

## **Land-use rules designed to fight global warming**

By Michael Gardner, U-T SACRAMENTO BUREAU  
San Diego Union-Tribune Sunday, August 31, 2008

SACRAMENTO – California is on the verge of initiating a historic rewrite of local planning laws, fusing for the first time the issues of urban growth and global warming.

Unprecedented nationally, the complex legislation would steer communities toward land-use policies to contain sprawl, using as much as \$12 billion a year in state-controlled transportation funds as an incentive.

“This bill will change the way California grows,” said state Sen. Darrell Steinberg, D-Sacramento, its author.

Under the measure, the state Air Resources Board would establish targets for 17 regions to reduce greenhouse gas emissions as part of a broader campaign to curb global warming. It then would be up to local planning agencies, such as the San Diego Association of Governments – known as SANDAG – to help cities and counties implement land-use policies that would meet those goals.

Regional agencies are expected to encourage more compact development, linking residents to transit, jobs and shopping.

The legislation offers builders density concessions, relief from time-consuming and costly environmental reviews, stronger safeguards against litigation aimed at stopping projects, and assurances that proposals complying with general plans will not be arbitrarily derailed.

“It will be a national model,” Steinberg said. “This is the biggest bill in the country to combat sprawl.

The Senate approved the measure yesterday, sending it to Gov. Arnold Schwarzenegger. The governor has not taken a position on SB 375, but he has championed many of its goals.

Despite the broad appeal the measure has enjoyed, there are reservations. Business property owners want the same deal given to home builders. Some transportation agencies seek more road-building flexibility.

And less-populated regions worry about their ability to meet such stipulations as frequent bus service and placing new homes in proximity to job centers.

In San Diego, the reviews are mostly positive. Prominent planning figures and major developers say they do not anticipate a revolutionary shift in growth patterns because the region already is moving to encourage environmentally friendly projects that link housing, transit and jobs.

“Our planning policies are in sync with the goals in the bill,” said Barry Schultz, chairman of the San Diego city planning commission and an advocate for affordable housing. “We are all traveling down the same road.

We all have the same values, the same interests, the same goals in mind.”

However, the San Diego Regional Chamber of Commerce is opposed, primarily out of fear that transportation projects that are important but may not meet the goals of the air board could be derailed, said Ruben Barrales, the chamber's president.

Chamber officials also lobbied to extend the environmental concessions to business properties, but Steinberg held firm, saying such a significant change so late could unravel the delicate coalition of supporters.

Steinberg said he expects to have to finagle legislation next year to address some of the complaints, including those leveled by the chamber.

"It continues to be a moving target," Barrales said, referring to ongoing negotiations over the issue. "We're moving closer to a bill that is acceptable and, more importantly, workable for economic growth."

The rewards, supporters say, are many. Residents are promised shorter commutes, improved mass transit and more affordable housing. "Future development will be more transit-oriented, more pedestrian-oriented, linking employment centers and housing centers," Schultz said.

Just as important, supporters say, curbing the need for car trips would significantly reduce greenhouse gas emissions, a primary contributor to global warming.

"This is the missing piece in California's historic effort to reduce global warming pollution," said Ann Notthoff, who represented the Natural Resources Defense Council in negotiating the bill.

Over the past two years, Steinberg has negotiated the carefully nuanced agreement with environmentalists, builders and local planning agencies.

It would provide the state Air Resources Board with an approved framework for how regional governments will comply with state law that requires significant rollbacks in greenhouse gas emissions. That way, supporters say, the air board will be less likely to impose Draconian regulations.

Steve Doyle, president of Brookfield San Diego Builders, said he mostly favors the bill but has some misgivings. He remains wary of the air board, noting that the measure is not as specific as he would like in limiting the agency's reach.

"Everything seems to be going the right way, but there is no assurance," Doyle said.

The drawbacks Doyle sees:

Projects could still be subject to cumulative impact studies.

Not all regional planning agencies may be able to work out differences to qualify for transportation funds.

There is some uncertainty over how future regulations will apply to projects on the drawing board today.

"It's a complete turnabout in how business is done," Doyle said.

Doyle's company has projects in different areas, in urban as well as suburban settings where there is more room for growth and pressure to change commuting patterns. His major concern there is whether overlapping planning agencies in Riverside County, Imperial County and other regions can reconcile differences with the targets. "I can see a lot of potential for confusion and conflict," he said.

However, Doyle is confident that San Diego's regional government group will be successful. "SANDAG has an excellent history of jurisdictional cooperation."

Sherman Harmer, president of the Building Industry Association of San Diego, said, "there's a huge new emphasis on reconnecting jobs and rooftops" in this era of \$4 gas, growth pressures and climate change.

One reason he was drawn to the bill, Harmer said, is it would provide clear direction for cities and counties. "How do you implement something when there are no rules?" said Harmer, who is also the president of Urban Housing Partners. "The issue has been defined now."

Harmer and Doyle say the incentives were important to the building community. "There has to be rewards," Harmer said.

Despite his endorsement, Schultz, the San Diego planning commissioner, said communities must be vigilant. Developers should not be able to wiggle out of complying with other key elements of the California Environmental Quality Act (CEQA), he said.

"You have to be careful you don't streamline and sacrifice the goals of CEQA," Schultz said. "That's the challenge."

Despite strong support from key environmentalists and home builders, the measure has drawn some stiff opposition.

Transportation agencies, particularly, are concerned that road projects were not included in some of the provisions meant to streamline projects.

Darren Kettle, executive director of the Ventura County Transportation Commission, said the measure could make it more difficult for his region to win voter support for a 2010 sales tax increase to fund badly needed transportation projects. Opponents, he said, could seize on that uncertainty to argue that some projects approved in a sales tax measure would not be guaranteed because of the mandatory link to greenhouse gas emission reductions.

"Our frustration is the rules of the game are being changed," Kettle said.

Developers were not the only ones seeking stronger shields against lawsuits related to compliance with greenhouse gas emission reductions. Cities and counties, including San Diego, have been pressured by Attorney General Jerry Brown, who had threatened legal action unless local governments became more aggressive.

Some Republicans maintain that the legislation cedes control over growth to the state.

"This bill changes the way land-use planning is done. (It's) 'smart growth' as defined by the state," said Assemblyman Robert Huff, R-Diamond Bar.

