

Florez offers help to Hanford City Council

By Eiji Yamashita

Hanford Sentinel, Wednesday, Feb. 21, 2007 (1:10 PM)

In a rare appearance in Hanford on Tuesday, Sen. Dean Florez spoke to city leaders, offering his help with their needs - while also pitching his pet cause of cleaning the Valley's air.

The Democrat from Shafter made his appearance during the regularly scheduled Hanford City Council meeting.

The lawmaker, whose district takes in Kings County, said he will explore ways to help Hanford find money to get its water system in shape and promised to press the state transportation agency to make expansion of Highway 198 a high priority.

In exchange, Florez urged Hanford to help give rural areas a voice by voting for an Arvin city leader to sit on the state air board as a small-city representative.

It was Florez's first direct formal address to the city leaders since his election to the state Senate in 2002.

After the council meeting Tuesday, Florez said his visit was prompted by a recent talk with City Councilman Dave Thomas in Sacramento.

"I found it refreshing," Florez said. "He was the first council person I can remember to invite me here, and we're here to offer assistance. I wanted to personally deliver that message."

In today's tough political climate in Sacramento, lawmakers have less influence in **allocating** money for necessary local projects, Florez said. But he promised to figure out whether any state money is available for the arsenic reduction project.

Hanford should not have to rely on a lobbyist to find state money, Florez said.

The main focus of his message Tuesday, not too surprisingly, rested on the topic of air pollution. Florez has been a leading figure in finding solutions to the Valley's air pollution crisis, taking on powerful interests, such as agriculture, along the way.

"We have a very, very dirty basin," Florez said of the Valley's topography. "We're interested in working with cities that are interested in air quality-type projects."

The state Air Resources Board will allocate \$1 billion for addressing air pollution **associated** with moving of commercial goods through the state's highways and railways.

"Not all issues are about the idling of engines caused by slowdowns in traffic on two-way highways," Florez said, referring to issues involving roads such as Highway 198.

Florez said one of his goals in Sacramento is to bring the air pollution issue associated with the east-west thoroughfares connecting small cities such as Hanford to the California Traffic Commission's attention.

"It not only happens along Highway 99 and I-5," he said of car exhaust polluting the air.

The senator also reminded the Hanford leaders of the election of a small-city representative on the state Air Resource Board at today's League of California Cities meeting scheduled to take place in Lemoore.

Mayor Joaquin Gonzales and city councilmen David Ayers and Thomas are expected to attend the meeting.

Florez urged them to vote for Raji Brar, a city councilwoman for Arvin, for the air board post.

"Arvin has the worst air in the Valley," Florez said. "Small cities are polluted. We need somebody who can really fight for small communities, and she is the one **who can do it.**"

Ayers, in response, asked Florez to come back to educate the city as to how it may take advantage of statewide bond measures passed in November, such as Proposition 84, the Clean Water, Parks, and Coastal Protection Bond.

Councilman Dan Chin asked Florez to press hard for the Highway 198 expansion, a project that has been in the works since 1998. The project has so far made little visible progress, the result of funding delays.

Florez said he will make the case to the California Transportation Commission.

People in business

Bakersfield Californian, Sunday, Feb. 18, 2007

LES CLARK was recently honored for more than a decade of service as chairman of the Citizens Advisory Group of Industry.

Clark was honored in a presentation made by incoming chairman Roger Isom of the California Cotton Ginners and Growers Associations. Clark is executive vice president of the Independent Oil Producers Agency. He has also served on numerous boards and committees related to air quality.

Senate to turn up heat on gov. to fight global warming

Saying Schwarzenegger has been too cozy with industry, leaders will seek new regulations.

By Janet Wilson, Times Staff Writer

L.A. Times, Thursday, Feb. 22, 2007

Impatient with Gov. Arnold Schwarzenegger's leadership in combating global warming, leaders of the Democratic-controlled state Senate plan to unveil a sweeping legislative package today that would impose new regulations on industries and government agencies.

