



As Ethan's [post](#) recounts, the California Assembly today passed AB 197, a bill linked to SB 32, which extends California's climate goals to 2030 and requires emissions reductions by that year of 40 percent below 1990 levels (see [my post](#) from yesterday describing the bills and how they are linked). The passage of the two bills is a huge victory for the Governor and will continue the state's global leadership on climate change. AB 197 does, however, have the potential to alter fairly significantly the path the state has been on to reduce its emissions. My aim in this post is to begin a conversation about what AB 197 is likely to do to the state's cap-and-trade program. I offer some initial thoughts about the bill's effects but first explain cap and trade, why the program is controversial and what AB 197 has to say about it.

The centerpiece of California's efforts to reduce greenhouse gas emissions is, of course, a cap-and-trade program that covers the vast majority of the state's emissions. Cap-and-trade has many advantages — at least theoretically — over more direct regulation, especially for greenhouse gas emissions that have largely global, not local effects. As I have explained in a previous [post](#) from which the following description is taken, under a cap-and-trade scheme, the government sets a total amount of emissions that all of the sources of greenhouse gas emissions covered by the program can emit. That total amount (the cap) is then divided into allowances (usually one allowance equals one ton) and distributed (or auctioned) to the polluters. The polluters can comply with cap and trade in several ways. They can cut their emissions to equal the total amount of allowances they have. They can cut their emissions below the amount of allowances they have and then sell the extra allowances to polluters who need more. They can emit more than they are allowed and buy extra allowances from sources that have extras. Or they can buy a certain percentage of "offsets," which are pollution reductions from sources not covered by the cap and trade program (see [here](#) for a detailed description of offsets). The main idea behind cap and trade

is to allow market forces to produce the cheapest emissions reductions instead of having the government decide which reductions will occur. Cap and trade is especially popular for greenhouse gas emissions because the problem is a global one, not a local one. A reduction in carbon dioxide in Ghana is just as good as a reduction in carbon dioxide in California. So cap and trade, if it works effectively, should produce large carbon emissions reductions cost effectively regardless of where the reductions take place.

Environmental justice advocates in California — and a number of supporters in the California legislature — have long been suspicious of cap-and-trade. Indeed advocates [sued](#) the California Air Resources Board five years ago to try to invalidate California's program.

The lawsuit was largely unsuccessful. As I explained at the time, the environmental justice opposition to cap-and-trade is based on the following concern. Most of the large emitters of greenhouse gases, especially carbon dioxide, also emit conventional pollution like precursors to ozone pollution (garden variety smog). If those large carbon emitters reduce their own carbon emissions, they are also likely in the process to reduce conventional pollutants: as they use cleaner energy sources or burn less fuel they'll not only emit less carbon but fewer traditional pollutants. In environmental parlance, reductions in carbon emissions can produce co-benefits in the form of cleaner air. Environmental justice groups in California oppose the idea that cap and trade will allow large polluters to continue polluting while buying their way into compliance under cap and trade. And in California, emitters can "buy" their way to compliance either by purchasing additional allowances or purchasing offset credits from sources like forests that are not covered under the cap.

AB 197 is based on this environmental justice view of cap and trade. Here is it's most important provision:

**38562.5.**

When adopting rules and regulations pursuant to this division to achieve emissions reductions beyond the statewide greenhouse gas emissions limit and to protect the state's most impacted and disadvantaged communities, the state board shall follow the requirements in subdivision (b) of [Section 38562](#) [requirements contained in the original AB 32] , consider the social costs of the emissions of greenhouse gases, and prioritize both of the following:

(a) Emission reduction rules and regulations that result in direct emission reductions at large stationary sources of greenhouse gas emissions sources and direct emission reductions from mobile sources.

(b) Emission reduction rules and regulations that result in direct emission reductions from sources other than those specified in subdivision (a).

AB 197 defines “Social costs” to mean “an estimate of the economic damages, including, but not limited to, changes in net agricultural productivity; impacts to public health; climate adaptation impacts, such as property damages from increased flood risk; and changes in energy system costs, per metric ton of greenhouse gas emission per year.”

Ethan’s [take](#) on what might happen to cap and trade in the wake of AB 197’s passage is an important one and worth reading — it may alter the politics of future legislation in important ways. But what happens if AB 197 remains good law? First, what does it mean to “prioritize” direct emission reductions? Does the language require ARB to impose such reductions? Or only consider them in conjunction with other considerations? What happens, for example, if direct emissions reductions are more expensive than reductions achieved through cap and trade even taking into account the social costs of emissions as required?

Health and Safety Code Section 38562(b)(1), for example, directs ARB in cutting emissions to do so “in a manner that is equitable, *seeks to minimize costs* and maximize the total benefits to California.” That provision remains in effect and AB 197 now imposes a new requirement. Is ARB given the discretion to balance these two requirements and make an independent determination about how to regulate? Or what if CARB determines that cap and trade is likely to result in direct emission reductions at large stationary sources as the overall cap on emissions gets tighter? Or that the state’s complementary policies like the Renewable Portfolio Standard — which directs utilities to procure 50 percent of their energy from renewable sources by 2030 — are sufficient to reduce emissions from large stationary sources since the emissions reductions that result from fuel switching may eventually lead to lower usage of those stationary sources? ARB is likely to be accorded deference by courts in making these decisions but can the board impose no emissions reductions directly on stationary sources without violating AB 197? Also, for the electric power sector at least, it is unclear whether direct emissions reductions requirements can achieve significant reductions. EPA faced this dilemma in crafting its Clean Power Plan for existing power plants. Because direct emissions reductions would [achieve relatively little](#), the agency treated our system of electricity as an interconnected machine and based its calculations of total reductions from the sector within each state on cuts that occur not just at the plant but “beyond the fence line”. Could ARB similarly treat large stationary sources such as power plants as part of an interconnected system and treat programs that reduce emissions within the system, like the RPS and energy efficiency programs, as direct reductions? And what happens to California’s plan to comply with the Clean Power Plan if it determines it cannot rely heavily on cap and trade since its cap-and-trade program is [at the heart of](#) the state’s plan to comply?

These are my initial musings early about the provision. I'd love to hear from others about your take. What does AB 197 require of ARB and what is the effect of the direct emissions provision on cap-and-trade?