

Future of Valley to be explored in four-part series

Special to the Madera Tribune Saturday, Feb. 17, 2007

In the next 40 years, the San Joaquin Valley is expected to more than double in size from 3.3 to seven million residents. Are we prepared for such exponential growth?

Two public television stations serving the San Joaquin Valley examine the issues in four half-hour programs that address the key challenges affecting the economic vitality of the region. Topics include economic and workforce development, health and human services, air quality and the San Joaquin Valley Blueprint Project, which covers land use, water, resources and transportation issues.

The series documents the work of the California Partnership for the San Joaquin Valley, established by Gov. Schwarzenegger and includes representatives from eight counties from Kern to San Joaquin. The series is produced by Valley Public Television/KVPT in Fresno in cooperation with KVIE in Sacramento and will complement regional planning efforts now under way.

The first episode debuts on KVPT on Thursday, Feb. 22 at 7 p.m. and will be followed by a 30-minute roundtable discussion hosted by Neil Koenig, Ph.D., a Fresno-based family business and management consultant. Viewers will have the opportunity to call KVPT and submit questions to the panel.

"These are critical issues that affect the future of our cities and our citizens," said Paula Castadio, KVPT chief executive officer. "Our hope is that this series will not only heighten awareness of the issues at hand, but serve to stimulate further involvement by Valley residents as solutions are explored."

Series Schedule on KVPT

February 22

7:00 p.m. The San Joaquin Valley: The Future at Work

7:30 p.m. Panel discussion

March 1

7 p.m. The San Joaquin Valley: Health & Human Services

7:30 p.m. Panel discussion

March 8

7:00 p.m. [The San Joaquin Valley: The Air Quality Outlook](#)

7:30 p.m. Panel discussion

Kerry Drake, EPA deputy director Region 9; Steve Worthley, board chair, Air Pollution Control District (Tulare); Peter E. Weber, chairman & CEO, Amron International.

March 15

7 p.m. The San Joaquin Valley: Our Growing Concerns

7:30 p.m. Panel discussion

Ethanol company partners with methane digesters in South Valley

The (Fresno) Business Journal Tuesday, Feb. 14, 2007

HBS BioEnergy, a bio-fuel production company, announced Monday it has partnered with a Visalia-based dairy group to build a methane digester in the San Joaquin Valley. While the location and financial terms of deal weren't disclosed, the partnership is expected to produce a central digestion system to power a future ethanol plant.

Dairy Development Group and Agrimass Enviro-Energy will design a gasification system that will use wastewater from surrounding dairies, said Len Chapman, CEO of Agrimass.

"The joint venture involves developing and operating an innovating agricultural waste-to-energy park," he said.

"This model for a completely vertically integrated project has never been implemented in the renewable fuel business to our knowledge," said Claude Luster, president of HBS.

Using methane digesters - which converts cow manure into natural gas, which can then be used to fuel a generator for electrical output - would provide energy cost savings of up to 80 percent, he said.

"This project will benefit the Valley, and help address the environmental issues here, by processing the waste to reduce emissions and practically eliminating water quality concerns normally associated with dairies."

While no details of the ethanol plant were disclosed, Nancy Lockwood, who represents the company as its spokeswoman, said it will be a multi-million-dollar operation when it starts production.

Low-income, minority areas bear brunt of Bay Area pollution

By Douglas Fischer, staff writer

Tri-Valley Herald, Sunday, February 18, 2007

Poor and minority residents in the Bay Area breathe and live with far more than their share of industrial and traffic pollution, according to the first analysis of the region's environmental disparities.

The stakes are high: Residents in neighborhoods closest to the pollution have higher lifetime cancer risks, greater rates of asthma and other breathing ailments, and, typically, less access to health care.

"The patterns are clear and indisputable," said Manuel Pastor, professor and director of the Center for Justice, Tolerance and Community at the University of California, Santa Cruz, who co-authored the report.

"Communities of color face greater exposure to air pollution and toxics. They bear a disproportionate burden and face greater hazards and risks than others in the Bay Area."

The report, "Still Toxic After All These Years," was released Saturday at the American Association for the Advancement of Science annual meeting in San Francisco.

It documents environmental disparity in the nine-county Bay Area by examining several key pollution databases and comparing that data with neighborhood demographics from the U.S. Census Bureau.

Among its findings:

Two-thirds of residents living within one mile of a pollution source regulated by the U.S. Environmental Protection Agency — refineries, power plants, factories and other large industrial polluters — are minorities. But of those living 2 1/2 miles away or farther, two-thirds are white.

-Recent immigrants are nearly twice as likely to live within one mile of such a facility than they are to live 2 1/2 miles away.

-Given equal incomes, minorities are still more likely to live closer to pollution sources than whites.

"The report really confirms what many (minority) community residents have experienced for years," said Amy Cohen, campaign director for the Bay Area Environmental Health Collaborative, which helped sponsor the analysis.

"They know the pollution sources are closest to them. They know they live near the highways and the large (pollution) facilities."

And they bear the brunt of the grave consequences of living near such pollution.

Last month in the British medical journal *The Lancet*, researchers at the University of California, Los Angeles, who had studied children over time reported that living near a freeway saddles children with a lifetime's worth of decreased lung capacity and function.

Rubye Sherrod sees this. The North Richmond community activist spends her days working with children afflicted with respiratory ailments, trying, as she says, "to keep the kids in school and not in the emergency room."

Upward of 60 percent of the children in her community carry an inhaler, she said.

"There are so many issues I don't know where to start," she said. "We're in the midst of all these refineries. ... There are too many big rigs in these communities. There's just a lot of undesirable activity going on."

"There's been too much suffering for too many years," Sherrod added. "The people who can help haven't paid any attention to what's going on or simply don't care. I'm not sure."

Global Warming Scientist Is Encouraged

By Randolphe Schmid, The Associated Press
in *The Washington Post*, February 19, 2007

SAN FRANCISCO -- A top scientist in the study of climate change says she is optimistic about public understanding of the dangers of global warming.

