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## **Lawrence Goulder and Robert Stavins: State fight against climate change benefits everyone**

BY LAWRENCE GOULDER - Special to The Bee

By enacting Assembly Bill 32, the Global Warming Solutions Act, California has taken a bold step to reduce greenhouse gas emissions. While AB 32 doesn't specify the mechanisms for achieving these reductions, one approach being considered is called "cap and trade."

Under this approach, regulators restrict emissions by issuing a limited number of emission "allowances," with the number of allowances ratcheted down over time, thus assuring ever-larger reductions in overall emissions. Pollution sources such as electric power plants and factories are allowed to trade allowances, and as a result sources able to reduce emissions least expensively take on more of the pollution-reduction effort.

Experience has shown that cap-and-trade programs achieve emissions reductions at dramatically lower cost than conventional regulation. Cap and trade has successfully cut acid rain by more than half in the United States at an annual savings of \$1 billion – savings that show up in monthly electricity bills. Likewise it was used successfully in the 1980s to phase out leaded gasoline more quickly than anyone predicted while saving \$250 million a year.

Yet some are uneasy about the prospect of cap and trade. In particular, the California Environmental Justice Movement announced last month its opposition to this approach, citing concerns that it would hurt low-income communities.

Would it?

One expressed concern is that a cap-and-trade policy might increase pollution in low-income or minority communities. The apprehension is not about greenhouse gases – the focus of AB 32 – since these gases spread evenly around the globe and thus would have no discernible impact in the immediate area. Rather, it's about "co-pollutants," such as nitrogen oxides, carbon monoxide and particulates, which can be emitted alongside greenhouse gases.

Because a cap-and-trade system would reduce California's overall greenhouse gas emissions, it would also lower the state's emissions of the co-pollutants. Still, it's possible, though unlikely, that co-pollutant emissions would increase in a particular locality. But here it's crucial to recognize that existing air pollution laws address such pollutants, and so any greenhouse gas allowance trades that would violate local air pollution limits would be prohibited.

If current limits for co-pollutants are thought to be insufficient, the best response is not to scuttle a statewide system that can achieve AB 32's ambitious targets at minimum cost. Rather, the most environmentally and economically effective way to address such pollution is to revisit existing local pollution laws and perhaps make them more stringent.

Some critics have offered a more fundamental criticism of cap and trade, claiming that it would fail to reduce statewide greenhouse gas emissions. Quite to the contrary, by imposing a fixed cap, a cap-and-trade system offers regulators unparalleled capabilities to ensure that a particular emissions target is met.

As evidence that cap and trade would not bring about real reductions, some have referred to Europe's Emissions Trading Scheme for greenhouse gas emissions. Indeed, emissions did not fall in the pilot phase of the ETS. But the pilot phase's main purpose was to test the system's design, not to achieve significant reductions. In the subsequent "Kyoto" phase of the ETS, which began this year, the cap has been tightened, and the program is achieving significant reductions.

While much attention has rightly been given to the effects of potential climate policies on environmental conditions in low-income communities, it's also important to consider their economic impacts on these communities. Reducing greenhouse gas emissions will require greater reliance on more costly energy sources and more costly appliances, vehicles and other equipment. Because low-income households devote greater shares of their income to energy and transportation costs than do higher-income households, virtually any climate policy will place relatively greater burdens on low-income households. But because cap and trade will minimize energy-related and other costs, it holds an important advantage in this regard over conventional regulations.

Moreover, a cap-and-trade system gives the public a tool for compensating low-income communities for the potential economic burdens: If some emission allowances are auctioned, revenues can be used to mitigate economic burdens on these communities.

All in all, cap and trade serves the goal of environmental justice better than the alternatives. It deserves a central place in the arsenal of weapons California uses to combat climate change. Beyond helping the state meet its emissions-reduction targets at the lowest cost, it offers a promising way to reduce economic burdens on low-income and minority communities.

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