In the comments to a recent post, Red Desert raises a good question about the application of cap-and-trade to greenhouse gases. Red points to this report in The Wonk Room of a letter signed by 14 Democratic senators asking that the leadership "ensure that emission allowances allocated to the electricity sector – and thus, electricity consumers — be fully based on emissions as the appropriate and equitable way to provide transition assistance in a greenhouse gas-regulated economy." The signatories want allowances to be distributed on the basis of past emissions, rather than on the basis of electricity sales or (gasp!) an auction.

Red's question: "Does anyone from the Planet have a perspective on this letter? What does this kind of policy do for clean energy states like California? Perhaps, this once, it's time to ask, what would Schwarzenegger say?"

I'll take a first crack at that, although other Planeteers are more expert on this topic and may well have different perspectives. Cara and Dan have both dealt with this issue before. Cara's post has a helpful link to economist Rob Stavins's defense of free allocation. His bottom line:

> the allocation of allowances – whether the allowances are auctioned or given out freely, and how they are freely allocated – has no impact on the equilibrium distribution of allowances (after trading), and therefore no impact on the allocation of emissions (or emissions abatement), the total magnitude of emissions, or the aggregate social costs.

To translate that out of economist-speak, how allowances are allocated is an important distributional issue, but should be irrelevant to the effectiveness of the policy. It matters a great deal to those who must have allowances whether they get them for free or have to buy them from the government or someone else. Coal-fired power plants are going to need a lot of allowances, so this is a critical point for them. But the total emissions under a cap-and-trade regime depend only on the level of the cap, and that decision is formally independent of how allowances are allocated.

Not surprisingly, since this issue is so important to current emitters, give-aways to them have been the rule, rather than the exception. About 10 years ago, Yale law professor Tom Merrill found that all U.S. emission trading programs to that point had given credits away. One conspicuous recent exception is the northeast Regional Greenhouse Gas Initiative, which says that participating states auction "a majority" of the allowances.

Although it doesn't directly affect the ultimate emission level, allowance allocation is an important issue in a number of respects. In the realm of raw politics, allocation schemes can build political support or undermine it. Emitters might be convinced to climb aboard, or at least to temper opposition, by promises of free allowances. On the other hand, coalitions can be built on promises to devote some portion of auction revenues to one cause or another. (Take a look at the details in Waxman-Markey of how the share of auction revenues that would be devoted to adaptation would be divided up. It looks to me like more care was devoted to those negotiations than to setting the cap or anything else.) And natural supporters of emission limits can be turned off by the appearance or reality of a fat give-away to polluters.

A little more subtly, as I indicated in the comments to Dan's earlier post, I think giving away allowances can enhance the already strong pressures on legislatures and regulators to over-allocate allowances. If allowances are free, there's nothing to discipline initial demands for them. Since historically over-allocation has been a serious problem for trading schemes like RECLAIM, it may be important not to add weight on that side of the political scale.

The distribution issues are also not trivial. There's a moral hazard aspect to giving away allowances on the basis of past emissions, as the letter writers are demanding. Under that scheme the worst polluters, who have done the least to address the problem in the past, end up with the biggest reward. That problem can be solved without necessarily auctioning allowances, by basing allocations on past electricity production rather than CO2 emissions.

Finally, auctioning can provide revenues to support things like development of green tech, and adaptation. It may well be fair to impose at least some of the costs of those response efforts on the polluters most responsible for the GHG problem (and, of course, on their customers).