"I'm incredibly encouraged," Susan Solomon beamed after speaking to the annual meeting of the American Association for the Advancement of Science.

Solomon, a scientist at the U.S. National Oceanic and Atmospheric Administration, was instrumental in developing the Intergovernmental Panel on Climate Change report released earlier this month in Paris.

That report reaffirmed ongoing global warming, said it is 90 percent likely to have been caused by human activity and added changes in rain and snowfall to the hotter climate expected with continuing change.

"Evidence of climate change is now unequivocal," she said.

Changes already under way will require adaptation in the short term, Solomon said, while efforts to reduce or reverse change will only occur on a long term.

"I am personally an optimist" about increased governmental and public understanding of the problem, Solomon said.

But, she added, "It is complicated. You can't see it, you can't smell it, you can't taste it."

She likened understanding of global warming to that of the ozone hole a few years ago. Once scientists were able to tell the story clearly, the public understood it, she said. Now science is on the same track with climate change.

Global warming has seen the planet's average temperature rise by more than 1 degree Fahrenheit over the last century, largely due to the addition of carbon dioxide to the atmosphere.

"We are forcing the climate system in a new way, outstripping the sun," Solomon said.

Overall there are more warm nights and fewer cold ones, a change that affects crops and animals as well as people.

Detecting change can be difficult in one place, she said, because local changes one way or the other can vary widely from the average changes around the world.

"It requires you to think beyond your own backyard," she said.

Solomon discussed the climate change reported so far, noting that further studies due out in the spring will address the effects of the change and what actions could be taken to reduce those effects or slow or reverse change.

Gov. says dams OK but no train

Schwarzenegger wants \$4b for two reservoirs

By Jake Henshaw, Sacramento Bureau

Visalia Times-Delta, Friday, Feb. 16, and Tulare Advance-Register, Saturday, Feb. 17, 2006

SACRAMENTO - Gov. Arnold Schwarzenegger promised Thursday to fight for legislative approval of new dams this year, but said there just isn't enough money for a high-speed train.

"If the people would approve, say, a \$150 billion in bonds for transportation, then you could go and say that [high speed rail] is part of the package," Schwarzenegger said in an interview.

Voters last fall approved a \$20 billion bond for transportation and are scheduled to vote next year on a \$10 billion high-speed rail bond to help build a system for a 200 mph train that would travel through the San Joaquin Valley between northern and southern California.

"When you look at \$20 billion, how you should divide that up and how you should spend that money, the high rail, the \$10 billion, just doesn't fit in because there are just so many roads that need to be built [or in bad condition] that are just years behind, decades behind," Schwarzenegger added.

He wants to the Legislature to take the high-speed rail bond off the ballot. The governor has proposed to keep the High Speed Rail Authority operating and recently appointed new members to its governing board.

While proponents of the bullet train have argued that it would reduce congestion and air pollution, Schwarzenegger said that getting traffic moving again is the best approach.

"Remember the thing that gives you much better air quality is traffic flows at 55, 60 mile per hour," the governor said.

But he said two proposed new water reservoirs, one at Temperance Flat on the San Joaquin River, are definitely on his agenda for this year.

He wants legislators to approve \$4 billion in bonds "most likely" for two reservoirs, one at Temperance Flat on the San Joaquin, with potential capacity of up to 1.3 million acre-feet, and another called Sites, an off-stream dam in the Sacramento Valley with the potential of 1.8 million acre-feet.

Together the governor estimated they could provide up to 500,000 acre-feet a year. Voters would have to approve \$2 billion in bonds as part of the package.

Republicans generally support the dams but Democrats have argued that it will take decades and billions of dollars to get them into operation.

Instead, the Democrats are pushing improvement of existing dams, conservation, more efficient use of water control systems and more groundwater storage.

"As you known with negotiations there is always like 'let's start out by saying no and then we can go somewhere with that,' " the governor said. "That's the way it works."

He said he'll push hard for a deal on the reservoirs.

"We will be fighting for them because I am a big believer in above-ground water storage," the governor said. "I'm a big believer that we need more conveyance. I am a big believer in

conservation also, so we have to do a combination of things in order to handle the population growth and get enough water supply."

Porterville to host Planners' Lunch Feb. 22

Visalia Times-Delta, Thursday, Feb. 15, 2007

The city of Porterville announced it will host a Tulare County Practicing Planners' Lunch from 11:30 a.m. to 1:30 p.m. Feb. 22 at El Nuevo Mexicali I restaurant, 640 N. Prospect in Porterville.

Guest speaker Arnaud Marjollet with the San Joaquin Valley Air Pollution Control District will discuss the indirect source review rule requirements.

Choice of lunches, but reservations must be made by Feb. 20.

Poor suffer from pollution in San Francisco Bay Area

The Associated Press

In the Bakersfield Californian, Monday, Feb. 19, 2007

Poor and minority residents in the Bay Area breathe a disproportionate share of industrial and traffic pollution, putting them at higher risk of cancer and asthma, according to the first analysis of the region's environmental disparities.

The study, released Saturday at the American Association for the Advancement of Science annual meeting in San Francisco, found that two-thirds of residents in the nine-county Bay Area living within one mile of a pollution source regulated by the U.S. Environmental Protection Agency are minorities. Pollution sources include refineries, power plants, factories and other large industrial polluters.

Recent immigrants are nearly twice as likely to live within one mile of such a facility than they are to live 2.5 miles away, according to the report, "Still Toxic After All These Years." And given equal incomes, minorities are still more likely to live closer to pollution sources than whites.

"The report really confirms what many community residents have experienced for years," said Amy Cohen, campaign director for the Bay Area Environmental Health Collaborative, which helped sponsor the analysis with the Center for Justice, Tolerance and Community at the University of California, Santa Cruz. "They know the pollution sources are closest to them. They know they live near the highways and the large facilities."