But if that were the case, cities and counties would be rising up in opposition, said Bill Higgins, who represented the League of California Cities in negotiations.

Nevertheless, admitted Higgins, "it's like walking down the altar for a lifetime commitment. You're really excited, but you're really nervous."

## **Calif. land use subject to global warming review**

By DON THOMPSON - Associated Press Writer

Sacramento Bee, Modesto Bee and Tri-Valley Herald, Sunday, August 31, 2008

SACRAMENTO -- For decades, California cities and counties knew one way to grow - by sprawling outward.

That approach, which has led to ever longer commutes, jammed freeways and worsening air quality, is being challenged under a bill that was approved Saturday in the state Legislature.

The bill would require local governments to plan their growth so homes, businesses and public transit systems are clustered together. The goal is to help California meet the emission mandates spelled out in a wide-ranging greenhouse gas reduction law passed two years ago.

At the same time, it will encourage housing to be built closer to where people work and shop while discouraging the type of suburban sprawl that has characterized California's development pattern for decades.

It requires local governments to submit regional development plans to state air regulators for approval, making them eligible for billions of dollars in state and federal transportation grants.

Sen. Darrell Steinberg, the bill's author, said it has drawn support from groups that typically are adversaries: home builders, environmentalists, advocates for affordable housing and local government officials. He called it "the coalition of the impossible."

Steinberg said the legislation "allows California to grow, but in a way that is consistent with our environmental goals."

California would be the first state to impose such statewide requirements on local land-use decisions and connect them to concerns about global warming. It is one of many steps the state is taking to meet the mandates of the 2006 law, which requires all greenhouse gas emissions statewide to be reduced to 1990 levels by 2020.

The state Senate approved the bill on a 25-14 vote. Gov. Arnold Schwarzenegger, who has championed the 2006 law, has not indicated whether he will sign it.

Steinberg, a Democrat from Sacramento, said the measure is needed even as record-high gas prices and a declining housing market have put the brakes on far-flung suburban developments through the state.

"Gas prices certainly may have an impact on growth patterns, but I think that's only one piece of it," Steinberg said in an interview. "I'm not confident that the current state of gas prices alone will combat sprawl."

His bill requires the California Air Resources Board to work with local governments to set regional targets for reducing heat-trapping greenhouse gases. Those targets would be used in transportation plans for each of the state's 17 metropolitan regions.

Similarly, the state would create regional housing plans that take into account the transportation plans, putting more homes near rail and bus lines and within a short commuting distance of major employers.

Local governments and transit agencies that comply would get faster regulatory approval, including an easing of the usual environmental review requirements. That provision allows a major concession to developers by making it more difficult for opponents to sue them as a way to stop projects.

Republicans opposed the bill, equating it to government telling people where and how they should live.

Sen. Tom McClintock, R-Thousand Oaks, said the legislation would force people to live in "a condo by the train tracks" by discouraging developers from building traditional suburban neighborhoods that provide more space.

He described it as "bureaucratic central planning over individual freedom of choice."

Steinberg and other supporters said it was false that his bill would allow only condominium-style developments.

"This is not about mandating where people live, but it is about urging our cities and counties about being more thoughtful about where people live," said Sen. Denise Ducheny, a Democrat from San Diego.

She said Californians are tired of having to commute hundreds of miles a day between home and work.

### **Bay Area**

#### **SPARE THE AIR:**

By Denis Cuff - East County Times

In the Tri-Valley Herald, Friday, August 29, 2008

Today is the third Spare the Air Day in a row in the Bay Area because of smoggy weather.

The region's air quality district urges the public to minimize driving, and refrain from using gas-powered lawn mowers or other activities that produce smog-forming pollutants. The district also advises children, the elderly and those sensitive to air pollution to limit outdoor exertion. This is the 11th Spare the Air health advisory of the year.

### **Governor gets land-use bill**

S.F. Chronicle, Monday, September 1, 2008

**What we said:** "Anyone who has studied Bay Area traffic patterns would recognize the effect of land-use decisions on congestion - and its corresponding level of pollution. New housing developments are built with the expectations of long commutes. Too many have been built far from employment centers and in suburbs where public transportation is insufficient or nonexistent. Fortunately, the Air Resources Board may be about to get strong guidance from the Legislature. State Sen. Darrell Steinberg, D-Sacramento, has done a remarkable behind-the-scenes job of building support for legislation (SB375) that would require the impact on greenhouse gas emissions to be included in regional housing and transportation plans. It also would provide regulatory relief for residential and mixed-use projects that optimize available public transit." - Editorial, "The planning void," Aug. 7, 2008

**What happened:** Steinberg's SB375 cleared the Assembly on Aug. 25 on a 49-22 vote, then advanced through the Senate on Saturday, 25-14.

**What's next:** The measure goes to Gov. Arnold Schwarzenegger for his signature or veto.

### **Scientists fear impact of Asian pollutants on U.S.**

By LES BLUMENTHAL, McClatchy Newspapers

In the Merced Sun-Star, Sunday, Aug. 31, 2008

WASHINGTON -- From 500 miles in space, satellites track brown clouds of dust, soot and other toxic pollutants from China and elsewhere in Asia as they stream across the Pacific and take dead aim at the western U.S.

A fleet of tiny, specially equipped unmanned aerial vehicles, launched from an island in the East China Sea 700 or so miles downwind of Beijing, are flying through the projected paths of the pollution taking chemical samples and recording temperatures, humidity levels and sunlight intensity in the clouds of smog.

On the summit of 9,000-foot Mt. Bachelor in central Oregon and near sea level at Cheeka Peak on Washington state's Olympic Peninsula, monitors track the pollution as it arrives in America.

By some estimates more than 10 billion pounds of airborne pollutants from Asia - ranging from soot to mercury to carbon dioxide to ozone - reach the U.S. annually. The problem is only expected to worsen: Some Chinese officials have warned that pollution in their country could quadruple in the next 15 years.

While some scientists are less certain, others say the Asian pollution could destabilize weather patterns across the North Pacific, mask the effects of global warming, reduce rainfall in the American West and compromise efforts to meet air-pollution standards.

