

## **Air quality board to consider fee on emissions**

by David R. Baker, staff writer

S.F. Chronicle, Thursday, June 25, 2009

Many California businesses could soon face the nation's first state fee for emitting greenhouse gases, under a proposal state air quality regulators will discuss today.

The fee - about 12 cents per metric ton of carbon dioxide - is not designed to penalize emissions. Instead, it would pay for creating and enforcing the state's global warming regulations, the result of California's landmark 2006 law to fight climate change.

If approved by the California Air Resources Board, the fee would not apply to every California business or industry. Oil refineries, cement factories and electric utilities would bear most of the cost, with a typical refinery paying an estimated \$1.3 million per year.

The fee would raise a total of \$51.2 million for each of the next three years, but eventually drop to \$36.2 million. Most of that money would stay with the air board, which develops most of California's climate change policies. For example, at today's meeting the board also will discuss regulations to capture methane from landfills and require glazed, heat-deflecting car windshields, which cut the amount of energy needed to keep cars cool.

With California's economy in crisis, the businesses covered in the proposal aren't pleased to face another fee. They resent that it goes after some industries but not others.

"We have maintained all along that it needs to be economy-wide, transparent and fair, and that it be a reasonable cost," said Michaelleen Mason, director of regulatory affairs at the Western States Petroleum Association. "That hasn't happened with this regulation."

Critics also complain that the air board did not provide enough information earlier for them to see precisely how the money would be used. Several business groups sued the board, arguing that the board did not turn over documents that would justify the size of the fee.

"We weren't getting the information we felt we needed to comment on the fee in any kind of rational way," said Dorothy Rothrock, vice president of the California Manufacturers & Technology Association. She said the board finally turned over 5,000 pages of documents on Friday, too late for the group to study in depth for today's hearing.

Air board staff members say they have tried to keep the fee as low as possible and make it simple to collect.

Although it doesn't apply to every industry that emits greenhouse gases, it does cover, in one way or another, 85 percent of the state's emissions. Some industries produce so little of the emissions that collecting the fee from them would actually cost the state more money than it would bring in, said Jon Costantino, manager of the board's climate change planning section.

"If there's a lot of overhead to go after a little bit of emissions, it's actually a loser," he said. "We have taken every effort to minimize this fee."

The fee would apply to three major sources of greenhouse gas emissions: fossil fuels, heavy industry and electricity generation. The fee, in general, would be collected from fuel and electricity suppliers rather than users. For example, the fee would apply to oil refineries but not to the companies that distribute gasoline. Nor would it apply to individual gas stations.

Companies facing the fee would probably pass the expense on to their customers. But the air board estimates that a typical Californian household would only pay an extra \$4 per year on its electricity and fuel bills as a result.

## **California weighs global warming fee on industry**

By Samantha Young - Associated Press Writer

In the NY Times, SF Chronicle, Modesto Bee and other papers, Thursday, June 25, 2009

SACRAMENTO -- Nearly three years after California adopted its landmark global warming law, the state is poised to impose the nation's first statewide carbon fee on utilities, oil refineries and other industries.

The money will go toward funding a regulatory bureaucracy that will oversee the law and ensure the state lowers its greenhouse gas emissions.

The California Air Resources Board on Thursday is expected to vote for the carbon fee, an action that comes as the state is mired in recession and experiencing its highest jobless rate - 11.5 percent - in modern times.

The timing of the air board's action has prompted concerns that the fee will impose yet another burden on California's businesses.

It would be imposed beginning in 2010 and would raise \$51.2 million annually during its first three years, an amount that would level off at \$36.2 million during the fifth year. The average cement plant would pay about \$200,000 a year, while the average oil refinery would pay about \$1.3 million a year.

Industry groups say the proposal unfairly singles them out to pay for the law, which has been championed by Republican Gov. Arnold Schwarzenegger.

"Whether the economy is good or bad, any time you impose a fee, it goes against the cost of doing business," said Dorothy Rothrock, vice president of government relations at the California Manufacturers & Technology Association. "We're always struggling here to remain competitive."