The measures reflect long-standing tensions between Schwarzenegger and the Legislature over how best to reduce greenhouse gases produced by vehicles, electricity suppliers, landfills and other sources.

Since the passage and signing last year of California's landmark greenhouse gas law, which called for a combination of regulations and possible market-based solutions, Schwarzenegger has met with leaders from other countries and states to promote creation of trading markets to allow industries to buy and sell emissions credits.

Leading Senate Democrats successfully fought inclusion of a mandatory market trading system in last year's law, Assembly Bill 32, but now contend that the Republican governor is promoting it while moving too slowly on regulation.

They and Assembly leaders also objected when Schwarzenegger signed an executive order last fall placing his appointee, state Environmental Protection Agency Secretary Linda Adams, in charge of climate policy. Legislators pointed out that AB 32 specifically gave the independent Air Resources Board authority for implementing the policy, not Cal/EPA.

Sen. President Pro Tem Don Perata (D-Oakland), who is spearheading at least five of the bills to be introduced, sharply criticized Schwarzenegger's approach Wednesday.

"The implementation of Assembly Bill 32 is getting bogged down in arcane discussions over intercontinental trading schemes, 'carbon markets' and free 'credits'.... That may work for Wall Street traders and Enron economists, but it doesn't work for Californians."

According to drafts of the bills obtained by The Times, the proposed regulations would ban methane releases from garbage dumps and sharply curtail black carbon spewed from trucks, school buses and construction equipment.

Utilities could be ordered to increase the amount of energy acquired from renewable sources to 33% from 20%.

State and local transportation agencies would be required to draw up plans to slash greenhouse gas emissions in their jurisdictions, funded in part by bond money approved by voters last year.

"Senate Democrats are unveiling new bills to ensure our climate program actually cleans up the air, reduces asthma and reduces greenhouse gases without market gimmicks and trading schemes," Perata said.

Schwarzenegger, who held a news conference with Republican presidential contender Sen. John McCain at the Port of Los Angeles on Wednesday to push for a national low-carbon fuel standard similar to one he has mandated for the state, was unavailable for comment.

But Aaron McLear, a spokesman for the governor, said Schwarzenegger continues to favor a market approach. "The governor feels we need to achieve our reductions through market-based solutions," McLear said.

Adams, who was at the event with Schwarzenegger, said she had not seen the bills, but said of the governor, "he's doing plenty in California.... California is the leader on this. The whole world is watching us."

She added that she and the governor had worked "very cooperatively with the Legislature" on the original law, and said, "We are moving forward on regulatory approaches as well as market approaches. We feel very strongly we do need to move forward with every possible tool."

As for her role, Adams insisted that existing state law gave her the responsibility for climate policy.

The bills will need to win support not just in the Senate, but from the Assembly and ultimately the governor, who could veto them. Perata spokeswoman Alicia Trost said the senator's staff had briefed Assembly Speaker Fabian Nuñez's staff and planned to work with him.

A Nuñez spokesman was noncommittal, saying, "The pioneering global warming bill we passed last year with the governor's support is the gold standard in reducing greenhouse gases. If these measures dovetail into what we've done, are practical and don't hinder the process that's been hammered out, then they may well win support in the Assembly."

V. John White, head of the Sacramento-based Center for Energy Efficiency and Renewable Technology, said that he had been advising the Senate on the bills and that they would be an important addition to last year's legislation. "They're also timely," White said, "because of the need to remind the governor and his administration of the importance of including direct emissions reductions."

He said that both energy credit trading and mandatory regulations were needed to bring down

greenhouse gas emissions statewide.

Several business leaders said they had not seen details of the legislation.

Kent Stoddard, a spokesman for Waste Management International, the state's largest trash and recycling operator, said his industry was already subject to strict regulations on capturing methane and carbon dioxide from landfills — gases believed to be accelerating the melting of glaciers. But he said, "We were early and big supporters of AB 32, so we'll be very interested in working with the Senate on this package."

