



By Robert N. Stavins

## Free GHG Cuts: Too Good to be True?

Global climate change is a serious environmental threat, and sound public policies will be needed to address it effectively and sensibly. In previous columns, I have emphasized the importance of recognizing the global commons nature of the problem, and hence designing and implementing an international policy architecture that is scientifically sound, economically rational, and politically pragmatic.

But despite the United States' decision not to ratify the Kyoto Protocol, and the apparent lack of interest by the White House in negotiating a post-Kyoto agreement, there are movements in Congress to establish a unilateral domestic program, and several regions and states are moving ahead with their own plans.

Key among these is California's Global Warming Solutions Act of 2006, intended to return the state's greenhouse gas emissions in 2020 to their 1990 level. Three studies were released last year indicating that California can meet its 2020 target at no net economic cost. That is not a typographical error. The studies find not simply that the costs will be low, but that the costs will be zero, or even negative! That is, the studies find that California's ambitious target can be achieved through measures whose direct costs are outweighed by offsetting savings they create, making them

economically beneficial even without considering the emission reductions they may achieve.

Given the substantial emission reductions that will be required to meet California's 2020 target, these findings are — to put it mildly — surprising, and they differ dramatically from the vast majority of economic analyses of the cost of reducing GHG emissions. As a result, I was asked by the Electric Power Research Institute — along with my colleagues Judson Jaffe and Todd Schatzki of Analysis Group — to evaluate the three California studies.

We found that although some limited opportunities may exist for no-cost emission reductions, the studies substantially underestimate the cost of meeting the 2020 target — by omitting important components of the costs of emission reduction efforts, and by overestimating offsetting savings some of those efforts yield through improved energy efficiency. In some cases, the studies focus on the costs of particular actions to reduce emissions, but fail to consider the effectiveness and costs of policies that would be necessary to bring about those actions. Just a few of the flaws we identified lead to underestimation of annual costs on the order of billions of dollars.

This episode is a reminder of a period when similar studies were performed by the Department of Energy at the time of the Kyoto negotiations. Like the California studies, the DOE studies suggested that substantial emission reductions could be achieved at no cost. Those studies were terribly flawed. I had thought that such arguments about massive free lunches in the energy efficiency and climate domain had long since been laid to rest. The debates in California have proven otherwise.

While the Global Warming Solutions Act of 2006 sets an emissions

target, critical policy design decisions remain to be made that will fundamentally affect the cost of the policy. For example, policymakers must determine the emission sources that will be regulated to meet those targets, and the policy instruments that will be employed. The California studies do not directly address the cost implications of these and other policy design decisions, and their overly optimistic findings may leave policymakers with an inadequate appreciation of the stakes associated with the decisions that lie ahead.

On the positive side, a careful evaluation of the California studies highlights some important policy design lessons that apply regardless of the extent to which no-cost emission reduction opportunities really exist. Policies should be designed to account for uncertainty regarding emis-

sion reduction costs, much of which will not be resolved before policies must be enacted. Also, consideration of the market failures that lead to excessive GHG emissions makes clear that to reduce emissions cost-effectively, policymakers should consider a market-based policy

(such as cap-and-trade) as the core policy instrument.

The fact that the three California studies have so egregiously underestimated the costs of achieving the goals of the Global Warming Solutions Act should not be taken as indicating that the act itself is necessarily without merit. As I have discussed in previous columns, that judgment must rest — from an economic perspective — on an honest and rigorous comparison of the act's real benefits and real costs.

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