this issue and will follow CalRecycle’s research.

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Dr. Crystal Reul-Chan	CalRecycle	<p>From studies of the decomposition of organic materials in compost piles (Kumar et al., 2011) and in chipped and ground green waste that is land applied similar to landfills (Burger et al., 2015), the largest non-methane organic compound (NMOC/VOC) emissions from organic materials at the landfill are likely to occur during the first week and last no longer than the first few months. According to rule 8-34, emissions controls at landfills are not installed and activated until 2-5 years from this point. It would therefore seem that VOC emissions from landfills are similar to those from uncontrolled windrows at compost facilities. However, green waste alternative daily cover is often applied to the active face of landfills, and, according to rule 8-34, is six inches of approved material. This material is not typically finished compost, but rather a material that does not have as absorbent/adsorbent qualities for controlling VOC emissions. From this understanding, CalRecycle hypothesizes that if using a six-inch finished compost cap (as suggested in WA2) for compost piles, that this would then control VOC emissions better than on the active face of a landfill. A better control of NMOC might be to compost organic materials, and thus prevent the need for increased methane collection from organic materials in the future (i.e., WA3). We recommend establishing baseline emissions from the active face of a number of landfills in the Bay area over a 90-day time period in order to better assess the difference in NMOC emissions from landfills versus compost facilities with the potential to credit compost facilities for reducing bay area wide NMOCs (VOCs) emissions.</p>	<p>The recommendations and hypothesis proposed will be considered during the rule development process for WA1 and WA2.</p>
Dr. Crystal Reul-Chan	CalRecycle	<p>We offer our support to “develop or identify and promote model ordinances requiring or facilitating: community-wide zero waste goals; recycling of construction and demolition materials in all commercial and public construction projects” CalRecycle has a long history of working with other agencies on similar efforts. For example, CalRecycle staff has been working with the CA Building Standards Commission and the Department of Housing and Community Development to develop CALGreen (http://www.bsc.ca.gov/Home/CALGreen.aspx) for nearly 10 years.</p>	<p>The Air District looks forward to working with CalRecycle on these efforts.</p>
Dr. Crystal Reul-Chan	CalRecycle	<p>We encourage BAAQMD to incorporate the use of compost and mulch into this urban tree planting control measure. Compost offers many co-benefits to the ones already listed in NW2: Urban Tree Planting, including decreasing the need for irrigation and encouraging soil health. We offer MWEL0 (see comment WR2: Water Conservation as an example of how to incorporate the use of compost and mulch into voluntary guidelines. CalRecycle is happy to collaborate on developing guidelines for the use of compost and mulch for urban tree planting in the Bay area.</p>	<p>Staff will consider this during the implementation of this control measure.</p>
Dr. Crystal Reul-Chan	CalRecycle	<p>CalRecycle suggests referencing DWR’s Model Water Efficient Landscape Ordinance (MWEL0; http://www.water.ca.gov/wateruseefficiency/landscapeordinance/), which “promote the values and benefits of landscaping practices that integrate and go beyond the conservation and efficient use of water.” The MWEL0 requires landscape installations to apply compost and mulch to conserve water. Local agencies are required to either adopt the MWEL0 or a local ordinance that is at least as effective in conserving water as MWEL0. We would be happy to share with you our extensive summary of research (over 100 articles) on the positive effects of compost and mulch on water conservation.</p>	<p>The control measure does reference the MWEL0 in the Regulatory Context and Background section. We look forward to working with CalRecycle as we move forward with implementation.</p>

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	Carbon Free Silicon Valley	Urgent to set GHG production budgets at the community level	Local governments have an important role to play in reducing GHGs. The initial State Scoping Plan, as required by AB 32, called for local governments to set municipal and communitywide GHG reduction targets of 15 percent below then-current levels by 2020, to coincide with the statewide limit. There continues to be a need for local government climate action planning. The Air District works closely with local government to develop local climate action plans, where we encourage and assist them in adopting mid-term and long-term reduction targets that are consistent with scientific assessments and the statewide goal of reducing emissions 40 percent below 1990 levels by 2040, and 80 percent below 1990 levels by 2050.
Tera Blackman	Carlsbad Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Greg Karras	CBE	Draft measure SS18 would among other things set CO2/barrel limits on each refinery's emissions. This requires a reliable and transparently verifiable CO2/barrel measurement. The emissions/barrel oil refined metric that the District Staff proposes in its concept paper for Rule 13-1 has been shown to be a reliable metric for refinery emissions associated with changes in oil feed quality based on publicly reported data. (See Karras, 2010; Abella and Bergerson, 2012; Gordon et al., 2015.) In contrast, the emissions/barrel refined products metric suggested in draft measure SS18 cannot be verified, established as an emission limit, or enforced based on publicly reported data at this time. The Air District has not reported any refiner's products volumes publicly, and moreover, it has said it cannot do so due to confidentiality concerns. Thus, it is very unlikely that the District could verify, establish, and enforce reliable and effective limits on emissions/barrel of refined products. Therefore, draft measure SS18 should be revised to include limits on refinery emissions/barrel of oil refined.	The measure has been modified to indicate that the carbon intensity metric will be based on CO2e per barrel of feedstock input rather than by barrel of product.
Greg Karras	CBE	The Air District should also investigate how such a fee would interplay with a statewide carbon pollution fee, or "carbon tax," should California adopt a similar measure of its own. This additional investigation should be described in the revised draft measure.	We will consider this as we further study the issue.
Greg Karras	CBE	State in SS11, that 12-16 would not result in leakage: Reversing its earlier analysis, the Air District Staff now concludes that draft measure SS11 does not have the potential to result in "leakage." Plan DEIR at 3.3-24. This revised conclusion is indisputably correct: DM SS11 (Rule 12-16) itself could not cause "a reduction in emissions ... that is offset" elsewhere. Designed to prevent refinery emissions from increasing, this measure would set emission limits at levels that each affected facility already complies with. (Id.) However, the Air District Staff has previously (and incorrectly) stated publicly that, because proposed Rule 12-16 could result in "leakage," it conflicts with the state's cap-and-trade scheme. Further, as a consequence of that incorrect conclusion, the Air District Staff has previously asserted (also incorrectly) that the District lacks authority to adopt this measure. Thus, the District Staff's revised and corrected conclusion that draft measure SS11 (Rule 12-16) would not be expected to result in "leakage" is crucial information about the effects of this measure and the District's authority to adopt it. The public, including public representatives on the District's Board of Directors, must know this to properly consider SS11 (Rule 12-16), but this crucial information is not disclosed in the Plan's description of the measure. Therefore, the description of DM SS11 must be revised to include this conclusion.	Proposed Rule 12-16 would establish GHG emission limits on refineries or refinery dependent business in the Bay Area. Based on annual GHG emissions for each affected facility from the year 2012 through 2015, the latest year information is available, no facility exceeded its currently proposed Rule 12-16 GHG limits for any year in which data are available. However, these years also were years of relatively low gasoline consumption in California. Total gasoline consumption in the state peaked in 2004 and then declined between 2004 and 2012, per data from the California Energy Commission. Gasoline consumption has been increasing every year since then. If gasoline consumption continues to increase, the limits in Rule 12-16 may prevent Bay Area refineries from increasing production to meet demand. This scenario could cause conflicts with state GHG regulations and perhaps result in increased GHG emissions outside the Bay Area due to the manufacture of transportation fuels being shifted elsewhere.

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Greg Karras	CBE	Draft measure SS12 would allow refiners to increase their carbon intensity by purchasing allowances in the Low Carbon Fuel Standard (LCFS) pollution trading market. The LCFS exempts all emissions associated with refined fuels that are “exported” for use outside the state from its allowance purchase requirements—and Bay Area refineries already increase exports when statewide fuels demand declines. Thus, this measure would encourage each refiner to gain a competitive advantage by refining cheaper, higher-carbon oil and further increasing production for export. That would increase emissions from higher-carbon refining for export, and shift tailpipe emissions elsewhere as more refined fuels are exported. The higher-carbon refining for export also would worsen disparate localized health impacts and environmental injustice. Refinery GHG and particulate emissions are strongly correlated (OEHHA, 2017) and low-income communities of color already are disparately burdened by refinery emissions of this toxic GHG co-pollutant (Pastor et al., 2010). Therefore, the design of this draft measure is fatally flawed. Draft measure SS12 should be revised to require a direct emissions control approach instead of pollution trading, or DM SS12 should be rejected	See Master Response 7
Greg Karras	CBE	Many of the plan’s measures could result in new, expanded, or modified fossil fuel infrastructure that would continue to emit GHGs and GHG co-pollutants. (Plan vol. 2; Plan DEIR.) SS1, SS5, SS6, SS7, SS8, SS12, SS18, SS20, SS21, SS22, SS30, SS31, SS34, TR17, TR18, TR19, TR20, TR21, TR22, TR23, EN1, FSMSS1, FSMSS2, FSMSS14, and FSMBL1: Revise to address cumulative emission impacts of fossil fuel infrastructure inertia that threaten to foreclose achieving health and climate protection goals.	The 2017 Plan by its nature has been developed to address “cumulative” emissions from all sources, not just “fossil fuel infrastructure”, to protect the health of Bay Area residents and the global climate. Reducing fossil fuel combustion is a priority in the 2017 Plan.
Greg Karras	CBE	Add a new “Community-based Just Transition Support” further study measure. This measure would provide transition assistance for workers and residents in low income communities that are disparately impacted by co-located fossil fuel infrastructure, to be designed by each community based on its site-specific circumstances and needs, by providing funding support through expansion of existing District fee programs.	More specificity is needed to understand what is meant by “transition assistance” in order to develop this concept for a further study measure. While training workers for a changing job market is very important, the appropriate role for a regional air district is unclear.
Bill Quinn	CCEEB	The draft plan should expand its discussion of interactions with state air and climate plans, as well as state and federal incentive programs. For example, future-year emission projections should account for commitments in the post-2020 Scoping Plan (2017 Revision) and the 2017 State Implementation Plan, particularly the Air Resource Board's Mobile Source Strategy	Air District staff has worked closely with ARB staff in developing the Plan, and will continue to coordinate our efforts as we implement the Plan. The emissions forecast reflect adopted and reasonably foreseeable rules and programs. We will continue to update the emissions inventories and forecast.
Bill Quinn	CCEEB	It is unclear how staff arrived at some emission and cost estimates for control measures, and what assumptions were used. Sharing this work would increase transparency and allow full evaluation of the draft Plan.	Where emission and cost estimates were lacking in some control measures, this information has been added.
Bill Quinn	CCEEB	The final adopted Plan should guide rulemaking, establish priorities for Board and staff, and set expectations among District partners. Abrupt or arbitrary deviations from the Plan divert District resources away from measures prioritized for air quality and public health benefits.	The plan is intended to set Air District priorities. Diversions should only occur due to new information or circumstances, e.g. changes in state or federal laws, or unforeseen financial limitations or new technology.
Bill Quinn	CCEEB	One important state effort is implementation of SB 350. The draft Plan briefly notes that SB 350 requires investor-owned utilities to procure 50 percent of electricity from renewable sources,1 and a doubling of energy efficiency in existing buildings.2 SB 350 is not mentioned again in the draft Plan, and presumably, GHG reductions required by it are not part of the District’s future year projections. We suggest that staff’s analysis explicitly consider how SB 350 will reduce regional GHG emissions, how energy generators and providers are likely to respond to SB 350 mandates, and where District actions can add the most value, aligning with state efforts without interfering or overlapping.	Impacts from the implementation of SB 350 can not be defined precisely at this time; we do not yet know how utilities and other electricity providers will respond to the mandate. Also, statewide goals can be met through uneven implementation across the state. However, the Plan's emissions forecasts do assume that the 50 percent renewable target will be achieved in the Bay Area.

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Bill Quinn	CCEEB	Similarly, the regional economy operates within statewide, inter-state, national, and often international systems. As the draft Plan acknowledges, the success of our climate change efforts ultimately depends on changes to these broader systems. This is why regulations at the highest level possible are the most effective. Consider the state cap and-trade program, which seeks to minimize economic and emission leakage outside of California, yet assumes that in-state production and economic activity will shift to the most energy-efficient and low-emission facilities. How would District regulations, overlaid on top of state requirements, affect this shift to the most efficient production? For example, under SS11, a Bay Area refinery would need to “cap” total emissions under permitted levels, and then, under SS18, meet a CO2 “intensity cap” and increase combustion efficiency. This would be in addition to projects undertaken for compliance with cap-and-trade, the Low-Carbon Fuel Standard, and the 20 percent energy efficiency measure currently under development at ARB. Unless staff has fully investigated such interactions, we recommend that control measures seeming to overlap with state programs be re-categorized as Further Study Measures, and urge staff to partner with ARB to evaluate these measures.	SS11 is currently in active rule-making and SS18 is a high priority rule slated to begin rule-making in 2018, so these will not be recategorized as Further Study Measures. In the case of SS11, Staff shares the commenters concern about the possible interaction with the statewide Cap-and-Trade program. In the case of SS18, staff will consider interactions with all statewide climate programs and will coordinate with ARB to ensure our rules are complementary.
Bill Quinn	CCEEB	Furthermore, because of the high potential for leakage, we believe it would help if the District reframe its 2030 and 2050 goals based on net GHG reductions.	The Air District's GHG reduction goals align with the state's goals. We do believe that such consistency with the state's climate programs is important.
Bill Quinn	CCEEB	The District should also consider whether a control measure adds unnecessary costs or process steps for activities already underway, even if there is no direct interference. For example, EN2 calls on the District to work with electricity providers to develop messaging about peak demand use— work that is already happening under CEC, CPUC, and EPA programs. How, then, is the District proposing to add value? It may help to revisit the District’s multi-sector gap analysis, in which many of these same questions were raised.	Control measure EN2 and other control measures are intended to complement and support, and not duplicate, other existing efforts.
Bill Quinn	CCEEB	There are two general areas where District efforts are clearly beneficial. First are District efforts to support projects undertaken to implement AB 32 and SB 350, such as EN1 and permit streamlining for large-scale renewables, biofuel, and combined-heat-and-power projects. We think this concept could be expanded to support and encourage other GHG reduction projects. Additionally, the District should examine where its policies may unintentionally impede GHG reduction projects, such as placing barriers on industries trying to produce low-carbon products to meet in-state demand.	The main goal of a multi-pollutant planning approach is to ensure that potential trade-offs are considered and the types of conflicts mentioned in this comment are avoided.
Bill Quinn	CCEEB	Although the draft Plan rightly identifies the need for adaptation planning alongside GHG mitigation, it does little to describe the role the District will play in supporting its partners at the Bay Conservation and Development Commission, the Bay Area Regional Collaborative, and other local and regional bodies. We think this area could be expanded.	Further information on adaptation was added to the draft plan. However, the Air District's focus will continue to be on emission reductions.
Bill Quinn	CCEEB	We strongly support the discussion on page 1/6 about the need to provide climate leadership to “inspire action across the nation and around the world.” To this end, we recommend the District add an objective that it will design its climate policies in ways that can and will be replicated by other jurisdictions. A measure of success would be whether or not other agencies follow the Bay Area’s example and adopt similar measures. Generally, we believe policies that can be copied in other areas will ultimately yield the greatest climate change benefit.	Some control measures address Bay Area specific issues, so a blanket objective for all control measures to be replicable may not be appropriate. Staff agrees that most of the climate policies and programs do need to grow beyond the Bay Area, but believes the importance of replicability is thoroughly and adequately included in the plan.
Bill Quinn	CCEEB	While the draft Plan includes a number of measures directed at clean transportation, urban forestry and green spaces, rehabilitation of the built environment, and other sustainable community strategies, these measures could unintentionally propel gentrification in economically disadvantaged communities. At the same time, the draft Plan does little to address the bigger drivers of regional GHG emission increases—or the growing quality of life inequities across regions. We believe this should be part of the District’s approach to climate change.	We will continue to work with MTC and other in addressing displacement and gentrification and consider an appropriate role for the Air District. Note that Plan Bay Area addresses this as well.;

Commenter	Organization/ Location	Comment	Air District Response
Bill Quinn	CCEEB	CCEEB, with many agency, industry, and environmental partners is, beginning a new round of advocacy in support of ARB's Mobile Source Strategy, which calls for significant investments above and beyond existing air and climate incentive programs, to accelerate deployment of clean technologies. We hope the BAAQMD joins these efforts.	The Air District indeed supports the efforts outlined in ARB's Mobile Source Strategy. The importance of the Strategy to our region's future air quality underpins the transportation sections of the 2017 Plan - see for instance pages 1-8 through 1-10 of the plan. Additionally, ARB's Strategy is cited in the relevant transportation measures. Mostly, ARB's Strategy is regulatory action taken at the state and national level to further control exhaust emissions. A recent example of the Air District's support of ARB's Strategy is our co-sponsoring a petition to EPA requesting adoption of a 0.02 g/bhp-hr NOx emission limit for new on-road diesel engines. In a favorable response, EPA is now undertaking the necessary (and lengthy) rulemaking effort to adopt the standard. ARB's Strategy acknowledges, though, that to meet ambient air quality standards in all parts of the state, regulations will not be enough and the purchase of near-zero and zero emission vehicles & equipment will require government subsidies. The South Coast Air District estimates that for their region alone "... \$12 to \$14 billion will be needed to help assist the turnover of older vehicles and equipment to near-zero and zero emission vehicles and equipment over the next seven years." Our region is unlikely to need quite that much in government subsidies, but the amount will still likely be large. The Air District will continue to seek additional funding and provide grants and incentives for the purchase of near-zero zero emission vehicles and equipment.
Bill Quinn	CCEEB	To help the District meet its goal of eliminating community-level disparities, we recommend that staff do the following analyses to evaluate impacts in CARE communities. ⁹ First, we strongly recommend the District conduct distributional impact analysis to estimate community-level emission reductions and public health benefit from proposed control measures, comparing CARE communities to non-CARE communities.	We will consider this idea as we move forward.
Bill Quinn	CCEEB	Second, we ask staff to include, as an appendix, a table listing sources of incentive funding, total amounts invested per year, and the breakdown of funds by county, or by community (e.g., CARE vs. non-CARE), to the extent information is available.	This information is summarized in Chapter 4 of the 2017 Plan. Further information, i.e. more details regarding funding per county, by specific program is presented annually to the Board of Directors. The most recent report was given on March 1, 2017. This report may be found in the Board packet, available on line at http://www.baaqmd.gov/~media/files/board-of-directors/2017/bod_agenda_030117-pdf.pdf?la=en .