Last month in the British medical journal The Lancet, researchers at the University of California, Los Angeles, who had studied children over time reported that living near a freeway saddles children with a lifetime's worth of decreased lung capacity and function.

Smog shrouds picturesque peaks

Utah residents can't see mountains through dirty air trapped by 'inversion'

By Ed White, Associated Press

Contra Costa Times, Sunday, February 18, 2007

SALT LAKE CITY - Utah's world-class mountain peaks have been barely visible at times from the floor of the Salt Lake valley. A winter storm that won't quit?

No, it's nasty pollution that just won't blow away.

Northern Utah's valleys have been smothered by an "inversion," a blanket of warm air that keeps cold air close to the ground and traps everything: car exhaust, factory emissions, even hard-to-see particles from furnaces or a cozy fireplace.

Together, they form a cloudy shroud that has been described as soup, gunk, smog -- and a few other titles that can't be printed.

Salt Lake and Davis counties, home to more than 1 million people, were under a "red" alert for 16 days in January, which means the unhealthy air should be avoided by the elderly or anyone with respiratory problems. Some schools kept kids off the playground.

Inversions aren't new to Utah, but this one is "wide, deep and dramatic," said Bob Dalley of the state Division of Air Quality, whose daily Web updates are must-reads.

Mike Atwell, of Bozeman, Mont., looked east toward the barely visible Wasatch Mountains, site of the 2002 Winter Olympics, and shook his head.

"It's a huge bummer. It's not what you see -- it's what you can't see. You feel robbed," he said. "Mountains are why we live in the West. I feel like I'm in a foggy daze."

Another visitor, Beth Brewster of Seattle, said: "You expect it in Los Angeles, not Salt Lake City."

Alicia Reichert typically spends her lunch break skating at an outdoor rink downtown.

"I cough a lot more than I usually do," she said, pausing after a set of tricky spins. "It seems harder and harder to come out here."

The remedy is simple: a stiff wind or storm, no matter the direction, to send the stuff elsewhere.

"Just get here," Dalley said.

Salt Lake City, elevation 4,300 feet, is in a bowl surrounded by mountains like much of northern Utah.

The pollution-trapping inversions can stretch 80 miles north to Cache County and 40 miles south to Utah County. Under a red advisory, wood burning is prohibited, and motorists are encouraged to park their cars and choose another way to get around.

There were only three red days posted for Salt Lake and Davis counties last winter, compared with 25 this season.

The threshold for a red day is lower this year, but the "criteria really are not significantly different," Dalley said.

In the Midwest and East, extreme cold commonly keeps school kids off the playground at recess. In Salt Lake City, however, principals go online to check air quality.

One school's 500 students were inside for one week last month.

"They get stir-crazy and restless," said the principal's secretary, Colleen McKnight. "On the other hand, you let them run outside and breathe the air and they start coughing."

"I've taken calls from two children with respiratory infections. I'm not sure if it's connected to the inversion, but I'm sure it doesn't help," she said.

Ron Smith from Sandy, said he has been inside using a treadmill and rowing machine, exercise that is no match for his strenuous 25-mile bicycle rides.

"I'm going through withdrawal," he said. "When it's this yucky, I can feel it in my lungs."

Smog study pioneer Sheldon K. Friedlander dies in Los Angeles

The Associated Press

In the Bakersfield Californian, L.A. Times and other papers, Sunday, Feb. 18, 2007

Sheldon K. Friedlander, whose work in identifying the sources of particles in Southern California smog led to new ways of studying and regulating air pollution, has died.

Friedlander died Feb. 9 at his home in Pacific Palisades of complications from pulmonary fibrosis, his family said. He was 79.

While a professor at the California Institute of Technology in the 1970s, he was among the founders of aerosol science - the study of gases and particles in the air.

Friedlander discovered a way to analyze the chemical makeup of smog particles and trace what was creating air pollution at any given time.

He linked lead particles to gasoline usage and zinc in the air to tire rubber.

"He developed a picture of what was in the smog that was far more detailed than anyone had put together before," Rick Flagan, chairman of Caltech's chemical engineering department, told The Los Angeles Times.

Flagan said more sophisticated versions of Friedlanders methods are used to regulate air quality around the world today.

In 1983, Friedlander moved from Caltech to UCLA where he was a professor of chemical engineering.

He headed the Clean Air Scientific Advisory Committee from 1982 to 1998. The group gives independent advice to the Environmental Protection Agency.

Friedlander is survived by his wife Marjorie, four children and eight grandchildren.

[Note: The following clip in Spanish discusses the debate on the Senate floor regarding the integration of a doctor and an environmental advocate to each of the Air District Boards in California. For more information, contact Maricela at \(559\) 230-5849.](#)

Legislatura solicita más especialistas para cuidar el aire

Así mejorarían las acciones

Noticiero Latino, San Diego, CA

Radio Bilingüe, Monday, February 19, 2007

La legislatura de California debate una nueva propuesta de la bancada demócrata en el senado para integrar un médico y unos activistas de protección ambiental a cada una de las oficinas oficiales encargadas de cuidar la calidad del aire en las principales ciudades.

Hasta ahora los médicos y ambientalistas pueden contribuir voluntariamente y opinar en sesiones sobre protección de la calidad del aire, pero carecen de votos.

El autor de la propuesta, senador Mike Machado, considera que unir los puntos de vista de la salud pública y el medio ambiente fortalece argumentos y decisiones, permite una visión integral y aumenta posibilidades de presupuesto contra la contaminación.

[Tri-Valley Herald, Guest Commentary, Thursday, Feb. 15, 2007:](#)

Can crow's landing go green?

IS environmentalism really back in vogue in the governor's office?

The answer seems to be yes. Gov. Arnold Schwarzenegger has made it clear that a hallmark of his final four years in office will be quality of life issues. A global warming bill he signed last fall has become one of his trademark accomplishments, earning him international praise, and this year he has signaled a top goal is comprehensive health insurance for Californians.

