As Cara wrote yesterday, a California court has put AB 32 on hold temporarily on the grounds that in preparing its scoping plan, the California Air Resources Board failed to assess alternatives to its plan with appropriate detail. In particular, the court took issue with CARB's failure , under the California Environmental Quality Act, to assess carbon taxes as an alternative to an economy wide cap and trade scheme (though as both Cara and I have written, the court case should at worst delay AB 32's implementation and the court rejected all of the plaintiffs' substantive challenges to the scoping plan).

What is especially interesting about the court case, *Associated Irritated Residents v. CARB*, is that the plaintiffs who filed suit are environmental justice groups and individuals, not a euphemistically named industry group seeking to halt the state's progress in cutting its greenhouse gas emissions. Environmental justice groups in California have made no secret of their discomfort with cap and trade as a centerpiece of the state's emissions reduction plan even though they are otherwise very supportive of AB 32's strong climate change goals. I confess at the outset that I disagree strongly with the environmental justice groups' position. Here's why.

First, let me set forth the basis for environmental justice advocates' concerns. Principally, the groups worry that the cap and trade scheme will allow the state's largest emitters of greenhouse gases — mainly utilities and refineries — to purchase their way to compliance rather than reducing their own emissions. Here's how. 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 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.

So what's the complaint from environmental justice groups? Most of the large carbon emitters also emit conventional pollution like precursors to ozone pollution (garden variety smog). And if those large carbon emitters reduce their 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 worry that cap and trade will allow large polluters to continue polluting while buying their way into compliance under cap and trade. They can do so either by purchasing additional allowances or purchasing offset credits (though the CARB cap and trade proposal limits offsets to 8 percent of covered emissions).

Rather than having cap and trade, e.j. groups propose two alternatives. The state could directly regulate the carbon emissions of its largest polluters by, for example, telling them what kind of technology to install or giving them an individual plant limit and allowing the company to decide how to comply. But the problem with this approach is that is likely to be much more expensive per ton of pollution reduced. And for me, one of the puzzles of the environmental justice position is that higher costs are likely to affect low income Californians disproportionately. If utility bills have to go up in order to reduce carbon emissions, higher electricity prices will hit those on fixed incomes most heavily. While I'm in favor of measures that both reduce greenhouse gases and air pollution all things being equal, all things may not be equal when comparing cap and trade to direct regulation. If direct regulation produces greenhouse gas emissions at significantly higher cost than direct regulation, that cost should matter in figuring out the best way to regulate. I'll come back to the question of air pollution in a moment.

Environmental justice groups also suggest that CARB adopt a carbon tax instead of a cap and trade program. The court listened to the environmental justice groups on this point. The central basis for the court slowing down AB 32 in the Association of Irritated Residents case is that CARB should have analyzed in much more detail a carbon tax as an alternative to cap and trade (though the court decision doesn't tell CARB it must adopt a carbon tax, only that it must analyze a tax as a potential alternative as required by CEQA). But I honestly don't understand why a carbon tax is preferable to cap and trade from an environmental justice perspective. A carbon tax would be imposed on emitters of carbon, probably also on a per ton of emission

basis. Companies could avoid the tax by reducing their pollution but they could also just decide that the cost of the tax is worth paying and continue to pollute. So a carbon tax seems just as likely to allow large polluters to continue to emit if it's more cost effective to do so. And a carbon tax doesn't give the state the benefit of capping overall emissions: if the state sets the tax too low and emitters decide it's cheaper to pollute rather than reduce their emissions, the state won't achieve its emissions reduction goals. The debate over whether a carbon tax or cap and trade is more effective in reducing carbon emissions is admittedly a complicated one (though I'm always struck by the fact that the argument seems to be "lets compare an actually proposed cap and trade scheme, with all its messiness, with a pure and clean ideal carbon tax rather than what a carbon tax would actually look like — riddled with loopholes and exemptions — if it could ever be achieved politically). But on environmental justice grounds about air pollution co-benefits, I just don't see why a carbon tax is a superior alternative.

I should note that I'm quite sympathetic to concerns by environmental justice groups about reducing air pollution from large sources in California. And in fact a number of the measures CARB has included in its scoping plan should help on the air pollution front: aggressive moves to cut greenhouse gases from automobiles should also produce cleaner cars; the state's requirement that utilities get 33 percent of their energy from renewable sources by 2020 should do the same. But I also think that the focus of AB 32 should mainly be on reducing greenhouse gases. Other statutes require very strict limits on air pollution, including both the federal Clean Air Act and the state's own air pollution laws. Those are the statutes that should be used to regulate air pollution directly. CARB should have as much flexibility as possible to implement AB 32 with a focus on reducing greenhouse gases as cost effectively as possible. If it can do so by also maximizing co-benefits like air pollution they should do so but the board's central focus should remain greenhouse gas emission reduction.