Commenter	Organization/ Location	Comment	Air District Response
Bill Quinn	CCEEB	We believe omitting state plans is a mistake, that the state Scoping Plan will be adopted and will achieve state targets. The Scoping Plan includes quantified reductions from known commitments, showing a 21% reduction from BAU. These reductions are not part of the District’s analysis, which instead relies on the BAU reference case. The Plan wrongly assumes post-2020 cap and trade program will retain the current allowance and reduction formula; nothing in the Scoping Plan or proposed amendments to cap-and-trade support this assumption. We would like to work with staff to improve the post-2020 projection to properly account for state commitments. While we understand the Plan’s timeline, we believe there is still time to improve figure 3-9 in the Final Plan.	Current forecasts do include committed and expected state policies and plans. The Scoping Plan Update (Jan 2017) was reviewed and current forecasts draw from this update. For example, the State’s recent Vision model and PATHWAYS model output were incorporated in the transportation sector and the stationary source sector, respectively. We note that the cap-and-trade program and other programs discussed the Scoping Plan Update are statewide approaches to reducing GHG emissions. Their statewide goals can be met with uneven emission reductions across the state. Without knowing how exactly the Scoping Plan or cap-and-trade program will be implemented, it is premature to assume what the localized impacts will be in the Bay Area. Staff believes that exercising caution and conservatism in developing estimated emission reductions and projections is the most prudent course. The Air District’s GHG projections will continue to evolve over time and we welcome continued input from CCEEB.
Bill Quinn	CCEEB	We recommend using tons per day (tpd) rather than pounds per day and million metric tons of CO2e rather than metric tons for greenhouse gases. This makes for easier comparison to the initial control measure descriptions released early in 2016, as well as comparison to ARB and other air districts where tons per day, tons per year, and million metric tons are common metrics. Use of pounds per day is confusing and seems to artificially inflate the numbers.	The units used in the report are based on the quantities of pollutants emitted and what is universally accepted. Million metric tons is used when referencing large quantities of emissions, while metric tons are used when reporting smaller amounts of GHGs, i.e. for reporting emissions of single sources. For criteria pollutants, pounds per day is widely used in our permitting, rule making and other Air District work. Tons/year or tons/day as a unit of measure for criteria pollutants are also sometimes used. Units of measurement are not used to inflate numbers, but rather used to best convey information to the public.
Bill Quinn	CCEEB	We appreciate Table C-1 in Appendix C that lists the health endpoints used in the MPEM and CAP analysis. However, we question the use of \$62/ton for the social cost of carbon, as it oversimplifies work done by EPA. District staff applied a discount rate of 2.5 percent without much explanation other than arguing that typical discount rates of 3 percent to 7 percent “would reduce the value of future benefits to near zero in today’s dollars, but this would raise ethical issues since putting a near-zero value on future benefits suggests that as a society we do not care about the future beyond a generation or two.” ¹³ Due to the change in its calculation method, the District’s estimate of GHG benefits per ton jumps 198 percent over what was used in the 2010 Clean Air Plan. CCEEB recommends the District use a range of discount values (5 percent, 3 percent, and 2.5 percent) to estimate the social cost of carbon, consistent with the approach ARB used in the 2017 Scoping Plan.	For purposes of the MPEM, Air District staff selected a value of \$62 per metric ton of GHG reduced (expressed in CO2-equivalent). This value was chosen from a range of potential values suggested by U.S. EPA in its Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 document.
Bill Quinn	CCEEB	We also recommend the addition of a table that shows cost estimates for each of the three “tiers” staff used to evaluate control measures, i.e., 1) avoided costs related to health impacts, 2) premature mortality, and 3) the social cost of GHGs. This is important because, unlike the first two tiers, the social cost of carbon represents benefits that may never be realized regardless of whether or not the Plan is successful.	This is a good suggestion that we can consider moving forward, especially as we implement control measures and develop new plans.

Commenter	Organization/ Location	Comment	Air District Response
Bill Quinn	CCEEB	Recently, staff has begun categorizing small residential sources as “stationary sources” rather than the more typical category of “area sources.” This seems to inflate the proportional contribution of regulated stationary sources in emission inventories, and is misleading. Moreover, the inconsistent use of categories makes staff analysis difficult to follow. For example, the discussion of SS18—the basin-wide combustion strategy— states that stationary sources account for over half of all GHG emissions at 40 MMT CO2e annually. However, this number includes residential and commercial fuel usage, which isn’t commonly referred to as a “stationary source” for the purposes of air quality and climate planning (and wouldn’t be subject to SS18 at any rate). Table 3-2, on the other hand, more properly attributes residential and commercial fuel usage to the Buildings Sector (residential and commercial electricity use, on the other hand, appears to be part of Electricity Sector emissions). CCEEB recommends that staff refer to residential and non-regulated commercial sources as “area sources.” This conforms to practices used at other air agencies. SS18 should be revised so that emission estimates reflect only those sources actually affected by the measure.	Rule SS18 addresses all fossil fuel combustion sources in the Bay Area, including residential and commercial end uses. While in the past some smaller sources have been referred to as “area sources,” staff has found that referring to all of these sources as stationary sources makes the Plan more understandable to the general public. The emissions estimates for SS18 include estimates only for those sources affected by the measure.
Bill Quinn	CCEEB	SS9: Crude Slate Changes and SS17: GHGs in Permitting/BACT: These two measures propose changes in federal Clean Air Act New Source Review permitting that go beyond the scope of federal requirements and EPA guidance. We will continue to work with staff on the development of these measures, as well as other proposed changes to Regulation 2 as discussed in the September 30, 2016 Training Session on Regulation 2.	We welcome and encourage your participation in this effort.
Bill Quinn	CCEEB	The discussion for this measure [SS18] incorrectly assumes that a rate-based standard for carbon intensity does not limit production at a facility and “Therefore, it would reduce the economic incentive for industry to move outside of the Bay Area...” While CCEEB agrees that SS18 is not a direct mandate limiting production—as is SS11—it could indirectly lead to lost production. For example, in cases where energy efficiency projects are infeasible due to cost constraints or because return on investment is higher at facilities outside the Bay Area, production is likely to shift, resulting in emission and economic leakage. Phase 2 of the measure [SS18], which proposes mandatory energy efficiency through rulemaking, appears at odds with state requirements, as it would eliminate flexibility given to facilities under cap-and-trade to plan projects holistically and optimize time schedules. Facilities also have a business reason to implement projects that are cost effective and technologically feasible. Unfortunately, SS18 seems designed to force projects that would either be implemented anyway (and in that case, does the District or ARB take credit?) or are cost prohibitive and risk leakage of emissions.	These issues will be discussed as part of the rulemaking process, and so the rule may differ from what was described in the control measure. Currently, the Air District anticipates setting carbon intensity limits at levels consistent with the implementation of energy conservation projects that pay for themselves with fuel savings within 10 years. It is unlikely that any such projects could be characterized as cost prohibitive.
Bill Quinn	CCEEB	We have several concerns with proposed Regulation 11, Rule 18, which we described in our December 2, 2016 written comments to the District (Attachment 1). The problems we identify remain, including but not limited to the need for dispute resolution, clarification of interactions with Regulation 2 New Source Review, the need for technical working groups to assist with TBARCT determinations, and clarification of how approved risk reduction plans could later be altered by the District or compliance times shortened. In discussions with staff, the suggestion to convene technical working groups was well received, but the District has not yet taken steps to do so. We strongly urge staff to convene these groups immediately.	Staff has been and continues to work with impacted industries on technical issues regarding this control measure. We have met with refineries, clean water agencies and are scheduling meetings with metals processing facilities and hospitals. We will continue to meet with industry groups to discuss technical issues as we develop the proposed version of the rule. These comments and those previously submitted will be considered in further development of the rule.
Bill Quinn	CCEEB	We are also concerned with the assumption that SS18 will reduce regional GHGs by 5 percent, based on staff interpretation of ARB energy audits, and the further assumption that PM2.5 emissions will be similarly reduced. We ask staff to provide a technical discussion of how it arrived at these conclusions.	A more detailed quantitative analysis will be provided as the first report from the development of the combustion strategy.
Bill Quinn	CCEEB	We also disagree with the assumption (in SS18) that there is no direct emissions tradeoff; it is well established that certain control technologies worsen combustion efficiency, such as diesel PM filters and wet scrubbers.	Technologies that decrease efficiency would likely not be appropriate for meeting requirements under SS18 because this control measure is designed to increase energy efficiency. This issue will be examined further during rule development.

Commenter	Organization/ Location	Comment	Air District Response
Bill Quinn	CCEEB	<p>CCEEB questions the discussion of the Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) on page 4/7 of the draft Plan. This successful program—which has resulted in significant risk reductions from stationary sources—continues to be implemented statewide through air district rules and programs. CCEEB has worked for the past several years with the District, the Office of Environmental Health Hazard Assessment (OEHHA), the California Air Pollution Control Officers Association, and ARB, and the South Coast AQMD to implement changes to the ATHS program based on a new AB 2588 health risk assessment (HRA) methodology approved by OEHHA. However, in discussions of Reg. 11-18, District staff has stated on several occasions that AB 2588 is a “one and done” statute, and that requirements to conduct quadrennial inventories, HRAs, public notification, and risk reduction plans have sunset. Staff believes that only the annual inventories and AB 2588 fees are ongoing, and thus the sunset of AB 2588 is justification for a new regulatory approach under Reg. 11-18. If this is the case, page 4/7 should be revised to clarify the District’s legal interpretation of AB 2588. The draft Plan currently implies that the entirety of AB 2588 still applies and is in effect, and that Reg. 11-18 is in addition to the ATHS program.</p>	<p>AB2588 was amended by AB564 in 1996 to exempt most facilities for which the initial inventory and risk assessment showed risks to be insignificant. Pursuant to the amendments, a facility would have to submit an inventory update if, in connection with a physical change or change in operation, a newly listed TAC is emitted, new sensitive receptors are located nearby, potency factors for emitted substances increase, or the facility begins emitting or significantly increases emissions of a listed TAC. However, the update requirements do not apply if the physical change or change in operation was subject to a district permit program that involves risk assessment, and the change was determined to pose no significant risk. Because the Air District has reviewed facility changes through its Toxics NSR program since 1987, the same year that AB2588 was signed into law, many AB2588 requirements do not apply. Air districts have broad power to regulate air toxics, and many air districts use the AB2588 requirements as a framework for implementing an air toxics program, even where they have a toxics NSR program in place. Here in the Bay Area, the Air District is developing Rule 11-18 because it offers the Air District greater flexibility than is available under the AB2588 framework. For example, the Air District may choose to implement lower action thresholds than the 100 in a million threshold used in AB2588 programs. To avoid any implication that the Air District intends to rely on AB2588 for its existing source toxics program, we have changed the words “are required” on page 4/7 to “were required.”</p>
Mary Kay Benson	Chico Resident	<p>I support this key statement from the document’s Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.</p>	
Jake Davis	Chico Resident	<p>Please, please, please improve on the Clean Air Plan to include meaningful regulations governing GHG emissions with enforceable repercussions if companies fail to adhere to them. Educating folks is what we in the environmental movement have been trying to do for decades to very little avail. It’s going to take strictly enforced government regulations to get people and companies to do what needs to be done. The science around man’s role in climate change is beyond dispute. And the clock is ticking incredibly fast. We each have to do whatever we can RIGHT NOW. Please, do all that YOU can. Make this plan better before you approve it.</p>	See Master Response 2
Gina Blus	Climate Ready Solution	<p>Reduce the amount of combustion material in densely forested areas to reduce risk of wildfires. Keep forests healthy</p>	<p>Build-up of “forest litter” increases the potential for explosive wildlife and is an element of fire suppression management of western forests. Periodic wildfire is a concern for air quality management as well. The Air District works with forest management agencies, both at the State and Federal level, to develop and follow forest management techniques that avoid air quality-degrading wildfires.</p>
Gina Blus	Climate Ready Solution	<p>Local businesses need to be involved in changing packaging practices. Both incentives and mandates for zero waste packaging essential. Consumers need to be educated on what is possible and what to demand.</p>	<p>We will consider this suggestion in public outreach and education campaigns.</p>

Commenter	Organization/ Location	Comment	Air District Response
Michael Sutton	Colma Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Dee Simmons	Concord Resident	Regarding energy, given the need to stop combustion and electrify to reduce both air pollution and greenhouse gases, the Plan should support the development of bioenergy only where sources are already present from current land use and should expedite permitting for biofuel projects only where necessary (EN1).	We will consider this suggestion as we implement this measure.
Dee Simmons	Concord Resident	The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to "offset" the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7
Phil and Lynn Fischer	Concord Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Elizabeth Lobos	Concord Resident	I vigorously support this statement: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Now we need to have clear, enforceable measures put in place to reduce greenhouse gases (GHGs). Please carefully consider additional regulations to assure that we reduce GHGs immediately. That is the only way we will meet our goals for an improved climate.	See Master Response 2
Samantha Sheldon	Concord Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Dee Simmons	Concord Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Dee Simmons	Concord Resident	The Plan regarding Green Buildings needs to provide incentive funding for the installation or change-out of fossil fuel-based space and water heaters with electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of these appliances.	See Master Response 5
Ralph Hoffmann	Contra Costa Spare the Air Resource Team, Senior Mobility Action Center	Insufficient warning about the effects of global warming on increased precipitation and wind. Rain can cure droughts and wind can generate electricity, good effects. Beyond that however, wind and rain can cause hurricanes, flooding, tidal waves, vehicular accidents, boating accidents and other negative consequences	This commenter draws attention to the decrease in weather regularity and the increase in storm intensity that scientists predict will accompany climate change. These factors are a major motivator for BAAQMD's work in climate protection.

Commenter	Organization/ Location	Comment	Air District Response
Lisa Baffi	Corte Madera Resident	The area which I most particularly concerned about is animal agriculture and the enormous impact it has on our environment. Not only is methane a more potent greenhouse gas but the growing of grains, sprayed mercilessly with pesticides, for the animals to eat is degrading our soil, polluting our waters and killing our bees. CA is the pinnacle of healthy lifestyle. It is paramount that we begin to help people lean about and adopt a more plant-based diet so that animal agriculture can be greatly minimized thereby decreasing a significant polluting pillars. Please focus your effort on this very important area. Thank you.	Measures in this Plan express the Air District's intention to engage the agricultural sector in efforts to reduce methane emissions. We are also striving to increase composting and return materials to farms as healthy soils. We expect to emphasize low-energy intensive diets in our public education campaigns.
Lisa Baffi	Corte Madera Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Mary Ellen Chell	Cupertino Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
David Sprowls	Cupertino Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Stephen Beck	Danville Resident	I like the key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Unfortunately, the plan relies mostly on education and incentive funding to reduce greenhouse gases. In addition to education and incentives, strict regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reduction and serious penalties for non-compliance.	See Master Response 2
Eloise Hamann	Dublin Resident	I support the Air District's Draft 2017 Clean Air Plan's recommendation to take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy. However, I did not see many enforceable measures for reducing greenhouse gases. Please consider further regulation to reduce GHGs. The time for action is yesterday.	See Master Response 2
	East Bay Regional Parks	The Park District is interested in working with the AD on off-site mitigation of GHG emissions through carbon sequestration projects. The Park District is also interested in collaborating on developing best practices on soil management.	The AD is currently working on an off-site mitigation program and is interested in working with all partners. We appreciate the EB Regional Parks interest in working together to develop and implement best practices.
	East Bay Regional Parks	The Park District is interested in learning more about incentive funds to enhance carbon sequestration.	As we move forward with this measure, and we have more information, we can share this information with the Park District.
	East Bay Regional Parks	The Park District is interested in generating renewable energy, i.e. solar and biomass utilization	The Air District commends the Park District's interest in the area of renewable energy.

Commenter	Organization/ Location	Comment	Air District Response
Brenda Carter	El Cerrito Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Brenda Carter	El Cerrito Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but more than these welcome actions are required to achieve real reductions. Experience has shown the strength of resistance to making changes to limit carbon emissions. Education and incentives are good, but enforceable rules are needed to get the job done.	See Master Response 2
Melissa Murphy	El Cerrito Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Margaret Crimmins	El Cerrito Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Elizabeth Boyne	El Cerrito Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Melissa Murphy	El Cerrito Resident	As I drive to work each day from El Cerrito to Martinez , I see the emissions plumes from three refineries; Chevron in Richmond, Philips 66 alongside highway 4, and Shell in Martinez. Everyone who lives or works in this refinery corridor suffers from the health effects of these emissions. The entire Bay Area and ultimately the world breaths the toxin that refineries produce.	Refineries are one category of emission sources that BAAQMD engages in multiple ways, from rulemaking to permitting to enforcement. The Air District is considering several ways of engaging refineries in the management of their emissions. Of note, we have three draft rules currently under development -- rule 11-18, rule 12-16, and rule 13-1 -- that may address your concern. The Plan proposes additional rules to further reduce refinery emissions.
Melissa Murphy	El Cerrito Resident	It's unconscionable for Air District to fail to take all possible action to reduce the impact of climate change and the negative health effects of refinery emissions. (Speaking of unconscionable, I noticed that the District has ordered documentation regarding these emissions to be destroyed ,per an article in the East Bay Express). It's time for the Air District to serve the public like its southern state counterpart and force the refineries in the Bay Area to cut back on emissions.	The Air District's role is to assure healthy air quality and to protect human health and the climate. Achieving this mission is an ongoing journey that we began in 1955 and continue to undertake. We believe the 2017 Plan presents a comprehensive strategy to reduce criteria pollutants, toxics, and GHGs. We appreciate your attention to the good work of the South Coast Air Quality Management District. We watch their efforts and successes closely, and we share findings with them on an ongoing basis.

Commenter	Organization/ Location	Comment	Air District Response
Donovan Rankin	El Sobrante Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Marinell Daniel	El Sobrante Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Natasha Kaluza	El Sobrante Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Carolyn Chaney	Emerald Hills Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Carolyn Chaney	Emerald Hills Resident	Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals. For example, I am glad that SS12 sets carbon limits on petroleum refineries, but I do not agree that they should be allowed to exceed those limits, even if increasing biofuel production, thereby doing an end-run around the set limits. The waiver from limits will only encourage processing of dirty fuels, such as tar sand And I am quite concerned that the plan is not reducing our Bay Area GHG emissions to the 1990 level by 2020. Every day that we fall behind is a day less for our habitation of our planet.	See Master Response 2 and 7
	Environmental Health Network	Require regulation about fabric softener and laundry products pollution.	The volatile chemicals in many types of consumer products can be a source of both indoor air pollution and a source of chemical precursors to smog. The California Air Resources Board regulates the chemicals in consumer products, and information about their program can be found https://www.arb.ca.gov/consprod/consprod.htm . The Air District works to support these efforts.
Sue Fox	Fairfax Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
	First Unitarian Church, Alameda Interfaith Climate Action	Wow, this is progress. A year or two ago, you weren't even looking at greenhouse gases or refineries. Keep up the good work	Comment noted.
	Food and Water Watch	Food&Water Watch represents 93k supporters in the Bay Area. We urge the AD to implement numeric caps on refinery emission for the health of refinery corridor communities and our climate	See Master Response 1
Amy Valens	Forest Knolls	One piece that strikes us as very important is SS12. Saying that there are carbon limits, and then providing a way to avoid the limit is counterproductive. With the industry's push for processing tar sands here, it is vital that we have stronger measures in place than the current plan proposes.	See Master Response 7
Amy Valens	Forest Knolls	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Nicole Fountain	Fremont Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Charesa Harper	Glen Ellen Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
	Green Fleets Group, 350.org	Wants to share business model for partnerships w/ Breathe California, CARB, CEEC, BAAQMD and the City of Oakland related to EV charging stations	We are interested in compiling a set of business models that can contribute to the rapid deployment of EV charging infrastructure. We are open to multiple types of partnership.
Ken Jones	Greenbrae Resident	We need a carbon intensity rule for SS12 that decreases (not allows for increases from tar sands) emissions. Something real, not pretend.	See Master Response 7
Ken Jones	Greenbrae Resident	We have failed to do much to reduce the Bay Area's GHG emissions and this is totally unacceptable. The need to put a cap GHG emissions on stationary sources, especially as you have been hearing with regard to refineries is so clear it almost goes without saying.	See Master Response 1
Jean Severinghaus	Greenbrae Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Jean Severinghaus	Greenbrae Resident	The plan must provide strong regulations as guidance to develop clean energy sources and keep all fossil fuels in the ground. No more tar sands oil, nor tar sands oil transport by any means, pipeline, railcar, truck or ship: all support more extraction. Regulations must prevent that.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Christine Dhein	Greenbrae Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Ken Jones	Greenbrae Resident	I am glad your are giving us the opportunity to comment on the Air District's Draft 2017 Clean Air Plan. I certainly support the statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." I think the "aggressive action" part is key here and seems lacking in this document. The Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals. California has to lead the way and where else but in the Bay Area will people in California look for an example?	See Master Response 2
Bob Harlow	Greenbrae Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Ken Jones	Greenbrae Resident	With regard to biofuel, EN1, that should be a very last resort and only in areas where sources exist from the way land is being used. We need to promote the electrification of transportation in a big way so that solar and wind can be maximized.	The Air District's distinction between natural and working lands reflects the differentiation of lands that you identify. We support the preservation of open space and the prevention of land use conversions that release carbon from soils. We facilitate and accelerate the deployment of zero emission vehicles that are powered by renewable energy resources through financial incentives and policy guidance.
Paul W. Rea	Hayward Resident	After revelations of the destruction of documents, the public is even more concerned about robust air quality enforcement. I do thank you for the opportunity to comment on the Air District's Draft 2017 Clean Air Plan. I particularly support a key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Despite that statement and the vision presented, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Patricia Deuter	Hayward Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Marjorie Xavier	Hayward Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Deirdre Fennessy	Hayward Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Amanda Groziak	Hayward Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
	Idle Free CA	Does heavy-duty diesel idling reg. fit under three basic approaches? Or should another approach be listed, such as: regulating direct source emissions such as restricting heavy-duty diesel idling	The Air District enforces idling limits for heavy-duty diesel vehicles.
	Idle Free CA	include an idling measure in table of TR measures	"Prohibiting or limiting idling is included in TR12 as a Smart Driving strategy. In addition, TR10: Land Use Strategies has been edited to reflect that prohibiting or limiting idling are included in the Air District's Planning Healthy Place. In Planning Healthy Places, one can find information on the location of communities and places throughout the region that are estimated to have elevated levels of fine particulates and/or toxic air contaminants. These areas are shown via web-based, interactive maps. Best practices are also in Planning Healthy Places, including ones to prevent and/or reduce idling. Best practices can be implemented by local governments and developers to reduce health risks from air pollution in locations that experience elevated air pollution levels."
Kristen Caven	Idle Free Oakland	Regulate stop lights so 1 st three cars turn engines off unless clean air vehicles	The Air District does not have jurisdiction over traffic lights. Traffic signals are designed and managed by local governments.