The air board targeted the fee to industries it considers the starting point for roughly 85 percent of California's greenhouse gas emissions. For example, refineries and utility plants are the first handlers of the fuel and electricity that Californians consume every year.

About 250 businesses in California that make, sell or import gasoline, diesel, natural gas and coal would be charged roughly 12 cents per ton of carbon dioxide that they and their customers emit.

Cement plants also would be subject to the fee because the chemical process to make cement produces greenhouse gases. The charge would drop to 9 cents per ton of carbon dioxide in 2014.

Industry representatives said the air board's approach unfairly holds them accountable not just for their own emissions but also for those generated by the millions of Californians who use their products. They would like the fee spread across a broader cross-section of the economy.

Air regulators say they need the fee to carry out the California Global Warming Solutions Act, which seeks to reduce emissions in the state to 1990 levels by 2020. It is intended to cover the salaries of 174 people hired since Schwarzenegger signed the law.

"Consumers won't notice this fee," said Bill Magavern, the California director of the Sierra Club. "From a taxpayer point of view, Californians should be glad that the big polluters rather than the taxpayers will be charged."

Others disagree. Dan Kammen, a professor of energy and public policy at the University of California, Berkeley, said he expects the costs will be passed along to consumers.

The air board staff projected those costs would be minimal if spread throughout the state.

The average restaurant, for example, would see an increase of roughly \$14 a year in its electricity and natural gas costs, said Jon Costantino, manager of the climate change section at the air board. The cost to each Californian would amount to between \$1 and \$1.50 a year.

A few local government entities have adopted similar fees. Last year, air regulators in the San Francisco Bay area imposed a 4.4 cent per-ton carbon fee on businesses that emit greenhouse gasses. In 2006, voters in Boulder, Colo., imposed a carbon tax on their own energy use.

## **Calif. wants autos to have UV-reflecting windows**

By Samantha Young- Associated Press Writer

In the Merced Sun-Star, Thursday, June 25, 2009

SACRAMENTO -- California, a trendsetter and nemesis of the auto industry for decades, is at it again.

The state's air regulators on Thursday will consider a requirement for auto manufacturers to include sun-reflecting glass on all vehicles sold within the state.

The idea is to keep the cars, pickup trucks and sport utility vehicles they sell in California cooler during hot weather, reducing the amount of air conditioning their drivers and passengers need. In turn, that will improve fuel efficiency and reduce greenhouse gas emissions.

"The end result of it is the customer gets a car that's more comfortable to ride in, air conditioners don't have to work as hard and the atmosphere will be happier because we won't be emitting as much carbon dioxide," said Mary Nichols, chairwoman of the California Air Resources Board.

Despite its financial troubles, the auto industry did not object to any potential cost of implementing the regulation but said it needed more time. It also petitioned the board to allow carmakers to consider exempting more fuel-efficient cars.

If regulators adopt the standard, three-quarters of passenger vehicles sold in California must have specially coated windshields that block 50 percent of the sun's heat from entering a parked car, beginning with the 2012 model year. All vehicles must have those windshields a year later.

The windows would cool a sedan's interior by an estimated 14 degrees Fahrenheit or 12 degrees for a pickup or SUV. The standard would be even higher in 2014. Some glass manufacturers told regulators they might not be able to meet that deadline.

The Alliance of Automobile Manufacturers and the Association of International Automobile Manufacturers also asked for more time to meet the standards. They raised concerns that reflective glass can interfere with cell phones signals, GPS navigation systems and electronic passes for toll roads.

In a joint written response to the air board, the groups did not indicate that financial troubles of the American auto companies would hinder the industry's ability to comply.

Drivers that replace windows in older cars also would have to meet the new standards.

The window mandate is among dozens of strategies pursued by the board in its effort to reduce California's greenhouse gas emissions to 1990 levels by 2020, the goal set by the state's 2006 global warming law.

California has been a leader for decades in setting auto standards. It was the first state to require the use of catalytic converters in 1975 as a way to reduce smog. A 2002 state law intended to force cleaner auto emissions was the reason the Obama administration implemented greater fuel-efficiency standards earlier this year.

A proposal to require so-called "cool paints" was removed from the regulation under consideration Thursday after the auto industry complained it might have to stop selling black cars in California.

