

JOINT LEGISLATIVE COMMITTEE ON CLIMATE CHANGE POLICIES
INFORMATIONAL AND OVERSIGHT HEARING
2030 TARGET SCOPING PLAN
June 14, 2017

HEARING RECAP

Members Present: Assemblymember E. Garcia (chair), Assemblymember Burke, Senator Canella, Assemblymember Cunningham, Assemblymember Frazier, Senator Skinner, Senator Stern

Guests: Assemblymember Cooley, Assemblymember C. Garcia

First Panel: Richard Corey, California Air Resources Board; Ross Brown, Legislative Analyst's Office; Mari Rose Taruc, AB 32 Environmental Justice Advisory Committee

- Mr. Corey opened the panel by stating that California is on track to meet our current climate goals. ARB has heard the Committee's request, and has delayed the Scoping Plan originally set for June 22nd – no precise date to vote has been determined at this point. The current draft Scoping Plan represents a balanced package of policies. Seventy percent of reductions are to come from existing measures. The driving principle behind the Plan is to achieve the SB 32 targets.
- Mr. Brown reviewed the LAO's handout for the hearing. He noted that emissions forecasts were subject to a high level of uncertainty.
- Ms. Taruc highlighted that the EJAC has collected hundreds of ideas from over 20 workshops conducted on the current draft Scoping Plan. She noted that environmental justice communities have had to generate data to document needs, referencing "A Preliminary Environmental Equity Assessment of California's Cap-and-Trade Program" released in September 2016. The EJAC wants California to be proactive and transformative in this Plan. She also pointed out that there were direct emissions measures outlined in the alternative scenarios in the Scoping Plan that weren't prioritized per the mandate of AB 197.
- Discussion:
 - Senator Canella asked if Cap and Trade was the best option for the 2030 Targets. Mr. Corey said it wasn't the only measure, but a compliment to other measures. Mr. Brown responded that the LAO recommended a market-based mechanism, but didn't have a preference between Cap and Trade or a Carbon tax.
 - Assemblymember Frazier asked why California didn't allow industry to figure out how they wanted to reach emissions reductions targets. Mr. Corey responded that flexibility for how industries respond to reductions targets is built in to most measures.
 - Assemblymember Frazier asked if the Low Carbon Fuel Standard was attainable. Mr. Corey responded that they are seeing over compliance now, but there is currently not enough production to meet future needs. The program is sending a strong price signal, and ARB predicts that companies will step up to produce the fuel needed.
 - Assemblymember Frazier commented that the current administration secures 40% of revenue to high speed rail instead of projects that could benefit environmental justice communities, asking Ms. Taruc if she thought that should continue with a new administration. Ms. Taruc responded that the top priority was emissions reduction, and that current law requires part of revenue go to environmental justice communities. She also commented that she would prefer a carbon tax so revenue could be used for dividends and job training.