"East Asia pollution aerosols could impose far reaching environmental impacts at continental, hemispheric and global scales because of long-range transport," according to a report earlier this year in the *Journal of Geophysical Research*. The report said that a "warm conveyor belt" lifts the pollutants into the upper troposphere - the lowest layer of Earth's atmosphere - over Asia, where winds can bring it to the U.S. in a week or less.

The National Academies of Science, at the request of the Environmental Protection Agency, NASA, the National Oceanic and Atmospheric Administration and in consultation with the State Department, has assembled a panel to examine the problem and its impact. Its report is due next summer.

"Everyone realizes this is an issue of growing importance," said Laurie Geller of the National Academies of Science. "This is very challenging science with lots of complexities and a lot of uncertainties."

Though the problem of Asian air pollution has been known for years, no one has a handle on how much is blown in and what it includes. Scientists say Washington state and Oregon might be feeling the brunt of the effects.

"This pollution is distributed on average equally from northern California to British Columbia," said Dan Jaffe, a professor of environmental science at the University of Washington's Bothell campus. "Anyone who has gone out to measure it has found something."

Particulates such as dust and soot, along with heavy metals, pesticides, PCBs, mercury, ozone, carbon dioxide, nitrogen dioxide and sulfur dioxide have all been found. Jaffe said the pollutants can't be tracked to a single source such as a particular coal-burning plant, but their "chemical fingerprints" can point to a specific country.

Viruses, bacteria and fungi also can be transported on dust particles, though, so far, they've been found only on the dust and sand blowing off African deserts, not Asian ones.

Mercury, one of the most hazardous pollutants from the hundreds of coal-burning electricity generating plants in China and elsewhere in Asia, is of particular concern. One study estimated a fifth of the mercury entering Oregon's Willamette River comes from overseas, with China as the mostly likely source.

Jaffe, a member of the National Academies of Science panel studying the issue, is wary of such reports. But he still estimates that as much as 30 percent of the mercury deposited in the U.S. from airborne sources comes from Asia, with the highest concentrations in Alaska and other western states.

"Ten years ago, there was a lot of skepticism," Jaffe said. "People assumed the atmosphere scrubbed itself and didn't believe these pollutants could travel thousands of miles."

The pollution from Asia will only make it increasingly difficult for the U.S. to meet stricter and stricter air quality standards, said Lyatt Jaegle, a professor of atmospheric sciences at the University of Washington in Seattle.

"It is only expected to get worse," Jaegle said of the Asian air pollution reaching the U.S. She added that scientists have discovered the problem isn't unique to the Pacific Rim. "Air pollution is not a local or regional problem, it is a global problem."

Days after a major dust storm in the Gobi Desert in Asia, visibility in the Grand Canyon was obscured. Dust from deserts in North Africa has reached Florida. U.S. air pollution can reach across the Atlantic to Europe, even as pollution from Europe can circle the globe and reach the U.S.

Air can circulate around the world in three weeks or less. The National Academies of Science is not limiting itself to pollution from Asia and will study the phenomenon worldwide.

"It's one atmosphere," said Mark Schoeberl, project scientist for NASA Aura satellite program.

Schoeberl said his and other satellites have "transformed" what scientists know about the Earth and can provide a near real-time snapshot of the track of airborne pollution. When the price of gasoline spikes, Jaffe said satellites can detect an increase in sulfur dioxide levels at Saudi Arabian refineries. They've also helped confirm global dimming as sunlight reaching the planet's surface is decreasing because the airborne pollution reflects it back to space. In some places, like Israel, sunlight has decreased 10 percent, Jaffe said.

The pollution also can mask the effect of global warming by reflecting the sunlight, said Veerabhadran Ramanathan, a climate researcher at the Scripps Institution of Oceanography in California who's heading the team of scientists flying the unmanned aerial vehicles off Korea this summer.

The UAVs started flying as China shut down factories and banned automobiles from Beijing during the Summer Olympics and are still flying as pollution levels increase.

"It's a once in a lifetime opportunity," Ramanathan said.

The reduction in sunlight could be increasing rainfall or it might be decreasing rainfall because of less evaporation off the ocean, Ramanathan said. In addition, the soot falling on mountains in the western U.S. could increase snowmelt, he said.

"There are a lot of questions and few answers," Ramanathan said. "We shouldn't be pointing fingers. Everyone else is someone else's backyard. This is a global problem."

## **A Balancing Act on Emissions**

By LIZ GALST

N.Y. Times, Monday, September 1, 2008

The Apollo Alliance, a coalition working to promote green jobs and clean energy, has been struggling with how to offset the global warming pollution that results from its day-to-day operations, especially from its travel.

"Our carbon footprint is ridiculous," its co-director, Kate Gordon, said referring to the amount of greenhouse gases emitted each year by the organization.

Air travel is its worst offender, Ms. Gordon said. The quest for renewable energy has its employees on the move for speaking engagements and lobbying.

“Our president, Jerome Ringo, is probably on the road 250 days a year,” Ms. Gordon said. “I travel about 25 percent of the time. We do a ton of travel as an organization.”

To help reduce the role it plays in the release of carbon emissions, the Apollo Alliance has tried to develop a two-pronged approach. One, cut back on air travel, seemed obvious.

Air miles are responsible for 3 percent to 13 percent of greenhouse gas emissions worldwide, according to various reports. A single round-trip coast-to-coast flight can create about three tons of carbon dioxide emissions, about the same amount as driving a midsize car for six months.

Another, more controversial, option that the Apollo Alliance considered was carbon offsets.

On paper at least, offsets pay for reductions in carbon dioxide production. Offset providers, both nonprofit and for-profit, finance renewable energy projects that reduce the need for electricity from fossil fuel, provide upfront costs for energy efficiency programs, or pay to plant trees.

But there has been criticism of offsetting, with some likening them to medieval papal indulgences, allowing individuals, companies and organizations to continue their polluting ways by simply paying a fee.

As carbon offsets increase in popularity — sales in the United States rose to \$88 million in 2007 from \$39 million in 2006, according to the research firm New Carbon Finance — many travelers have questions about the practice.