Since the governor essentially works in Sacramento but lives in picturesque Pacific Palisades in Southern California, it is especially important that his policy focus not neglect the space in between — specifically communities located in the state's Central Valley.

In many ways, this is the region that sustains the rest of California through food and industrial production. Yet development here has also brought with it an enduring problem: the region is afflicted with some of the worst air quality not only in California, but in the entire Western states. And much of this region's air quality problem is due to East Bay commuters.

According to a comprehensive 2006 opinion survey by the Public Policy Institute of California (PPIC), the number of residents who say air pollution is a big problem in their area has jumped 17

points (28 percent to 45 percent) since 1999. In a ranking of the most important issues facing the Central Valley, air pollution ranked number one.

But perhaps the most troubling sign that something is amiss is how much the proportion of residents who cite asthma or respiratory problems for themselves or a family member has grown in the past three years, rising from 37 percent to 49 percent! Moreover, the south San Joaquin Valley has been hit the hardest. A majority of its residents living there cite asthma or respiratory problems (58 percent), and 48 percent believe air pollution poses a very serious health threat to themselves and their families.

These survey results imply a public health crisis. And it will not be improved or reversed by a single speech or bill signing. It will take a sustained and collaborative effort for the next several years.

An excellent place to start addressing these pollution concerns would be some clear leadership on one of the most important issues facing the Central Valley — the industrial future of a former military site that stands to be a benefit to regional development, but could also add to the pollution woes already of major concern to local residents.

This former naval station is at Crows Landing Air Facility, a 1,527-acre area that was turned over to Stanislaus County a little more than two years ago. Located six miles south of Patterson, various plans by developers seek to establish a railroad connection for freight and passenger service between the Port of Oakland and the western side of Stanislaus County.

The use of a short-haul rail system could be an environmental plus since such a system would get high-polluting diesel trucks off of the major commute corridors. Short-haul rail transit systems could also reduce the cost farmers must bear for shipping their products to market. By creating tens of thousands of new jobs in Stanislaus County instead of the East Bay, commute times could also be greatly reduced, potentially removing a similar number of pollution-causing commuter cars off the road.

Whatever final form this Crows Landing development and others like it takes, the best way forward is a realistic approach to balancing economic development with environmental quality. California can be a leader in encouraging innovative developments like Crows Landing, but only if it also is cognizant of the need to clear the air. Conservation easements should also be employed to preserve critical open space. Otherwise, the negative consequences of industrial activities will be overshadowed by the health impacts and costs of pollution and runaway development.

Crows Landing offers an opportunity for genuine leadership from Gov. Schwarzenegger, who can help make sure that new development in the Central Valley lives up to his environmental rhetoric by flexing his political muscles and making air quality a top priority in new industrial ventures in the Central Valley. After all, a short-rail train through the Altamont Pass to the Central Valley is included in Governor's Goods Movement Act Plan released recently.

Whether one is alarmed about long-term concerns such as climate change the issue of how the development of Crows Landing is managed may be a key harbinger of whether the governor's bi-partisan and collaborative approach to problem-solving can filter down to the local level and bear fruit in the Central Valley.

Peter Asmus is an environmental author and past consultant to the Local Government Commission, the University of Southern California and numerous environmental organizations including the Union of Concerned Scientists. A Bay Area resident, Asmus lived in the Central Valley for 20 years.

[Tracy Press, Guest Commentary, Saturday, Feb. 17, 2007:](#)

10 ways to decrease global warming

His Voice: From Chuck Hall.

With both the President Bush and Congress considering legislation on the issue of global warming, many people are wondering exactly what we can do to minimize greenhouse gases. Here are a few proposals:

1. There are 2 billion cars in the world. In the U.S., the average fuel economy is 22 miles per gallon. We have the technology to increase fuel economy to between 30 and 60 mpg.

Automakers should consider offering a wider range of more fuel-efficient vehicles until zero-emissions vehicles can be designed and manufactured (see item 10).

2. Decrease car travel through public transportation, telecommuting, biking or walking. The latter two choices have the added benefit of providing daily exercise.

3. Use energy-saving measures, such as compact fluorescent lighting, energy-efficient appliances and added insulation to decrease energy consumption in all existing buildings by up to 25 percent.

Design future buildings using green-building techniques to create no harmful emissions and to be as energy-efficient as possible. The new Leadership in Energy and Environmental Design certification is a step in the right direction.

4. Stop clear-cutting our rainforests. Double the rate of new tree plantings. More trees mean less carbon dioxide. This is something anyone can do. All you need are a few seedlings and a place to plant them.

5. By using "conservation tillage" techniques, soil erosion could be slowed or even stopped in many farms throughout the world. Less soil erosion means more plants. More plants means less carbon dioxide.

Encouraging local and organic farming decreases transportation costs to and from distant markets (and therefore carbon emissions caused by the trucks used to transport produce) and eliminates pesticides from the atmosphere.

6. Switch to wind power wherever possible. The newer wind turbines can function in winds as little as 3 or 5 mph. Wind energy is totally emission-free. Also, once the turbine is paid for, the only cost for the electricity it generates is a little routine maintenance.

7. Increase use of solar power whenever possible. Prices continue to come down on solar panels and accessories, and city, state and federal governments offer many tax incentives for purchasing solar systems. Some banks are loosening lending criteria for purchasing home solar power systems as well.

8. As solar and wind power become more available, phase out coal-burning power plants. Set standards for efficiency and carbon emissions, and close down any plants that don't live up to the standards.

9. Practice carbon dioxide sequestration at existing coal plants until they can be phased out as more solar and wind farms come online.

10. Develop zero-emissions vehicles, including hydrogen fuel-cell technology, plug-in electric vehicles that recharge overnight at home and hybrids powered by renewable biofuels, such as ethanol and biodiesel.

We already have the technology to do many of the things on this list. All that is missing is public will. If any of these suggestions make sense to you, let your local members of Congress know by getting in touch with them!