- Assemblymember Burke commented that greenhouse gas reductions were separate than co-pollutant emissions trends, asking Ms. Taruc which type of pollution her report referenced. Ms. Taruc responded that the OEHHA report (released in January 2017) showed a correlation between the different types of pollution.
- Assemblymember Burke commented that the Cap and Trade program isn't designed to reduce co-pollutants, asking Mr. Corey to verify Ms. Taruc's claims that there haven't been reductions. Mr. Corey responded that there have been reductions, but ARB needs to do more air monitoring for air quality concerns.
- Assemblymember Burke asked what would happen if the Legislature doesn't reauthorize Cap and Trade. Mr. Corey responded that the alternative scenarios without Cap and Trade would be more expensive.
- Senator Skinner asked Mr. Brown if the LAO recommended a market-based mechanism for the goal of emissions reductions or revenue generation. Mr. Brown responded that there would be trade-offs between those two goals with a Cap and Trade system or a Carbon tax. Senator Skinner responded that the Carbon tax price would have to be much higher, so Cap and Trade might be the more cost effective option.
- Senator Skinner commented that the Legislature hasn't seen ARB's analysis of previous efforts, but that the draft Scoping Plan makes assumptions about the effectiveness of the programs. She asked what analysis ARB has done on those previous efforts, and whether there had been analysis on the impact the price of carbon will have on low-income households. Mr. Corey responded that ARB's assumptions were based on historical performance and economic modeling. Assemblymember Frazier responded that ARB hasn't been tracking progress on each measure. Mr. Corey responded that ARB has been tracking their measures, but aren't sure if they were using the right metrics. Ms. Taruc said the main objective is air quality benefit, and that the low price of carbon isn't sufficient to change behavior. Ms. Taruc also mentioned the importance of the social cost of carbon. Senator Skinner asked about the potential impacts of a higher price on low income households. Ms. Taruc responded that a dividend program could be a part of the solution to that problem.
- Senator Skinner asked if Cap and Trade could be designed to address air quality concerns. Mr. Corey responded that climate policy is too blunt of a tool to address localized issues, but that more needs to be done in terms of local community exposures to toxic air contaminants. Ms. Taruc responded that Cap and Trade was designed with loopholes preventing emissions reductions in communities next to facilities. Ms. Taruc referenced the OEHHA report (released in January 2017) on page 36, where a chart shows strong correlations between greenhouse gas emissions and emissions of co-pollutants.
- Senator Stern referenced the AB 197 compliance chart in the draft Scoping Plan. Mr. Corey replied that some of the issues were regional in scale and hard for them to assess at a state level, especially with regard to co-benefits. Mr. Brown agreed, replying it was hard to tease out exact impacts in a way that tied those impacts to a specific policy change. Mr. Brown added that this was a prospective analysis, not based on what has been achieved.
- Senator Stern referenced Mr. Corey's comments that there had been a seventy percent reduction in other pollutants, like diesel particulate matter. Mr. Corey agreed with Senator Stern's comments, but mentioned that the cumulative health risk from exposure to those pollutants in some communities is still very high. Senator Stern followed up by asking about any attribution analysis conducted to understand why those emissions changed. Mr. Corey responded that it depends, pollution changes due do a mixture of policies. Ms. Taruc responded that the reduction numbers cited by ARB follow a long timeline, and that the Legislature should be more interested in what reductions have been seen since 2012.

- Assemblymember Burke commented that the Legislature can't evaluate a program like Cap and Trade based on what it wasn't designed to do. The system was designed for greenhouse gas reduction, not co-pollutants.
- Assemblymember C. Garcia commented that the goal of Cap and Trade is to reduce greenhouse gas emissions by changing business and consumer behavior, asking Mr. Corey how much behavior has changed. Mr. Corey responded that the Cap and Trade system is changing behaviors, most notably by changing investments.
- Assemblymember Frazier commented that less diesel emissions can also be due to a shortage of drivers. He also commented that traffic congestions impacted industry as well as nearby communities.

Second Panel: Emily Wimberger, California Air Resources Board; Michael Wara, Stanford University; James Bushnell, University of California Davis

- Ms. Wimberger opened the panel by stating that ARB's analysis of the current draft Scoping Plan showed the policies would have a minimal impact on the economy, showing that California can still expect economic growth while reducing emissions. ARB's analysis does not show social impacts or new industries, so their results look more expensive than they will be.
- Mr. Wara stated that the post 2020 climate targets are ambitious, and will be more difficult to accomplish than the 2020 goals. Most reductions so far are from the power sector. Transportation is our biggest source of pollution, and emissions from the transportation sector are going up. Mr. Wara discussed the importance of California's federal waivers to ensure transportation emissions can be largest source of reductions moving forward. The emissions projections to 2030 have a high level of uncertainty, so policies need to be flexible to ensure we reach our targets. Mr. Wara concluded by stating that ARB's models are limited with regard to carbon pricing, and that the Legislature may want to request additional modeling.
- Mr. Bushnell stated that the Legislature has a policy design problem as much as a modeling design problem. Cap and Trade is the most cost effective path forward. ARB's modeling understates the economic costs of Cap and Trade, as the system allows industry to pivot to future lower cost options we do not yet know about. Mr. Bushnell also stated that he supports the concept of a hard price cap, as ARB's current process for containing auction prices with the Allowance Price Containment Reserve is too ad hoc.
- Discussion:
 - Assemblymember Cunningham asked how the price of carbon is set with a Carbon tax system to hit emissions targets, and whether there were examples from other jurisdictions. Ms. Wimberger answered that the British Columbia tried a Carbon tax model, but failed to meet their targets when they didn't raise the price sufficiently. She also stated that ARB's currently model with a price floor and a soft price ceiling provided price certainty to businesses. Mr. Wara said the Cap and Trade system as currently designed will lead to over compliance early and under compliance later, so any mechanism will probably require intervention to ensure emissions targets are achieved. Mr. Bushnell responded that uncertainty with the baseline scenario makes it hard to estimate cost and reductions, and that no measure can give estimates with complete certainty.
 - Senator Skinner asked which options for cost containment were best. Mr. Bushnell responded that a hard price cap would be effective. While most economists would probably prefer a carbon tax, he also stated that California needs to be careful about the potential for major changes to the Cap and Trade system to interrupt linkages to other jurisdictions. Mr. Wara stated that the Legislature needs to pay attention to the price floor as well, ensuring it is closer to the social cost of carbon to compensate California for the damage of pollution.
 - Assemblymember C. Garcia asked how to set the appropriate price cap. Mr. Bushnell recommended establishing a containment reserve at the ceiling price, and to make special