“I talk to a lot of people about carbon offsets these days,” said Rusty Pritchard, a former environmental economist at Emory University who serves as outreach director for the Evangelical Environmental Network, a national Christian organization. “They have questions that range from the scientific, like, ‘How does paying for energy efficiency in Brazil offset the carbon you’re emitting on a flight to New York?’ to ‘Is it fair to claim this as a business expense?’ I’ve even had people at universities ask, ‘How do we explain this to our donors?’ ”

Specialists in global warming say the best way for business travelers to reduce their carbon emissions is to limit the time they spend on the road. “The average American creates about 20 tons of CO<sub>2</sub> — about twice the emissions of the average European and far more than people in the rest of the world,” said Anja Kollmuss, senior scientist at the nonprofit Stockholm Environment Institute, a science-based policy institute. “So, if you fly to Europe and back a couple of times, that adds quite a lot to your carbon footprint.”

Once a traveler has reduced flying time, “carbon offsets are worth doing, if you do them right,” said Mark C. Trexler, a carbon reduction strategies consultant and author of a 2006 report, “A Consumer’s Guide to Retail Carbon Offset Providers.”

The challenge is to find quality offsets, because no universally accepted method of certification or verification exists, though some voluntary standards — like the Voluntary Carbon Standard, the Gold Standard and Green-E Climate certification — are gaining acceptance.

“You need careful monitoring to make sure these offsets are transparent and verifiable, that you can document that the offset is permanent and additional,” said Representative Peter F. Welch, Democrat of Vermont and a sponsor of the Carbon Neutrality Act of 2007. The legislation would guarantee that offset providers deliver what they promise, much in the way the Agriculture Department verifies organic farming practices.

Crucial to finding quality carbon offsets is looking for what in the field is called “additionality.”

“You want to invest in a project that would not have happened otherwise,” Ms. Kollmuss said. Consider a program that helps build wind farms, she says. If a particular wind farm would not have been built without the capital provided by the offset vendor, the project is additional.

“But if it’s required by law,” to, say, help meet a state’s renewable energy requirements, “it’s not additional.”

To help sort through the confusion and decide which providers to use, John B. Izzo, an author of business books and a management consultant, used several online references, including a guide to offsetting published by the Nature Conservancy and an offset-provider rating compiled by the [Tufts Climate Initiative](#).

He chose a Swiss-based offset provider, Myclimate, because of its high ranking on the Tufts survey.

Similarly, Mr. Welch offsets the travel associated with his work by using the Vermont-based offset provider Native Energy. He pays more than \$800 out of pocket to offset 71-plus tons of carbon each year.

## **Beyond Carbon: Scientists Worry About Nitrogen’s Effects**

N.Y. Times, Tuesday, Sept. 2, 2008

TOOLIK FIELD STATION, Alaska — As Anne Giblin was lugging four-foot tubes of Arctic lakebed mud from her inflatable raft to her nearby lab this summer, she said, “Mud is a great storyteller.”

Dr. Giblin, a senior scientist at the Marine Biological Laboratory in Woods Hole, Mass., is part of the Long Term Ecological Research network at an Arctic science outpost here operated by the University of Alaska at Fairbanks.

Public discussion of complicated climate change is largely reduced to carbon: carbon emissions, carbon footprints, carbon trading. But other chemicals have large roles in the planet’s health, and the one Dr. Giblin is looking for in Arctic mud, one that a growing number of other researchers are also concentrating on, is nitrogen.

In addition to having a role in climate change, nitrogen has a huge, probably more important biological impact through its presence in fertilizer. Peter Vitousek, a Stanford ecologist whose 1994 essay put nitrogen on the environmental map, co-authored a study this summer in the journal *Nature* that put greater attention on the nitrogen cycle and warned against ignoring it in favor of carbon benefits.

For example, Dr. Vitousek said in an interview, “There’s a great danger in doing something like, oh, overfertilizing a cornfield to boost biofuel consumption, where the carbon benefits are far outweighed by the nitrogen damage.”

Soon after Dr. Vitousek’s report, the journal *Geophysical Research Letters* branded as a “missing greenhouse gas” nitrogen trifluoride, which is used in production of semiconductors and in liquid-crystal displays found in many electronics. According to the report, it causes more global warming than coal-fired plants. Nitrogen trifluoride, which is not one of the six gases covered by the Kyoto Protocol, the celebrated international global warming accord, is about 17,000 times more potent than carbon dioxide. Its estimated worldwide release into the atmosphere this year is equivalent to the total global-warming emissions from Austria.

“The nitrogen dilemma,” Dr. Vitousek added, “is not just thinking that carbon is all that matters. But also thinking that global warming is the only environmental issue. The weakening of biodiversity, the pollution of rivers, these are local issues that need local attention. Smog. Acid rain. Coasts. Forests. It’s all nitrogen.”

Dr. Vitousek's summer report followed a similar account in May in the journal *Science* by James N. Galloway, an environmental sciences professor at the University of Virginia and a former chairman of the International Nitrogen Initiative, a group of scientists pushing for smarter use of nitrogen.

Dr. Galloway is developing a universal calculator for individual nitrogen footprints. "It's Goldilocks's problem," he said in an interview. "Reactive nitrogen isn't a waste product. We need it desperately. Just not too much and not too little. It's just more complicated than carbon." He continued, "But we're not going to get anywhere telling people this is simple or easy."

Dr. Giblin of Woods Hole spent the summer at the field station here, midway between the Arctic Circle and the Arctic Ocean, researching the nitrogen content of lakebed sediment — not the inert nitrogen that makes up 80 percent of air, the reactive nitrogen that Dr. Galloway referred to. In forms like nitric acid, nitrous oxide, ammonia and nitrate it plays a variety of roles.

Nitrogen is part of all living matter. When plants and animals die, their nitrogen is passed into soil and the nitrogen in the soil, in turn, nourishes plants on land and seeps into bodies of water. Dr. Giblin is pursuing her research because as the Arctic warms, the tundra's permafrost will thaw, and the soil will release carbon and nitrogen into the atmosphere.

When an ecosystem has too much nitrogen, the first response is that life blossoms. More fish, more plants, more everything. But this quickly becomes a kind of nitrogen cancer. Waters cloud and are overrun with foul-smelling algae blooms that can cause toxic "dead zones." Scientists call this process eutrophication, but the laymen's translation is that the water gets mucked up beyond all recognition. A recent such plague bedeviled China when its Yellow Sea was smothered in algae at Qingdao, the planned site of Olympic sailing events this summer. More than mere inconvenience, such problems routinely threaten many coastal areas and riverside communities.