The technology used by glass manufacturers to make more reflective car windows has been around for nearly 20 years, said Mukesh Rustagi, director of strategic product management at Pittsburgh Glass Works, the largest automotive glass supplier in North America.

General Motors Corp. has installed the windows in several of its minivans, including the Oldsmobile Silhouette and the Chevrolet Lumina. Both BMW and Mercedes use the windows in several of their cars, Rustagi said.

A metallic coating that blocks infrared rays is applied to glass before a window is laminated and is invisible to the naked eye. Adding reflective windows would raise the cost of a new car by about \$111.

Nichols, the air board chairwoman, said drivers eventually would save money because they wouldn't use the air conditioning as much. An air conditioner can increase the fuel consumption of a vehicle by more than 20 percent, according to the board.

## **Smog causes increased cancer risk in L.A. County**

By Dana Bartholomew and Susan Abram, Staff Writers

L.A. Daily News, Thursday, June 25, 2009

Los Angeles County residents face nearly twice the risk of cancer from air pollution compared with the rest of the nation, with a slice of Cerritos facing the greatest potential harm, according to a federal study released Wednesday.

The Environmental Protection Agency reported that county residents face a 63-in-a-million cancer risk from 80 toxic chemicals released by cars, factories and similar polluters.

The average cancer risk across the country is 36-in-1 million, according to the report, which is based on 2002 data, the most recent available.

That's an improvement from the 2006 report which, based on 1999 emissions, calculated a 42-in-a-million cancer risk.

Part of Cerritos - a city tucked between the 5 and 605 freeways - had a 1,200-in-1 million risk, or 34 times the national average. Elsewhere in the county, 70 census tracts had an increased cancer risk of greater than 100 in 1 million.

But local air regulators criticized the most sweeping study of the nation's air to date for failing to include cancer-causing diesel among the toxic chemicals considered. Diesel particulates act like microscopic suitcases for toxins like benzene that can lodge deep within the lungs.

"It really does not give the full picture of the most serious source of toxic air pollution in Southern California, which is diesel soot," said Sam Atwood, spokesman for the South Coast Air Quality Management District.

The EPA's National-Scale Air Toxics Assessment pinpointed parts of the nation where residents face the greatest health risk from air pollution.

While urban areas such as Los Angeles and New York were at greatest risk, the air was the foulest in rural counties in Mississippi and Kentucky.

The EPA found that 2.2 million people lived in neighborhoods where air pollution raised the cancer risk to unacceptable.

While the worst single neighborhood lay in Cerritos, part of Madison County, Ill., wasn't far behind.

Parts of Coconino County, Ariz., and Lyon County, Nev., had the lowest cancer risk from air toxins. The counties with the least toxic air are Kalawao County, Hawaii, and Golden Valley County, Mont.

"Air toxic risks are local. They are a function of the sources nearest to you," said Dave Guinnup, who led the EPA risk assessment study. "If you are out in the Rocky Mountains, you are going to be closer to 2-in-a-million. If you are in an industrial area with a lot of traffic, you are going to be closer to 1,100-in-1 million."

A comprehensive AQMD study released early last year found that Southland residents were exposed to a lifetime cancer risk from air pollution of 1,200 in a million.

It concluded that 84 percent of the risk is from diesel exhaust from trucks, ships and locomotives, with 10 percent from cars and 6 percent from industrial sources.

The greatest risk was to residents who live within 100 yards of freeways or ports, the AQMD study said.

But federal EPA officials defended the science behind their report.

"We had a panel of experts review the numbers," Guinnup said, "and they said you can't make qualitative risk conclusions about cancer based on diesel emissions."

Earlier this year, the American Lung Association deemed the Los Angeles area the most ozone-polluted region in the country, with transportation the biggest cause of air pollution.

Wednesday's EPA report "does not represent the full range of toxic pollutants," said Bonnie Holmes-Gen, senior policy director for the American Lung Association. "But it is a signpost that the cancer risk in California and across the country is too high.

"I think their report raises concerns about the elevated cancer risks from mobile sources."

Researchers all agreed that toxins affect those who live near busy highways, which are magnets for low-income communities.