Commenter	Organization/ Location	Comment	Air District Response
Kristen Caven	Idle Free Oakland	include bullet on idling	“Prohibiting or limiting idling is included in TR12 as a Smart Driving strategy. In addition, TR10: Land Use Strategies has been edited to reflect that prohibiting or limiting idling are included in the Air District's Planning Healthy Place. In Planning Healthy Places, one can find information on the location of communities and places throughout the region that are estimated to have elevated levels of fine particulates and/or toxic air contaminants. These areas are shown via web-based, interactive maps. Best practices are also in Planning Healthy Places, including ones to prevent and/or reduce idling. Best practices can be implemented by local governments and developers to reduce health risks from air pollution in locations that experience elevated air pollution levels.”
Kristen Caven	Idle Free Oakland	Include no idle zones and signage at school drop off zones	Some cities and school districts have developed anti-idling ordinances. The Air District supports these efforts and provides assistance when requested.
Kristen Caven	Idle Free Oakland	Avoid idling when stopped over 30 seconds	We support anti-idling ordinances and public education campaigns that encourage people to shut their cars off. We have seen shut-off recommendations that range from 30 seconds to a minute, and we are happy to help cities and counties develop their policies around them.
Pennie Opal Plant	Idle No More SF Bay	The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to “offset” the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7
Pennie Opal Plant	Idle No More SF Bay	I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Pennie Opal Plant	Idle No More SF Bay	I live on the hill directly across from the Chevron refinery in Richmond. I have First Nations friends at the Alberta tar sands who are suffering horrendous health effects as a result of fossil fuel extraction. I also have indigenous friends in the Amazon in Ecuador who are suffering from what refineries in our communities are doing to their communities. And, my family also suffers from the emissions from Chevron that are not accounted for. We see what Chevron puts out on a daily basis, we see the flares, and we had a front row seat when the refinery exploded in 2012.	Refineries are one category of emission sources that BAAQMD engages in multiple ways, from rulemaking to permitting to enforcement. The Air District is considering several ways of engaging refineries in the management of their emissions. Of note, we have three draft rules currently under development -- rule 11-18, rule 12-16, and rule 13-1 -- that may address your concern. The Plan proposes additional rules to further reduce refinery emissions.
Jan Warren	Interfaith Climate Action Network of CCC	There needs to be better education on the Bay Area GHG footprint due to consumption	The consumption-based GHG emissions inventory discussed in the Plan will inform public campaigns to reduce our personal GHG "footprint."

Commenter	Organization/ Location	Comment	Air District Response
Frances Aubrey	Interfaith Climate Action Network of CCC	I have been working to reduce emissions of CO2 and other greenhouse gases for the past eleven years, on both the east coast and in California. I'm on the steering committees of the Alameda Interfaith Climate Action Network and the Contra Costa Interfaith Climate Action Network . We view addressing climate change as a moral issue. It is immoral to leave our children and grandchildren a planet that is less able to provide clean air, water and soil than the planet you and I inherited. It is morally wrong to harm the planet God created and its ability to sustain life when other clean alternatives to fossil fuels are readily available. We need to do everything we can to slow and stop the emissions of all greenhouse gases, as quickly as possible. .	See Master Response 2
Jan Warren	Interfaith Climate Action Network of CCC	I liked the number of times you mentioned areas disproportionately impacted by air pollution	We are working to produce a healthy environment for all members of the Bay Area, and disproportionately affected areas are a particular concern.
Susanna Marshland	Kensington Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Susanna Marshland	Kensington Resident	I hope you will strongly consider incentivizing solar sources over biofuels, promote green buildings, focus on renewable energy generation, and hold the line on carbon limits.	The Plan includes numerous control measures that incentivize or otherwise promote solar and other renewable energy generation and green buildings. In determining the use of incentive dollars, Air District staff consider public health and climate impacts of various options.
Pamela Patek	La Honda Resident	The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to "offset" the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7
Pamela Patek	La Honda Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Pamela Patek	La Honda Resident	Furthermore, the Air District should be at the limit of its authority to drive renewable energy generation, including at permitted sources and as an on-site mitigation measure for CEQA projects. The Plan needs to expand on the implementation actions in this area.	Air District staff will consider these recommendations as we move forward to implement the CAP's control measures.
Shiva Berman	Lafayette Resident	As well, I am concerned with the fact that there does not seem to be enough said in the plan about holding the refinery industry accountable while allowing them to exceed the carbon intensity limits set by the plan. This compromise allows for the refineries to continue to pollute; all they have to do is change the source of their pollution.	See Master Response 1 and 7
Shiva Berman	Lafayette Resident	I support the key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take AGGRESSIVE action to eliminate fossil fuel combustion and transition to a post-carbon economy". However, I feel strongly that without regulation that will encourage compliance while punishing those who do not, this plan will not have the necessary Teeth (shall we say) to really make much of a difference. It also makes me wonder what is really meant by the use of the word AGGRESSIVE in the statement?	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Barbara Hollenbach	Lafayette Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Linda Riebel	Lafayette Resident	When I moved to the Bay Area in 1979, you could see a layer of ugly smog stretching from Marin across San Francisco and down the peninsula from my window in the Berkeley hills. I've often felt grateful to the regulators and their staffs who made it possible to replace the greasy smudge with cleaner air. "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Good goal! I support regulations to make it happen.	Comment noted.
Shiva Berman	Lafayette Resident	For instance, if the plan does not provide incentives funding for the installation of solar water heaters, or electric heat pumps in commercial and multi-unit developments, and does not propose a future date to phase out the existing carbon based heaters, then it is not truly making any meaningful strides forward.	See Master Response 5
Sandra Ruliffson	Larkspur Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Kelly Jones	Larkspur Resident	I'm very concerned that Clean Air Plan really doesn't appear to have meaningful, enforceable measures for reducing greenhouse gases (GHGs). Please plan for and advocate additional, powerful regulations that would >assure< we reduce GHGs in a much more rapid timeframe than currently envisioned. As you may know, climate change is now occurring at a rate near the "worst case" scenario curve of projections made years ago, and we need to respond forcefully and rapidly to this tremendous threat.	See Master Response 2
Sandra Ruliffson	Larkspur Resident	The current Plan is not reducing Bay Area GHG emissions to the necessary levels and should therefore include a discussion of why that is the case and why more action needs to be taken at regional levels. We must be on target to reduce GHG levels by 2020 to the 1990 levels and it looks like we will not achieve that with the current Plan. I write with the urgency of a citizen who is concerned about the future for my grandchildren, given what we know to be the disastrous effects of climate change if left unchallenged. Thank you.	See Master Response 3
Sandra Ruliffson	Larkspur Resident	The Air District should be at the limit of its authority to drive renewable energy generation, including at permitted sources and as an on-site mitigation measure for CEQA projects. The Plan need to expand on the implementation actions in this area.	Air District staff will consider these recommendations as we move forward to implement the CAP's control measures.
	Los Altos Environmental Commission	Thank you for research on energy efficiency in buildings, green building codes	Aggressively supporting and advancing energy efficiency and green building codes is a key priority of this Plan.
Janelle London	Menlo Park Resident	We also need firm limits on emissions from oil refineries. The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits and "offset" by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible. Rather, the limit should be firm.	See Master Response 7

Commenter	Organization/ Location	Comment	Air District Response
Joan Hebert	Menlo Park Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Janelle London	Menlo Park Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Janelle London	Menlo Park Resident	Finally, our energy should come from renewable sources. The Air District should be at the limit of its authority to drive renewable energy generation, including at permitted sources and as an on-site mitigation measure for CEQA projects. The Plan needs to expand on the implementation actions in this area. It should only support bioenergy where sources are already present from current land use and should expedite permitting for biofuel projects only where necessary (EN1).	Air District staff will consider these recommendations as we move forward to implement the CAP's control measure.
Janelle London	Menlo Park Resident	We need widespread fuel-switching from gas to electric in buildings. The Plan needs to incentivize and fund electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of gas appliances.	See Master Response 5
Mark Swoiskin	Mill Valley	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Christine Orth	Mill Valley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Marilyn Price	Mill Valley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Elizabeth Schumacher	Mill Valley Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Helen Bruner	Mill Valley Resident	Thank you for the opportunity to comment on the Air District's Draft 2017 Clean Air plan. Thank you! An insist rather than a protest. I commend you, Helen	Thank you for your comment.

Commenter	Organization/ Location	Comment	Air District Response
Sheryle Paukert	Milliken Creek Farms	Provide help in eliminating all ag burning	The Air District has an Open Burning Rule that restricts how people can burn waste. Our staff recently amended this rule in 2013 with updated best practices. Please see Regulation 5 on our rules webpage: http://www.baaqmd.gov/rules-and-compliance/current-rules .
Joffre Baker	Montara Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Joffre Baker	Montara Resident	The Plan shows (in Figure 3-9) that California's climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action.	See Master Response 3
Corinne Smith	Monterey Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Dean Mayer	Moraga Resident	SS12 needs modifying. The offset scheme as now written would allow more biofuel production to offset increased carbon intensity from processing tar sands, which is not acceptable. The Plan should cap or decrease refinery carbon intensity.	See Master Response 7
Kathryn Santana	Moraga Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Marti Roach	Moraga Resident	Engage Private Sector	Thank you for this suggestion.
Ted Rees	Mountain View	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Linda Brown	Napa Climate NOW	Your focus on further reductions in ground level ozone precursors, NOx and reactive organic compounds, with the goal of continuing progress toward state and national ozone standards, are extremely important, not only from an air pollution standpoint, but from a climate protection standpoint as well. That's because ozone in the troposphere is an extremely potent GHG. See, for instance, The UNEP/WMO Integrated Assessment of Black Carbon and Tropospheric Ozone (2011). In addition to the precursors NOx and VOCs, methane also contributes to ozone in the troposphere.	As you note, our Plan strives to address different kinds of pollutants -- from air quality-degrading smog to various kinds of greenhouse gases, including black carbon.

Commenter	Organization/ Location	Comment	Air District Response
Linda Brown	Napa Climate NOW	While this table mentions urban tree planting, we did not see anything in this report about forest and woodland preservation. From a carbon sequestration standpoint, active forest management and protection of woodlands from encroaching development should be a critical component of any climate plan.	As described in Control Measure TR10: Land Use Strategies, open space preservation will be addressed through implementation of <i>Plan Bay Area</i> . Specifically, the Air District will work with local governments, regional agencies, and Local Agency Formation Commissions (LAFCo) both to discourage conversion of and to work for the protection of agricultural and natural lands identified as Priority Conservation Areas (PCAs) in <i>Plan Bay Area</i> .
Linda Brown	Napa Climate NOW	The 20-year GWP for methane of 86 referenced in this Plan does not take into account methane's effects as a precursor in the formation of tropospheric ozone	The Air District uses the IPCC AR-5 to determine GWP values, as this is the most up-to-date, widely accepted research on this topic. We would be interested in seeing any additional research that provides further information, such as a GWP for methane that accounts for ozone formation.
Linda Brown	Napa Climate NOW	We appreciate the use of the term "super-GHGs" to convey their importance. However, since black carbon is not a gas, and in fact, behaves quite differently than a gas both in the atmosphere and when it deposits back onto the earth's surface, we believe that you should consider changing this to "super climate pollutants". This terminology would be more consistent with the terms now being used by other leading climate scientists and the state.	Please note that in order to make the Plan more approachable for a wider public audience we have made the decision to simplify some of our terms, but in doing so have made sure to define them. For interested readers who would like more detailed information on black carbon than what is provided in the Executive Summary, they can navigate to page 5/27 of the Plan.
Linda Brown	Napa Climate NOW	GWP values are typically expressed based upon how much a given GHG will contribute to global warming over a 100-year time frame. The 100-year time frame is appropriate for CO2 and other gases that have a relatively long atmospheric lifespan. However, certain GHGs, such as the super-GHGs discussed below, exert their impact in heating the climate in a much shorter time frame. So, in the case of these super GHGs, a 20-year time frame provides a more realistic means to express their global warming potential.	On pages 3/12 and 3/13 of the draft Clean Air Plan we provide background and rationale for using 20 year and 100 year timeframes depending on the GHG.
Linda Brown	Napa Climate NOW!	As aggressive as these targets are, much has been learned about the rapid pace of climate change in recent years to suggest that these targets may still fall short of preventing the earth from crossing critical climate change thresholds within the very near term (as soon as the next decade). We recognize that BAAQMD (and the state) are grappling with the art of the possible in setting goals. Nonetheless, it's time to reconsider and strengthen these targets in light of the fact that: 1) global temperature is now rising on a non-linear curve; 2) the earth is already experiencing temperature spikes crossing the lower Paris threshold of +1.5°C (first few months of 2016), and can expect to experience spikes crossing the +2.0°C upper Paris threshold within a decade; 3) the earth's fundamental support systems are under extreme duress – vast coral reef die-offs, deoxygenation of large areas of the Pacific Ocean, species extinctions around the globe, rising oceans and accelerating changes in the Arctic. And these, of course, are just a few of the signals. BAAQMD could play a true leadership role by challenging the state to adopt an even stronger stance.	Staff will continue to explore new research on appropriate GHG targets moving forward.
Chris Benz	Napa Climate Now, Napa Sierra Club	Napa has ag burning of grapevines and burning of cut trees. Please look for alternatives to ag/forest waste burning such as incentivizing biomass	Amendments to the Open Burning Rule were adopted in 2013. The Air District, in recent years, has offered incentives for chipping waste in lieu of burning. Further incentives will be investigated.
Allen Lilleberg	Napa Resident	Allowing the port of Oakland to export coal will only add to our problems. Over a quarter of our particulates come off the ocean from China! We cannot allow our old military ports to be facilitating our air pollution problem.	The Air District's new Clean Air Plan is our most direct and comprehensive effort to reduce greenhouse gases, particulate matter, as well as other pollutants. We cannot regulate goods shipment into and out of the Bay Area, but we are working to decarbonize the energy sources within our air shed, and to continue to reduce particulate matter.

Commenter	Organization/ Location	Comment	Air District Response
Allen Lilleberg	Napa Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Kit Long	Napa Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Kit Long	Napa Resident	As a resident of Napa County I am pleased about the progress of BAAQMD in beginning to address standards for addressing short lived climate pollutants. Your efforts are helping our County to create a more realistic Climate Action Plan. However, you are also using protocols of measurement that are outdated, particularly with methane. How will we be able to accurately assess the impact of a gas that we know is much more powerful in trapping heat than CO2 unless the GWP20 are updated to reflect current scientific knowledge?	Please note that the Air District recently updated its GHG emissions estimates, after release of the draft CAP. The CAP has been modified to reflect these updated estimates (please see discussion in Chapter 3 of the CAP and the technical support document - <i>Greenhouse Gas Emission Estimates and Draft Forecasts: Updates and Work in Progress</i> - available on the Air District web site). As discussed in greater length in this recently released document, the GWP values used in the CAP are based on IPCC climate-carbon feedback values from the IPCC 5th Assessment Report (AR5). This report used GWPs with feedback effects because the IPCC concluded that including them likely gives a more accurate estimate of climate impacts from short-lived, high-GWP GHGs, such as methane. While using different GWP values can lead to inconsistent reporting among reporting agencies, the Air District concluded that it was most important to use the latest science to report emissions as doing so will likely result in better policy decisions.
Jim Wilson	Napa Vision 2050	We want to change "rule" and "regulation" to "protection". The former are negative in tone and frame issues as costly and burdensome to industry.	Thank you for your comment.
Martha Utley	Newark Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Karen Walls	Novato Resident	I am writing to ask that you add enforceable rules to your draft to ensure that the Plan is real and will be carried out.	See Master Response 2
Perla Sandoval	Novato Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Karen Walls	Novato Resident	I am grateful that you are addressing this important challenge for reducing greenhouse gases. I ask that this plan be given actual teeth by adding in enforceable rules.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Janice Cumming	Novato Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Silke Valentine	Novato Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Edward Mainland	Novato Resident	I hope the Plan's basic mission gets strong support: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." But we need deeds to go with this fine words. It seems to me that the Plan lacks enough means of enforcement. To realistically cut CO2 emissions, the Plan needs to outline real mandatory steps to do so. I urge you to develop and enforce added regulations. Otherwise, we will not reduce GHGs soon enough. And climate goals set by the state and cities will not be reached. We need to decarbonize the entire energy economy rapidly. The District's Plan must be enforceable, effective and comprehensive.	See Master Response 2
Mike Cass	Novato Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Lida Brosh	Novato Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Robert Ortiz	Novato Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Gail Shafarman	Oakland Resident	I support Plan goals, and in addition, increased funding of bikeways, roads, lanes, and path program; increased focus on providing secure bicycle parking at transit stations and stops	Thank you for your comments.
Gail Shafarman	Oakland Resident	The Plan should include a discussion of why climate programs aren't reducing the Bay Area's GHG emissions to highlight the need for regional actions. The offset scheme would allow increase biofuel production to offset increased carbon intensity from procession tar sands, which is not acceptable. There is no reason to incentivize biofuel production, when we know the transportation must be incentivized to the fullest extent possible.	See Master Response 7
Karuna Holm	Oakland Resident	I want to request more movement towards electric (sic) and the measure shouldn't allow the set carbon intensity limits to be exceeded, even if offsets are allowed. More regulation and accountability.	See Master Response 7