Nancy Rabalais, executive director of the Louisiana Universities Marine Consortium, is known as Queen of the Dead Zone. She cruises around the Gulf of Mexico every summer in the research vessel *Pelican* to look for damage from nitrogen-rich river flows into the gulf. This year, she expects a dead zone that will beat the Massachusetts-size 8,500-square-mile bloom of 2002.

One of the problems, Dr. Rabalais said, is that the Mississippi River involves so many communities that it requires stronger federal guidance, which she said was not a part of the Bush administration's policies. She is part of a national research committee financed by the Environmental Protection Agency and run by the National Academies of Science, but, she said, "it's so much talk and not enough action."

She continued: "Because you're not just going up against the agribusiness lobby, but also the livelihood of farmers. It's not exactly popular in the Midwest."

Fertilizer use is largely inefficient. With beef, only about 6 percent of nitrogen used in raising cows ends up in their meat; the rest leeches out into air or water supplies. With pork, it is 12 percent; chicken, 25 percent. Milk, eggs and grain have the highest efficiency, about 35 percent, or half of what, in the metric of report cards, is a C-minus.

"Look," she said, "you just can't have all these states and all these communities knowingly overfertilizing their land because they want a bumper crop every year. That's just all kinds of bad. But Des Moines, for example, is willing to filter their drinking water to an extra degree just to be able to flood their water supply with more-than-normal levels of fertilizer."

Reactive nitrogen competes with greenhouse gases that have greater public awareness. "But it's like looking at malaria and AIDS in Africa," Dr. Rabalais said. "They're both problems. And they both need vigilant attention."

Environmentalists face the puzzle of how to deal with multiple problems at once. And some worry that after the hard-fought campaign spotlighting carbon, turning to focus on nitrogen could upset that momentum.

The tension can plague even the most informed and articulate campaigners. "One of the many complexities that complicate the task I've undertaken is complexity," said Al Gore, the former vice president who won a Nobel Peace Prize for his environmental work. Mr. Gore added, "Look, I can start a talk by saying, 'There are 14 global warming pollutants, and we have a different solution for addressing each of them.' And it's true. But you start to lose people."

### **Dutch venture plans cheap, powerful electric cars**

By *VIJAY JOSHI*, The Associated Press  
Washington Post Tuesday, September 2, 2008

SHAH ALAM, Malaysia -- A Dutch-based company announced plans Tuesday to produce affordable electric cars by the end of 2009, promising they will be much more powerful than existing models and have zero emissions.

Detroit Electric is in negotiations with Malaysia's national auto maker, Proton, to produce the car in this Southeast Asian nation and is also talking to a German and a U.S. carmaker, said the company's chief executive, Albert Lam. He declined to name the companies.

"We believe in affordable electric vehicles for the public. That is our dream ... to find innovative ways to counter global warming," Lam told a news conference before journalists test drove a sports car, a sedan and a subcompact car fitted with Detroit Electric's technology.

Malaysian Prime Minister Abdullah Ahmad Badawi drove the sedan Sunday when he arrived at a National Day parade -- which officials called a testament of the government's commitment to finding green alternatives to tackle rising fuel prices.

Lam said the car will use lithium ion batteries and a motor developed in-house.

"When people tell you it (an electric car) is not practical, that it runs at a slow speed and you can't charge it, that is not true," Lam said at Proton's test track in central Shah Alam city.

An Associated Press journalist who drove the sports car felt it zoom from zero to 100 kilometers per hour (62 mph) in less than five seconds, comparable to gasoline-powered sports cars.

Most electric cars developed so far are quite a bit heavier than regular cars, weighed down by their battery and motor, which limits their acceleration.

Existing models were used for the demonstration -- the sports car was a modified Lotus -- but will create their own designs and market the vehicles under the Detroit Electric brand -- named after a now-defunct U.S. company that produced electric cars in 1907. Lam bought the rights to the name to restore its historical legacy.

Detroit Electric's chief scientist, Frits van Breemen-Schneider, who invented the motor, said it is four to 12 times lighter than existing motors and has a much higher power-to-weight ratio. It can produce 5 kilowatts of power per kilogram, whereas the best electric car in existence can only produce 0.25 kilowatts per kilogram, he said.

The 80,000 ringgit (\$24,000) price tag of the car will be more expensive than conventional vehicles in Malaysia, though the additional expense would be offset by fuel savings. The car battery will have a life span of 200,000 kilometers (125,000 miles).

The company is majority owned by Lam, a British citizen, and has entered into a partnership with several Dutch, American and Malaysian investors with an investment of about \$300 million over the next five years.

They are targeting about 30,000 vehicles worldwide within the first year, ramping up to 270,000 vehicles in the third year.

The cars will have a range of about 200 miles on a full charge after keeping them plugged to an ordinary electric power outlet for seven to eight hours.

Lam acknowledged a major challenge would be to set up battery charging stations throughout the country for long distance travel, but expressed confidence it can be done at least in Malaysia because of the government's backing.

"It is about conviction. If you're an early adapter, there will be some inconveniences, but I'm sure that in two to three years, there will be a comprehensive infrastructure for fast charging," Lam said.

The Dutch government has given incentives to electric cars, including free parking.

"It is great news that Detroit Electric is practically ready to produce a car that has zero emission," said Jan Soer, the Netherlands' deputy ambassador in Malaysia. "All the technology came from the Netherlands.

We are very proud of our tulips, our windmills and our wooden shoes, but we are more than that."

## **Beijing sees clear air from Olympic cleanup**

USA Today Monday, Sept. 1, 2008

BEIJING (AP) — A massive effort to clear up the skies over Beijing for the Olympics paid off with China's capital seeing its cleanest air in a decade, the city's environmental authority said Monday.

The Beijing Municipal Environmental Protection Bureau said the improvement in air pollution was mainly the result of special temporary measures that shut factories and banned cars from the roads for the Olympic Games.

The clear weather continued into September, with crisp, clear blue skies offering a rare glimpse of Beijing's western hills normally obscured by smog.

The environmental bureau said in a notice on its website that the density of major pollutants was cut by 45% in August. It said there were 14 days with the best air quality, or level 1, and only one day rated at the worst quality, or level 3. Normally, some months have only a handful of days with level 1 air quality.