But while air toxins are significant in causing cancer, other factors contribute to illnesses, said Dr. Michael J. Thun, vice president emeritus of Epidemiology and Surveillance Research for the American Cancer Society.

Thun said reports that toxic air quality increases the average cancer risk to 36 in 1 million may be confusing and misinterpreted.

"In other words, air pollutants add an additional 36 people in a million who will develop cancer over a lifetime," he said. "An additional 36 is a meaningful number in terms of policy and regulation, but it comprises a very small fraction of background risk."

## **Climate bill will pass House on Friday, lawmaker predicts**

Renee Schoof - McClatchy Newspapers

In the Merced Sun-Star, Thursday, June 25, 2009

WASHINGTON — A Democrat who helped draft the sweeping climate bill that limits greenhouse gases and improves the nation's energy efficiency predicted Wednesday that the legislation would be approved by the House on Friday.

Rep. Ed Markey, D-Mass., said the measure would lead to a "green revolution," reduce global warming pollution, reduce oil imports, create jobs in clean energy companies and protect consumers from higher prices and industries from the effects of competition from overseas.

"On Friday we are going to pass the most important energy and environment bill in history," Markey said at a rally to drum up support.

The rally, outside the Capitol building, drew Democratic leaders and environmental, labor and religious groups to press members of the House of Representatives to vote for the legislation.

Not everyone is happy with the proposed climate law, however.

Republicans complain that a key component of the bill — a mechanism to trade carbon emission permits and collect revenue to offset the higher cost of fossil fuels — was just another form of tax.

The Congress of Racial Equality, a civil rights group with some 100,000 members, opposed the bill Wednesday, saying it was an "elitist view" that higher prices for fossil fuels would prompt conservation and that "the poor and working families we represent cannot bear that luxury."

Roy Innis, the group's chairman, also objected to provisions in the bill that would return money from the sale of permits to consumers. "Americans don't want 'energy welfare payments' from the government to help ease the sting of these government-driven cost increases."

The bill is designed to set up sweeping changes in the production and use of energy in the United States into the middle of the century. It would lead to increases in the price of fossil fuels, but also incentives for cleaner alternatives. Some of the money from sales of permits for each ton of emissions would be distributed to regulated utilities that would be obligated to hold down ratepayers' bills. Some revenue would go to industry.

Two recent reports, by the Environmental Protection Agency and the Congressional Budget Office, said the costs to consumers would be minimal. The EPA analysis said that in 2020 the average household would pay 7 percent less for household energy because efficiency measures would reduce demand. The CBO said consumers could expect to see costs rise by \$175 a year and that poor households would save \$40 a year.

Rep. Mike Doyle, D-Pa., a member of the House Energy and Commerce Committee, said the bill would provide a "clean energy future" for the next generation and boost the U.S. steel industry with jobs for new products such as wind turbines.

"'Drill, baby, drill,' is Flintstones technology. This is about the future technology and it's technology that's going to be kept here in the United States of America," Doyle said.

Republicans, with few exceptions, oppose the bill.

Rep. Eric Cantor of Virginia, a member of the House Republican leadership, said it would bring "the largest tax increase in the country's history."

Cantor in a statement on Wednesday cited a Massachusetts Institute of Technology study that Republicans said shows the bill would cost \$3,100 per household. The author of the study earlier said the GOP misinterpreted the study to derive that amount.

Another opponent of the legislation, the American Petroleum Institute, said the recent CBO study, which found the average household would pay \$175 per year if the bill passed, was too rosy. It didn't include gasoline price increases that could cost \$800 per family per year, API president Jack Gerard said in a statement.

A coalition of major environmental groups, including the National Wildlife Federation and the Sierra Club, urged members of Congress to pass the bill, strengthen its environmental protections and defeat amendments that opponents are expected to offer to weaken it on Friday before the final vote.

If it passes the House on Friday, the bill would still be far from becoming law. There are many unknowns ahead, including how the Senate would shape a version of the legislation, and whether it would pass.