He said the company also believes that both mandatory and market-based measures are needed to slow global warming, provided the regulatory mandates are "reasonable."

But Vine Sollitto, spokesman for the California Chamber of Commerce, which initially opposed the original greenhouse gas law but now backs a market-based approach, said there was a good chance it would not support the latest legislation. He said the measures could increase costs to consumers while providing little additional environmental benefit.

"California must implement its emission law in a way that maximizes the rewards to our environment, while minimizing the risk to our economy. The way to do that is to use market mechanisms to provide incentives ... not one-size-fits-all, 'government knows best' command and control decrees."

Duke Balancing Demand Vs. Global Warming

By IEVA M. AUGSTUMS

The Associated Press Thursday, February 22, 2007

CHARLOTTE, N.C. -- Jim Rogers wants to do something about global warming. But the chief executive of Duke Energy Corp. also has a growing customer base that needs power now, and he says that means building more coal-fired plants.

It's a dilemma faced by many in a position to significantly reduce carbon dioxide emissions, and one highlighted by President Bush's visit to North Carolina on Thursday to tout cellulosic ethanol, a fuel that has the potential to reduce gasoline consumption but remains years away from widespread use.

"My job is, when you throw on the switch, I need to be there," Rogers told The Associated Press. "My No. 1 job is to make sure there is a reliable supply of energy for our customers. "While I've devised a plan to assure reliability, I also have to do the right thing for the environment."

The United States is by far the biggest emitter of carbon dioxide and other gases blamed by scientists for global warming, and for years, Rogers has been one of the few utility executives to speak out publicly about the need to reduce carbon emissions.

Last month, he joined chief executives of nine other major U.S. corporations including BP America Inc. and General Electric Co. to push Bush and Congress to address climate change. The group, known as the United States Climate Action Partnership, wants a nationwide limit on carbon dioxide emissions that would lead to reductions of 10 percent to 30 percent over the next 15 years.

Their announcement came a day before Bush who for years said there wasn't enough known about global warming to act, and that efforts to cut back greenhouse gases emissions would harm the U.S. economy proposed reducing gasoline consumption by 20 percent in 10 years during his State of the Union address.

Bush's administration has also set a goal of reducing "greenhouse gas intensity," which measures the ratio of greenhouse gas emissions to economic output, by 18 percent by 2012.

"That's good, but more can and should be done," Rogers said.

The problem, Rogers and others said, is that the technology and infrastructure for alternative energy doesn't yet exist to substantially satisfy the energy demands of a country dependent on cars, computers and all kinds of modern electrical conveniences.

"There is no way we can supply the electricity that keeps our lifestyle going in the United States with alternative energy sources right now," said CreditSights bond analyst Dot Matthews. "The technology and resources aren't enough."

Cellulosic ethanol, which Bush will promote Thursday, is made from waste, wood, plants and other biological products. While experts said the entire process from harvest to production to actually burning cellulosic ethanol instead of gasoline would lead to a 70 to 90 percent reduction in greenhouse gas emissions, it remains experimental and commercial-size refineries are several years away.

"The next couple of years will be a test," said Steve Bantz, a senior engineer with the clean vehicles program at the Union for Concerned Scientists. "We will then see if they can really make this happen and make it economical."

At Duke, the new nuclear power plants the company has suggested building hardly a favorite of the same environmental and consumer groups upset with Duke's desire to expand its coal-burning capacity are about a decade away from coming online.

In the meantime, Rogers has 3.9 million customers spread across several states. In North Carolina alone, Duke expects a 50 percent increase in demand from 2000 to 2030 due to new homes, new businesses and what Rogers called a "love affair with anything electronic."

To meet that demand, Duke the nation's third-largest consumer of coal wants to spend \$3 billion to build two coal-fired units at its existing Cliffside Steam Station in western North Carolina. Opponents worry about the plant's effect on air quality and say Duke hasn't taken enough steps to generate more capacity through conservation.

