



SF Environment

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Mary Nichols
Chair, California Air Resources Board
Sacramento, CA 95814

City of San Francisco Comments on AB 32 Draft Scoping Plan

Dear Chair Nichols:

The City and County of San Francisco looks forward to partnering with the state to help tackle the greatest environmental challenge of our time. The following is our input into the Draft Scoping Plan. While the Plan emphasizes that local governments and regional government agencies are essential partners in achieving California's greenhouse gas goals, the only target attached to the local government section is a transportation measure, which vastly understates the contribution that local governments can, should and will bring to the goal of reducing greenhouse gas emissions.

Most greenhouse gas emissions are local. Cities now produce seventy-five percent of all the world's greenhouse gas emissions, so climate solutions that ignore municipalities do so at the planet's peril.

Local governments are on the front lines in fighting the sources of global warming: from revising building codes, promoting energy efficiency, providing recycling and compost services, requiring renewable fuel and energy use, and managing transit systems. Cities too, are responsible for dealing with the impacts of the climate crisis: from providing the first responders in case of extreme weather events to dealing with the day-to-day climate implications for public health, infrastructure, and local economy.

More than 852 US cities, including San Francisco, have committed to reduce their greenhouse gas emissions to Kyoto Protocol levels (or beyond). Before we develop an entirely new set of complex regulations to help us implement AB32, we could learn a lot by recycling a few ideas from our past.

In the 1980's, California faced another big environmental crisis: we were running out of space to put our garbage. At that time the state only recycled 11% of all waste and landfills were reaching capacity. In 1989, the State legislated that every city and county achieve a fifty percent recycling rate by 2000 (AB939). This was a truly audacious goal. However, it was the implementation that was precedent setting.

All local governments are required to report annually to the State in great detail on the types and quantities of waste diverted from landfill through reduction, recycling, and composting activities, as well as how they are going to meet the targets. Just as with measuring carbon emissions, waste is often a hard thing to track down. The profession of waste auditing and accounting was born. Today every one of California's 536 local jurisdictions knows how much of their paper, scrap iron, lawn trimmings, bottles and cans, and even building materials is (or is not) being recycled. It is only through this level of detail that we can claim to have a hope of solving multi-source environmental issues from waste to carbon. Any jurisdiction failing to reach the recycling target can be fined \$10,000 per day. This threat allowed cities and counties to develop innovative programs like curbside food scrap collection as a way of avoiding hefty fines.

Rather than enacting a cooking-cutter regulation that would work for no one, the recycling law allowed each County to adopt a implementation strategy that would work for their communities. This flexibility fostered innovation and efficiency. At the same time, a Recycling Market Development Zone program was created to fuel new businesses wanting to profit from diverting waste from landfills.

This recycling law may be the single most effective piece of environmental legislation ever to come out of Sacramento. Today the City and County of San Francisco has been able to work with its residents and businesses to recycle and compost 70% of the waste (we were at 35% in 1990). This same basic legal framework should be applied to the issue of climate change.

Under this local CO₂ reduction model, counties would be responsible for reducing carbon emissions from building energy, agriculture, manufacturing, and of course waste management. These plans should mandate both a municipal facilities and community wide target for energy, waste reduction and recycling, water and waste water, transportation and community design. Counties would work both locally and regionally to reduce vehicle miles traveled (VMT). The State would continue to have jurisdiction over large emitters like oil refineries, energy utilities, and over developing a low-carbon fuels policy.

The State needs to begin by establishing county-level reporting requirements and procedures. Cities and counties will then need financial incentives to develop the critical infrastructure that reducing and measuring carbon emissions will require.

Recent reports suggest that building dense transit-oriented urban areas can lead to a forty percent reduction in carbon emissions. Local land-use and zoning policies have therefore become one of the single most important tools in combating climate change.

With this newfound power comes the need for accountability. The State should hold counties answerable for meeting targets, and provide rewards to those who achieve more.

One of the major problems with the Draft Scoping Plan is that there are no targets for reductions from municipal efforts in recycling, water use or energy, nor are there any targets attached to planning and regional local government efforts. All of these are required elements for a comprehensive plan that would maximize our efforts and resources.