investments with revenue from the sale of those reserve allowances to direct emissions reductions activities. Assemblymember C. Garcia responded that it wasn't clear whether the concept of cost containment was intended to be costs to businesses or to communities.

- Senator Stern asked ARB to see the analysis done for the alternative scenarios. Ms. Wimberger stated that those numbers were released in March 2017.
- Senator Stern asked the panel what they thought should be done with the unsold allowances from the pre-2020 Cap and Trade program. Mr. Bushnell responded that it depends on what ARB does for cost containment moving forward, as a hard price cap would make holding unsold allowances for future use a redundant measure. He also responded that retiring the pre-2020 allowances could result in higher prices. Mr. Wara recommended keeping the unsold allowances for the containment reserve, selling them first when the ceiling price is hit at future auctions. Ms. Wimberger clarified that the unsold allowances are emissions that are not occurring as long as they are in ARB's accounts. If ARB were to sell those allowances, Ms. Wimberger asserted that emissions would still meet the cap.
- Assemblymember C. Garcia asked what other direct emissions measures ARB could take if the Cap and Trade program didn't meet the cap. Ms. Wimberger responded that it wasn't possible for the Cap and Trade system not to meet the cap. She also stated that Cap and Trade is only 30% of reductions, giving flexibility to how reductions are achieved while limited the number of allowances to ensure the cap is reached.
- Assemblymember Burke asked about the use of "speed bumps" to control costs. Mr. Bushnell and Mr. Wara both responded that ARB could design price points between the floor and ceiling price of allowances that would trigger the release of containment reserve allowances to keep the prices from rising too quickly.
- Senator Stern asked how ARB picks the current Allowance Price Containment Reserve Trigger. Ms. Wimberger replied that the decisions are made in context, and that ARB's system is modeled after other Federal and international programs. Mr. Wara responded that Cap and Trade is the insurance policy to ensure goals are met, and that the current model for the APCR is not necessary. Mr. Wara continued to say that the Legislature has two options: tell ARB that they need to change their philosophy about Cap and Trade functioning as an insurance policy, or specify the price of carbon.
- Assemblymember Frazier stated that the impacts from California's last recession are still impacting industry, asking the panel how to ensure climate policies don't put too much pressure on industry. Mr. Wara responded that the primary way to address those concerns is with free allowance allocation. He also stated that California companies needed a level playing field with out-of-state competitors, which could lead to a Border Tax Adjustment.
- Senator Skinner stated that industrial activities aren't cleaner out of California, so we don't want industrial activities to leave.
- Assemblymember Burke asked about the impacts of these policies on low-income households. Mr. Wara responded that ARB is doing all it can with current authority, and recommended that the Legislature consider a partial rebate as part of a 2/3 vote reauthorization.
- Senator Stern asked ARB for modeling of the impact of putting revenue toward dividends versus investments. Ms. Wimberger responded that ARB's analysis includes those questions.

Third Panel: Rajinder Sahota, California Air Resources Board; Richard Corey, California Air Resources Board; Alice Kaswan, University of San Francisco

- Ms. Sahota opened the panel by reviewing current data integration efforts underway at ARB. Their mapping tool will include data for toxic air contaminants by the end of the year. In addition to

analyzing each policy with the Scoping Plan, ARB also analyzed entire scenarios. Social cost of carbon is different than cost efficiency; ARB is using social cost to measure the benefit of each measure. Current modeling on emissions reductions doesn't include air quality. ARB has convened an Industrial Sources Action Committee. Ms. Sahota noted that some perceived benefits in their analysis is actually attributable to leakage out of state.