### **Obama promotes climate-change bill in face of conflicting figures He says a House measure, along with his auto-efficiency plan, would save as much as the U.S. imports from the Persian Gulf. Some government projections suggest that's an overstatement.**

By Paul West, staff writer

L.A. Times, Thursday, June 25, 2009

Reporting from Washington -- President Obama on Wednesday defended his assertion that a climate-change measure making its way through Congress would greatly reduce U.S. dependence on foreign oil, even as government figures raised questions about whether he was overstating its effect.

Obama has intensified his lobbying effort ahead of an expected House vote Friday on a Democratic energy proposal designed to reduce greenhouse gas emissions sharply by 2050. The plan is one of the president's most ambitious legislative priorities, along with his push to overhaul the nation's healthcare system.

In a White House interview, Obama said that if the House proposal becomes law, "we are greatly reducing our dependence on foreign oil."

Estimates initially provided by the White House showed that the reduction in oil imports advertised by the president would amount to a cut of about 10% in 2030. Aides provided additional estimates Wednesday from an outside group that tripled the expected savings.

"All this stuff takes a while to ramp up," Obama said during a half-hour discussion in the Roosevelt Room. "Ten years out, it's not going to necessarily look as if the changes are massive. Twenty years out, suddenly you start really getting huge impacts. Thirty years out, you had a transformative difference in the economy. And that's how we've got to look at it."

Obama said that the combination of the House bill and his recent proposal to improve auto efficiency would save the U.S. "the equivalent of what we import from the entire Persian Gulf."

Heather Zichal, deputy assistant to the president for energy and climate change, said Wednesday that the House measure would reduce overall U.S. oil consumption by 700 million barrels in 2030. The White House later corrected that figure to 245 million barrels a year by 2030, citing a report by the Environmental Protection Agency.

That's less than one-third of the amount that the country now imports from the gulf. In 2008, the U.S. brought in 845 million barrels of crude oil from the gulf, according to the Energy Information Administration, an arm of the Energy Department.

In 2030, that figure would be about 584 million barrels, according to the information agency.

The Energy Information Administration has projected that total U.S. oil imports will drop over the next two decades, in part because of action taken during George W. Bush's administration to increase the production of ethanol and other biofuels. By 2030, oil imports will represent 40% of total U.S. consumption, down from 58% in 2007, according to an April report by the agency that took into account Obama's economic stimulus package but did not factor in either the energy legislation or his auto plan.

But the White House seized on a new preliminary assessment of the House legislation released Wednesday by an outside group, the American Council for an Energy-Efficient Economy, to buttress its claims.

The group, which analyzed portions of the House measure not calculated by the EPA, came up with just over 1 million barrels per day in reduced energy consumption in 2030. The additional energy savings would come from relatively minor portions of the legislation that would direct money to new investments in transportation planning and research on plug-in hybrids and other electric-powered vehicles.

Adding that figure to the EPA estimate, the White House came up with overall energy savings of nearly 2 million barrels a day, or more than the amount projected for Persian Gulf imports in 2030.

## **Attorney general sues Pleasanton over its voter-approved housing cap**

By Sophia Kazmi, Staff Writer

In the Contra Costa Times and Tri-Valley Herald, Thursday, June 25, 2009

PLEASANTON — Attorney General Jerry Brown took legal action Wednesday against the city of Pleasanton over what he called its "draconian and illegal" limit on new housing.

Brown called the city's 29,000-unit voter-approved cap a significant cause of traffic congestion, air pollution and urban sprawl in the East Bay.

The limit "forces people to commute long distances, adding to the bumper-to-bumper traffic along (Interstate) 580 and 680 and increasing dangerous air pollution," Brown said in a news release. He said Pleasanton needs to balance its housing and jobs and take advantage of "underutilized land and proximity to BART."

Brown, in filing a motion to intervene in Alameda County Superior Court that would force the city to lift its permanent cap, essentially is joining a lawsuit that was originally filed by the nonprofit group Public Advocates in October 2006. That filing, at the time, said the city was not doing enough to provide affordable housing.

Pleasanton Mayor Jennifer Hosterman said the city has discussed the issue with the attorney general's office, which she said is going after cities it feels are not complying with the state's climate change or greenhouse gas emission reduction law, known as AB 32.

