

## **In honor of Earth Day, church in east Bakersfield kicks off festival**

The Bakersfield Californian

By Matt Weiser, Californian staff writer

April 25, 2004

Bakersfield's Unitarian Universalist Church kicked off a new tradition Saturday with an Earth Day festival. The event featured displays of hybrid cars, demonstrations of composting and solar electric panels, and free native California poppies.

Organizer Cydney Henderson said a group at the activist-minded church decided it was time to "walk the walk" on Earth Day, especially because Bakersfield's air quality is so poor.

"We feel like we have a deep connection to the Earth," Henderson said of church members. "The way I feel is, if you can't breathe, you can't do much else."

Organizers also used a solar oven to cook an apple pie, and taught proper tree-planting techniques by planting three Chinese elm trees on the church grounds with help from the Tree Foundation of Kern.

Turnout was modest, but Henderson hopes to draw more people next year.

"For a first-year thing, it was a good beginning," she said. "My hope is that it will help people become a little bit more aware of our church, as well as how we can all make Earth-friendly living choices in our lives."

The church on Sterling Road in east Bakersfield was formed about 20 years ago, Henderson said, and has about 80 members.

Earth Day officially falls on April 22. The first event was held in 1970, with the goal of inspiring concern for the natural environment.

## **Clean technology firms attract growing share of venture dollars**

Terence Chea, Associated Press Writer

Published in the S.F. Chronicle

Sunday, April 25, 2004

(04-25) 10:53 PDT PALO ALTO, Calif. (AP) --

Martin Roscheisen, CEO of Nanosolar Inc., holds up a plastic vial filled with dark, purple liquid -- the secret ingredient behind a new kind of technology startup that's turning heads in Silicon Valley.

In a private laboratory here, Nanosolar scientists are designing low-cost solar electricity cells that Roscheisen submits will make solar power competitive with conventional energy sources.

The purple liquid is a nano-engineered material that "self-assembles" into tiny solar cells that convert sunlight into electricity.

"We're at the threshold of making solar electricity profitable," says Roscheisen, whose firm raised \$6.5 million last year from U.S. Venture Partners, Benchmark Capital and other investors. "We're seeing a lot of interest. We're being contacted all the time by investors."

Across the country, venture capitalists are opening their wallets to upstarts that, like Nanosolar, develop "clean" technologies in anticipation of a growing market for products that generate revenue without harming the environment.

In 2003, investment in clean technology ventures rose 8 percent to \$1.2 billion while overall venture capital investment fell 14 percent to \$18.2 billion, according to the Cleantech Investor Network. The Howell, Mich.-based group defines clean technologies as technologies that allow for more efficient use of natural resources and greatly reduce ecological impact.

Venture capital firms are pouring money into clean technologies related to water purification, agriculture, transportation, manufacturing, recycling, air quality and alternative energy such as solar, wind and hydrogen.

"We're getting a bigger and bigger piece of the pie year after year," said Keith Raab, Cleantech's president and chief executive. He expects more than 300 attendees at the Cleantech Venture Forum in San Francisco April 28-30.

Among the startups that pulled in the most money last year were Evergreen Solar Inc., a Marlboro, Mass.-based developer solar electricity systems that raised \$29.5 million, and Powerspan Corp., a New Durham, N.H.-based maker of pollution-control technology for the energy industry that secured \$20 million.

Still, some venture capitalists remain wary about investing in environmentally friendly companies after getting burned in the 1980s, when solar and wind energy startups raked in venture dollars, and in the 1990s, when hydrogen fuel cells were hot.

Nanosolar was the first green venture investment for Menlo Park-based Benchmark Capital, but general partner Bill Gurley said the decision was motivated more by its belief in the startup's management team than the sector itself.

"There haven't been a lot of success stories in the cleantech space," Gurley said. "There's no Microsoft, E-Bay or Cisco that says this is a fertile ground for venture investment."