Chuck Hall is a sustainability consultant and author.

[Fresno Bee commentary, Sunday, Feb. 18, 2007:](#)

MARK STOUT: Nuclear power may not be the best energy option

The Fresno Nuclear Energy Group has proposed building a 1,600-megawatt nuclear power plant at a projected cost of \$4 billion. This proposal faces significant hurdles, including a state moratorium against siting new nuclear plants, and a 2005 Public Policy Institute of California statewide survey showing only 20% support for living near a new nuclear plant.

The biggest hurdle, however, may not be one of legislation, waste storage technology or public opinion. It is the economics pulling capital into more profitable investments in renewable energy.

State legislation passed in 1976 placed a moratorium on the siting of new nuclear plants until the California Energy Commission finds that the federal government has approved a demonstrated technology for the permanent disposal of nuclear waste. The proposed federal permanent nuclear repository at Yucca Mountain in Nevada has been stalled for more than a decade and its future is less than certain now that Harry Reid, D-Nevada, is Senate majority leader.

Nuclear plants have a long history of construction cost overruns. Pacific Gas Electric's 2,160-megawatt Diablo Canyon plant had an estimated cost of \$320 million, only to balloon to \$5.8 billion. The actual cost is more than \$12 billion in 2007 dollars.

The two units also began full operation in 1986, 12 years behind schedule. Diablo Canyon was hardly unique. A review of U.S. nuclear plant construction cost overruns indicates a trend of two to four times initial estimates.

Based on this history, the Fresno proposal could likely expand to more than \$12 billion, with an actual completion after 2025. High capital cost, long lead time and regulatory uncertainty of the Fresno Nuclear Energy Group proposal make it financially risky for investors, particularly in the face of competing opportunities to invest in more profitable renewable energy projects.

California utilities have a legislative obligation to buy an increasing percentage of their supply from renewable energy resources under the Renewables Portfolio Standard, now 20% in qualifying renewables by 2010. Gov. Arnold Schwarzenegger backs raising the standard to 33% by 2020. We will have to triple our renewable energy capacity to meet this mandate.

The \$12 billion could first be used to capitalize 3,000 megawatts of solar thermal electric, at an estimated \$4 per watt capital cost. Since 1985, 354 megawatts of solar thermal electric has been operating in Southern California Edison territory. According to the Department of Energy, the cost of generating power with this technology has declined 80% since then.

Edison, San Diego Gas and Electric and Pacific Gas Electric have recently signed over 1,000 megawatts of solar power purchase agreements to meet their 2010 goal. California Energy Commission research shows that solar thermal electric technology would perform well in the southern San Joaquin Valley. With the federal 30% investment tax credit and five-year accelerated depreciation, an estimated \$7.5 billion of tax advantages would be returned, in addition to the sale of renewable power. Three thousand megawatts would yield 7.7 million megawatt hours per year or an estimated \$770 million per year of peak-period, renewable power. Within seven years, this 3,000-megawatt solar thermal electric project would recover the \$12 billion capital investment, before the proposed nuclear would likely be operational.

With the solar capital investment fully recovered, a second round of renewable energy projects could be funded: 7,500 megawatts of California wind power, averaging \$1.60 per watt, beginning with Tehachapi Pass. These wind farms would produce more than 16.4 million megawatt hours per year. In addition to offering much-needed renewable power to utilities, they would likely

qualify for a federal production tax credit, currently 1.9 cents per kilowatt hour, which works out to \$312 million a year and adjusts for inflation.

This totals 10,500 megawatts of solar thermal electric and wind farms, all developed on the same timetable as a 1,600-megawatt nuclear reactor. The solar and wind investors are generating 24.1 million megawatt hours per year of high value renewable power, much at peak periods, plus \$312 million a year in tax credits. Compare this with 12.9 million megawatt hours per year baseload nuclear power.

This power-purchase-agreement model has already been used to finance more than 11,000 megawatts of wind power projects in the U.S. In fact, the solar power purchase agreement was the financial structure selected by the Fresno-Yosemite International Airport for their recent, successful one-megawatt solar Request For Proposals.

Seven European nuclear plants were shut down in the first two weeks of 2007. Will the San Joaquin Valley take advantage of our natural resources to move into the clean energy future, or will we stay stuck in the nuclear past?

Mark Stout handles major accounts for Unlimited Energy Solar Solutions. He holds an electrical engineering degree from the University of Illinois at Urbana, and a master's degree from the University of California at Berkeley Energy and Resource

JOHN HUTSON and M. ASLAM LONE: Time to look at a safe, reliable energy source

Things have changed. The world was a different place 35 years ago. At some business meetings back then, the only electronic instrument in use was a coffee maker. We took photos with cameras, not cell phones and PDAs. Like all technologies, nuclear energy has undergone a transformation.

Thirty-five years ago, environmentalists united in opposition to nuclear power. Today, thoughtful ecologists like Dr. Patrick Moore, original founder of Greenpeace, and James Lovelock, author of the Gaia Theory, support nuclear energy.

Lovelock writes, "There is no alternative but nuclear fission until fusion energy and sensible forms of renewable energy arrive as truly longer-term providers. Nuclear energy is free of emissions and independent of imports from what will be a disturbed world."

Electric demand is increasing by more than 1.5% in California, due to population and industrial growth. Efficiency, conservation and higher use penalties are not adequate to significantly reduce demand. More than 40% of electricity is generated by gas and 13% by nuclear power.

Nuclear provides benefits as a hedge against gas prices and greenhouse gases from alternate fuels. Availability and location of renewable sources are at nature's mercy. Fossil/nuclear can be built anywhere and operated on demand. Thus, nuclear is the only viable option to reduce California's dependence on natural gas and reduce greenhouse gases.