While both the Draft Scoping Plan and the appendices reference the vital role that local governments play in community energy, community waste and recycling, community water and wastewater systems, and community design, both the scope and appendices are void of any analysis or recommendations on how local government can and should reduce emissions in these areas. By stating "although not quantified at this time, actions taken by local government are expected to provide significant greenhouse gas reductions" the majority of the efforts

that many local governments are already putting into greenhouse gas reductions are essentially being left out of the Draft Scoping plan.

To put this into a numerical perspective, San Francisco's Climate Action Plan, passed in 2002 by the City and County's Board of Supervisors, set targets of reducing emissions by almost 2 million metric tonnes by 2012. San Francisco accounts for about 2% of the state's population, yet its reduction target is essentially equal to the local government target set for the entire state. San Francisco, and many other cities, have set targets that are at least double the total target set for local government actions by the state (San Francisco is committed to reducing municipal emissions by 25% by 2017, and 40% by 2025 from 1990 levels).

The draft plan and the appendices lump together local and regional governments, and it is not always clear what refers to local government operations, what is directed at local governments only and what applies to regional governments. In preparing the final scoping plan, we recommend that ARB include the following distinct sections under Local Government Actions and Regional Targets:

1. Actions and targets for municipal facilities and operations that are under the direct control of local government, which would include transportation, energy, water and wastewater and waste reduction/recycling.
2. Actions and targets for community wide activities that are directly influenced or under the control of local governments. For example, building codes can directly impact energy use, and greenhouse gas reducing targets should be implemented by local governments.
3. Actions and targets for regional efforts including efforts achieved through regional planning.

Transportation

It appears from the appendices (although not at all clear in reading the draft scoping plan), that the target chosen for the local government section is based on regional transportation-related greenhouse gas targets (the appendices go from regional transportation to a target to a list of actions to a discussion of policies to assist local actions). The four other measures under evaluation in the appendices (all transportation measures) are all worthy programs that should also be included in the draft scoping plan. However, only congestion pricing and programs to reduce vehicle trips can truly be implemented at a local government level. Pay as you drive programs cannot be implemented at a local government level alone, and indirect source rules for new development is best implemented at the regional and state level.

In addition to being included in the draft scoping plan, the combined target for congestion pricing and programs to reduce vehicle trips should be higher. The appendices give a potential for entire state of up to 2 MMT for these two areas. San Francisco, with a little over 2% of the state's population, has set a target of 322,000 tons for San Francisco alone – by 2012!

Public education and programs to reduce vehicle travel are effective and continue to be in demand especially with the increase in fuel prices. However, there is a limited amount of funding available to local governments to staff public education activities. Additional resources and funding to staff public outreach programs specific to promoting driving alternatives would be very helpful. In addition, San Francisco recommends that the state adopt the following transportation demand management programs:

- *Un-bundle parking (Transit Oriented Development TOD):* Paying for parking separately from Housing or Office Space. The cost of parking for residential and commercial units is often passed on to the occupants indirectly through the rent or purchase price ("bundled") rather than directly through a separate charge. Unbundling parking helps reduce vehicle ownership as residents are able to save more

by not owning a car and it can complement car-sharing programs. Making it a requirement to un-bundle parking in new developments will reduce the use of vehicles.

- *Implementation of Smart Parking Pricing:* Incentivize local governments to make Smart Parking Pricing mandatory. This would including the following:
 - Charge users directly for parking facility use, often with variable rates. Better parking management yield following benefits:
 - Make parking easier to find and easier to pay for.
 - Reduce frustrating circling for parking, which means less congestion.
 - Reduce transportation-related greenhouse gas emissions.
 - Increase safety for pedestrians, bicyclists, and other drivers by helping drivers be less preoccupied by the search for parking.

- *Guaranteed Ride Home:* Mandate Guaranteed Ride Home (GRH) programs. Also known as Emergency Ride Home (ERH), GRH provides a free or low-cost ride home in cases of emergency for employees who use alternative transportation, such as carpooling, vanpooling, public transit, bicycling, and walking. This program helps promote driving alternatives to commuters who would otherwise drive just to address the possibility of needing their personal automobile in case of an emergency. The City and County of San Francisco currently offers a free Emergency Ride Home program to all SF destined commuters and their San Francisco based employers.