Commenter	Organization/ Location	Comment	Air District Response
Sarah Nicolazzo	Oakland Resident	I am particularly concerned about the oil industry's attempts to expand tar sands refining in the Bay Area. The industry must be stopped from extracting tar sands if we are to have any hope of averting the most catastrophic effects of climate change, and I believe strongly that we here in California must stand in solidarity with the First Nations communities in Canada who have been devastated by the environmental destruction and toxic contamination resulting from tar sands extraction. Refining of tar sands here in the Bay Area would only worsen the negative public health impacts experienced by communities like Richmond due to pollution from the refineries. To that end, I urge the Air District to play a stronger role in regulating refineries. The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to “offset” the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible. The purpose of a carbon intensity rule for SS12 should be to hold the line or decrease carbon intensity at refineries, not pretend to set a limit, then immediately provide a means to avoid the limit and allow more tar sands to be processed.	See Master Response 7
Emily Laskin	Oakland Resident	Finally, I'm concerned about this region's role in the global fuel economy. The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to “offset” the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7
Boris Lukanov	Oakland Resident	I support it's goal to take aggressive action to curb GHG emissions. However, I would like to see more enforceable measures for reducing GHGs. Please consider additional regulations that would reduce GHGs in the Bay Area at a fast enough rate.	See Master Response 2
Zemeira Singer	Oakland Resident	I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Shelley Noyes	Oakland Resident	I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Miguel Campo	Oakland Resident	I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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Mel Noyes	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Julie Fisman	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Gail Shafarman	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Amy Stimmel	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Amy Stimmel	Oakland Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions.	See Master Response 2
Emlyn Guiney	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Dasha Lebedeva	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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Phoebe Schenker	Oakland Resident	I agree wholeheartedly with the plan's dual goals of improving public health and protecting the environment. We need to move to a carbon neutral future if we are going to accomplish these things and i fear that the plan is overly reliant on education and incentives and does not support/lay out strong enough regulations to get us there. I believe we are already behind our current goals and would like to see an analysis of why - it is mere speculation but education and incentives are likely not sufficient in the face of artificially inexpensive fossil fuel. I'm supporter of a fully rebated carbon fee and believe we need to price carbon if we are really going to see the kinds of transformations that this plan lays out and that we so desperately need. As an architect I know there is also much more that needs to happen for the industry to be able to achieve the net zero goals we all strive for. Until the economic equation changes around these technologies (i.e. when utility costs accurately reflect the costs to the environment and our health) it will still be an uphill battle to implement energy and water saving systems. Thank you for your time (and everything you do to help solve the climate crisis).	See Master Response 2
Dalya Massachi	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable regulations (protections) for reducing greenhouse gases (GHGs). Please consider additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Gayle Eads	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, I'd like to see some specific goals with enforcement provisions so that this document has some real teeth to use when it is implemented. Let's omit the wiggle room and be very serious about adopting a document that will provide measurable steps forward for cleaner air in our air basin. Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Sarah Nicolazzo	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Keith Bein	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Cecilia Brown	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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Janice Gloe	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Nancy Kelly	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Julia Dashe	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Caitlin Cronkhite	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Frances Aubrey	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Janika McFeely	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Anita Watkins	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Caitlin Piccolo	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Caitlin Piccolo	Oakland Resident	I urge you to be strong in the face of powerful industry lobbyists, contrary to what certain state regulatory bodies have failed to do in the past. Education and incentive funding are important options for reducing GHGs, which I understand well because I have the privilege of working in the field of environmental education as a peace corps volunteer in Mexico. But I also understand, working in this field, that real change requires strict regulations and enforcement of them. That is why I ask that you consider stricter options for enforcement of GHG limits. In particular, stationary sources of GHGs should not be given the option of compensating for exceeding carbon intensity limits under measure SS12 by increasing biofuel production. We need to move to more electrified transportation. If possible industry responsible for exceeding carbon intensity limits should be faced with harsh fees that go towards sustainable public transportation options or restoration or reforestation projects that capture GHGs.	See Master Response 2 and 7
Nora Privitera	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Rich Yurman	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Susan Herting	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Gabriel Steinfeld	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Ilyana Landes	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Lisa Tracy	Oakland Resident	I'd like to comment on the Air District's Draft 2017 Clean Air Plan. Unfortunately, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please consider additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our long-term climate goals.	See Master Response 2

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Joan Kiley	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Ann Wizer	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Nadya Tichman	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Claudia Wornum	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Emily Jacobi	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Beth Weinberger	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
W Elahdab	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Emily Laskin	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Emily Laskin	Oakland Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions. Furthermore, the Plan shows (in Figure 3-9) that California's climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action.	See Master Response 2 and 3
Charis Stiles	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Arthur Gregorian	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
J Furstoss	Oakland Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Evan Holm	Oakland Resident	I'd like to encourage your office to create more enforceable clauses in the 2017 Clean Air Plan. The environment needs brave protection.	See Master Response 2
Derek Shoonmaker	Oakland Resident	I'd like to see a Plan with more enforcement teeth. Without these measures, the environment will stay gummed up.	See Master Response 2
Amy Stimmel	Oakland Resident	The Plan shows (in Figure 3-9) that California's climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action.	See Master Response 3
Frances Aubrey	Oakland Resident	The Plan shows (in Figure 3-9) that California's climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action.	See Master Response 3

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Emily Jacobi	Oakland Resident	The Plan shows (in Figure 3-9) that California’s climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren’t reducing the Bay Area’s GHG emissions to highlight the importance and necessity for regional action.	See Master Response 3
Susan Herting	Oakland Resident	We need more meaningful public transportation, efforts to get away from fossil fuel combustion.	See Master Response 4
Frances Aubrey	Oakland Resident	The Air District should be at the limit of its authority to drive renewable energy generation, including at permitted sources and as an on-site mitigation measure for CEQA projects. The Plan needs to expand on the implementation actions in this area	Air District staff will consider these recommendations as we move forward to implement the CAP's control measures.
Gail Shafarman	Oakland Resident	Support expanding idling strategies as part of smart driving or as a standalone program.	“Prohibiting or limiting idling is included in TR12 as a Smart Driving strategy. In addition, TR10: Land Use Strategies has been edited to reflect that prohibiting or limiting idling are included in the Air District's Planning Healthy Place. In Planning Healthy Places, one can find information on the location of communities and places throughout the region that are estimated to have elevated levels of fine particulates and/or toxic air contaminants. These areas are shown via web-based, interactive maps. Best practices are also in Planning Healthy Places, including ones to prevent and/or reduce idling. Best practices can be implemented by local governments and developers to reduce health risks from air pollution in locations that experience elevated air pollution levels.”
Meredith Cowart	Oakland Resident	I agree that "we must take aggressive action to eliminate fossil fuel combustion and transition to a post carbon economy." However, I believe that that the plan needs to incentivize funding for home energy efficiency (e.g. changing out conventional heating with heat pumps).	See Master Response 5
Emily Jacobi	Oakland Resident	The Plan needs to provide incentive funding for the installation or change-out of fossil fuel-based space and water heaters with electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of these appliances.	See Master Response 5
Michael Roemer	Orinda Resident	Given the need to stop combustion and electrify to reduce both air pollution and greenhouse gases, the Plan should support the development of bioenergy only where sources are already present from current land use and should expedite permitting for biofuel projects only where necessary (EN1).	Air District staff takes note of the need to be clear about the appropriate role of biofuel and will consider this comment as we move forward to implement measures that include biofuel.
Michael Roemer	Orinda Resident	The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to “offset” the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7
Michael Roemer	Orinda Resident	The purpose of a carbon intensity rule for SS12 should be to hold the line or decrease carbon intensity at refineries, not pretend to set a limit, then immediately provide a means to avoid the limit and allow more tar sands to be processed.	See Master Response 7
Michael Roemer	Orinda Resident	I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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Michael Roemer	Orinda Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions.	See Master Response 2
Carolyn Knoll	Orinda Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Michael Roemer	Orinda Resident	The Plan shows (in Figure 3-9) that California's climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action.	See Master Response 3
Michael Roemer	Orinda Resident	The Air District should be at the limit of its authority to drive renewable energy generation, including at permitted sources and as an on-site mitigation measure for CEQA projects. The Plan needs to expand on the implementation actions in this area.	Air District staff will consider these recommendations as we move forward to implement the CAP's control measures.
Michael Roemer	Orinda Resident	The Plan needs to provide incentive funding for the installation or change-out of fossil fuel-based space and water heaters with electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of these appliances.	See Master Response 5
Vera Loewer	Pacifica Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Sara Theiss	Pacifica Resident	However, the plan lacks sufficient measures to make that vision a reality. As you know better than I, climate change has been having a deleterious effect on our state's environment for awhile, and that process appears to be speeding up. So we need more regulations in order to reduce greenhouse gases in a time frame that will meaningfully address the problems as well as meet our longer term goals. We in California are fortunate to have a legislature and population that understands the urgency of the situation and are in what may be the best position we will ever be in to get effective measures enacted.	See Master Response 2
Jeremy Spencer	Pacifica Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Sara Theiss	Pacifica Resident	Biofuels lead to combustion and are a poor use of our state's resources - land, water and other inputs. Support for the development of biofuels needs to stop. They are now part of the problem, not the solution, and are being pushed by big ag economic interests. Regulations should stop future development of biofuels.	Biofuels developed in a way that considers impacts across their life-cycle can be part of the solution to climate change. Our goal is to work in concert with public and private actors to strive for biofuel production that is zero net carbon and that does not transfer an atmospheric problem to other media or create equity problems.

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Sara Theiss	Pacifica Resident	Be bold! I urge you do amend the plan so that the Air District uses all its authority to push renewable energy and implementation actions in this area. Regulated sectors will sue no matter what - why self-censor at this point?	Air District staff will consider these recommendations as we move forward to implement the CAP's control measures.
Sara Theiss	Pacifica Resident	Overall, California needs to move away from energy that produced GHGs and pollution toward electrification and solar energy. For these reasons, I urge you to adopt measures to provide incentives to discontinue space and water heaters in commercial and multi-family dwelling and a deadline for the phase-out. Similarly the plan should be shaped with the goal of electrifying transportation as much as possible, despite what appears to be a lack of support from Washington.	Master Response 5 and 4. The Air District agrees with the commenter with the need to electrify transportation as much as possible.
Shelly Gordon	Palo Alto Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Wesley Alexander	Paradise Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Rich Goldberg	Penngrove Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Maura Sullivan	Pinole Resident	The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to "offset" the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7
Maura Sullivan	Pinole Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Suzy Karasik	Pinole Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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Cheryl Higgins	Point Reyes Station Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Hunter Wallof	Pt. Reyes Sta Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Kim Anderson	Red Bluff Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
G & B Martin	Redwood City Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Anne Szostek	Richmond Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Marguerite Sgrillo	Richmond Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Elsa Stevens	Richmond Resident	Protect public health and stabilize the climate, Transition to a post-carbon economy." Reduce greenhouse gases (GHGs). Add regulations that assure we reduce GHGs in a meaningful time frame and meet our climate goals.	See Master Response 2
Anne Szostek	Richmond Resident	In particular, the Plan needs to provide incentive funding for the installation or change-out of fossil fuel-based space and water heaters with electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of these appliances.	See Master Response 5

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Kerry Stanwyck	Rohnert Park Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Knable Dorothy	Sacramento Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Victoria Gorski	San Anselmo	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Stephanie Morris	San Anselmo	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Victoria Gorski	San Anselmo	I need to add look at my address, I live directly on Sir Francis Drake Blvd in San Anselmo. There is not a minute, not one that there is not a car idling in front of my house between the hours of 3:30 pm till 6:30 pm. Every 5 minutes cars that have been at traffic lights east and west of my home are driving by. Huge trucks start driving by my home at 5 am, often so loud that they shake my windows. The increase in traffic in the last 8-10 months has been increased by 1/3 from the previous year. I'm sure of this.	Our Plan, along with the efforts of the Metropolitan Transportation Commission (MTC), is intended to help reduce air quality concerns driven by automobile usage, as well as help inspire infrastructure development that makes mobility easier without cars. We encourage you to contact city and county officials with your concerns and to attend public transportation planning meetings in San Anselmo and Marin.
Mary Margaret Flynn	San Carlos Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Laetitia Benador	San Diego Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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Rebecca Koo	San Diego Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	In general, the plan successfully conveys the magnitude of change needed and, equally important, that only a multipronged approach can achieve state and regional targets in air quality and greenhouse gas emissions. However, we feel the plan could be stronger in some ways. The plan identifies the insufficiency of current regional, state, and national policies to achieve the State and District's 2030 and 2050 goals, but the plan's recommendations generally fall within the landscape of those policies. While the District's direct rulemaking authority may be limited, there is room in the Plan for stronger advocacy for the policies that will be necessary.	See Master Response 2 and 3
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	5/10: Key Elements: Instead of "alternative means of transportation" please specify, "walking, bicycling, and transit." We would prefer to avoid language that portrays SOV travel as the default and everything else as an "alternative."	Additional text has been added per this comment.
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	ES3/1-8: How and Where we Travel: Please place active transportation modes - bicycling, walking, and transit - ahead of electric vehicles. The bullet regarding the mode share should be placed first. Further, there is not consensus among researchers that non-electric autonomous vehicles will result in VMT reductions, so emphasis should be on electrification.	The order of the bullet points has been changed per the comment.
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	ES5: In addition to directing development to those locations that are well-served by transit, we need to provide high-quality transit service that attracts passengers and the capacity to accommodate them comfortably.	This comment has been noted.
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	1/9: Reduce Motor Vehicle Travel: We agree that the transportation landscape includes many new services, products, and technologies. We hope that the District can guide the conversation about leveraging these changes to benefit the environment.	This comment has been noted.
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	1/10: Promote Zero-Emission Vehicles and Renewable Fuels: Consider also mentioning that the benefit of electric vehicles depends on the state energy mix.	This comment has been noted. The critical importance of assuring that EV's are powered by low- or zero-carbon electricity is noted elsewhere in the Plan.
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	1/14: Pricing: The pricing language is vague and should emphasize how pricing policies and revenue could be used to transform the sector to meet goals of the Plan.	The level of detail regarding carbon pricing is unknown at this time; more details would be developed during any program or policy development.
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	4/9: Grants: The plan has previously recognized public transportation as an important strategy for reducing greenhouse gas emissions, but none of the grant programs listed in Table 4-3 directly relate to it. Are there opportunities to develop additional grant programs to strengthen this strategy?	See Master Response 4. This information is exclusively about Air District grant programs. MTC funds public transportation projects.
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	5/11: TCMs: For TR3 and TR4, please clarify what constitutes bus and rail "projects" - continuing to support transit operations and maintenance, not just capital projects, is important to further regional sustainability goals.	Additional text has been added as suggested.

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Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	5/11: TCMs: On TR6, the correlation between freeway performance and greenhouse gas emissions is unclear, due to increased VMT and induced demand.	We agree that this is an area that need ongoing study and consideration. The Air District will continue to work with MTC on this issue as we go forward.
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	5/12: TCMs: Can we be stronger than to "encourage" planning for bicycle and pedestrian facilities? We will need to provide actual incentives for jurisdictions to include bicycle and pedestrian facilities in their plans. Are there funds that can be conditioned on having these elements present, like the Caltrans Bicycle Transportation Account?	Both the Air District and MTC currently provide funds for bicycle and pedestrian facilities.
Lucas Woodward	San Francisco Municipal Transportation Agency (SFMTA)	5/32: Dollar value of health benefits: Does this table include health benefits from reductions in collisions? Using US DOT guidelines, SH,ITA and the SF Department of Public Health have determined that the cost of a traffic injury to society ranges from \$27,300 for a minor injury to \$9.6 million for a fatality. (Reference: U.S. Department of Transportation: "Guidance on Treatment of the Economic Value of a Statistical Life (VSL) in U.S. Department of Transportation Analyses - 2016 Adjustment" 2016).	This table provides results from the multi-pollutant evaluation method (MPEM), which does not include health benefits from reductions in collisions. Please see Appendix C for further information on the methodology behind the MPEM.
Jean Lindgren	San Francisco Resident	The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to “offset” the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7
Judith Stoddard	San Francisco Resident	The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to “offset” the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7
Kristina Pappas	San Francisco Resident	- Not allow stationary sources to exceed carbon intensity limits (otherwise, why bother placing limits?).	See Master Response 7
Fione Smythe	San Francisco Resident	2) Significant penalties for stationary sources (like the petroleum refineries in and around Richmond) that exceed carbon intensity limits. The emissions and environmental pollutants at those refineries pose a health threat to the communities around them, in addition to contributing the GHGs our region emits into the atmosphere.	See Master Response 1 and 7
Peggy da Silva	San Francisco Resident	Stationary sources: We need very strong limits on carbon intensity at power plants; eventually we must stop using fossil fuels. Do not let petroleum refineries exceed the limits you set.	See Master Response 1 and 7. Note that SS18 proposes to set carbon intensity limits at power plants.
Sheila Whelan	San Francisco Resident	I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Linda Koffman	San Francisco Resident	Please add enforceable measures for reducing GHGs timely and effectively.	See Master Response 2
Janie Lucas	San Francisco Resident	I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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Margaret Pearce	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Jane Calame	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Marta Lutz	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Peggy da Silva	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs).	See Master Response 2
Joan Smith	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Nora Roman	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Jean Lindgren	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Jean Lindgren	San Francisco Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions.	See Master Response 2

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Michael Tomczyszyn	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Mahin Charles	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Anne Veraldi	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Mark Beckwith	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Ellen Koivisto	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Ellen Koivisto	San Francisco Resident	Specifically, a plan that relies on education and incentive funding won't do much. I'm a teacher. I work hard to help my students know their actions have consequences, and what those consequences will mean to them. But it's only when there are immediate consequences that they actually change their behavior.	See Master Response 2
Paul Donald	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Paul Donald	San Francisco Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions.	See Master Response 2
Joseph Illick	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Nurit Baruch	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Judith Stoddard	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Nicholas Woodbury	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Kristina Pappas	San Francisco Resident	- The plan needs more enforceable rules requiring GHG reduction;	See Master Response 2
Elliot Helman	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
David Shearn	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Joy Hahn	San Francisco Resident	The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions.	See Master Response 2
Sarah Dorrance	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

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Elise Stengle	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Lawrence Dillard, Jr	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Melissa Ambrose	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Chris Baldwin	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Bianca Malgora	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
James Masi	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Martin Horwitz	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Aryeh Frankfurter	San Francisco Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Sara Greenwald	San Francisco Resident	Reducing greenhouse gases (GHGs) must of course be the top priority. Looking at the figure that shows overall GHG reductions so far and planned (Figure 3-9) I can see that the California climate program falls short. We will not be down to the goal of 1990 levels in 2020. What is the reason for this shortfall, and what does BAAQMD plan to do about that?	See Master Response 3
Ellen Koivisto	San Francisco Resident	Reducing to 1990 levels (and it looks like we won't even manage that in the Bay Area) by 2020 is insufficient. We'll be wading in an acid sea by then all along the coasts. To make any real change, we need no allowance to exceed limits on CO2 output and no offsets; we need to fix the climate, not keep it where it is now.	See Master Response 3
David Shearn	San Francisco Resident	Furthermore, the Plan shows (in Figure 3-9) that California's climate program is not going to reduce Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action.	See Master Response 3
Joy Hahn	San Francisco Resident	And the Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action.	See Master Response 3
Fione Smythe	San Francisco Resident	1) Actionable ways California can go beyond current efforts to bring Bay Area GHG emissions back to 1990 levels by 2020. I realize this is aggressive, but we must act now and act decisively to address climate change.	See Master Response 3; this Plan includes 85 control measures designed to contribute to the Bay Area achieving our long-term GHG reduction goals.
Ellen Koivisto	San Francisco Resident	All buildings need to be green, whether new or remodeled. We need to be adding to these requirements (such as making all roofing either living, water reclaiming, solar, or high albedo). We need to be diving into alternative energy (non-nuclear) generation at a breakneck pace, and rapidly phasing out all appliances, HVAC, and other building systems that require fossil fuels.	Many measures in this Plan support the objectives you raise - providing model ordinances to local governments for advancing low- and no-carbon buildings, high albedo roofing, and fossil fuel-free energy generation. We agree these are critically important objectives and that is why they are key priorities in this Plan.
Sara Greenwald	San Francisco Resident	In addition, there is too much reliance on good intentions. Transportation emissions get particularly short shrift in this regard. Incentives and education plans such as Drive Smart are good, but not enough. For example, employers should be required to limit parking available to employees or to charge solo drivers (of non-electric vehicles) a small fee that could then be rebated to those who carpool or take public transit. A small fee in a company where most commuters drive solo would create an appreciable incentive to carpool	See Master Response 4. Pricing carbon and "putting a price" on driving are certainly ideas contained in the plan. One specific measure, TR11: Value Strategies, discusses ways we may pursue implementation of various value pricing strategies such as tolling on trans-bay bridges and cordon pricing on roads, as well as auto pricing options, such as a VMT fee and pay-at-the-pump auto insurance.
Peggy da Silva	San Francisco Resident	Motor vehicles: I am a bicyclist, doing all I can to travel without using my car. I am appalled that every time I am riding my bike I am surrounded by hundreds of motor vehicles spewing toxics into my lungs. Bay Area regulatory agencies are not doing nearly enough to dramatically reduce the number of cars on the road. Not just more bike lanes -- we need to reduce the number of cars.	See Master Response 4. The Clean Air Plan includes numerous measures to reduce driving. Reducing driving through efforts to increase biking, walking and transit use is listed as one of the plan's key priorities. The transportation measures, as proposed in the 2017 Plan will decrease emissions of criteria pollutants, TACs, and GHGs by reducing demand for motor vehicle travel, promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying motor vehicles and equipment.