In 31 countries, 443 reactors are operating and 24 are under construction. Nuclear contributes 17% to world electricity. In the U.S., 103 reactors generate 20% of the electricity. Nuclear provides radioactive sources that are now vital for medical and industrial applications. Over the past 30 years, the nuclear industry has significantly improved reactor safety. Newer designs essentially eliminate the risk of serious core damage and escape of radiation to the environment. Modular standardized designs reduce construction times.

Concurrently, regulatory authorities have developed processes with streamlined generic reviews of standard design, construction and operation license and approvals prior to the start of construction. This build-and-operate strategy has reduced the acquisition times of new plants to 10 years or less and has significantly reduced the risk of cost overruns due to construction delays. In Asia, newer plants have been built within budget and on time with five-year construction schedules.

The Fresno Nuclear Energy Group is exploring a 1,600-megawatt plant with high efficiency and low outage time. The safety features incorporate four identical control rooms. The reactor core is inside two concrete domes four feet thick. The spent fuel storage pool and the concrete rooms are covered by a concrete dome at least four feet thick.

These features make the nuclear components fail-safe against potential terrorist attacks by air or other external explosions. Reactors of similar design are operating in Europe and are under construction in Finland and France. The manufacturer of this plant is experienced and has designed all of the 59 reactors in France, which provide 78% of its electricity. This investor-built plant poses no financial risk to residents. Californians will benefit from price stability and the elimination of more than 1 million tons of greenhouse gases from alternative gas fuel.

Fresno's economy will gain more than 3,000 construction jobs and more than 360 technical continuing jobs. Compared with gas generation, the nuclear plants operating in the state save more than \$2 billion and eliminate more than 4 million tons of greenhouse gases annually. These estimates are based on data reported in "Nuclear Power in California; Status Report," prepared by consultants for the 2005 Integrated Energy Policy Report of California Energy Commission.

The National Regulatory Commission requires that any radiation leakage from the plant to the outside of the plant boundaries should be less than one-third of the average natural background level. In reality, the plant operators tend to aim to achieve significantly lower limits, around 1/100 of the background.

For managing spent fuel, comprehensive assessment of numerous options led the U.S. National Academy of Sciences to recommend storage in a geological repository. Following this, Congress designated the Department of Energy to design and operate a repository at Yucca Mountain. The Environmental Protection Agency was mandated to set guidelines based on Academy of Sciences recommendations and the National Regulatory Commission is responsible for approval of the Department of Energy's design and operating license of the repository. The EPA is establishing the guidelines for long-term storage.

The composition of the spent fuel, its long-term radiation source strength and heat production is well known. This enables nuclear engineers to design barriers to protect against leakage of radiation as well as provide a mechanism to remove heat. Currently, spent fuel is safely stored in fuel pools or temporary dry storage facilities that are robust for 100 years or more and provide adequate safety. Assessment of migration of contamination from Yucca Mountain repository requires understanding and modeling of all leakage. This study is in progress. However, delays are being caused by litigation. This is a right in our free society and unfortunately leads to unavoidable delays.

As the nation prepares to embark on a new nuclear era, it is time to look at a safe, reliable and affordable electricity source that does not produce carbon dioxide and other air pollutants: nuclear energy.

John Hutson chaired the Fresno Utilities Commission and M. Aslam Lone, Ph.D., of Fresno is a consultant in nuclear and radiation physics.

[Sacramento Bee editorial, Tuesday, February 20, 2007](#)

Is transit worth a tax?

Regional Transit kick-starts the debate

Regional Transit General Manager Beverly Scott is right that transit in Sacramento needs more money. Buses and light-rail trains don't run frequently enough or cover enough ground in the region.

While 20 percent of downtown workers use transit to travel to their jobs, countywide on a typical workday, no more than 5 percent of Sacramento commuters use transit. Most drive. Persuading those drivers to tax themselves for a transit service they don't use will be difficult.

Yet ridership can't be boosted significantly unless transit service is improved, and service can't improve significantly without more money. That's RT's conundrum.

Armed with a new survey that shows 74 percent of Sacramento County residents would support a ballot tax measure for transit and roads, Scott wants to put a new tax measure on Sacramento County's ballot as early as 2010.

Although she would prefer a comprehensive measure that would pay for roads, transit, and pedestrian and bike needs, Scott noted that the district's telephone survey of 2,000 registered voters found that 68 percent would support a tax increase just for bus and light rail. If other transit agencies are not willing to support a ballot measure in 2010, she thinks RT should consider moving forward alone with a transit-only proposal.

Sacramento is the only county in the region that has a local sales tax for transportation. County voters approved an extension of Measure A, the current half-cent sales tax for transportation in 2004, endorsing a plan to raise \$5.2 billion over 30 years. Going back so soon to voters would be risky; a transit-only measure would make it even riskier. RT also needs to demonstrate it's a good steward of the money by better managing its work force. RT's bus drivers on average are absent 21 days beyond the 12 annual sick days allowed under their contract. That's unacceptable.

Nonetheless, transit improvements are essential if the Sacramento region is serious about dealing with its congestion problems, its air pollution and its sprawl. Without a serious investment in transit, all the fancy regional blueprints are a waste of time. Scott has started a useful, necessary debate and deserves credit for that. Now it's time for others to weigh in.

[Fresno Bee editorial, Saturday, Feb. 17, 2007:](#)

Try, try again

Two legislators renew efforts to restructure air district board.

We've long argued for a change in the structure of the Valley air district's governing board. Now a couple of state senators have renewed their own efforts to bring about just such a change.

Sen. Dean Florez, the Shafter Democrat, has offered an interesting carrot for the San Joaquin Valley Air Pollution Control District: Add new public members and expand the board, and the state will pony up some major funding.

And Sen. Mike Machado, D-Linden, is back with his own plan to remodel the district's board. Machado suggests the district would enjoy more clout in Sacramento if it expanded its board by adding a doctor and an environmental engineer, and giving permanent seats to representatives from Fresno, Bakersfield and Stockton. He is also dangling a carrot: \$50 million a year in funds for smog-fighting.