Others believe the latest funding boom is different -- that a variety of technological, political and economic forces have converged to make clean technologies ripe for investment.

"The fundamental economics suggest there's a good payout for a whole fleet of alternative, renewable technologies," said Kyle Datta, managing director of the Rocky Mountain Institute, a Snowmass, Colo.-based nonprofit that promotes eco-friendly capitalism.

The sector has gotten a boost from a new California plan to invest \$1.5 billion of the state's pension funds in environmental technologies. State Treasurer Phil Angelides said the "Green Wave" initiative is aimed at helping the state improve financial returns, generate jobs and clean up the environment.

"I want to see California in the best position to reap the benefits of this growing sector of the global economy," Angelides said in an interview.

The California Public Employees' Retirement System, the nation's largest pension fund, voted in March to invest \$200 million in clean technology startups, and agreed this month to pump \$500 million into environmentally responsible stocks and mutual funds.

"This is just the tip of the iceberg," said the Cleantech Venture Network's Raab. "I think you'll see other pension funds following suit."

The market for alternative energy is sure to grow as global oil prices rise, fossil fuels become more scarce, states look for more reliable energy supplies and the United States reduces its dependence on foreign oil, investors say.

"There are other people at the table that are changing the supply and demand curve on a global scale," said Erik Straser, general partner at Mohr Davidow Ventures in Menlo Park. "The Chinese and Indian governments are seeking a better way of life for their citizens. To do that they need access to energy."

The market for clean technologies also is being driven by increasingly stringent regulations on air, water and energy. And as the Internet, telecommunications and computer sectors mature, venture capital firms with plenty of money to spend are hunting for new markets.

On top of that, many corporations are now keen to promote "green" business practices, if only to show they're good corporate citizens.

"If you can cut costs and reduce pollution, it's attractive to your investors, employees and customers," said Bob Epstein, co-founder of the nonprofit group Environmental Entrepreneurs.

It helps that the sector is attracting more seasoned entrepreneurs such as Nanosolar co-founder Roscheisen, who previously started the Internet firm eGroups and sold it to Yahoo Inc. for \$720 million in 2001.

Nevertheless, many venture capitalists urge caution in investing in "clean tech", given that the sector has many unproven technologies, a complex marketplace and a history of poor returns.

"People sell so much on the promise and don't spend enough time on the execution," said Benchmark's Gurley. "You set yourself up for a bubble that can pop."

## **Bush uses radio speech to boost environment policy**

Siobhan McDonough, Associated Press Writer

Published in the S.F. Chronicle

Saturday, April 24, 2004

(04-24) 11:03 PDT WASHINGTON (AP) --

President Bush pledged Saturday an "enduring national commitment" to expanding America's wetlands and said his administration's environmental efforts honor a strong legacy of conservation and stewardship.

Wetlands are one of America's most important natural resources and expanding them is an important goal, Bush said in his weekly radio address, capping several days of touting his environmental record in appearances outside Washington.

A plan announced this week aims to restore, improve and protect at least 3 million acres of wetlands over the next five years.

"This new wetlands policy reflects an enduring national commitment, carried forward by both parties, to protecting the environment," Bush said.

"In the past three decades, America has made great strides in honoring the ideal of conservation, and living by high standards of stewardship. My administration's environmental efforts uphold that legacy."

John Kerry, the Democrats' presumptive candidate to face Bush in November's election, accused the president of not coming clean about his environmental record and promised that, if elected, he will change Bush's policies.

"George Bush isn't telling the truth when he says 'America's air, land, and water have all gotten cleaner' on his watch. That is false," Kerry said.

He said Bush rolled back laws to reduce asthma-causing smog and mercury levels that endanger pregnant women and "pursued policies that force local taxpayers to foot the bill when corporate polluters make a mess."

Kerry said his policies as president would "make sure that we give our children and future generations clean air, clean water and communities they can live in."

Delivering the Democrats' radio address, Rep. Mark Udall of Colorado also criticized the Bush administration's environmental policies.