- Mr. Corey stated that the Scoping Plan will create many benefits, but ARB still has a long way to go in reducing emissions and improving public health.
- Ms. Kaswan suggested that ARB needs to focus more on decarbonizing the economy. The Scoping Plan suggests that Cap and Trade will provide very little cost pressure until 2025. Ms. Kaswan stated that ARB needs stronger regulations and more multi-pollutant planning, not all of their direct emissions reductions are fully examined. On site energy is biggest emissions issue; ARB could focus on what else can be done to transform that technology. Ms. Kaswan closed by discussing offsets and the potential for creating emission reductions outside of California.
- Discussion:
 - Senator Skinner commented that regulatory measures are also a price signal, not just Cap and Trade. Ms. Kaswan responded that more prescriptive measures releases pressure on Cap and Trade. Ms. Sahota commented that there is evidence that Cap and Trade is motivating behavior changes. She added that the carbon price signal is already favoring renewable power. ARB is already taking measures to restrict natural gas, a large source of industrial emissions.
 - Senator Stern commented that the bulk of emission reductions have come from the power sector, California's weakness is in petroleum and transportation. He asked how California can do more to regulate mobile sources, and burden on Cap and Trade regulated entities is unequal. Mr. Corey responded that there are multiple strategies within the Scoping Plan, this is why a portfolio-based approach is so important. We need to do more, but are already seeing a lot of progress.

Public Comment:

- Eleanor Torres from Incredible Edible Community Garden and the AB 32 Environmental Justice Advisory receives funding from the Greenhouse Gas Reduction Fund and supports the Cap and Trade program. She also mentioned the importance of hearing from people on the ground implementing policies.
- Bill Magavern from Coalition for Clean Air commented that California needs to focus on direct emission reductions. The goal is decarbonization to address both greenhouse gas problem and local pollutant problems.
- Mikhael Skvarla from the Gualco Group commented that California is stretching the economy with current policies. ARB is expert on emissions of both greenhouse gas reductions and co-pollutants. Cost containment measures are important.
- Luis Olmedo from Commite Civico del Valle and the AB 32 Environmental Justice Advisory Committee commented on the need to focus on rural, disadvantaged, and border communities. Environmental justice organizations need to be a part of the conversation. More granular data and community monitoring is needed.
- Tim Carmichael from San Diego Gas and Electric and Southern California Gas Company commented that they support Cap and Trade with all cost control options. Mobile sources are also important for greenhouse gas strategies as well as criteria and toxic air pollution.
- Valerie Turella Vlahos from Pacific Gas and Electric Company commented that they support the climate goals and the existing Cap and Trade program. The program is fundamentally well-designed, but needs price controls from a price collar. California already has a dividend with Climate Credits that pass through utilities to customers. The Legislature needs to reauthorize with a 2/3 vote.

- Adam Smith from Southern California Edison: support the Cap and Trade program and the policy proposals in the draft Scoping Plan. Utilities want to be a part of the solution for mobile sources.
- Bonnie Homes-Gen from American Lung Association-California commented that they want a strong Scoping Plan that meets goals while maximizing air quality and other co-benefits. Regulatory measures like the Low Carbon Fuel Standard is critical. Can't get to targets without a mix of other strategies.
- Julia Kingsley from the Natural Resources Defense Council commented that they want California to maintain progress, and that the Legislature shouldn't impede ARB's work. The Scoping Plan should account for new policies passed by the Legislature. We support the extension of Cap and Trade.
- Lucas from the Nature Conservancy commented that they support the extension of Cap and Trade.
- Michael Shaw from the California Manufacturers and Technology Association commented that they support the extension of Cap and Trade with a 2/3 vote. Also commented that the third compliance period starting next year will reduce free allowances to low and medium risk industry, which will harm production for those entities.
- Jeremy Smith from the State Building and Construction Trades Council commented that they support the extension of Cap and Trade with 2/3 vote.
- Amy Vanderwarker from the California Environmental Justice Alliance commented that Cap and Trade exacerbates negative air quality issues, and that California's climate policies aren't supposed to increase pollution.
- Brent Newell from the Center on Race, Poverty, and the Environment commented that ARB is not proposing as many direct emissions reductions as possible.
- Barbara Haya from UC Berkeley commented that the offsets program has large issues that could negate the expected benefits.
- Jon Costantino from Tradesman Advisors commented that offsets provide an important voluntary reduction measure, and are currently producing real benefits for California.