Commenter	Organization/ Location	Comment	Air District Response
Jean Lindgren	San Francisco Resident	The Air District should use its authority to drive renewable energy generation, including at permitted sources and as an on-site mitigation measure for CEQA projects. The Plan needs to expand on the implementation actions in this area. I hope you are really serious about this issue and take the much needed steps to ensure that the move to totally renewable energy is successful. I, for one, am counting on you to do so.	We will consider these recommendations as the Air District moves forward to implement the CAPs' control measures.
Fione Smythe	San Francisco Resident	4) Support bioenergy only where sources already exist - we need clean, renewable energy like solar, wind, thermal, etc.	Air District staff takes note of the need to be clear about the appropriate role of bioenergy and will consider this comment as we move forward to implement measures that include bioenergy.
Judith Stoddard	San Francisco Resident	The Plan needs to provide incentive funding for the installation or change-out of fossil fuel-based space and water heaters with electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of these appliances.	See Master Response 5
Jean Lindgren	San Francisco Resident	The Plan needs to provide incentive funding for the installation or change-out of fossil fuel-based space and water heaters with electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of these appliances.	See Master Response 5
Fione Smythe	San Francisco Resident	3) Funding to promote the installation or replacement of fossil fuel space and water heater with electric ones in large and commercial developments by 2025.	See Master Response 5
Kristina Pappas	San Francisco Resident	- The plan should address whether CA is on track to meet its goals as laid out in the AB 32 (2006), why or why not, and what we can do about it;	See Master Response 3
Marc Dahlberg	San Jose Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Deborah St. Julien	San Jose Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Patty Linder	San Jose Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Eric Meece	San Jose Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Eric Meece	San Jose Resident	Progress has been slower than has been planned. The Plan needs to provide incentive funding for the installation or change-out of fossil fuel-based space and water heaters with electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of these appliances.	See Master Response 5
Marc Dahlberg	San Jose Resident	The only way we will succeed long-term is by making worthwhile, short term decisions now in a meaningful time frame.	Thank you for your comment.
Eugene Cordero	San Jose State University	K-12 education can achieve outcomes that a) produce immediate environmental benefits and b) create student champions who practice pro-environmental behavior for many years in the future. The Air District should consult with educational professionals to develop rigorous and well designed plans on how to develop and deliver educational programs that can have lasting success.	Thank you for the suggestion. We are considering how to expand our educational campaigns to include more climate related material and/or programs. The Youth Environment and Sustainability (YES) conference, is one example of such a program. It is held jointly held each year with the Metropolitan Transportation Commission. Students and practitioners from around the San Francisco Bay Area gather to discuss transportation issues, learn how personal decisions impact climate change, and share ways of encouraging everyone to walk, bike, take transit, or carpool to school in order to improve air quality in the San Francisco Bay Area. We welcome further partnerships with educational professionals as we move forward.
Carol Bardoff	San Leandro Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Carol Bardoff	San Leandro Resident	I do support this statement. However, the Plan seems to lack enforceable measures for reducing greenhouse gases (GHGs). Please do all you can to add more regulations that would promote reduction of GHGs within a time frame that would support our goals in the battle against climate change.	See Master Response 2
Jon Bazinet	San Lorenzo	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Bruce Jensen	San Lorenzo Resident	•The Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to "offset" the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 1
Bruce Jensen	San Lorenzo Resident	•The purpose of a carbon intensity rule for SS12 should be to hold the line or decrease carbon intensity at refineries, not pretend to set a limit, then immediately provide a means to avoid the limit and allow more tar sands to be processed.	See Master Response 1
Bruce Jensen	San Lorenzo Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Bruce Jensen	San Lorenzo Resident	<ul style="list-style-type: none"> The Plan shows (in Figure 3-9) that California’s climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren’t reducing the Bay Area’s GHG emissions to highlight the importance and necessity for regional action. 	See Master Response 3
Bruce Jensen	San Lorenzo Resident	<p>It needs to incorporate Residential and Commercial Energy Conservation Ordinances (RECO / CECO) or their regulatory equivalents to require energy efficiency measures at time of sale in order to help make older building stocks, notorious wasters of energy, much more energy efficient and carbon-neutral. We here at the local government level (I am a Planner for Alameda County) would love to have some backup on these and other unnecessarily controversial common-sense Climate Action Plan (CAP) measures.</p>	The Air District is interested in hearing from local planners like you about ways to support your efforts in Alameda County on this subject. We are aware of efficiency ordinances that introduce requirements at the time of real estate sale, and we have begun evaluating their fit for the Bay Area and how to best approach them under measure BL3.
Bruce Jensen	San Lorenzo Resident	<ul style="list-style-type: none"> The Air District should be at the limit of its authority to drive renewable energy generation, including at permitted sources and as an on-site mitigation measure for CEQA projects. The Plan needs to expand on the implementation actions in this area. 	Air District staff will consider these recommendations as we move forward to implement the CAP’s control measures.
Bruce Jensen	San Lorenzo Resident	<ul style="list-style-type: none"> The Plan needs to provide incentive funding for the installation or change-out of fossil fuel-based space and water heaters with electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of these appliances. 	See Master Response 5
Bruce Jensen	San Lorenzo Resident	<p>We need to recognize the effect water treatment and processing has on energy use, and work with local agencies to implement water conservation measures that have also been difficult to include in CAPs due to public opposition. We live in a Mediterranean climate - this should be second nature to us, and yet we waste water and burn carbon energy in the process.</p>	Thank you for your comment. Control measure WR2 in the 2017 Plan includes ideas on how the Air District, in partnership with local governments, may promote water conservation, including reduced water consumption and increased on-site water recycling, in residential, commercial and industrial buildings for the purpose of reducing greenhouse gas (GHG) emissions. Specifically, the Air District will support efforts of local governments in achieving and exceeding state water use reduction goals by disseminating best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; encouraging the adoption of water conservation ordinances; and incorporating public outreach and education on water conservation into the Air District’s outreach programs. The Air District will also incorporate best practices for water use into local plan guidance, CEQA guidance, and other resources for cities and counties.
Scott Grinthal	San Mateo Resident	<p>I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.</p>	See Master Response 2
Cheryl Kozanitas	San Mateo Resident	<p>I support this key statement from the document's Executive Summary: “To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.” Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.</p>	See Master Response 2

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Carol Cook	San Mateo Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Carol Cook	San Mateo Resident	In summary, the Draft Plan relies mostly on education and incentive funding to reduce greenhouse gases. Education and incentives are good, but regulations are needed to get the job done. The Plan needs more enforceable rules requiring GHG reductions.	See Master Response 2
Elaine Salinger	San Mateo Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Elaine Salinger	San Mateo Resident	In particular, I would suggest adding charging stations for cars close to our freeways. For example, I have a car with an 80 mile range, and have to take a gas car to drive from the Peninsula to Sacramento. And by the way, Sacramento has almost NO public charge stations! Amazing for a state capital with a green perspective.	Staff will consider these comments during the implementation of this control measure.
Tom Heinz	San Rafael Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Tom Heinz	San Rafael Resident	The education goals and green house goals are great but there need to be more enforceable rules. The rules will level the playing field so everyone knows what can and cannot be done. It is the only way to move forward otherwise there will be people and companies who will slide around the goals and take unfair advantage of loop holes.	See Master Response 2
Philip Simon	San Rafael Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Joe Buhowsky	San Ramon Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Sharon Hull	Santa Cruz Resident	In addition, the Plan states that measure SS12 would set carbon intensity limits on petroleum refineries, but says they can exceed those limits—probably from the processing of extreme fuels like tar sands—and allows them to "offset" the increase in carbon intensity by increasing biofuel production. This is not acceptable when we know transportation must be electrified to the fullest extent possible.	See Master Response 7

Commenter	Organization/ Location	Comment	Air District Response
Erica Stanojevic	Santa Cruz Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Sharon Hull	Santa Cruz Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Michelle Miranda	Santa Cruz Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Sharon Hull	Santa Cruz Resident	The Plan shows (in Figure 3-9) that California's climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action.	See Master Response 3
Abigail Zoger	Santa Rosa Resident	Great start on the Clean Air Plan. But the Plan needs more enforceable measures for reducing greenhouse gases (GHGs). Things to think about: green building incentives especially for retrofitting Hold the line on large industry carbon generation. Make biofuel easier	See Master Response 2
Joey Smith	Santa Rosa Resident	To be blunt, I think it needs more teeth. While I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy.", the rest of the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need to do this in a meaningful time frame, and I hope you'll consider more TEETH to this Plan.	See Master Response 2
Steve Roth	Santa Rosa Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Christine Hoax	Santa Rosa Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." That's a good statement and vision, however, the Plan seems to have few enforceable measures. The Plan relies mostly on education and incentive funding to reduce greenhouse gases, but the millions for incentives won't achieve many reductions! Education and incentives are good, but regulations are needed to get the job done. The Plan needs MORE ENFORCEABLE RULES requiring GHG reductions. Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Theresa Vernon	Santa Rosa Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Cassandra Bradshaw	Sausalito Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Ayyub Johnson	Sausalito Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Craig Merrilee's	Sausalito Resident	I was troubled by the lack of specific mechanisms and regulations to reduce greenhouse gas emissions. Without specific rags and enforcement power, this will be just another good plan with lofty ideals that goes on the shelf. Hopefully, you will consider adding the missing specifics in the current draft, to make this a policy document with consequences and impact.	See Master Response 2
Alice Merrill	Sausalito Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Catherine Crockett	Seaside Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Stacie Charleroi's	Sebastopol Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Tamara Voiles	Sebastopol Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
John Holtclaw	Sierra Club	I think it is important to cover these issues in the (Executive) summary. The success of the energy and climate emissions recommendations depends on the region's cities and counties developing in a more location efficient pattern. Curbing excess emissions from transportation, construction materials, heating and cooling buildings and personal consumption are all heavily dependent on development patterns. Compact mixed-use development not only reduces auto ownership and driving, but also saves building materials, and lowers the energy to heat and cool buildings. Apartments and condos in compact infill are generally smaller than single family houses, lowering furnishing requirements, and lighting and appliance energy use. Achieving these savings to meet the Blueprint's goals requires ramping up a land use campaign.	Thank you for your comment. Infill development is mentioned in the Executive Summary of the draft plan as a key element of the strategy and is given the same level of emphasis and/or priority as all other key elements of the 2017 control strategy. TR10 addresses these issues in greater detail.
John Holtclaw	Sierra Club	I urge the District, along with sister agencies, to launch a major campaign to publicize the benefits of denser, mixed-use infill and complete streets, along with increased public transit. These benefits include not only the reduction in climate change and toxic emissions, but also shorten personal trips, allowing more to be walked or cycled, improving public health thru increased physical activity. With this information campaign, and a campaign for cities to relax lot size and building height limits, and allow coffee houses, markets and restaurants in all neighborhoods, we have a chance to meet the Blueprint's goals. Without such an effort, we risk getting our exercise when swimming home.	See Master Response 4. The Air District supports mixed-use, infill development regionally via support for Plan Bay Area as well as at cities and counties.
Karen Pedersen	Sonoma Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Shelia Numan	Sparks, NV Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Kathleen Ruppel	Stanford Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2

Commenter	Organization/ Location	Comment	Air District Response
Wendy Sommer	StopWaste	With SB 1383 and AB 1826 in place, California will see an increase in organics diverted from landfill; the challenge will be capacity to produce compost. We encourage the Air District to further support this measure and help foster the development of both new composting facilities and capacity at existing facilities. We suggest incentivizing conversion of open windrow systems to aerated static piles (ASPs), which accommodate two to three times the volume of material on site, while reducing overall emissions from composting by 80%, according to the Plan. We suggest that the Air District consider the baseline of emissions from windrows when permitting facilities converting to ASPs, and acknowledge the reductions in emissions from that baseline, rather than treating emissions from ASP systems as additional emissions.	We will consider this suggestion as we implement measures in the waste sector.
Wendy Sommer	StopWaste	Include urban/suburban application of compost and mulch	This will be considered during implementation, i.e. development of best practices, etc.
Wendy Sommer	StopWaste	Please continue to include CBEI in GHG conversations	We will continue our efforts to understand GHG emissions from a consumption perspective.
Wendy Sommer	StopWaste	Add a FSM on consumption based emissions reductions	Staff will continue to investigate opportunities to use the CBEI in our climate programs.
Wendy Sommer	StopWaste	StopWaste recommends that the Air District use and account for in their emission goals the most current accepted tools available for determining GHG impacts such as the life cycle analysis widely accepted by the WARM Model v14, which calculates the climate impacts of alternative methods of managing waste. For example, 200 tons of food waste and mixed organics in equal proportions landfilled will result in an emission of 32 MTCO2E, while the same material composted will result in a net reduction of 34 MTCO2E (a 66 MTCO2E differential), and if anaerobically digested, would result in a reduction of 13 MTCO2E (a 45 MTCO2E differential).	Staff will explore the WARM model and consider using it for future quantification exercises.
Wendy Sommer	StopWaste	In reviewing this measure (WA2) and its source material (the Base Year 2011 Emission Inventory), it appears that Air District is overestimating volumes of organic materials being processed at compost facilities, and therefore the emissions associated with composting. The Inventory estimates the volumes of materials processed based on bulk density of the finished product, rather than feedstock. This leads to an overestimate because significant volume reduction (about 50%) takes place during composting. The Inventory lists an estimate of 565 pounds per cubic yard, which is in the range of bulk density of finished compost, as the bulk density for green waste. However, green waste is estimated by Cal Recycle as 108-343 pounds per cubic yard. StopWaste recommends that the Air District revise the tonnage and corresponding emissions estimates based on the appropriate bulk densities for the typical Bay Area feedstocks, using CalRecycle's conversion factors here: http://www.calrecycle.ca.gov/lgcentral/library/dsg/IOrganic.htm	We will consider this information as we update our emissions inventory. During the rulemaking process the emission factors and estimates of compost tonnage identified in WA2 will be reevaluated to ensure the appropriate data is being used for the basis of any future rules related to composting.
Wendy Sommer	StopWaste	As noted in the plan, open windrow composting reduces VOC and GHG emissions from green waste compared to natural decomposition or landfill. ⁷ Properly managed ASPs can reduce emissions even further compared to windrows, but they are a significant capital investment for a facility, so should be incentivized rather than required. To support expansion of composting capacity and reduce emissions, StopWaste makes the following two recommendations: a. That the Air District reinforce CalRecycle's existing BMPs for compost facilities to control emissions, rather than setting emission limits so low that all facilities must use ASPs or be fully enclosed to comply. b. That the Air District add an Implementation Action to incentivize development of new ASP facilities or conversion from open windrows to ASPs with grants and access to technical assistance.	These recommendations will be considered during the rulemaking process identified under WA2 and other programs related to composting.

Commenter	Organization/ Location	Comment	Air District Response
Wendy Sommer	StopWaste	StopWaste recommends adding an Implementation Action to review and incorporate research on VOC emissions from typical Bay Area composting feedstocks to determine emissions reductions. Developing rules, emission standards, and measures based on Bay Area-specific conditions and feedstocks will help avoid unintended consequences of applying the more stringent regulations from other districts, such as slowing expansion of composting facilities, which will be needed to meet the goals of the Short Lived Climate Pollutant plan and other state measures.	Future rulemaking and related programs associated with WA2 would consider Bay Area specific research and data related to composting feedstocks in conjunction with research and data from other regions of the State and country.
Wendy Sommer	StopWaste	StopWaste recommends that the Air District create separate measures and separate emission reduction goals for composting facilities and Anaerobic Digestion facilities (ADF), because they are two distinct and separate processes with different goals, systems, inputs and outputs, co-benefits, and emissions. a. Composting produces compost through controlled aerobic decomposition. WA3 Co-benefits section (p WA-12) states that composting produces biogas, which is inaccurate. ADF's produce biogas through an anaerobic process, which leaves behind the byproduct of digestate (as noted in the measure). b. Composting is conducted typically in an open or covered aerated system. Anaerobic digestion is a closed system to maximize gas collection. c. Compost facilities process a wide variety of feedstocks. ADFs handle a narrow range of organic materials with higher nitrogen and moisture content. Compost is a valuable soil amendment (as noted in NW1) with multiple benefits to the soil, including improved carbon sequestration, increased water holding capacity, reduced erosion and sedimentation, improved beneficial soil biology, and plant resistance to disease. Biogas is a renewable energy source, but it also produces a digestate that is often land applied. Land application of digestate results in emissions. Composting the digestate before land application, however, would reduce these emissions and create a valuable soil amendment with all the benefits of compost. e. Composting generates fewer VOCs and GHGs than ADF.	These recommendations will be taken under consideration as we move forward. WA3 has been amended to remove reference to compost producing biogas.
Wendy Sommer	StopWaste	We recommend that the Air District develop specific rules and mitigation measures for the Bay Area through a collaborative process with affected parties, as in the San Joaquin, South Coast, and Mojave Districts. We recommend modeling the process used in those Districts, rather than applying the same or similar rules to the Bay Area, for the following reasons: a. The Bay Area is much closer to being in attainment for ozone than the other Districts, and could likely reach attainment through less aggressive limits. b. Applying the SJVPCD and SCAQMD rules directly to the Bay Area will likely result in an overestimation of GHG and CAP emissions for Bay Area composting facilities. This is because the organic material stream in the Bay Area is predominantly green waste and food waste, whereas the feedstock in San Joaquin is largely manure and agriculture waste. Emission factors for manure and agricultural wastes are higher than those for green waste. c. The current rules for San Joaquin and South Coast Districts appear to overestimate the VOC emissions from composting. A 2011 UC Davis study and others have found that most VOC emissions from composting green waste are non-reactive/low reactive compounds and do not contribute to ground level ozone formation	Any future rules will involve an open public, collaborative process to determine the appropriate information and data to be used for Bay Area rulemaking. We will address waste profiles appropriate for the Bay Area as we proceed with rules and/or programs for the waste sector.
Wendy Sommer	StopWaste	The additional heating load on the electricity grid from fuel switching, particularly for residential space heating, may coincide with the evening net peak period expected in future - thereby impacting the assumed co-benefit of peak power reduction for reducing cooling load	Guidance on specific energy efficiency and other strategies to balance impacts on peak load from fuel switching will be considered during the implementation of the building control measures.
Wendy Sommer	StopWaste	We support the Air Districts leadership to help local governments overcome regulatory and technical barriers	Identifying and addressing regulatory and technical barriers is an important facet of the Air District's work with local governments moving forward.
Wendy Sommer	StopWaste	Co-generation of wood chips is established but declining due to economic factors. In the current context, we recommend composting is prioritized as a main option for woody materials.	Air District staff will consider this recommendation as we move forward to implement the CAP's control measures.