"Today we are headed in the wrong direction," he contended. "Under President Bush, we have basically sold out our environment for the profit of the special interests."

Udall said the administration is proposing to undermine drinking water by slashing money for the states' Clean Water programs by 37 percent.

With toxic waste-site cleanup, the sellout story repeats itself, he said, arguing that the administration has ditched the "polluter pays" approach and is shifting the burden to taxpayers.

On clean air, Bush said he is building on the progress of the Clean Air Act of 1970 under which major air pollutants have been reduced by nearly half. His administration is implementing "smarter ways to raise standards and improve air quality," he said.

The clean air interstate rule, based on the Clear Skies legislation sent to Congress last year, will reduce the major causes of ozone and fine particles by 70 percent, he said. The rule employs a market-based approach to reduce air pollution that crosses state borders.

A new rule is also being completed to remove sulfur from diesel fuels; and his administration is regulating mercury emissions from power plants for the first time ever, he said. Under the administration's new proposal, mercury emissions will be cut by about 70 percent, the president said.

"All these rules are based on sound science and good economics," he said, "and they will help every American breathe cleaner air."

On land matters, Bush noted that he signed legislation two years ago to clean up more of the abandoned and polluted industrial sites, known as brownfields. Between 2001 and 2003, he said, his administration restored over 1,000 brownfields to usable condition, more than were restored in the previous seven years.

The efforts have opened usable land for small businesses and residents in hundreds of communities, and created more than 25,000 jobs in cleanup and redevelopment, he said.

The president said another critical environmental priority is healthy forests. He said the Healthy Forest Restoration Act he signed in December reduces the risk of fire, saves lives and property and improves the health of forests. The law, he said, opens millions of acres of forest land to vital thinning projects.

Critics say the new forest law favors the timber industry, leaving old-growth trees and remote, roadless areas of forests at risk of logging, in the name of clearing brush to prevent wildfires.

## **Air inside car can harm**

By Emil Guillermo, (Stockton) Record staff writer  
April 24, 2004

Ritz Yamamoto, 26, of Tracy, commutes to San Francisco every day in his Ford Taurus and can spend up to five hours in his car round-trip.

He's never even thought about the air inside his car and doesn't think it has affected his health. "Nothing noticeable," said Yamamoto, back in Tracy after a long drive.

He may be checking more often now.

The air inside cars may be more dangerous than the air outside, according to a new EPA study that links prolonged exposure to in-car air to cardiovascular disease.

While Tracy commuters like Yamamoto can spend over five hours a day in a car, EPA researchers in North Carolina focused on workers who may spend even longer amounts of time in their cars -- as much as nine hours a day on the road.

The EPA found new reasons for concern about continued exposure to tiny particulate matter less than 2.5 microns in diameter, also known as PM2.5.

"This research supports other studies that have found PM2.5 from mobile sources may be a particular health concern," Dr. Robert Devlin, an EPA scientist and the author of the study, said in an EPA news release.

Said to be smaller than the diameter of a human hair, PM2.5 has been connected to illness and premature death, particularly among very young asthmatics.

While the EPA has established air-quality standards for PM2.5, the survey sought to find the potency of PM2.5 from cars.

In Devlin's study, nine young highway patrol officers from North Carolina took part. Scientists monitored air pollutants from both inside and outside their vehicles during a standard nine-hour shift.

Among the pollutants were ozone, nitrogen dioxide and carbon monoxide. Monitors were placed on the side of roads and at fixed sites in the Raleigh-Durham area.

Scientists then examined cardiovascular effects on the officers before, during and after their shifts.

The research showed that people in vehicles exposed to PM2.5 and other pollutants from cars experienced cardiovascular changes: increases in abnormal heartbeat rates and increased levels of vascular proteins that could lead to blood clots, a factor in heart attacks.

The changes weren't a threat to healthy troopers but could be a concern to older people with cardiovascular disease, according to the EPA release.