"This is the best quality in the past 10 years," the statement said, referring to the 45% reduction.

The city's air pollution was a major concern in the months leading up to the Olympics, but the worries largely evaporated as the games began under relative blue skies.

"Temporary measures to reduce pollution that were put in place in Beijing and surrounding provinces to guarantee clean air for the Olympics played a fundamental role in improving the air during the Olympic period," the bureau said.

Levels of major pollutants such as sulfur dioxide, carbon monoxide and nitrogen dioxide fell to levels normally found in cities in developed countries, it said.

Beijing typically has air that is two to three times dirtier than in most Western countries. City officials shut down scores of factories, stopped almost all construction and removed 2 million vehicles from the roads for a two-month period that will last from July until after the Paralympics end on Sept. 17.

[Tri-Valley Herald commentary, Sunday, August 31, 2008](#)

### **Daniel Borenstein: The trains likely will be running**

Plans to resurrect freight train service on an East Contra Costa rail line present a public policy dilemma for local and Bay Area officials.

On one hand, they've been fighting to reduce freeway traffic and pollution — two goals aided by shifting cargo from trucks to trains. On the other hand, they have allowed home construction next to the dormant tracks and now must tell new residents that their quiet neighborhoods will be disrupted.

The reality is that within the next few years, mile-long freight trains will probably rumble down Union Pacific's Mococo line through Antioch, Oakley and Brentwood — and there is no way to derail the plans. As painful as that might be for some residents, it's the right outcome. The alternative would be worse.

This is the price we pay in the Bay Area for reaping the benefits of a growing national economy and increased globalization. The East Bay, in particular the Port of Oakland, serves as a hub in the worldwide market. As trade with Asian nations continues to grow, Oakland, the second busiest port on the West Coast, is expected to see container shipments increase at least 67 percent by 2020.

On land, we cannot move all that extra cargo in and out by truck. Our air quality will deteriorate and shipping costs will rise with the price of fuel. Trains are a more fuel-efficient alternative and they are a key to the Port of Oakland's plans for the future.

But there are a limited number of rail lines through the East Bay and into the Central Valley and beyond.

Commuter trains like the Capitol Corridor to Sacramento and the ACE Train through Altamont Pass take up valuable slots on tracks otherwise used for freight. It was just a matter of time before rail companies turned to the Mococo line.

The Bay Area is not unique. Since 1930, railroads have abandoned roughly half their tracks. Now, the resurgence in train traffic brought on by the doubling of the price of a barrel of oil in the past year will stretch rail companies to meet the demand. All of this is little consolation to homeowners along the Mococo line, which has not been used for nearly two decades.

One can't help but wonder whether those residents saw the rarely used tracks before they spent hundreds of thousands of dollars on their homes. Did they inquire about their future use? What did the real estate agents and developers tell them? Is there a warning in the fine print of their closing documents? I suspect we will hear more from them when the trains begin to run.

Zoe Richmond, Union Pacific's spokeswoman, said she doesn't know when that will be. "It's not going to be something where we're going to flip a switch," she said. It will depend on how quickly the economy rebounds and fuel prices rise. It could be two or three years off, but it's inevitable.

The company has recently started notifying local officials. City managers from the three cities are banding together. Antioch, Brentwood and Oakley were all much smaller communities when trains last ran on the Mococo. The city managers rightly worry about the roadway congestion that will be created when trains block traffic on major thoroughfares. There are a lot more cars on those streets than there were in the 1980s.

"This is going to be a huge, huge impact for our communities," said Brentwood City Manager Donna Landeros. "We have developments that back right up to it."

The city managers are going to consult attorneys about their options. They might obtain some mitigation from the state Public Utilities Commission, which is responsible for ensuring railroad crossings are safe. But Union Pacific officials are clear about their intentions and their belief that the cities cannot legally stop them. I'm told by legal experts that they're probably right. Union Pacific never officially abandoned the line. It's free to add as much train traffic as it safely can.

Of course, city officials, especially in Brentwood, will have to answer the question of why their predecessors allowed construction of homes right next to the rail line. In the rush to develop, did they simply turn a blind eye to the obvious? We're left with an unfortunate situation. Residents will be hurt emotionally and financially when trains start running through their neighborhoods. But it's the cost of strengthening the region's economy.

[Fresno Bee commentary, Tuesday, Sept. 2, 2008:](#)

### **7 years to climate midnight**

By Carlos Pascual and Strobe Talbott

The world may have only seven years to start reducing the annual buildup in greenhouse gas emissions that otherwise threatens global catastrophe within several decades.

That means that between Inauguration Day in January 2009 and 2015, either John McCain or Barack Obama will face the most momentous political challenge of all time.

Reflecting a consensus of hundreds of scientists around the world, the Intergovernmental Panel on Climate Change has affirmed that greenhouse gas emissions are raising the Earth's temperature. The Earth is on a trajectory to warm more than 4.5 degrees Fahrenheit by around mid-century.

Exceeding that threshold could trigger a series of phenomena: Arable land will turn into desert, higher sea levels will flood coastal areas, and changes in the convection of the oceans will alter currents, such as the Gulf Stream, that determine regional weather patterns.

Manhattan and Florida would be under water, while Nevada would have no water at all. Some Russians quip that they would welcome a more temperate climate, but they would probably be sorry to lose St. Petersburg.

Countries such as Bangladesh and Mali do not have the resources to mitigate or even to adapt to the impact of climate change; millions would flee coastal flooding and the desertification of farmlands, creating instant "climate refugees."

R.K. Pachauri, the head of the Nobel Prize-winning IPCC, recently told us: "The cities, power plants and factories we build in the next seven years will shape our climate in mid-century. We have to act now to price carbon and create incentives to change the way we use energy and spread technology -- and thereby avert nothing less than an existential threat to civilization."

Urgent and drastic action by the international community is required, and the United States must take the lead.

Americans produce more than four times as much carbon per capita as the Chinese; 12 times as much as Indians; and more than twice as much as citizens of Germany, France, Britain and Japan. Unless the United States acts first, it will have no credibility in persuading other countries to do their share.