Commenter	Organization/ Location	Comment	Air District Response
Wendy Sommer	StopWaste	Increasing intermittent renewables on the grid increases the variability of emissions by hour. CAISO, CEC, and other grid-related agencies are increasingly concerned with time-of-use. Demand response strategies are important. We encourage the Air District to track the anticipated trends which show a shift of net "peak" hours from traditional daytime peaks to a steep ramp-up in the evening; and explore promoting emerging technologies that support load shaping, including automated demand response and energy storage technologies. We recommend adding demand response and storage (providing guidance for local government permitting and IOU rate structures) to the last implementation action bullet regarding working with local governments. Additionally, the Air District could offer guidance on which types of energy efficiency measures would specifically reduce peak load.	Text has been added to Control Measure EN2 per the comment. Additionally, the Air District's new Technology Implementation Office will explore the emerging technologies. Guidance on specific energy efficiency measures to reduce peak load will be considered during the implementation of this control measure.
Wendy Sommer	StopWaste	StopWaste supports the Air District's Implementation Action to reduce emissions from food waste through advocacy for state and federal tax incentives for commercial food donation. A significant barrier to food rescue and recovery is donor concern about liability. Therefore, we encourage the Air District to advocate for increased protection to individuals and/or organizations under the existing federal Bill Emerson Good Samaritan Act and newly proposed California Good Samaritan Act (AB 1219).	Thank you for your comment. This can be considered as we move forward in implementing this measures.
Wendy Sommer	StopWaste	StopWaste recommends that the Air District add a Further Study Measure to address the Land Farming Source Inventory Category to limit emissions from land application of green waste and un-composted bio solids. We also recommend that the emission factor for this source be updated to reflect emissions from natural decay, rather than composting, which is currently used. Land application or farming of these raw materials results in higher GHG emissions than does composting, so the emissions from this source is likely underestimated.	Staff will continue discussion on these issues with StopWaste in implementing control measure NW1 and in evaluating emission factors in future inventory exercises.
Wendy Sommer	StopWaste	StopWaste recommends that the Air District add an Implementation Action to partner with CalRecycle to align efforts in creating model waste reduction programs or model policies. StopWaste recommends that the model policy for Zero Waste goals include waste reduction/prevention. Zero Waste is an aspirational goal which requires changing the structure of our global economy. In some countries, such as in Japan and parts of Europe, Zero Waste policies have resulted in the increased use of incineration in order to avoid landfilling. In Alameda County, a county charter initiative amendment, "Measure D", bans incineration of garbage in unincorporated areas of the county. Rather than a Zero Waste goal, StopWaste strives for a waste diversion goal of less than 10% of readily recyclable/compostable materials in the landfill by 2020, while also focusing on source reduction and waste prevention.	Staff will consider these during the implementation of this control measure.
Wendy Sommer	StopWaste	StopWaste supports the Air District's Implementation Action to support the reduction of green waste going to landfill. Reducing wasted food at the source has lower emissions than processing food waste through composting or AD. In addition, decreasing the overall volume of organics going to composting and AD could free up capacity at existing facilities. Therefore, we encourage the Air District to increase support for model policies, legislation, ordinances and programs that prioritize food waste prevention and the recovery of edible surplus food to feed people and/or animals.	Thank you for your support. We look forward to working with StopWaste as we implement measures to divert green waste from landfills.
Wendy Sommer	StopWaste	Wherever green waste is mentioned, add food waste if appropriate	Comment noted
Wendy Sommer	StopWaste	StopWaste has reviewed Air District documents that contribute to the development of the proposed control measures. We recommend that the Air District revisit its GHG emissions assumptions about landfill gas capture rates in the Base Year 2011 Emissions Inventory. The methodology for landfill fugitive emission sources assumes 75% of landfill gas is captured. However, the majority of organics decompose within a short period of time after delivery to the landfill and before the installation of any gas recovery system. Typically landfill gas collection systems do not become operational for 2-3 years after the waste has been deposited, whereas emission fluxes for organics decomposing in landfills occurs within 0-90 days of deposition. This means the majority of landfill Criteria Air Pollutants and GHG emissions are fugitive area source emissions not quantified by the Air District's emission inventory.	We will consider your suggestions as we move forward with any updates/revisions to the GHG emissions assumptions that go into our inventory and forecast.

Commenter	Organization/ Location	Comment	Air District Response
Wendy Sommer	StopWaste	StopWaste supports amending Regulation 7 to strengthen odor standards and enhance enforceability. To meet the goal of enhancing enforceability, we recommend that the Air District add an Implementation Action to collaborate with CalRecycle in developing standards and leverage existing enforcement efforts by Local Enforcement Agencies (LEA's). In practice, this measure could include the development of monitoring and detection methods to accurately identify odor sources, especially where multiple potential sources exist, and providing training and resources for Air District, CalRecycle, and LEA staff to provide consistent enforcement.	The details for how odors will be monitored and controlled will be determined during the rule development stage of this control measure; we will consult with CalRecycle, LEAs, StopWaste and other as we proceed.
Wendy Sommer	StopWaste	We recommend including the following in any model ordinance and/or guidelines: a. Required minimum rootable soil volume for street trees to grow to full size. We suggest referencing the City of Emeryville's landscape requirements ¹ and minimum rootable soil volumes. Another helpful resource is DeepRoots web page of municipal codes. b. Compliance with the state's Model Water Efficient Landscape Ordinance (MWELO), which requires the use of 4 cubic yards per 1000 square feet of compost and 3 inches of mulch to create healthy soil. c. Prioritize the planting of large stature trees where appropriate as they have exponentially larger positive impacts for clean air, storing carbon and reducing stormwater runoff than small stature trees. d. Support sustainable landscape standards. For example, the Bay-Friendly Rated Landscape Scorecard awards points for the planting of large stature trees.	These comments will be considered as we move forward in implementing this measures.
David Gassman	Sunflower Alliance	The goal being to have clean air and protect the climate, it is necessary to adopt Rule 12-16, putting a cap on GHG, PM, NOx and SO2	See Master Response 1
David Gassman	Sunflower Alliance	The health impact of tar sands crude will be enormous. It's very dirty, containing TACs. We need Rule 12-16 to help keep tar sands in the ground.	See Master Response 1
Bill Hilton	Sunnyvale Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2
Subrata Sircar	Sunnyvale Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Subrata Sircar	Sunnyvale Resident	In particular, as much as companies hate regulations, if we do not make them reduce GHGs, they won't. It is always more profitable for them to pollute rather than modernize, so we must require that they modernize and reduce their pollution via regulation, not incentives.	See Master Response 2
A Bonvouloir	Sunnyvale Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Bill Hilton	Sunnyvale Resident	The Plan shows (in Figure 3-9) that California's climate program is not reducing Bay Area GHG emissions to the 1990 level by 2020, and it looks like we will fall farther behind. The Plan should include a discussion of why California efforts aren't reducing the Bay Area's GHG emissions to highlight the importance and necessity for regional action. It should also include specific actions--regulations if necessary--to show how the Bay Area and the state may catch up our goals.	Master Response 3

Commenter	Organization/ Location	Comment	Air District Response
Bill Hilton	Sunnyvale Resident	The Plan needs to provide incentive funding for the installation or change-out of fossil fuel-based space and water heaters with electric heat pumps and solar water heaters in commercial and multi-family developments (SS30 & BL2) and needs to propose a future effective date for the phase-out of the fossil fuel appliances.	See Master Response 5
	Sustainable Solano County	Plan overlooked urban agriculture and small-scale local food production. The sustainable backyard gardening can contribute to low-carbon footprint diet. Permaculture-based backyard gardens fed by laundry-to-landscape greywater and stored rainwater reduce water consumption and GHG by eliminating transportation and chemical use on foods.	These recommendations will be considered during implementation of this measure.
	SweetGrass Longhouse	I cannot speak to other parts of the world, but American children are rapidly becoming unable to sustain health on the planet Earth. Poor air quality, chemical sprays and pesticides, Coal and smog, along with changing climate concerns are reducing our species' ability to Thank you for the opportunity to comment on the Air District's Draft 2017 Clean Air Plan. I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
	SweetGrass Longhouse	I recently retired from teaching. In the last decades I followed the continual decline of health and well-being of my student population. Allergies and Asthma became so increasingly an issue of impact and import that I (we) had to readdress our curriculums to accommodate who could run in gym, who could attend gym, who could play outside, who could be outside, or in what weather they could be outside. Children would have to be escorted to the Nurse's office for inhaler treatments, and others missed school all together, staying at home or being hospitalized, again causing the redevelopment of curricula to accommodate this increasingly pressing dilemma of human sustainability. The children are the canaries in the coal mine. Clean air, clean water, clean food, are all really good ideas. Sustaining human life development is also a good idea, one I have watched over my years as a teacher, become of little importance to those who would own us.	The rise of childhood asthma is a concern at the Air District, and we understand that there are many factors that may be causing it. We see our role as working to reduce airborne particulate matter and other air pollutants from mobile and stationary sources, in an effort to create healthy breathing environment for all members of the Bay Area. You may be particularly interested in our CARE program, which looks at efforts to address these kinds of problems in the most impacted areas of the region.
Brendan Folie	UC Berkeley	TR9 discusses promoting bicycle and pedestrian facilities. However, how well this rule works out depends on how cooperative local planning agencies are. I would encourage the Air District to support more stringent regulations whenever possible, and use all possible incentives (including funding) to encourage local planning agencies to support low-GHG development.	This transportation measure is not regulatory. Incentives and funding for capital projects are the core component of the projects being proposed in this measure. TR10 addresses strategies related to land use and transportation.
Brendan Folie	UC Berkeley	The Air District should focus more on aiding the transition to solar energy generation. The Bay Area can and should be powered primarily on solar power generated nearby. I liked the support of Community Choice Energy programs, and would like to see the Air District supporting solar in other ways (through legislation advocacy, for example	Air District staff will consider this recommendation as we move forward to implement the CAP's control measures. The Air District will continue to advocate for clean energy, including continuing to defend and expand Community Choice Energy programs.
Brendan Folie	UC Berkeley	SS11 proposed to consider limiting emissions from refineries. Depending on how this rule is interpreted, the results could be quite different. On one end it could have no effect. But if strict limits are placed, then the effect could be significant	See Master Response 1 and 7
Brendan Folie	UC Berkeley	More sophisticated sensors could be employed. For example, distributed networks of low cost air quality sensors and hyperspectral imaging cameras are two technologies that could be deployed to monitor the generation and diffusion of pollutants on the local level.	The District is actively engaged in evaluating, supporting, and implementing innovation around more flexible and efficient deployments of measurement technologies. Both of the technologies you mention may find useful application in guiding the Air District's research and policymaking in the near future. We collaborate with UC Berkeley, LBNL, and other researchers on my of these efforts.

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Lacey Hicks	Union City	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Jennifer Tomlin	United Marin	Re-introduce close lines	This idea was added to the draft Plan in control measure BL2.
Roy Molseed	VTA	TR8 should extend to include all organizations, public agencies or entities interested in piloting or conducting first/last mile studies or programs	As stated in TR8, the Air District is interested in providing incentive funding to pilot projects to determine feasibility of implementing cost-effective car sharing and other innovative last-mile solution trip reduction strategies. A multitude of organizations would be eligible to apply, including public agencies.
Roy Molseed	VTA	TR2 does not discuss establishing specific vehicle trip reduction targets and an enforcement mechanism if not met.	Details such as trip reduction targets will be developed during implementation, or at the local level, as they develop their own local ordinances/programs with regional incentive or grant money.
Karen Irias	Walnut Creek	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Jan Warren	Walnut Creek Resident	Notwithstanding that statement and the vision presented, however, the purpose of a carbon intensity rule for SS12 should be to hold the line or decrease carbon intensity at refineries, not pretend to set a limit, then immediately provide a means to avoid the limit and allow more tar sands to be processed	See Master Response 7
Laura Cottril	Walnut Creek Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Judith Schumacher-Jennings	Walnut Creek Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Trisha Burnap	Walnut Creek Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." However, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). We need additional regulations to assure we reduce GHGs in a meaningful time frame or else we will never meet our climate goals.	See Master Response 2

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Jan Warren	Walnut Creek Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Joel Sokolsky	Walnut Creek Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Susan Christy	Woodacre Resident	I support this key statement from the document's Executive Summary: "To protect public health and stabilize the climate, we must take aggressive action to eliminate fossil fuel combustion and transition to a post-carbon economy." Notwithstanding that statement and the vision presented, however, the Plan seems to have few enforceable measures for reducing greenhouse gases (GHGs). Please give careful consideration to additional regulations that would assure we reduce GHGs in a meaningful time frame and meet our faraway climate goals.	See Master Response 2
Bob Brown	WSPA	WSPA does not believe it is warranted or within the authority of the District to use its Clean Air Plan policies to seek elimination of fossil fuel usage considering the improvements to air quality and the public demand for energy	The Plan contains 85 control measures that represent a mix of regulatory and non-regulatory approaches to reducing criteria pollutants, toxic air contaminants, and greenhouse gas emissions. The regulatory measures have been thoughtfully proposed by staff and all fall into areas where the Air District has clear regulatory authority. The non-regulatory measures, many of which are designed to further the objective of dramatically reducing fossil fuel use, do not require Air District regulatory authority in order to move forward with implementation. While we agree there will always be public demand for energy, the Plan attempts to decrease that demand, and increasingly satisfy it with non-fossil fuel-based sources.
Bob Brown	WSPA	The District's Plan identifies the need for higher-efficiency buildings, but neglects mentioning the potential health impacts on indoor air quality with lower air exchange rates	This is an important point, and one that will be considered during the implementation of control measure BL1.
Bob Brown	WSPA	WSPA has previously submitted comments regarding the legal vulnerability of the District's proposed localized regulation of greenhouse gases (GHGs). There is publicly available information from both the California Air Resources Board and the Intergovernmental Panel on Climate Change regarding the efficacy of regulating sources that are already covered by the state's Cap and Trade Program. Climate change is a global issue that accordingly needs to be addressed on a wider scale than solely within the District's boundaries. The Plan should be clear on its objective as it relates to climate change in order to avoid unintended consequences, and specifically the potential for costly, ineffective and inequitable climate policies and regulations.	The Bay Area is the 21st largest economy in the world and as such represents a significant contribution to global GHG emissions. Through our own actions directly, and through the example we set, Staff believes that it is effective and appropriate for the Bay Area to take all action possible to reduce these emissions. The Air District's open and public rule development process is designed to be consistent with the California Health and Safety Code requirements for developing new regulations. This includes an analysis of the Air District's legal authority, cost effectiveness of the proposed requirements, and the economic costs on industry. These requirements ensure that future rules do not result in ineffective and/or inequitable policies and regulations. We will continue to work with ARB and CAPCOA to assure that our rules do not conflict with state or other regional programs.

Commenter	Organization/ Location	Comment	Air District Response
Bob Brown	WSPA	<p>The Plan’s opening statements in the Executive Summary acknowledge that air quality now is the best it has been in decades (page ES1), and that Bay Area air quality (which the Plan identifies as including average PM2.5 concentrations of 8.7 µg/m3) meets both the national and California Ambient Air Quality Standards for PM2.5 (12 µg/m3 annual average, 35 µg/m3 24-hour average) which are set at a level “<i>requisite to protect the public health</i>”, “<i>allowing an adequate margin of safety</i>”. However, the District then identifies that the same PM2.5 (excluding diesel PM2.5) is currently resulting in 2,500 premature deaths per year and an annual cost of \$21.6 billion dollars, “<i>based on the assumption that every 1.0 µg/m3 reduction in PM2.5 concentration results in a one percent reduction in mortality rate for individuals over 30 years old</i>” citing a 2006 document that was not published in a peer-reviewed journal This assumption is not representative of the spectrum of more recent peer-reviewed scientific literature, which includes papers that identify many questionable assertions in this analysis. WSPA urges the District to accurately present information that properly reflects the full spectrum of peer-reviewed and credible knowledge on these subjects. This should be accomplished by a) identifying the well-documented uncertainties about causality and the overestimation of risk, (b) estimating the extent of conservatism being applied, and (c) determining what a “best guess” of the impacts are likely to be, not just the “worst case” or “potential” risk.</p>	<p>We appreciate WSPA's attention to using science in an accurate and balanced manner. As you note in your comment, the literature offers a spectrum of findings. Our scientists review a wide range of documents, including peer-reviewed articles in scientific journals, to gather information and make recommendations that form the basis for of judgment and that guide our mission to protect public health. We are, of course, always happy to discuss data and uncertainties in analysis, taking in to account ways that particulate matter impacts may be overstated or underestimated.</p>
Bob Brown	WSPA	<p>The second unintended consequence (of local and direct regulation of GHGs) is the inequitable regulation of stationary sources. This occurs because a regulating authority of another California jurisdiction may have a different climate change goal, even though the pollutant has no distinction in terms of localized air quality impacts. For example, the BAAQMD may require a local source category to achieve a GHG emissions standard while another air quality management district in the state may require a different GHG standard. The direct regulation of greenhouse gases on any source category should be handled by the California Air Resources Board to prevent inequitable regulation of sources by individual air districts.</p>	<p>The Air District works with the California Air Pollution Control Officers Association (CAPCOA), which includes all 35 individual air pollution control agencies in the State, and the California Air Resources Board (ARB) to coordinate the development of rules and regulations to the maximum extent possible. The Air District also prepares socioeconomic studies to evaluate a proposed new or amended rules’ impact on affected sources within the Bay Area through an open and public rule development process. This process allows for any other air district or the ARB to consider similar or identical rules for adoption by their approving body. Therefore, the potential for any inequities associated with an Air District specific GHG rule within the Bay Area will be identified, evaluated and considered by the Air District Board of Directors prior to approval of a new or amended rule.</p>

Commenter	Organization/ Location	Comment	Air District Response
Bob Brown	WSPA	The District's analysis of how changes in emissions of PM and PM precursors will affect changes in ambient PM concentrations is far too simplistic. There should be a greater discussion on the issues of long-range transport, PM formation and re-volatilization, limiting reagents with regard to ammonium salt formation, and known inaccuracies/uncertainties in regional emissions inventories. This level of important analysis has been omitted from the District's Plan.	The Air District's analysis of how changes in emissions of PM and PM precursors will affect ambient concentrations is based on both comprehensive modeling and ambient trend analysis; it is not simplistic. We utilize the best available tools and analysis techniques. In regards to the comment on long-range transport – if that refers to regional transport, we specifically selected a large modeling and analysis domain to include the impact of emissions hundreds of miles from the Bay Area on the Bay Area's ambient levels. Our domain extends from about 100 miles offshore to the Sierras and from Shasta to Bakersfield and covers regional transport. If the comment refers to intercontinental transport, we have been collaborating with federal and state agencies including U.S. EPA, NOAA, NASA, and California Air Resources Board to quantify the influence of intercontinental transport to Bay Area ambient levels of ozone, PM and their precursors. This is an ongoing project and its progress largely depends on the progress of federal agencies. Both hemispheric modeling and satellite data are being considered to improve the estimates of intercontinental transport. PM formation and re-volatilization are handled within the CMAQ model, which we used to assess how changes in emissions of PM and PM precursors affect ambient concentrations. In regards to ammonia, several control measures specifically target reducing ammonia; and ambient PM's response to reductions in ammonia emissions is discussed in the Plan. In terms of inaccuracies in regional emissions inventory, the Air District has been continuously improving emission estimates. Emissions from on-road sources, shipping, aircraft, etc. are estimated by federal and state agencies, with whom we collaborate.
Bob Brown	WSPA	The District's Plan needs to acknowledge that reducing one pollutant can create increases (i.e., tradeoffs) in others. The District's Plan advocates for reductions in NOx by citing that increased NOx can contribute to ozone. However, the District's Plan acknowledges in Appendix D that NOx reductions actually increase ozone concentrations in urban parts of the Bay Area	The main goal of a multi-pollutant planning approach is to ensure that trade-offs are considered and the types of conflicts mentioned in this comment are avoided. It should be noted that in recent decades, Nox and VOC emission in the Bay Area have declined significantly and ozone levels have declined as well.
Bob Brown	WSPA	Locally regulating source categories which produce carbon-intensive goods will simply displace GHG emissions to another location and have a zero to negative impact on climate change.	Proposed Rule 12-16 would establish GHG emission limits on refineries or refinery dependent business in the Bay Area. Based on annual GHG emissions for each affected facility from the year 2012 through 2015, the latest year information is available, no facility exceeded its currently proposed Rule 12-16 GHG limits for any year in which data are available. However, these years also were years of relatively low gasoline consumption in California. Total gasoline consumption in the state peaked in 2004 and then declined between 2004 and 2012, per data from the California Energy Commission. Gasoline consumption has been increasing every year since then. If gasoline consumption continues to increase, the limits in Rule 12-16 may prevent Bay Area refineries from increasing production to meet demand. This scenario could cause conflicts with state GHG regulations and perhaps result in increased GHG emissions outside the Bay Area due to the manufacture of transportation fuels being shifted elsewhere.