Hosterman said she has not seen the lawsuit, but the attorney general's office sent a very strong letter to the city notifying it of its intention to file a lawsuit if Pleasanton did not set aside the cap. The City Council has discussed the possibility of the state joining the lawsuit and has agreed to strongly defend the voter-approved cap on housing, Hosterman said.

"All of us who live and work in Pleasanton are vehement about safeguarding our special quality of life," she said. The lawsuit says Pleasanton knew that the housing cap did not comply but did nothing to fix it. The city caps residential building permits to 750 a year, which will allow for 3,750 permits during the next five years, fewer than the 4,188 units the state says it should have.

According to the attorney general's office, during the past 10 years, job growth in Pleasanton has nearly doubled — from 31,683 jobs to more than 58,000, but new housing has not kept pace with demand, even though there is land for it, including sites near the BART station.

Hosterman said if Brown is successful in getting a judge to declare the housing cap invalid, the matter would be back in voters' hands.

"We're going to do whatever it takes to ensure the people of Pleasanton are able to make the final decision on how we grow," Hosterman said.

## **Draft permit issued for proposed Calpine plant in Hayward**

By Eric Kurhi, The Daily Review

In the Contra Costa Times and Tri-Valley Herald, Thursday, June 25, 2009

HAYWARD — Greenhouse gas reductions are key to the approval of plans for a 600-watt power plant near the Hayward shoreline, according to a draft permit released by the air district charged with giving it the go-ahead.

In an 80-page document released Wednesday, the Bay Area Air Quality Management District revised its permit conditions to include a requirement that the proposed Russell City Energy plant use only technology that would release the least amount of greenhouse emissions possible.

The draft permit seeks additional public comments, and air district officials stressed that it does not mean the plant is guaranteed for approval.

Calpine officials said they had no objections to the district's greenhouse gas requirement, even though there is no federal requirement to limit those emissions.

In practice, the proposed plant's two large gas-turbine generators would be modified to cut down on emissions, making them comparable with new technology, said Rick Thomas, Calpine's vice president of project development.

"Since the turbines were ordered five or six years ago, (the manufacturer) has developed new control technologies and other changes," Thomas said. "These are upgrades that will help us comply with the required level (of emissions)."

Thomas stressed that the engines are not used models, but rather ones that were purchased after the plant first won approval.

According to the draft report, the only way to control emissions is through the efficiency of the engine, and Thomas said the output would be competitive with the most modern turbines.

He said federal regulations are foreseeable in the future, and that "it makes sense to work with the environmental community to come up with something that's going to work for everyone."

But opponents of the plant, who have spoken at numerous hearings and submitted hundreds of letters to the air district as part of the public comment period, maintain that problems remain with the location of the plant that such regulations would not fix.

Rob Simpson, a Hayward resident who filed a lawsuit against the plant — resulting in a previous permit being remanded — said the fossil-fuel plant is an "archaic design that would emit nearly twice the particulate matter into the local community than modern (alternative) facilities."

"The worst impacts would be to the residents of Hayward, increasing asthma rates for youth and respiratory failure for the elderly," he said.

He added that many people do not trust that the facility will be operated as promised, and other residents and groups have written about a host of associated potential problems, including effects on the nearby shoreline, endangered species and pilots using Hayward Executive Airport.

The public comment period is expected to last through late July and include a public hearing.

Calpine officials said they are hopeful they are still on track to begin construction next year and have the plant functioning in 2012.

The draft document can be viewed at [www.baaqmd.gov](http://www.baaqmd.gov).

[L.A. Times commentary, Thursday, June 25, 2009:](#)

### **Global warming bill still contains some smoke and mirrors**

**The European-style 'cap and trade' provisions on emissions will fuel only failure and should be replaced by a carbon tax.**

By Todd Darling

George W. Bush fought global warming policy all the way to the Supreme Court. And he lost. Despite this judicial rebuke, he opposed climate-change legislation to the end. Now, with President Obama, White House views on global warming finally are in line with scientific data. But this doesn't mean that politics can't still trump science.

Congressional response to the climate crisis has taken shape in the Waxman-Markey American Clean Energy and Security Act. The bill has a lot to like. It sets efficiency standards, encourages alternative energy and establishes emissions ceilings on vehicles, industries and power companies by 2020.