- *Mandatory Pre-Tax Transit:* Commuters who take the bus, train, ferry, or vanpool to work could be saving up to 40 percent on their commuting expenses. Here's how it works: The federal government allows employees to deduct up to \$115 per month from their paychecks, pre-tax, to pay for transit and vanpool expenses. Employees save by using pre-tax dollars for their commute expenses, and employers get the advantage of reduced payroll taxes and a popular benefit program that's easy and inexpensive to administer. Making this program mandatory for employers to offer at their worksite would encourage the use of driving alternatives. The Board of Supervisors at the City and County of San Francisco have been presented with a legislation that would make San Francisco the first City in the nation to make pre-tax transit program mandatory for employers to offer their employees.

- *Municipal Bicycle Fleet:* Require cities, large corporations and institutions to implement bicycle programs and/or provide incentives for the implementation of shared bicycle fleet for workers to help reduce the need for vehicle pool or fleet for workers to perform on-job duties. This helps reduce vehicle miles traveled and carbon emissions. The City and County of San Francisco has implemented a program for workers who make a significant number of vehicle trips and are able to use a bicycle to perform their on-job duties. The program has been in existence for over four years and currently provides over 400 bicycles to park gardeners, parking control officers, health care workers, city planners, etc.

- *Public Bicycle Fleet:* Require that large urban areas provide a public bicycle fleet and/or provide incentives to establish such a fleet. Implementation of a shared bicycle fleet for the general public is a great way to promote clean and green transportation option. Paris, France and Amsterdam, Netherlands

along with Portland, Oregon serve as a few good examples of shared bicycle fleet programs available to the general public.

- *Promotion of Parking Cash-Out:* Offers commuter financial incentives for using alternative modes. Free parking is the most common fringe benefit offered to workers in the U.S. A 1992 California law created a program known as "parking cash-out" that eliminates subsidization of parking for solo drivers. According to University of South Florida's National Center for Transit Research, with the cash-out programs implemented, the average share of solo commute drivers decreased from 76 percent to 63 percent, a 13 percent decrease.
- *Car free Tourism:* Encourage car free, carefree transportation to and around California Tourist destinations to promote cleaner air and a healthier planet. San Francisco has started work on its first carfree tourism project that provides the tourist with information (guides, brochures, website) on how to best experience San Francisco by walking, on bicycles and using public transit.

In addition to the Transportation Demand Management programs that can be administered by local jurisdictions, congestion pricing can also help reduce emissions. San Francisco is implementing a \$158 million grant designed to combat congestion, which will include congestion pricing on one of the roadways entering the city, and the city is also looking at the potential implementation of toll roads downtown.

Electricity and Natural Gas

The Draft Scoping Plan recognizes that some local governments are already very active in this field; however, many are not. Everything needs to be done to build the capacity of local governments to take action, not only in their own facilities, but to participate in the reduction of GHG's throughout their jurisdictions. First, Climate Change needs to be brought to the attention of local elected officials. CARB and the Governor's Office should sponsor workshops with elected officials of every city and county in California. This could be done in ten or so regional meetings. ARB, the Governor, the corresponding members of the state legislature, and local elected officials should meet to discuss the goals, the how this will impact their jurisdiction, their role, how to build their capacity in each local government, and how to build support in their jurisdictions. Second, they need assistance with the ability to take action. Technical assistance can be made available through contracts at the CEC and regional workshops and mentoring can be sponsored by ARB.

ARB expects the value of GHG emissions reduction to be determined through a market mechanism of offset trading; however, there are many activities that will not be part of the trading system due to the difficulty of documenting and monitoring 'additionality' and other necessary trading criteria. The Draft Scoping Plan stresses the need to expand energy efficiency and renewable energy programs; however, these are investment decisions that are made based on the value of those reductions. Given the vastly destructive 'potential' of Climate Change, previously calculated values are undoubtedly too low to have much impact on investment decisions. For example, the CPUC sets energy efficiency cost-effectiveness criteria that affect the investments made by PGC funded programs. That calculation must include what reductions can save in Climate Change impacts, ie avoided costs incurred on the 'adaptation' side.