"I think it's a contradiction," said state Rep. Phil Luebke, a Democrat from Durham. "It's a contradiction for Mr. Rogers to be in the international press talking about Duke's commitment to fighting global warming while at the level of North Carolina the company seems to be committed to moving full steam ahead (on the Cliffside project)."

Rogers said Duke is working to avoid the adverse impact of its disproportionate reliance on coal, but the new plants are necessary to meet a booming market with a growing need for power a need he said he can't yet serve solely with clean technology.

In the interim, he supports a so-called cap-and-trade system, which he said would create a financial incentive for reducing emissions by assigning a cost to polluting. It is one of a few ideas floating around on Capitol Hill, a place Rogers has been recently visiting sometimes weekly to talk with lawmakers about the issue.

"I've gotten past the problem," Rogers said. "I'm focusing on the solutions."

Fuel-saving downside

Less gas per car, less tax collected has highway fund heading to deficit

By Sue Doyle and Harrison Sheppard, Staff Writers

LA Daily News, Thursday, Feb. 22, 2007

America's growing love affair with energy-efficient cars is starting to take a toll on the nation's crumbling highways and roads.

Requiring fewer fill-ups at the pumps, the vehicles are putting a pinch on the federal Highway Trust Fund - the major government funding source for highway and mass-transit projects.

And federal officials say the fund, financed by a federal tax on gasoline, is careening toward a deficit within two years.

To be fair, federal officials say, it's not just energy-efficient autos that are sucking the fund dry. Higher construction costs, congressional overspending and an aging highway system are also putting a growing strain on it.

But now a panel chartered by Congress is looking for new ways to finance the system, and the answer could mean an increase at the pump for consumers who already pay 18.3 cents into the fund for each gallon of gas.

"The bottom line with the Highway Trust Fund is that spending is at a higher level than funds coming in," U.S. Transportation Secretary Mary E. Peters said in an interview Wednesday. "This total dependence on gas tax isn't working anymore."

Peters also chairs the National Surface Transportation Policy and Revenue Study Commission that is reviewing the situation and will make recommendations to Congress in a report this year.

On Wednesday, the commission began a two-day hearing with California transit officials at the Metropolitan Transportation Authority's downtown Los Angeles office to discuss the region's needs.

Peters said one estimate shows the highway portion of the Highway Trust Fund - which pays for roads and bridges and uses 80 percent of the federal gas tax that is collected - will see a \$230 million deficit by fiscal year 2009.

That doesn't mean the account will be at zero, but rather that it won't reach levels authorized by Congress. Some in the Congressional Budget Office believe the deficit will be even more substantial, possibly \$3 billion to \$4 billion.

The second portion of the fund - used to finance mass-transit projects with 20 percent of the federal gas tax collected - is not expected to go into deficit.

Field hearings on the fund quietly began in November in New York and Memphis, where the commission started to measure the nation's transportation needs.

Hearings in L.A. are taking place simultaneously with ones in Atlanta. Las Vegas is next, and the commission will conclude its hearings after visiting Minneapolis and Chicago in April.

After the commission files its report, legislators could decide to adopt its recommendations or use them as a guide for funding federal projects, said Chris Bonanti, special assistant to the administrator at the Federal Railroad Administration and staff liaison to the commission.

Brian Turmail, spokesman for the U.S. Department of Transportation, said commissioners are asking why all the increased spending on road projects isn't paying off. Roads are still congested. Traffic is getting worse.

"What we're spending isn't really getting the results we want," he said.

But Peters said funding also is a problem as Congress overspends its means, and revenue for the Highway Trust Fund has slowed as more alternative-fuel cars have hit the road.

People also aren't driving as much as they once did, she said.

Predictions of trouble with the federal Highway Trust Fund surfaced in 2005. A report commissioned by the U.S. Chamber of Commerce predicted that the fund would run out of money.