At the Tracy California Highway Patrol, Sgt. Pat White said an average patrol person might spend six or seven hours in a car. She said she believed that pollution inside vehicles could be a factor, not just because of outside pollutants, but also from the effects that higher temperatures can have on plastics and other materials inside vehicles.

[Letter to the Modesto Bee, April 26, 2004:](#)

### **Environmentalism that works**

As a dairy operator and farmer, I'm amazed at the accomplishments and benefits we can attain through working together to improve the air and environment.

Working with groups such as Sustainable Conservation (a business-minded environmental group), Natural Resources Conservation Service, the EPA, Region 5 Water Control Board, the University of California Cooperative Extension and businesses such as Western Farm Service and Monsanto, many farmers and dairy producers, like me, have been able to try new concepts and ideas without too much risk to our farms.

We've also been able to see if these ideas work in a business environment. Experimental changes need to be done without a loss in yield to make this a plus from the business standpoint. Together, we have found ways to try practices, such as conservation tillage, that can reduce tractor traffic by up to 90 percent compared to conventional farming. This lowers tractor emissions and dust while improving water quality draining off fields.

With support from producer groups like California Dairy Campaign, National Farmers Union, Milk Producers Council, the Farm Bureau and the previously mentioned organizations, it is more than likely that we can benefit the environment and the quality of life for the dairy person, the farmer and, best of all, everyone not involved.

ANDY ZYLSTRA

Turlock

[Fresno Bee editorial, April 25, 2004:](#)

### **All aboard**

#### **High-speed rail proposal is the focus of hearing in Fresno this week.**

(Updated Sunday, April 25, 2004, 5:58 AM)

Building the proposed high-speed rail system has always seemed like a tall order for California. In this time of fiscal collapse, it seems like an even harder task.

But it may be that the bad times -- and these certainly qualify, in terms of state and local governments' ability to provide the services that we all demand -- are the best times for big dreams. And this is a big dream.

A public hearing in Fresno on Wednesday will give the Valley a chance to closely examine the plans for the high-speed system linking this region with the rest of the state.

The catalog of good reasons for building this system is a lengthy one. Begin with this:

California expects tremendous population growth in the next couple of decades. With coastal California filling up and real estate and land prices climbing past the stratosphere, most of that growth will come in the Central Valley, from Redding to the Tehachapis. That will create great pressure on the state's infrastructure, not least of all in transportation.

When it comes to filling the transportation needs of all those new Californians, we essentially have three choices.

We can do nothing.

We can double the airport capacity and the number of freeway lanes in the state.

We can build the high-speed rail line.

The first option is really no option at all.

The freeway/airport option will exacerbate existing air quality problems and be at least twice as expensive as the third.

That makes it an easy choice.

### **A big payoff**

Building the system will mean a generation's worth of jobs in the construction and engineering trades. Those are jobs that pay well, allowing people to raise families in a decent measure of comfort and security. Additional long-term employment will follow in maintenance needs, and new industries -- building the rolling stock for the line, for instance -- will be created.

When travel time to and from airports is factored in, plus increased time spent going through security procedures, airline travel likely will be slower than the high-speed trains, which may reach 200 mph on the longest stretches.

Driving is full of aggravations that simply don't apply to train travel. Ask the Europeans and the Japanese, who figured out the value of high-speed rail decades ago. It is dangerous, for instance, to do business on the phone while driving a car. On a train, it's both safe and easy. Falling asleep at the wheel is deadly. Taking a nap on the train is a truly civilized experience; travelers arrive at their destinations rested and relaxed instead of harried and tired.

### **Looking forward**

This is a project we simply have to build. Not to do so would be to condemn the Valley and the state to an increasingly crowded and polluted transportation future based on yesterday's technology. We owe it to ourselves -- and to our children -- to learn about this grand notion and then work to make it happen.