New statewide requirements for existing buildings must be addressed through a combination of time-of-sale requirements as well as 'date certain' approaches. Air-sealing, ceiling and wall insulation, and solar water heating can dramatically reduce natural gas use. Development of these requirements can leverage existing experience of local ordinances and enforcement will require active participation of all local governments.

Additionally, the real estate, remodeling, and repair industries should be engaged by CARB and the Governor's Office to enlist their participation. In the future, contractor or other State licensing should be contingent upon certification in GHG reduction and monitoring of each license recipient's activity.

The State Board of Education needs to be engaged in the development and implementation of Climate Change curriculum as well as incorporation into the testing requirements. Teachers and schools are frequently overwhelmed by existing requirements and view 'new requirements' as just more work. Climate Change can be incorporated into existing work but in some cases it may mean supplanting existing activities. Teachers and schools need direction from the State Board.

Section 5: Green Building

In order to be effective, ARB must make explicit recommendations to utilize green building opportunities toward achievement of AB32 requirements. ARB's recommendations with relation to green building must be clear, and convey motive intent. The green building section has many ideas prefaced by "Group X *could* take Action Y." ARB has been tasked with recommending - and to a large degree implementing - solutions to the unprecedented challenge of reducing California's greenhouse gas emissions.

ARB is correct that the majority of individual measures capable of yielding significant greenhouse gas emissions reductions in the built environment are largely addressed in other issue areas within the Scoping Plan, and should not be double-counted under the heading of Green Building. However, the vast scope necessary to realize AB32 goals is very complex, and potentially unwieldy. Existing and upcoming Green Building ratings and metrics are essential tools to taking an integrated, comprehensive approach at the project level, and to convey the scope of opportunities for greenhouse gas reduction and sustainability. Accessible, intuitively understandable benchmarks, such as the Energy Star label for buildings and increasing levels of LEED certification, are tools that help spur the public, practitioners, and investors to incorporate many sustainability strategies into a given project. While the California Green Building Code and ongoing revisions to Title 24 Part 6 energy standards will be the primary tools for mandatory statewide increases in environmental performance of buildings, any AB32 related public outreach should encourage – and incentivize – green building commitments above and beyond any mandatory standards.

While ARB has made substantive proposals for greenhouse gas emissions reduction through alternate fuels and supporting the efforts of CPUC and CEC to minimize emissions from the operation of buildings, the best opportunity to influence the future emissions associated with a building occur in land use planning and entitlement. Street layout, zoning, and other planning considerations heavily influence the vehicle miles travelled by future residents, long term needs to commute to and from a given site, and the opportunity for effective solar orientation of a building. With the expectation of 44 million Californians by 2020, ARB and the state must collaborate with local governments – not supercede them – to co-locate housing, essential services, and jobs in new development and redevelopment, to increase the density of the state's built environment in ways that will structurally reduce the transportation needs of the average Californian. San Francisco, already one of the most dense cities in the western United States, recognizes that we need to go much further, and is participating in five separate major development projects under the USGBC's LEED for Neighborhood Developments Pilot program, which provides a benchmark and opportunity for recognition in the solution to not only greenhouse gas challenges, but opportunities to increase quality of life by reducing time wasted travelling for basic neighborhood services. ARB must devote significant resources to direct support of Smart Growth policies among California local governments, including provision of consulting dollars, and should explicitly recommend increased investment in transit in combination with increased density of existing California communities.

Additional significant opportunities not yet addressed in the draft Scoping Plan include:

- Overcome the distinction between capital and operating expenses in public facilities by establishing and applying a life cycle costing methodology for state facilities. State adoption of such a methodology would allow local jurisdictions to employ it as well.
- California should provide a statewide bond pool to minimize financing costs for cities establishing energy financing districts to finance renewable energy systems and energy efficiency improvements on property tax bills. AB811 now allows general law cities to establish such districts on the “Berkeley Model,” which had previously been limited to charter cities.
- Work with CEC so that updates to Title 24 Part 6 energy efficiency standards are targeted at absolute greenhouse gas minimization. The Base Case in Title 24 energy efficiency compliance calculations generally utilizes the same systems and building orientation as the proposed design. This can inadvertently penalize some significant design opportunities, including designing for *effective* natural ventilation. Removing an HVAC system entirely from a proposed design also removes the HVAC load from the base case. To cost-effectively move design toward zero-net energy, it will be necessary to instead propose an energy budget based on the building size and use type, and give credit for savings in comparison to a baseline energy budget. The building energy budget should be based on percentage reductions from standard practice, such as the Energy Star Target Finder or its source data, the US Department of Energy’s Commercial Buildings Energy Consumption Survey (CBECS.)