However, key provisions of Waxman-Markey resemble earlier European efforts, and Europe's experience raises serious questions about the ability of this legislation to adequately cut emissions or fund green solutions.

The Waxman-Markey bill proposes a market-based "carbon trading" plan that mirrors a European system initiated in 2005. This plan requires polluters to obtain government-issued "carbon credits," which then allow them to pollute above the agreed-on limit.

Think of these pollution credits like a golf handicap. You'd like to shoot 72 on 18 holes, but you rack up 108 on your score card. So just as the hapless golfer would use his handicap to cover the 36-stroke deficit, polluters would use pollution credits to cover their extra emissions. What if a polluter doesn't have 36 credits? Then it must buy them on the open market or pay a penalty. The penalties are expensive, and so the polluter is motivated to find either a solution or more credits.

In theory, money generated by this "carbon market" will jump-start investment in clean technology.

In a recent conference call to climate activists, Rep. Henry Waxman (D-Beverly Hills) stated that his bill's carbon-trading plan "is based on work by the USCAP." USCAP, or the United States Climate Action Partnership, is a coalition of environmental groups, including the Natural Resources Defense Council, the Nature Conservancy and a couple dozen A-list corporations, including General Electric; Duke Energy; oil companies Shell, ConocoPhillips and BP America; chemical companies DuPont and Dow; as well as numerous utilities.

USCAP's carbon-trading plan, which became part of the Waxman-Markey plan, shares key details of the European system -- most importantly, it gives 85% of the pollution credits to the biggest polluters for free.

The European experience shows the critical weakness of this plan. In Europe, the distribution of free pollution credits to industries failed to establish a strong carbon market. In turn, the weak market in carbon credits failed to generate the money needed to fund new technology. And because there was a glut of free credits, polluters that went over the emissions limit could buy the necessary credits cheaply. So important states, such as Britain, continue to exceed the pollution limits.

Faced with disappointing results, Europe began auctioning off more of the credits in 2006. But the damage was done. The arrival of the recession caused the "carbon price" to plummet further. Critics point at companies that cut back their production 20% -- and therefore pollute 20% less because of the recession -- and now sell their unused pollution credits to prop up their bottom line. Money that was supposed to be generated from pollution credits to fund clean technology goes elsewhere.

The complex European trading scheme, started with free pollution credits, has not produced dramatic cuts in pollution or dramatic developments in technology or a robust market in carbon credits. The Financial Times of London was blunt: "Carbon markets leave much room for unverifiable manipulation. [Carbon] taxes are better, partly because they are less vulnerable to such improprieties."

Unfortunately, global warming and its solutions are complicated, but we have very little time for mistakes.

A recent scientific report from the Intergovernmental Panel on Climate Change warns that a 2-degree Celsius warming of our atmosphere has a 90% chance of undoing the conditions on Earth that allowed and supported the development of human civilization.

Scientists from Oxford University, using this report, calculate that we can avoid this potentially catastrophic 2-degree warming if we limit our emissions between 2000 and 2050 to 1 trillion metric tons of carbon. They note that we've already burned 25% of that limit since 2000.

In response to criticism of the Waxman-Markey bill, the NRDC's Dan Lashof told National Public Radio's Warren Olney: "This is the best bill that can actually get through committee." Other supporters of the bill frequently cite Bismarck's line: "Politics is the art of the possible."

But which "possible" do they see? The 2007 corporate gauge of the best possible deal? Or the 2009 update of broad populist sentiment that favors coherent action over special interests?

Controlling pollution will require incentives. But does that mean giving away 85% of the credits for free, possibly setting up yet another questionable Wall Street "market"?

We need this bill to pass, but in a strengthened form: Put the emissions cap in line with the trillion-ton limit, cut back the freebies to fund innovation and green jobs and protect poor families from utility rate spikes.

In the face of clear scientific warnings, we have broad popular support for climate legislation. Don't let Congress waste this crisis on a historic miscalculation of what is possible. Talk to your representatives this week.

*Todd Darling produced and directed "A Snow Mobile for George," a documentary that examines the effect of environmental deregulation on individuals.*