Commenter	Organization/ Location	Comment	Air District Response
Bob Brown	WSPA	The District's draft socioeconomic analysis report is based on values that are either poorly referenced (e.g., "Source: BAAQMD") or incompletely supported. The Plan does not clearly identify what specific values were used from the reference or how the District used those values in its calculations. The District claims that the costs of 17 control measures are "known" before most of those rules have even been drafted, and provided no supporting details on how those figures were estimated.	The cost estimates used in the draft socioeconomic report come directly from the draft control measures, described in Volume 2 of the Plan. Cost estimates are developed for control measures using the best information we have, at the time the control measure is drafted. More detailed cost analysis is performed during rule-making. During rule-making, much more information is known regarding control technology, and therefore costs.
Anonymous - Open Space Forum		Make fine and fee records public. The recent new[s] stories about destroying polluter records and covering up relationships with refineries are disturbing, to say the least.	Comment noted.
Anonymous - Open Space Forum		There should be no governmental restrictions on farming air quality. Adding costs to farmers will only force them to leave the BAAQMD territory and move elsewhere, which will reduce agricultural jobs. This will also be counter-productive because it is wrong to think that just because farming is done outside the BAAQMD territory that pollution won't migrate into the BAAQMD territory because the air can freely circulate around Planet Earth.	If actions displace production outside the Bay Area only to have importation bring them back in, we call that process "leakage." We strive to assure that no leakage occurs as a result of our rules. We also value the agricultural production that takes place within the Bay Area, and our programs are intended to sustain it and enhance its quality.
Anonymous - Open Space Forum		How about working with ranchers/farmers to encourage/teach the use of carbon sequestering?	There are multiple programs being developed to aid farms in sequestering carbon and decreasing greenhouse gas emissions. Among them is the Healthy Soils Initiatives of the California Department of Food and Agriculture, and BAAQMD strives to support this program.
Anonymous - Open Space Forum		[Supports including] edibles in your urban planting plans. Decrease the distance of farm to field to zero miles, zero emissions.	We believe these ideas are worth considering as we move forward, but they are currently beyond the scope of our Plan.
Mary Dateo		Add mini-farms closer to urban consumers to reduce transportation	An agricultural system that decrease the distance between food production and consumption can decrease the transportation footprint of food. Depending on the situation, hyper-local production might increase the cost of food because of the high land values interior to the Bay Area.
Marti Roaut		Engage with agro-ecology and healthy soils groups	The Air District strives to support the Healthy Soils Initiatives of the California Department of Food and Agriculture and expects that agro-ecology and healthy soils groups will be among those participating.
Ambo Paukert		Provide promote and pass regulations regarding alternatives to agriculture burning.	Amendments to the Open Burning Rule were adopted in 2013. This idea may be incorporated during implementation, i.e. development of best practices.
Mary Dateo		Should explicitly say no more buildings on open space or minimize expansion into open space	As the cities and counties, who make the land use decisions that you are encouraging, choose urban growth boundaries as part of their development and climate change mitigation strategies, the Air District works to support them.
Mary Dateo		As traffic is reduced, convert over capacity street lanes to green belts and bike lanes	See Master Response 4

Commenter	Organization/ Location	Comment	Air District Response
Gladywn d'Souza		Incentives for electric bikes	Currently, there are no Air District funds specifically identified for electric bikes. However, if a grant applicant were to propose electric bikes, as perhaps a "first mile, last mile" solution or as a pilot project to reduce trips, the Air District could consider funding such an effort.
Marti Roach		Plan must take a tougher stance on improving alternative transportation access and service. Many roads are dangerous for cyclists	See Master Response 4. Safety improvements for cyclists are important; they are discussed in TR9.
Nadia Stanis		Plan states that SS12 would set limits on refineries, and then allows for liberal offsets and plans to raise limits on biofuels. This offset scheme would allow increase biofuel production to offset carbon intensity from processing tar sands	See Master Response 7
Anonymous - Open Space Forum		BL2: Thank you for incorporating our comments on the previous draft of BL2. We support the implementation actions and look forward to the Air District's guidance for local government permitting and enforcement options to encourage low/zero carbon technology	We hope you will engage with your local government as it develops and implements GHG reduction programs.
Anonymous - Open Space Forum		I believe the largest sources of pollutants in the Bay Area are the stationary fixed (industrial) sources, which are also usually in or near low income neighborhoods, therefore, I feel a major part of your focus should be focused on improvements to the homes and buildings near industrial polluters through grants and gifts, to improve insulation, indoor air quality, and ventilation.	As discussed in our Plan, the CARE program focuses attention to the communities within the region that have the highest emissions and concentrations of air pollutants of concern and vulnerable residents; we are working concertedly to reduce emissions from both stationary and mobile sources to assure that everyone in the Bay Area has a healthy breathing environment. We appreciate your suggestion to develop programs, such as the use of grants and gifts, to help reduce exposure in areas with depressed air quality.
Anonymous - Open Space Forum		I would like to see these measures become stronger sooner. Pollution by refineries and other fossil fuel processors is too dirty and dangerous. I would like to see all trades stopped out of the Bay Area so caps have to be utilized fully, not mitigated.	See Master Response 1 and 2
Shelia Thorne		Plan goals need to be backed up with more enforceable rules if it is going to be successful. The carbon intensity rule should hold the line or decrease carbon intensity at refineries, not set a limit and then provide a means to avoid it. There should be no means by which tar sands could ever be processed. The offset scheme would allow increased biofuel production to offset increased carbon intensity.	See Master Response 7
Anonymous - Open Space Forum		Carbon sequestering is very promising and should be encouraged and funded in any way possible.	Comment noted.
Anonymous - Open Space Forum		Yes! More wetlands!! Please help Alameda develop wetlands to protect our shorelines from rising tides and for sequestration.	Comment noted.
Mary Dateo		Soil management and carbon sequestration should include suburban and urban spaces	A wide variety of soils and lands could be included in the management of soils and soil carbon. This Plan's first priorities are engaging managers of larger tracts of lands, such as farms and forests, to increase carbon sequestration and decrease carbon emissions. Over time we hope to work with cities and counties to promote these practices in urban and suburban areas too.
David Bezanson		Part of the plan is adding more EV recharging stations. This infrastructure should include 240 volt DC charging stations next to major highways in the Bay Area. The governors of 3 nearby states, including NV, jointly drafted a plan to build such.	The specific type of charging stations and their locations will be decided as the Clean Air Plan and Plan Bay Area incentive programs are implemented.

Commenter	Organization/ Location	Comment	Air District Response
David Bezanson		Ordinances banning smoking have been passed in Bay Area cities, e.g. San Bruno. Their chief objective to improve local air quality by decreasing smoke emissions within and proximal to public buildings and parks, businesses, and multifamily housing. Please include tobacco smoke in the plan and take measures to protect public health	We agree that reducing smoking is a good idea. It simply is beyond our authority to implement smoking bans and restrictions. That is the work of the cities and counties that you rightly identify in your comment.
Anonymous - Open Space Forum		I would also like to note that top section of your website showing a house fireplace chimney as a cigarette is offensive to me; it is proof positive to me that the BAAQMD is trying to bully the citizens by forcing them to do things the liberal Democrat way, rather than the BAAQMD being a fair, non-partisan, and impartial referee of society that it is supposed to be. Things like house fireplace chimneys shown as cigarettes will reduce public confidence in the BAAQMD.	Comment noted.
Tom Heinz		We need to regulate emissions from restaurants	Air District Rule 6-2 limits emissions from restaurants. Further regulating emissions from restaurants is discussed in control measure SS33.
Anonymous - Open Space Forum		CBEI addresses leakage inherent in geographically based inventories, which can have the unintentional consequence of encouraging out-sourcing of commercial activities and their related emissions to other jurisdictions or regions. This can have detrimental impacts to the local economy, creates an artificial conflict of interests between local government priorities of sustainability and economic development, and only relocates total GHG emissions without reducing them (and possibly increasing them). To continue to advance progress on addressing consumption-related emissions, we recommend adding a Future Study Measure FSM_WA1: Consumption-based Emissions Reductions.	Even though no further study measure on this topic is written explicitly into our plan, our climate protection planning and actions will use findings from the CBEI to inform our programs.
Erik Ferry		I am a fan of biofuels...to a point. A decentralized solar, wind, and tidal electrical generating system sited primarily upon the existing massive collection capacity of the current built environment should be emphasized, however. Use your authority to bring this on more strongly. As you know, the combustion of even carbon-neutral biofuels will produce additional air pollution in a region which already has plenty.	Air District staff takes note of the need to be clear about the appropriate role of bioenergy and will consider this comment as we move forward to implement measures that include bioenergy.
Bruce Naegel		Move to electric appliances and cars, and use renewable sources for electricity. Weatherize homes.	The Air District agrees that the approaches raised by the commenter are important elements of the transition to a carbon-free future outlined in the Plan.
Anonymous - Open Space Forum		This measure promotes an increase in co-generation. Co-generation of wood chips is established but declining due to economic factors. In the current context, we recommend that composting is prioritized as a main option for woody materials, given the need identified in measure NW1 to provide compost for carbon sequestration.	Air District staff will consider this recommendation as we move forward to implement the CAP's control measures.
Anonymous - Open Space Forum		Also, encourage communities and power companies to reward rooftop solar and allow solar generation which does not go back into the grid. I want a solar generated battery source for my electric car when I get one!!	Air District staff will consider this recommendation as we move forward to implement the CAP's control measures.
Anonymous - Open Space Forum		I would like to see us convert from natural gas soon	Comment noted.
Anonymous - Open Space Forum		Imported electricity is not likely going to be clean energy from out of state, it is going to be petroleum fired power generation which just moves the emissions out of state and doesn't solve the GHG issues you are claiming to be working so hard to eliminate.	The CAP advocates for decarbonizing all energy consumed in the Bay Area, regardless of where it is generated. Part of the Air District's efforts to green the electricity that is imported into the region, including from outside the State, is to work with electricity providers in the Bay Area to maximize the contribution from renewable energy sources (see Control Measure EN1).
Anonymous - Open Space Forum		You are going to put THOUSANDS of people out of work with the implementation of these proposed reductions. The restriction are unfairly placed on a fixed sources that produces less than 5% of the emissions you are attempting to control. These rules will have little to no effect on the overall emission on our area.	Comment noted.

Commenter	Organization/ Location	Comment	Air District Response
Anonymous - Open Space Forum		...many people would like to move to a petroleum free environment but it isn't feasible yet. There just aren't enough electric cars nor are there enough sustainable green energy facilities creating electrical power even to run them if they were available.	The CAP lays out a vision to a post-carbon Bay Area that will require a transformation in our lives - how we live, how we travel, what we produce and what we consume. As noted by the commenter, two key changes will be in how our energy is generated and the types of cars we drive. Both are changes that are already underway, esp. in the Bay Area, and will require the actions of all - the Air District as well as other government agencies, private companies, and the public.
Anonymous - Open Space Forum		If your plans to shutdown refineries in the area as a way of reducing air pollution ever pan out, all you will really be doing is shifting the emissions to other areas in the world and eliminating jobs in the area. That might help though because the population in the area would drop because of the workers moving out of the area to where the new jobs in oil refining and production will be replaced. This of course will help Northern California because the air here will be cleaner, right? That is not the case. In many instances the air coming out of some of the furnace in a refinery are cleaner than what the ambient air going into them is. Our economy runs on petroleum, the food we eat comes in by vehicles running on petroleum, our daily lives are surrounded by petroleum products like the phones we use the bodies our electric cars are made from our watches even some of our clothing to name just a few. It is naive of those who think that shooting down refineries will truly help our environment and our economy. Refineries not only provide jobs they provide money directly to the state and local agency through the huge taxes they pay. These plans need to be thought through and not bullied into our society by the few but vocal minority that are screaming for the closing of fixed sources.	Comment noted.
Anonymous - Open Space Forum		Since the BAAQMD territory includes rural and unincorporated areas, which are sparsely populated, and won't have noticeable health risks to individuals, parcels larger than 1/2-acre should be exempt from all emergency backup generator restrictions.	Concerns about emissions from emergency backup generators include localized, regional, and global impacts. We will consider impacts to nearby receptors as we implement this measure.
Pat Walker		There is too much reliance on voluntary action and public education. Public education is always necessary but it does not reach enough people or cause them to change their habits. Spare the Air days are almost useless unless they are mandatory and impose consequences.	See Master Response 2. Public education is an effective element of Air District programs.
Anonymous - Open Space Forum		Fully engage cities and get community involvement at the local level. I live in Alameda and never hear about the city doing anything in many of these areas, although we do have AMP, which offers good options for renewable electricity.	As you suggest, the Air District is in ongoing communication with the 101 cities and 9 counties in the Bay Area. Each one varies in its approach to air quality and climate management and in its communication with its citizens. We are working to support each jurisdictions efforts, as well as engage the public directly through our own Community Engagement Office.
Loring Dales		Consider the refinery emissions caps and the HRA proposals separately and to move forward with a full analysis of such proposed caps right away.	Staff will present these proposed rules to the Board of Directors as separate items.
Anita Rees		Passing Rule 12-16to cap refinery emissions would be a significant move for the Bay Area's health and welfare.	See Master Response 1
Emilie Anna Reaves		Reconsider the offset scheme proposed in SS12 regarding providing credits for biofuels production via the LCFS framework. There is no reason to incentivize biofuel production when focus and dollars could be diverted to more sustainable and economically transformative efforts to electrify the transportation sector	See Master Response 7
Joelle Provost		SS12 is too vague, and ultimately the result is that there will be more tar sands. The rule of carbon intensity simply provides the façade or gesture of decreasing carbon intensity, but slips the permission of more tar sands to processed. We need your staff to set firm rules, unbending rules, no wishy washy framework that will create grounds to reduce emissions substantially by 2020.	See Master Response 7

Commenter	Organization/ Location	Comment	Air District Response
Erik Ferry		I would urge disallowing 'offsets' for petroleum refineries exceeding emission limits by producing more biofuels or other compensations, such as carbon-trading...Refineries should keep within emission limits and produce more biofuels...Offsets are a half-measure. That will be exploited by petroleum interests	See Master Response 1 and 7
Anonymous - Open house		Promote alternatives to clothes dryers, i.e. drying racks, etc.	This suggestion was added to control measure BL2
Laurie Limeh		Could we have a campaign to try and get building owners, retail, theaters, etc., to decrease energy use by dialing back air conditioning	Encouraging building energy efficiency will be one of our key priorities as we move forward with implementation.
Anonymous - Open Space Forum		The demand for energy far exceeds the supply of alternative fossil free energy sources. Fossil free energy is not possible. Certainly it is advantageous to maximize the use of alternative energy.	The CAP sets out a vision for when renewable energy sources will be able to meet most, if not all, of the demand. Key to accomplishing this vision is decreasing overall demand for energy.
Nadia Stanis		Plan needs more enforceable rule regarding tougher GHG reductions, as it relies heavily on incentives	See Master Response 2
Martin Poitras		Please pass rule 12-16. To achieve emission reductions we need to create an enforceable cap. And restricting refining of dirty tar sands oil would also be socially beneficial	See Master Response 1
Emilie Anna Reaves		I urge the AD to adopt more enforceable rules for petroleum refineries to drastically reduce it climate impacts	See Master Response 1 and 7
Nadia Stanis		Plan is step in right direction, however too soft, incentivizing rather than enforcing standards. We need firm guidelines and regulations, rather than suggestions	See Master Response 2
Pat Walker		[Supports] ...more mandatory action with more clout.	See Master Response 2
Susan Harris Gladywn d'Souza		Consider subsidies, grants, incentives to oil refineries to help them with the cost of plugging leaks include an equity component for addressing criteria pollutants in communities of concern	Comment noted. Assuring clean, healthy air in all Bay Area communities is a basic objective of this Plan. The CARE program supports Air District programs to improve health in disadvantaged communities.
Ann C Resser		The AD should not adopt a rule that lowers Bay Area emissions, while increasing exports of fossil fuels	As we move forward with our Plan, we will continue to pay attention to these issues to avoid migration of carbon emissions outside of the Bay Area.
David Bezanson, Ph.D		Provide education on divestiture of public and private funds from fossil fuel companies and others producing harmful products. Catalyze the local renewable energy industry, e.g., via new issues of green municipal bonds.	Comment noted.
Kelsey Poole		AD should require residential composting	The Air District does not have regulatory authority to require residential composting. However, we encourage and support local governments to adopt local ordinances and/or programs to promote residential composting.
David Bezanson		The document refers to health hazards from being "near" freeways. Could the District expand on this concept to give city planners a quantitative guideline on how big a buffer should be placed along freeways?	To address the issue of healthy infill development, i.e. development near freeways and other sources of air pollution, the Air District prepared a guidance document entitled <i>Planning Healthy Places</i> . This document includes important information for local governments, developers, and the general public, including the location of communities and places throughout the region that are estimated to have elevated levels of fine particulates and/or toxic air contaminants. These areas are shown via web-based, interactive maps. The document also includes best practices that may be implemented by local governments and developers to reduce health risks from air pollution in these locations that experience elevated air pollution levels.