Last, in order for the ambitious complementary statewide efforts underway across multiple California state agencies to be successful, agencies must increase coordination. One helpful mechanism would be development of a statement and intent of shared goals – and agreement to defer across jurisdictions – in areas related to energy efficiency and green buildings. While it’s clear the California Public Utilities Commission, Energy Commission, Building Standards Commission, and Air Resources Board are all obviously aware of one another, it is clear to the outside observer that there is insufficient communication among state agencies to effectively align their goals, powers, and outcomes to realize the state’s ambitious goals. ARB should provide state-government-wide benchmarks under AB32, and convene regular public inter-agency workshops and meetings, as well as less formal exchanges, to keep the state on track to achieve the desired economy-wide improvements in resource efficiency.

Section 7. Recycling and Waste:

The current draft of the Scoping Plan does not attribute any greenhouse gas savings to waste reduction, recycling, and composting even though local governments recognize that recycling and composting cost-effectively and significantly reduce greenhouse gas emissions. San Francisco’s Climate Action Plan, for example, gets 14% of its projected greenhouse gas emission reductions from the waste sector. On a statewide level, a 25% reduction in disposal would result in a reduction of at least 5 million tons of CO₂ emissions. Zero waste could result in a reduction of at least 10 million tons of CO₂ emissions. Waste reduction and recycling reduces emissions across sectors, including mining, forestry, agriculture, transportation, manufacturing, electricity, and disposal.

The appendices acknowledge the contribution from commercial recycling alone can be as high as 6.5 MMT, which is significantly higher than the potential reductions from landfill methane capture. The appendices also acknowledge a potential reduction of 3.1 MMT from increased composting. Anaerobic digestion also has a potential of 2.2 MMT. While anaerobic digestion is an important and effective way to reduce emissions, we do not believe it should be lumped in with waste-to-energy, since many waste-to-energy programs do not make the

best, most efficient use of waste materials. While not quantified, extended producer responsibility and environmentally preferable purchasing are also valuable mechanisms for increased reductions.

ARB should, as a minimum, adopt the recommendations of the ETAAC committee (Economic and Technology Advancement Advisory Committee). These recommendations include:

- Mandatory commercial recycling
- Mandatory multi-family recycling
- Disposal limits for readily-recyclable materials like cardboard
- Emission reduction / offset protocols for manufacturing with secondary materials, avoiding methane at landfills, reducing GHG emissions from agriculture, and upstream GHG reductions of recycling.
- Remove barriers to composting by addressing regulatory hurdles, providing financial incentives for composting and use of compost, and increase market demand through local and statewide procurement efforts.
- Eliminate diversion credit for greenwaste used as alternative daily cover.
- Reduce emissions from synthetic fertilizers/pesticides and energy-intensive irrigation by increasing agricultural application of compost, including through financial incentives and demonstration projects.

The ARB also needs to:

- Ensure the effective and comprehensive implementation of already-adopted Early Action Measures on landfill gas collection.
- Improve GHG inventory and other landfill emissions models through mandatory reporting and better quantification of fugitive emissions.

Economic Analysis

The Scoping Plan references an economic analysis being conducted of potential impacts on low-income communities due for release in Summer 2008. This is an important piece of analysis. It is important to understand and address the potential cost impacts that may be passed to residents/consumers through electricity and fuel surcharges, along with any programmatic fees that might be levied through other avenues. We have significant concerns that low-income residents may be disproportionately affected by these costs due to relatively low ability to pay, and urge that specific actions be taken to help offset these disproportionate effects.

We look forward to working with you and your staff to successfully implement AB 32.

Regards,



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Director