To their credit, McCain and Obama support the creation of a cap-and-trade system that would limit national emissions. Trading among firms would put a price on carbon. That is an essential step toward changing industry behavior, encouraging energy conservation and providing an incentive for new technologies.

As the most powerful national economy, the United States can set an example for the world in harnessing wind and solar power; "sequestering" (or capturing) carbon from coal plants; and developing cellulosic ethanol and safe civilian nuclear power as alternatives to fossil fuels.

But the domestic obstacles to these and other measures are daunting. While some industries will prosper, other sectors of the economy, especially those that produce or rely on coal, steel and cement, will contract. Electricity prices will increase in the near and middle terms. Many workers and households will need help with the costs of transition.

Coping with the resulting economic and political hardships would be onerous even if the next president inherited forward-looking climate-change policies. But George W. Bush has pursued an "anti-policy," based on a combination of denial, procrastination and backsliding.

His successor will have to make up for lost time while also dealing with a half-trillion-dollar federal deficit, a recession and a national housing crunch, a looming health-care crisis, wars in Iraq and Afghanistan, and diplomatic showdowns with North Korea and Iran.

The winner in November will need all the help he can get -- including from his opponent, who will go back to the Senate as a major voice on this and other issues. The next president will also need support from the private sector, nongovernmental organizations, academia and -- crucially -- citizens who recognize the consequences if they do not consent to sacrifices and changes in lifestyle.

Many Americans will accept that logic, and make real changes, only if they believe greenhouse gas emissions will affect them personally.

Today's adults, even if they will not be around at mid-century, must think about the fate of their children and grandchildren. Obama can look to his two daughters, and McCain to his four grandchildren. They are among nearly 75 million Americans -- and 2.2 billion people worldwide -- younger than 18.

That generation will be in its 40s or 50s when one of two things happens: Either the temperature of the planet warms more than 4.5 degrees and vast regions slide toward being uninhabitable, or the wisdom of the next president and his fellow leaders around the world pays off in the ultimate reward -- survival.

*Carlos Pascual and Strobe Talbott are, respectively, vice president for foreign policy studies and president of the Brookings Institution. They are involved in a joint project with Stanford University and New York University on global governance.*

[Bakersfield Californian editorial, Sunday, Aug. 31, 2008:](#)

We must change the way we think about growth

We cannot afford to sprawl any more. The cost of new infrastructure is just too high, the price of gas too exorbitant, the impact on air quality too devastating.

Despite the obvious benefits of compact development, cities like Bakersfield continue to struggle with it. Developers are reluctant to build anything but the conventional, big-yard homes they insist

buyers want, and municipal officials are loathe to burden builders with fees commiserate with the broad impact of their projects.

The effect is city planning departments that have trouble walking the walk, builders who promote destructive old models of development, prospective buyers who fear innovation they've never been offered or exposed to, and the perpetuation of some of the nation's worst air.

City councils across California, handcuffed by lack of will, absence of vision, or ideological brain-lock, have generally failed to address the central issues.

Now the Legislature is stepping in. SB 375, written by state Sen. Darrell Steinberg, D-Sacramento, links California land-use planning and global warming remediation targets.

Under SB 375 -- Steinberg's fifth rewrite of the proposal -- each metropolitan area of the state would adopt a "sustainable community strategy" to encourage compact development and connect those plans to greenhouse emissions targets set by the California Air Resources Board.

The bill includes preferential funding for transportation projects that mesh with these local strategies. Participants would get first shot at the \$5 billion in transportation money Sacramento hands out every year.

In addition, residential builders would get relief from a lot of environmental red tape -- an expedited path to completion, as long as their projects fit the goals of the law and the individual community.

In other words, the bill would create opportunities for local creativity in the pursuit of common, statewide benefits.

Regional planners are concerned about a loss of some local control, particularly a perceived one-size-fits-all approach that seems mostly geared to urban areas. But they also see benefits.

"From the standpoint of reducing the amount of vehicle miles traveled -- and land use is certainly part of that -- it's a good thing," said Kern County Planning Director Ted James. "How do you get people to change their patterns and habits? That's always been the challenge.

"I do have concerns with (diminished) local land-use authority, but some of the concepts outlined in the legislation are things we need to start thinking about as we update the Metropolitan Plan with the city of Bakersfield."

Bakersfield city planner Jim Movius agrees that the overall effect will aid cities.

"Some good will come out of it as far as (community) walkability," he said. "I don't necessarily agree with the approach. They say they're not taking any authority away from local planning agencies, but they are by taking away some transportation and (environmental) authority. ... But the things that are going to spin off this (legislation), I think, are good things."

Those with limited imaginations will look at the bill and see the Legislature pushing us all into downtown apartments overlooking the GET bus transfer station. It's that kind of thinking that, over the years, has stymied the inventiveness and innovation that changing times demand.

Steinberg's bill would not eliminate the suburbs or the big, ranch-style homes that some people prefer, but rather create an environment that would give homebuyers more responsible and affordable options.

Creatively applied, attractively rendered urban density built around mass transit lends itself to job growth, affordable housing and protection of farmland, never mind cleaner air. The time to take

bold strides in that direction is now. The governor should sign Steinberg's bill as soon as it crosses his desk.

[Tri-Valley Herald editorial, Sunday, August 31, 2008:](#)

## **Smart growth measure fights greenhouse gas emissions**

MediaNews editorial

TWO YEARS AGO, California made a precedent-setting commitment to significantly reduce greenhouse gas emissions. That's when Gov. Arnold Schwarzenegger signed landmark legislation aimed at cutting emissions 25 percent by 2020.

It is an ambitious goal that, if reached, would result in cleaner air, a reduction in fossil fuel use and less dependence on imported oil. However, cutting back on greenhouse gases is particularly challenging in a state with a population that is expected to grow from about 37 million today to more than 42 million by 2020.

Any successful attempt to reduce greenhouse gases must include ways to cut back on fuel consumption by passenger cars, which account for 30 percent of emissions.

Technology will play a major role as hybrid and other high-mileage cars replace less efficient vehicles. But more must be done if California is to meet its goals. Less driving as well as greater fuel efficiency is needed.

That is where Senate Bill 375 by Darrell Steinberg, D-Sacramento, comes in. The measure's supporters understand that reducing greenhouse gas emissions is best accomplished with a comprehensive plan that includes land use to go along with transportation strategies.