[Sacramento Bee editorial, April 24, 2004 \(published in the Tri-Valley Herald\):](#)

### **California lacks resources to reduce air pollution**

YEARS late and only after the prodding of a court order, the Bush administration has released its list of 474 counties across the nation that fail to meet new and tougher national clean air standards. California's perennially smoggy Central Valley and the Sierra foothills figure prominently among counties with the dirtiest air. Most worrisome, the San Joaquin Valley has become the most polluted region of the country. The new standards, which measure pollution over an eight-hour period rather than shorter, hour-long spikes, represent a better understanding of how lung-searing smog affects public health. While the standards are tougher, Bush administration policies will make it harder for many localities to meet them. For example, the Environmental Protection Agency has largely abandoned enforcement of clean air rules that used to force power plants, oil refineries and other high-polluting industries to upgrade pollution control systems when they modernize their plants. The administration's misleadingly titled Clear Skies Initiative, a package of bills pending in Congress, would allow higher levels of some pollutants, would shift from mandatory to voluntary compliance and would push back deadlines for meeting clean air standards, among other things. Even before Bush, the federal government had failed to impose emission limits on some of the biggest sources of pollution -- railroad locomotives, cargo ships and large construction and agricultural equipment, most of it powered by large, dirty diesel engines. The EPA is set to come out with some new rules next month, but the preliminary indications are that they won't be enough to bring counties with dirty air into compliance early enough to meet current government deadlines. In California, Gov. Arnold Schwarzenegger has said his administration is committed to cutting smog-forming ozone 50 percent by 2010. But that will take money to replace the oldest and dirtiest cars, buses, trucks and off-road equipment with new, cleaner models. It also will take money to adequately enforce pollution laws already on the books. At the moment, neither citizens nor government seems interested in shelling out more for such purposes.

[Contra Costa Times editorial, April 23, 2004:](#)

## **Cannot breathe easier**

CALIFORNIA IS TOPS in three important categories. It has the largest number of hybrid vehicles in the country, garnering about a quarter of the over 44,400 registered nationwide. The state also has some of the dirtiest air in the nation, according to the Environmental Protection Agency. It also has the most expensive gasoline in the United States.

The three first-places are not unrelated.

Tougher EPA rules have turned even the Bay Area, usually cleansed by our ever-present westerlies, into violation of the standards. Although many of the pollutants that dirty the air are from a variety of sources, including industry and agriculture pollutants, a good portion of the smog is generated by vehicle use.

The EPA said the Los Angeles basin had the worst smog problem, the only region to be placed in the "severe" pollution category. Three other regions of California -- Riverside County, the San Joaquin Valley and Sacramento -- were designated as having "serious" pollution and have until 2013 to meet the standards. Failure to meet the standards could result in loss of federal dollars. Getting Californians out of their cars appears to be a near-impossible task. Even expensive gas prices have failed to dissuade drivers from purchasing their gas-guzzling SUVs and trucks.

However, the public is getting the message. But the growing popularity of hybrids, with engines powered by a combination of battery and gasoline, can't be attributed to car manufacturers. Only two carmakers, Honda and Toyota, are selling them.

Until hydrogen fuel cells or other new technology is perfected, hybrids may be the short-term solution to our dirty air. Several other automakers are poised to join the hybrid market as their growing popularity combines with political pressure to make cars with cleaner emissions and better gas mileage.

It can't come a moment too soon.

[Letter to the S.F. Chronicle, April 24, 2004:](#)

## **Fighting bay smog**

Editor -- I am an eighth-grade student who is concerned about air pollution here in San Francisco. Environmental inequity remains a problem in neighborhoods of lower-income levels, and it should not be.

It is shocking to me that San Francisco ranked among the worst 10 percent in the United States in terms of areas where the cancer risk from air pollution is more than 1 in 10,000. Cars are responsible for roughly 75 percent of the smog in the Bay Area.

If you're complaining about not seeing a clearer day, why don't you hop on a bike instead of clumping down in your SUV? Or walk instead of churning up more smog? Do it for Earth Day!

NINA MOOG

San Francisco