Commenter	Organization/ Location	Comment	Air District Response
David Bezanson		Health effect of PM2.5. Since PM2.5 is identified as a major health risk, could the document expand on how the public can avoid emitting or being exposed to this pollutant. In particular, pellet fireplaces are often sold as very low polluting devices. Is this a valid statement?	More information on particulate matter is available on the Air District's website: http://www.baaqmd.gov/plans-and-climate/air-quality-plans/current-plans
Anonymous - Open Space Forum		TR19 Trucks....: There is no such a thing as a zero emission truck (or any other device). Electric powered items also pollute. Since the generation of electricity is 30% efficient, and electric motors are 90% efficient, the overall efficiency of electrical items is 27% (i.e., 30% multiplied by 90% equals 27%). Is also wrong to think that just because the power plants might be outside the BAAQMD territory that they will not pollute our territory, because the air is free to circulate around Planet Earth.	Thank you for your comment. We certainly recognize that in order to meet our climate objectives, we must decarbonize electricity. This is a key priority in the 2017 Plan.
Tom Yamaguci		Supporting increased use of biking and walking means more affordable housing, higher densities. We need to get people to understand that opposing housing densities means fewer people can walk to shopping, and other destinations. Transit less efficient with sprawl	The Air District supports community choices to develop with densities that can reduce pollution, and we encourage transit-oriented development. We also work to assure that dense development protects the health of residents using both health-protective design and appropriate exposure-reducing technologies.
Erik Ferry		...The [Draft Plan] lacks regulatory sticks. I would favor ...investment in more positive incentives for our Bay Area fossil-fuel energy companies to get serious about post-carbon and carbon-neutral renewables alongside greater regulations with teeth...	See Master Response 2
Anonymous - Open Space Forum		I believe the largest creator of pollutants in the Bay Area is the fixed industrial sources. I feel the regulations and restrictions on them should be very stringent. At this time we have several very old refineries lining the shores of the northern bay and the greatest thing we could do for everyone is to force them to upgrade their systems. They have no right to pollute the air and water we all need to live for their profit. I urge you to please increase your funding for enforcement of current regulations.	See Master Response 2
Anonymous - Open Space Forum		Definitely would love to see more rewards go to those who effectively recycle and minimize throw-aways.	Comment noted.
Anonymous - Open Space Forum	 TR23 Lawn and Garden Equipment: For Lawn and Garden Equipment, electrically operated equipment can also produce deadly electrocution hazards when water is present, and fires when they need to link multiple extension cords in series to get from the power outlet to the work location. The best public policy would be to let citizens use the lawn and garden equipment they deem appropriate without any governmental restrictions. The amount of use of this equipment will have an insignificant effect on air quality.	Thank you for your comments. Control measure TR23 deals directly with lawn and garden equipment. Use of gasoline lawn mowers and leaf blowers contribute to air pollution, primarily through the release of volatile organic compounds (VOC) and particulate matter (PM). While progressively more stringent emission standards have reduced pollution from lawnmowers and leaf blowers, sufficient numbers of older two-stroke and four-stroke engines remain in use in the Bay Area. The Air District has pursued removal of these older engines through voluntary exchange programs that target commercial all lawn and garden equipment, including mowers and backpack-style leaf blowers. The Air District will continue this program, and other efforts to replace older engines and to encourage battery and/or electric equipment.

Commenter	Organization/ Location	Comment	Air District Response
Pat Walker		<p>...when there is a Spare the Air day, leaf blowing and lawn mowing should not be permitted, regardless whether they are gasoline or electric. Leaf-blowing ...is so harmful in so many ways, it is appalling that the BAAQMD and ARB did not regulate them decades ago and the 2017 BAAQMD plan offers only the same old voluntary exchange program that has existed. BAAQMD has underestimated the problems caused by leaf blowers. Leaf blowers generate three kinds of pollution - hydrocarbon emissions, particulate matter, and noise - every day of the week, throughout the year, thus contributing to global climate change. They are ubiquitous, ... the leaf blowers used by gardening services are generally old, not properly tuned, and emit significant quantities of hydrocarbons such that we can smell them both in our house and yard. Leaf-blowers should be banned altogether. They are harmful to the laborers who use them. They are harmful to the neighbors, bicyclists, walkers who are in the vicinity. The use of leaf blowers is a bad gardening practice - it compacts and necessitates the soil and is detrimental to the survival of beneficial insects and soil microorganisms.</p>	<p>The Air District does not have the statutory authority to regulate emissions from lawn and garden equipment. We encourage low-emitting models, including via incentives, and discourage harmful use, particularly on Spare the Air days.</p>
David Bezanson		<p>Gasoline-powered leaf blowers do not have catalytic converters. Their emissions per hour of operation far exceed that of gas-guzzler automobiles. Lacking mufflers, they also generate noise pollution. Check out options for replacing these with electric leaf blowers.</p>	<p>Control measure TR23 deals directly with lawn and garden equipment. Use of gasoline lawn mowers and leaf blowers contribute to air pollution, primarily through the release of volatile organic compounds (VOC) and particulate matter (PM). While progressively more stringent emission standards have reduced pollution from lawnmowers and leaf blowers, sufficient numbers of older two-stroke and four-stroke engines remain in use in the Bay Area. The Air District has pursued removal of these older engines through voluntary exchange programs that target commercial all lawn and garden equipment, including mowers and backpack-style leaf blowers. The Air District will continue this program, and other efforts to replace older engines and to encourage battery and/or electric equipment.</p>
David Bezanson, Ph.D		<p>Livestock factories (CAFOs) emit massive amounts of N2O, methane, and toxics. These pollute our air, land, and water. Monitoring and enforcement by the EPA and FDA is pitiful. There are ways to mitigate these emissions, but only slightly. Globally, livestock is the largest source of methane emissions. The most eco-friendly way to produce beef is to use organic management of pasture-fed beef. The best solution for the environment, however, is for humans to cease consumption of dairy and meat. Reallocate land use to crops.</p>	<p>You raise important points about greenhouse gas emissions associated with modern food production, particularly the production of beef. Our Plan includes four measures designed to reduce emissions from agricultural production of meat and dairy products. You can review them on pp. 5-20 and 5-21 of the Plan and in the agriculture section of Volume 2. We also encourage a low-GHG diet.</p>
Kelsey Poole		<p>Buses are often late, making it harder to use public transit</p>	<p>Comment noted.</p>
David Bezanson, Ph.D		<p>On web page 28, replace the final sentence in the Low GHG Diet section with something stronger. All research published in the past 15 years has found that GHGs (and many other global environmental problems) would be significantly decreased by humans consuming vegetarian, and preferably vegan, diets. Beef has a higher carbon footprint than any other food.</p>	<p>Comment noted.</p>
Bruce Naegel		<p>[The Draft Plan should]...put out measurable goals, follow through to see if they are met, and supply corrective action if they are not.</p>	<p>Our intention is to make our goals as measurable as possible. Our biggest metrics of success are the quality of the air in the Bay Area, the state of public health that coincides with that air quality, and the amount of greenhouse gas emitted within our region. We will track implementation of the Plan.</p>
David Bezanson, Ph.D		<p>Dollar value of reducing one ton per year of each pollutant using MPEM. The values in table c-2 are somewhat different from those in the 2010 CAP on the equivalent table 1-2. Can a discussion be inserted why several of the values have changed?</p>	<p>The Air District continuously updates its data resources. As new data or other information comes available, the Air District updates its models and other tools that rely on outside data sources, i.e. hospital admissions data, cost of carbon, etc.</p>
David Bezanson, Ph.D		<p>Reclassify N2O as a super GHG. This is consistent with data on web pages 79, 84, 146, and elsewhere throughout the document</p>	<p>We will consider this suggestion.</p>

Commenter	Organization/ Location	Comment	Air District Response
Joan McClure		Considering current fed administration, CA needs to remain strong and dedicated	Comment noted.
David Bezanson		Would like to see ocean acidification addressed	Thank you for your comment. This topic is raised in Chapter 3, and we hope to continue the discussion about it during our implementation phase for this plan.
Anonymous - Open Space Forum		There should be no activity.	Emission reductions achieved are the largest determinant in Air District funding decisions.
Anonymous - Open Space Forum		Coordinate with those looking into the overall design of how the Bay Area should deal with rising tides and flooding, which is already evident in Alameda. I am very concerned about that.	The Air District coordinates with the Bay Conservation and Development Commission and the Association of Bay Area Governments on adaptation and resiliency.
Nicholas Littlejohn		CA must take this action to protect the economy and people, especially if federal action is unlikely.	Comment noted
Rebecca E Skinner		Thank you for plan, responsiveness to equity, multi pollutants, CO2 emphasis, etc.	Comment noted.
David Bezanson, Ph.D		There is an enormous amount of repetition throughout the draft. Without deleting a single factoid of content (statistic, concept, fact, or citation), editing out the reiteration would decrease the number of webpages from 274 to less than 100. This would decrease the environmental impact of the plan and respects readers' time.	Comment noted.
David Bezanson		include nuclear radiation as a toxin in the plan and collaborate with government agencies to prevent exposure.	We agree that radionuclides can negatively impacts human health, and we cooperate with the efforts of the California Department of Public Health to reduce exposure to them. The chemicals that the Air District is able to regulate as toxins under our statutory authorities are those established by the California Air Resource Board as toxic air contaminants and by the US EPA as hazardous air pollutants.
Marti Roach		Ensure policies and incentives to reduce excessive packaging	In efforts to reduce waste in the Bay Area, we will strive to make packaging waste and packaging material efficiency a part of the conversation.
Pat Walker		...when there is a Spare the Air day, there must be a mandatory reduction of cars that are allowed to drive. For instance, only cars with odd or even numbered license plates would be allowed to drive. This is a drastic solution that would get everyone's attention. It would make the driving public finally aware of the consequences to the environment of their driving. It would make people aware of the seriousness of air pollution and its effect on our health (and the health of the planet). It would force people to think about purchasing cars that get better mileage, which would lead inevitably to greater demand for hybrid and electric cars. It would force car manufacturers to get serious about the technology needed to make environmentally-safe cars. Although the car manufacturers are starting to be more responsible about manufacturing hybrids and electric vehicles, they are not moving fast enough. They are taking advantage of the low fuel prices and people's desire for large vehicles and ignoring the environmental consequences of their actions. (Another example of inaction unless rules are mandatory and impose consequences.)	To achieve the GHG reduction targets, we will need to reduce emissions from motor vehicles as well as oil refineries. By decreasing demand for gasoline and diesel, measures to reduce motor vehicle travel and promote electric vehicles can also lead to reduced emissions from refineries. We will consider this suggestion as we implement the Spare the Air Program.
Susan Harris		Include self-driving cars	Autonomous vehicles are discussed in the transportation section of the Vision in Chapter 1 of the 2017 Plan.
Erik Ferry		I agree with 350.org's assertion that we need a more aggressive timetable and set of incentives for the phasing-out of combustion-based heating systems.	The Air District has previously provided financial assistance for the replacement of wood-burning stove or fireplaces with cleaner devices, including electric heat pumps. As noted in the implementation actions of BL2, the Air District will explore incentives for property owners to replace fossil-fuel based furnaces (as well as other appliances) with zero-carbon alternatives. See Master Response 5

Commenter	Organization/ Location	Comment	Air District Response
Anonymous - Open Space Forum		We note that the co-benefits section on p. BL-10 describes a benefit for peak power reduction for reducing cooling load. At the same time, the additional heating load on the electricity grid from fuel switching, particularly for residential space heating, may coincide with the evening net peak period expected in the future (see comment under EN2).	As the commenter notes, the changes in fuel source to electricity will require that the grid be able to accommodate the expected increased load as a result of increased electrification. As such, it is key that overall demand for electricity decrease with time (as noted in EN2).
Bruce Naegel		Prioritize eliminating super GHGs first.	We agree that Super-GHGs are a near-term priority. We have several measures in this Plan that will take near-term actions to address them. We also expect to work in support of SB 1383, which will create new tools and requirements to reduce short-lived climate pollutants.
Anonymous - Open Space Forum		Definitely concerned about methane leaks and their disastrous effects on climate change...stopping the worst leaks is imperative.	Reducing methane leaks is a priority in this Plan. Please see pp. 5-4 through 5-9 for a list of stationary source measures. Measures SS2, SS13 SS14, SS15, and SS16 address your specific concern. Of note, SS16 (the basin-wide methane strategy) is a rulemaking effort slated for this year that will reduce methane leaks.
Ann C Resser		Would be hypocritical to adopt GHG reduction rule that incentivizes tar sands	See Master Response 7
Gladywn d'Souza		ARB should integrate past failures of the clean air plan for criteria pollutants and GHGs w/ annual reports on how targets are being met and adjusted to make the target	Comment noted.
Ann C Resser		Plan should include discussion of why CA efforts aren't reducing Bay Area GHG emissions to 1990 levels by 2020	See Master Response 3
David Bezanson, Ph.D		Research has shown that communities who set lofty targets for environmental health achieve more change than those who set low targets. Aim high, but be prepared to negotiate and accept less. E.g., taxation of gasoline is far too low to motivate us to pursue 2050 targets: Work toward a 40% increase by 2020 but be prepared to negotiate lower.	Comment noted.
Glenda Lee		Support for the aggressive goals set out in the new draft of the clean air plan for the bay area. Climate change is a truly frightening threat, and with the federal government in denial we need to work harder than ever at the local level to reduce our impact as much as possible.	Comment noted.
Rose Abramoff		Support for the goals of the Clean Air Plan and urge AD to limit pollution and greenhouse gasses as strongly as possible	Comment noted.
Anonymous - Open Space Forum		We need this organization and others to protect our air/land/water and look to the future to transition the Bay Area to renewables faster than we ever thought we had to. I feel like 2050 is not soon enough. I think we should target 2035 or 2040. We have to push this forward and not spend a lot of time studying and debating. Clearly, you know a lot about the answers already!	Comment noted.
Anonymous - Open Space Forum		I believe this plan is a pipe dream. We can't control the weather so expecting wind power and solar power to sustain the current population in the existing buildings with power is silly. Our wind farms in the central valley in the past year produced less than 60% of what was expected because the winds didn't co-operate. Solar power still requires huge footprints to sustain power consumption in High Rise Facilities...I hate to say it but it will be longer than 2050 before you will eliminate petroleum based power for this issue. The renewable energy technologies you are hoping to export around the world are not economically sound especially in countries where the cost of these products are cost inhibitive verses the cheaper ways to generate power. Just because you want to change the world culture by setting an example you are not likely going to do so in 30 years especially since there is enough other fuel resources available at a less expensive price.	A strong body of research indicates that renewable energy technologies are cost-competitive or nearly so with traditional fossil fuels. Making the transition from fossil fuel energy to renewable energy will certainly require tremendous effort by multiple levels of government as well as businesses and residents, but with commitment and leadership we believe it can be done.

Commenter	Organization/ Location	Comment	Air District Response
Anonymous - Open Space Forum		Unless you are near BART or in the inner cities public transportation in the Bay Area is generally frustrating and slow. A new model of public transportation is needed in those areas. Perhaps smaller feeder vehicles in more places that could meet up with major bus/Bart/Caltrain lines.	We will consider this suggestion as we implement the Plan.
Anonymous - Open Space Forum		Encourage sufficient and efficient parking near BART and other public transit lines. This is a major problem that will get worse as the areas around stations are used more by housing and retail. We still need parking for the long term and especially for transition.	See Master Response 4
Anonymous - Open Space Forum		If you truly want to reduce emission put pressure on the automotive industries to have lower emissions standards	California currently leads the country in encouraging stringent emission standards for vehicles. The federal government sets emissions standards for vehicles, which are managed by the US Environmental Protection Agency (USEPA). The Clean Air Act allows California to seek a waiver of the preemption which prohibits states from enacting emission standards for new motor vehicles. CA was successful in obtaining this waiver, and therefore has lower vehicle emission standards than those set by USEPA. Since 2009, California's emissions standards have been adopted by 16 other states. Given the size of the California market plus these other states, many manufacturers choose to build to the CA standards when selling in US market. California's emission standards have also influenced EU emissions standards.
Mary Sue Mead		Wants to see a variety of trees in Bay Area	Comment noted.
David Bezanson		The most effective way of removing CO2 from our air is preserving and adding vegetation, especially trees on private and public lands. Protect our forests by prohibiting clearcutting. Promote tree planting in urban areas. Prohibit burning of fallen branches, leaves, and trees in forests.	The Air District supports efforts to use vegetation planting as a climate change mitigation initiative. This turns out to be good for the health and vitality of many urban and suburban areas as well. We draw your attention to measure NW2 (Urban tree planting) as one effort to do so.
Anonymous - Open Space Forum		Create more places for construction industry people to donate reusable materials, like Urban Ore in Berkeley, and use the proceeds to address other issues. Have more recycling cans in public spaces in more cities/towns.	We agree that making sure there are enough places to either recycle materials or donate reusable materials will be important for accomplishing the goals of reducing waste. Although the Air District has no direct authority in the siting of such locations, we are supportive of efforts that making recycling and reusing easier and more practical.
Jennifer Tomlin		Due to drought, we should look at composting toilets	Comment noted.
Ellen Kerr		Golden Gate Park and other parks in the Bay Area should not have so much grass. Native plant should be substituted. The conservatory of flowers should have an exhibit on native plants that don't need water and could be tourist attraction. The conservatory of flowers should have an exhibit on native plants that don't need water and could be tourist attraction. Need more tall building w/ green roofs	Comment noted.
Mary Dateo		Local conservation should explicitly state "better management/conservation of storm water"	This could be considered as we implement water conservation measures.
Marti Roaut		We are losing snow pack, need new ways to capture and store water and reduce non-permeable surfaces	Air District staff will consider this recommendation as we move forward to implement the CAP's control measures.
Anonymous - Open Space Forum		[Supports]... regulations requiring new or repaired roadways or parking areas to include rain gardens to reduce the runoff of pollutants into storm drains.	Air District staff will consider this recommendation as we move forward to implement the CAP's control measures.
Anonymous - Open Space Forum		How about on site water collection from roof tops?	We will consider including this suggestion as we implement the CAP's control measures.

Commenter	Organization/ Location	Comment	Air District Response
Anonymous - Open Space Forum		[Supports...] more water fountains especially ones made to refill reusable bottles.	Comment noted.
Anonymous - Open Space Forum		Support [Water] conservation and more storage to transition between dry and wet years.	Air District staff will consider this recommendation as we move forward to implement the CAP's control measures.
Anonymous - Open Space Forum		Save the Bay's work on wetlands could be supported and expanded. School groups? EBRPD?	Measure NW3 (Carbon Sequestration in Wetlands) addresses wetlands. We agree that encouraging engagement with school groups and the East Bay Regional Park Districts is a good idea.
Anonymous - Open Space Forum		<p>SS34 Wood Smoke: Since the BAAQMD territory includes rural and unincorporated areas, which are sparsely populated, and won't have health risks to individuals, parcels larger than 1/2-acre should be exempt from all wood smoke restrictions. and parcels less than 1/2 acre should continue to allow wood burning. People have heated their homes and cooked with wood burning stoves for decades/centuries without health risks. Also it is bad public policy to create a monopoly without any alternatives to force everyone to heat their homes with natural gas from PG&E. People should not be forced to buy natural gas from PG&E to heat their homes, and PG&E proved in San Bruno on 9 Sept. 2010 that their system is flawed and not reliable. Natural gas is known to the State of California to cause cancer. Wood is a non fossil fuel that is cleaner burning. Wood burning for home heating also reduces outdoor fire hazards by letting all homeowners, regardless of parcel size, to clear their parcels of wood and using it to heat their homes. The spare the air restrictions apply to the entire BAAQMD territory, there should be separate spare the air regulations for the dense urban areas, and for the sparse rural/ unincorporated areas. Since California has a political monopoly controlled by liberal Democrats, they should not be allowed to enact a complete ban on wood burning to bully all citizens to do things their way. Even though elected officials are elected through political parties, the government operation itself should be a fair, non-partisan, and impartial referee of our society, and the government should not be a political forum itself; which led to the Civil Service system in the 1880's.</p>	Wood burning is a significant source of fine particulate matter, the pollutant with the greatest health effects in the Bay Area. Our wood burning program has helped to dramatically reduce emissions, resulting in important health benefits for Bay Area residents.
		<p>Appendix C highlights that valuation of health effects from pollution, and thus valuation the benefits of pollution control measures, is limited to specific negative health outcomes, not a fully comprehensive set of known negative health effects from criteria pollutants and TACs, which your own Plan outlines in fuller breadth than the MPEM tool. To assign a cancer death that can be attributed to benzene emission a monetary value in your health burden and cost/benefit accounting while excluding, for example, the monetary cost of a child born with birth defects because of the same benzene exposure seems arbitrary. Doing so also clearly understates the economic cost of the pollution and inaccurately weights cost/benefit analyses against pollution control.</p>	The text in Appendix C has been revised to make it clear that there may be additional public health effects from air pollution which are not accounted for in the Multi-Pollutant Evaluation Method.