The measure requires the California Air Resources Board to set vehicle emission reduction targets for different regions of the state by 2010. Then each of the state's 17 metropolitan planning associations would devise a plan to meet the goals.

One of the key strategies of SB 375 is to reduce suburban sprawl by linking transportation money to "smart growth" planning. Cities and counties could continue to approve developments. However, only those that are built near transit or clustered near current developments would be eligible for a share of state transportation money.

If new residential and commercial growth is directed toward transit villages and in-fill projects that are nearer to jobs, shopping and mass transportation, people are likely to drive significantly less.

The alternative is more suburban sprawl that requires more driving miles and reduces open space and agricultural land.

What makes SB 375 so appealing is its lack of draconian measures to force people out of their cars. Instead, it uses positive inducements for developers to build intelligently. The bill also exempts qualified "smart growth" developments from the California Environmental Quality Act requirements.

This exemption saves builders from the considerable time and expense of what can be a tedious CEQA process.

The proactive, positive approach of SB 375 has earned the bill the support of the California Building Industry Association.

The measure still does not have the support of some business groups and those fearful of losing local control over land use.

But there is no way to successfully cut greenhouse gas emissions or the wasteful use of nonrenewable fossil fuels and imported oil without regional planning that curbs suburban sprawl.

It is far better to act now, using positive incentives to help Californians drive less without imposing higher fuel taxes, registration fees or driving restrictions.

We are confident that Californians can significantly cut back on their consumption of fossil fuels with new technology and intelligent development that results in less driving.

SB 375 is an important part of that strategy and merits bipartisan support in the Legislature and the governor's signature.

[Fresno Bee editorials, Sunday, Aug. 31, 2008:](#)

### **Bill to reward smart growth**

#### **Bipartisan effort addresses several of state's biggest problems.**

An innovative bill changing the way land-use decisions are made in California is moving through the Legislature and should land on the governor's desk soon. It may wait there a while, since the governor is still determined to hold up most legislation until a budget deal is achieved.

But the measure, Senate Bill 375, by Sen. Darrell Steinberg, D-Sacramento, is a carefully crafted effort to rein in sprawl, cut greenhouse gas emissions, boost mass transit and increase the amount of affordable housing in the state. It deserves the governor's signature.

The bill is complicated, reflecting the fact that Steinberg has worked hard on it for two years, trying to assemble an unlikely coalition of environmentalists, the residential building industry and local governments.

But basically, it would reward local governments for adopting "smart growth" policies in their general plans that encourage denser urban growth, the use of mass transit and shortened commute times. The incentive, in return: Growth that meets those standards would have a higher priority for state transportation funding than areas that don't comply.

The state's Air Resources Board will be setting targets for reductions in greenhouse-gas emissions, part of the process of implementing Assembly Bill 32, California's historic effort to attack global warming.

Local and regional governments would have to create land-use policies that reflect those goals to move ahead in line for transportation funding.

Cities and counties would still be free to sprawl to their hearts' content, but growth outside the target parameters wouldn't qualify for the funding break, a powerful incentive to grow wisely.

SB 375 is a real breakthrough. As Steinberg remarked at a press conference earlier this month, it is "the first time in the country that the issues of land use, transportation, housing and climate change have been brought together in a comprehensive piece of legislation."

The need is obvious. The number of miles we drive in California is growing at almost twice the rate of our population. At the same time, the roads and highways we use are falling into disrepair, exacerbating smog-producing congestion.

Our air quality, especially here in the Valley, is among the nation's worst. All that's compounded when our cities grow outward instead of inward and upward.

Opponents of SB 375 include some business groups and Republicans in the Legislature -- among them Assembly Minority Leader Mike Villines, R-Clovis. They argue it will reduce consumer choices in housing and local control.

But eight Republicans joined the majority Democrats to pass the bill in the Assembly, 49-22, making it a truly bipartisan effort.

SB 375 is a carefully crafted bill that addresses some of the biggest issues facing California communities. Steinberg should be congratulated for his landmark work, and the governor should sign his bill.

## **Change to state regulations will let those who drive less pay less**

Twenty years ago, voters took a stand on car insurance. In California, rates can be based only on three factors: a driver's safety record, miles driven annually and years of driving experience.

The "miles driven" factor is supposed to ensure that the less you drive, the less you pay. But while the law is strong, the current regulation is weak, based on motorists providing estimates of how many miles they expect to drive that year. These estimates are notoriously inaccurate and provide little incentive to drive less.

In this time of high gasoline prices, concerns about greenhouse gas emissions and congested roads, California needs a system where drivers pay car-insurance premiums based on actual, verified miles driven.

So Insurance Commissioner Steve Poizner has proposed amendments to the state's regulations that would provide an option for actual mileage, or pay-as-you-drive coverage. Insurers would be allowed to offer a voluntary option for consumers who want a discount for driving less.

Miles driven would be verified by one of three methods: odometer readings, service records from an auto repair shop or technical devices approved by the commissioner. Poizner has said insurers will be allowed to track only miles driven, not other factors such as when and how individual motorists drive, a concern of consumer groups.

Poizner's amended regulation, which would take effect in fall 2009, is just another way that individuals and businesses can do their part to reduce carbon emissions. Currently, 28% of California's greenhouse gas emissions come from cars.

Thirty-four states already have the pay-as-you-drive option. With 26 million cars and 330 billion miles driven per year, California, the big kahuna among the states, needs to get on board.

[Letter to the Merced Sun-Star, Friday, Aug. 29, 2008:](#)

### **How to clean up air**

Editor: Amidst our budget woes, there is still a way the governor can help clean up the Valley's air for free.

A year ago, the legislature passed Senate Bill 719 allowing the governor to appoint a physician and scientist to the San Joaquin Valley Air Pollution Control District board.

In April, he appointed Fresno cardiologist Dr. John Telles but has yet to fill the post for the scientist seat. This voice is critical to the passage of smart policies aimed at reducing air pollution that causes one in five

Valley children to carry asthma inhalers with them to school.

I know there are several great minds at UC Merced who would qualify for this seat. It would be a wonderful use of resources to tap someone from our newest University of California as well as allow Merced's voice to be at the table.

*Kara Middlebrooks, Merced*