Fresno, the Valley's largest city, has not had a representative on the district board since 1994. That's a serious problem.

Florez recently announced Senate Bill 240, which would authorize \$300 million from Proposition 1B, passed by state voters in November. The district would also be permitted to raise another \$100 million each year by assessing a surcharge on vehicle license fees of up to \$30 per car or truck.

In return for that largesse, the district would be required to expand its board from the current 11 members to 18. Two of the new members would be chosen from the public. The district's board currently comprises one supervisor from each of the eight counties that make up the district, plus three seats that rotate among city councils in the district.

One of the criticisms Florez, Machado and others -- including The Bee -- have had about the current arrangement is that it gives too much weight to the status quo. County boards of supervisors, and the members they contribute to the air district board, are too often beholden to powerful agricultural and other business interests.

In addition, public members drawn from the ranks of environmental experts and medical professionals could bring a dose of much-needed expertise to the board's work. Such additions wouldn't tip the balance against the entrenched interests necessarily, but would bring new voices to the table.

The Machado and Florez bills face an uphill fight. Many in the Legislature want to avoid specific earmarks in allocating the Proposition 1B money, and the competition from coastal California, with its enormous clout in Sacramento, will be fierce. And Machado's earlier efforts to expand the board were vigorously opposed by the air district and the special interests who wish to do as little as possible, as slowly as possible, to clean up the Valley's air.

But the Valley deserves a significant boost in funding, given our status as one of the worst air basins in the nation, and an expanded board, we believe, would better serve Valley residents. If Florez and Machado can manage those changes with their bills, then more power to them.

[Letter to the Fresno Bee, Monday, Feb. 19, 2007:](#)

Cost of ignoring global warming much too high

The "Five Myths" about suburbia and our car-loving culture (Vision Feb. 11) is a thought-provoking article that turns many assumptions about sprawl upside down. But it leaves out important details that weaken its fundamental argument.

It argues that Americans, like Europeans, are not "addicted" to driving, but do so because they can afford it. True enough. But Europeans, unlike Americans, do so in a far less environmentally harmful manner. Europeans average fuel economy is more than twice that of America's, and carbon dioxide emissions about half of America's. This is largely because automotive technological advances in Europe have gone into increasing fuel economy and lowering carbon dioxide emissions, rather than simply increasing performance.

The argument about the high cost of global warming misses the point. As the Economist magazine and the authoritative Stern Review of the Economics of Climate Change both point out, the cost of inaction is far more than the cost of action. Effective incentives, zoning and tax policy are all part of the solution to global warming. The question is not whether there is enough money; it is about whether we want to work together to solve the problem, or simply get in our cars and drive away.

Ken Martens Friesen, Fresno

[Letter to the Fresno Bee, Saturday, Feb. 17, 2007:](#)

Making transit work

Re "The five myths about suburbia and our car-loving culture" : The authors would have the reader believe that Americans aren't any more addicted to driving than, say, the average office worker is to the computer; public transit doesn't reduce traffic congestion; air pollution can be cut in other ways besides giving up driving; America isn't being paved over to any large degree; and global warming cannot be adequately dealt with unless we stop driving.

That "public transit doesn't reduce traffic congestion," I agree in the sense that nationwide, according to the authors, roughly 5% use public transit to get to work. In that sense, transit doesn't significantly reduce traffic congestion.

However, if a significant number of workers used public transit, provided it's made more widely available and it's properly and effectively marketed, there are employer-provided incentive programs encouraging its use, it serves the mobility needs of a majority of an area's citizenry getting riders to and from areas where people want and/or need to go, and did so comfortably, economically, effectively, reasonably quickly and safely, then public mass transit would probably contribute significantly toward reducing traffic congestion.

Alan Kandel , Fresno

[Letter to the Fresno Bee, Friday, Feb. 16, 2007:](#)

'All in this together'

The poor air quality in the Valley is a health risk to all of us. The recent New England Journal of Medicine report and Barbara Anderson's article Feb. 7 discuss the increased risk of cardiac events in older women due to fine particulate air pollution.

It is important to know that the Women's Health Initiative only studied post-menopausal women. It is reasonable to extrapolate the findings to people who were not included in the study, but who live in our Valley and breathe our Valley air.

Because we're all in this together, we all need to minimize our risk factors by not smoking, keeping fit, eating smart and minimizing our contribution to poor air quality. Drive less, keep your car tuned up, don't burn wood. Finally, our Valley leaders need the vision to balance short-term economics with long-term consequences.

John Gasman, Clovis

[Letter to the Tracy Press, Saturday, Feb. 17, 2007:](#)

Grieving loss of bio-lab

I grieve for my city!

Looks like the opposition came out strong and early with its scare tactics on the bio-lab at Lawrence Livermore National Laboratory's Site 300, but where were the thinkers and the leaders

Where were the folks who understand risks and that Americans kill 45,000 people a year on the roads and freeways of our country, while there has never even been a release from a Level 4 bio-lab, let alone a fatal accident

Where were the folks who understand that although our country was the technological leader of the 20th century, we are losing ground to China and India in the 21st century

Where were the folks we expect to cut through the deluge of negativism and actually do something right for the future of Tracy

And where were the Tracy Chamber of Commerce and the Tracy Press, the leaders of my city

Oh, you mean there's a Level 4 bio-lab in downtown Atlanta And Boston And four other places in the country But not in Tracy!

In the last 50 years, the city of Tracy and the chamber have spent hundreds of thousands of dollars of our tax money on economic development, but here's a chance for the development of not one, but perhaps a cluster of clean industries (they won't overpower our sewer plant) with above-average-income workers and scientists, but let's turn it down before we learn something about it.

I expected a negative reaction from the city councilwoman who has been negative about just about everything since she arrived on the council, but I didn't expect that thinking council members would follow her on this issue.

I grieve for my city!

I urge the council to reconsider the vote for negativism and keep an open mind on what might happen regarding the bio-lab.

Willard "Woody" Souza, Tracy

[Letter to the San Diego Union Tribune, Sunday, Feb. 18, 2007:](#)

Common-sense solution to a myriad problems

Regarding "California leads U.S. by example in conservation"

The article offered a startling but common-sense solution to many of our problems. The article stated: "Electricity there (in California) is expensive, so people use less of it." We have an almost \$9 trillion national debt, a \$763 billion trade deficit (2006) and trillions of dollars of future unfunded obligations, such as the war in Iraq and federal and military pensions.

The choice we have to today is to do nothing and hope the enviable crash happens after we are dead and buried. That is our current policy. Or we could address the problems with a common-sense tax. We simply add an additional 25-cent tax to every gallon of fuel, each and every year. Since we use 20 million barrels of fuel every day, that small but growing tax would generate \$76 billion in the first year. That number would double the second year, provided fuel use wasn't reduced. Of course, fuel use would be reduced and so would greenhouse gases, the federal deficit, the national debt and the trade deficit. Our children would thank us.

Douglas Smithdeal, San Diego

[Letter to the Merced Sun-Star, Friday, Feb. 16, 2007:](#)

Fuel for the Valley

Editor: I agree wholeheartedly with the Merced Sun-Star's Our View titled, "State needs to shift gears," concerning alternatives to carbon-based fuels. But Gov. Arnold Schwarzenegger's feeble plan to reduce carbon emissions by only 10 percent in California in 13 years is just about as absurd as importing corn from the Midwest.

We all can very easily convert to using noncarbon-based biodiesel for every purpose well within 13 years. I have already outlined how any farmer and especially the many expert tree farmers in Merced County can grow Honge trees (which produce oxygen because you don't have to cut them down like corn or sugar cane) right here and right now in California to produce copious amounts of clean-burning and extremely inexpensive biodiesel fuel to run virtually every power plant and vehicle in existence. Instead of continuing to dance around the air pollution, respiratory and air quality problems we are suffering here in Central California and wasting more billions and billions of taxpayer dollars on ways to spend more money with the flawed system we have now, let's use our state's money more wisely. Subsidize every registered California vehicle owner, farmer and industrialist in switching to biodiesel vehicles and power plants or adapt their existing vehicles and power plants to run on biodiesel. This isn't rocket science. This is just basic common sense.

We don't need teams of rocket scientists or a bunch of highly overpaid private sector economists to figure this out. And, more importantly, we need to end this charade of importing extremely expensive, foreign, carbon-based, air polluting crude oil when we can easily grow our own fuel right here on our own soil for virtually pennies on the dollar.

Ron Aragon, Merced

[Letter to the Washington Post, Friday, February 16, 2007](#)

Technology and Climate Change

In his Feb. 7 op-ed column, "Global Warming and Hot Air," Robert J. Samuelson correctly pointed to the importance of advanced technologies in addressing climate change. President Bush has made technological innovation one of the pillars of his administration's approach to the issue.

In September, the U.S. Climate Change Technology Program released its strategic plan, which provides a road map of technological options that could make available increased energy to sustain economic growth while reducing greenhouse gas emissions. Since 2003, the administration has invested about \$3 billion a year in a broad portfolio of advanced technologies. The president's budget for fiscal 2008 includes increased funding to accelerate breakthroughs in solar energy, biofuels, hydrogen, advanced batteries, near-zero-emissions coal, nuclear power and carbon sequestration, all of which can reduce greenhouse gas emissions.

Innovation is an American strength, and our scientists and engineers are making progress in improving the performance and lowering the cost of technologies that will enhance global energy security and reduce air pollution and greenhouse gas emissions.

*Stephen D. Eule, Director, U.S. Climate Change
Technology Program
U.S. Department of Energy*

[Letter to the Contra Costa Times, Tuesday, Feb. 20, 2007](#)

War, global warming, wood fires

A recent Times article went after the little wood burners instead of taking on the big boys.

Last summer, there were numerous Spare the Air days in the Bay Area, and I didn't see one article suggesting that we fine people driving on those days.

Those driving across a bridge on Spare the Air days could be fined \$25 at the toll booth, and the money used to fund electric car research.

I saw no chart showing the amount of PM 2.5 from wood fires in the summer, which must be low. I also didn't see anything describing the emissions composition from refinery stacks at Chevron, Valero, etc., besides PM 2.5. How much of the 33 percent PM 2.5 comes from restaurants burning wood? Will refineries be fined or asked to close on Spare the Air days?

People driving cars poison the air and water and cause global warming and wars worldwide to protect oil interests.

Some 20,000 more young people will soon deploy to Iraq to protect the oil. How many will die while we put out wood fires?

Going after the wood burners is easy. It's harder and nobler to go after the culprits of environmental pollution, global warming and war.

Al Moore, El Sobrante

[Letter to the Contra Costa Times, Sunday, Feb. 18, 2007](#)

Spare us pretzel logic

This is regarding Spare the Air days, fireplaces and a proposal to ban incandescent light bulbs, and misguided inconsistencies, as reported in the Feb. 2 Times.

Snitching on scofflaw neighbors can backfire and lead to harassment. Perhaps there could be a "chimney-smoke tax" on residences using fireplaces. It wouldn't keep the air pristine, but maybe people would think twice. After all, don't businesses that pollute have to make up for their messes?

Banning incandescent light bulbs is overboard! I want my apartment to look warm and homey, not like a gas station. I love colored bulbs -- fluorescents don't come in clear red, green, etc.

Would a ban extend to incandescent Christmas lights and Chinese altar lamps? I bet computers, "entertainment" traps, gaudy businesses and public street "insecurity" lights waste more energy.

A few years back, little silver sugar cake and cookie decorating balls were banned as "health hazardous/toxic." But there's plenty of diesel sprinkles on more than just cupcakes, and lots of leaded glassware known to cause birth defects.

Spare the Air, fine -- and spare us all the pretzel logic.

Kenneth R. James, San Pablo