Later that year, President George W. Bush signed a \$286.4 billion transportation law that also established a 12-member commission - a mix of federal, state and business leaders - to look for sustainable funding options.

Paul Taylor, chief economist for the National Automobile Dealers Association, said hybrids account for just a fraction of the car market and could not be playing a significant role in the decline of the Highway Trust Fund.

In 2006, 16.5 million cars were sold nationwide - just 251,862 of them hybrids.

But Taylor acknowledged that over the years, automotive technology has made all cars and trucks more fuel-efficient and contributed to fewer trips to the pump.

"All vehicles are improving their gasoline mileage," Taylor said.

Jack Kyser, chief economist for the Los Angeles County Economic Development Corp., said the national highway system has been underfunded for years and that the problems are returning to haunt the government.

Blaming fuel-efficient cars for the decline of money in the fund is a distortion of reality, he said.

"There are still a lot of people out there who bought big pickup trucks and are driving them at a rapid rate of speed," he said.

At the same time, the price of construction has increased far quicker than inflation, partly driven by a development boom in China that has driven up the price of raw materials such as cement and steel, said Dan Beal, managing director of public policy for the Automobile Club of Southern California.

Beal said there are several alternative revenue options for the fund that are likely to come under greater scrutiny in California.

The first is to increase the number of toll roads and raise toll prices during rush hour.

Another possibility is to charge drivers by the mile, rather than the gallon - similar to the way they pay for utilities.

There already is a pilot project on that option in Oregon, but it's not clear how that might affect how much the average driver would pay.

Ultimately, whatever solution public officials adopt will have to involve persuading drivers that they are getting good value for their tax dollars, Beal said.

"The public has to be convinced that what they're paying now is being used appropriately and wisely," he said. "Nobody wants to pay more if they don't think they're getting value for what they're currently paying."

Green Limo Line at Oscars Gets Longer and Sexier

By REUTERS

In the N.Y. Times, Thursday, Feb. 22, 2007

HOLLYWOOD (Reuters) - From a plug-in hybrid car to the sexy electric Tesla Roadster, celebrities wanting to make a green statement on the way to the red carpet of the Oscars will have plenty of environment-friendly rides this Sunday.

Global Green USA has lined up 30 cars to shuttle the likes of [Leonardo DiCaprio](#) and Davis Guggenheim, director of the Oscar-nominated documentary on [global warming](#) "An Inconvenient Truth," to the star-studded ceremony in Hollywood.

The environmental group began the green limousine campaign five years ago at the Oscars to raise awareness among the tens of millions of viewers worldwide about alternative fuel cars, energy independence and solutions to global warming.

DiCaprio was among the first celebrities to take the green ride to the Academy Awards, the world's top film honors that will be given out this year on February 25.

"The past years we only worked with the hybrid cars and this year we really wanted to promote alternative fuels and different technologies that represent what's next," said Matt Petersen, chief executive of Global Green USA.

On a Hollywood parking lot ahead of Wednesday's Global Green USA celebrity party, Steve Schneider showed off his tiny \$10,000 ZAP (Zero Air Pollution) cars made in California. One was a mini pick-up and the other a three-wheeler.

"It is the first time that common people can be introduced to this type of technology," said Schneider. "We are trying to have mass appeal. This vehicle operates at a cost of a penny a mile."

But it is the two-seat, scarlet-colored prototype of the Tesla Roadster, invented and financed in Silicon Valley, that will be the coveted car pulling up to the red carpet.

Already 330 celebrities, including [George Clooney](#), have signed up to buy the electric car that goes from 0 to 60 mph (0 to 100 kph) in four seconds -- "faster than most Porsches," according to Tesla Motors vice president Darryl Siry.

Production will begin later this year and the base price is \$92,000, although the company also is working on a sedan that will cost between \$50,000 and \$65,000.

But organizers were secretive about who would be the lucky passenger to ride in the Tesla on Sunday.

Would it be the sultry Spaniard and best actress nominee [Penelope Cruz](#), who was also attending Wednesday's green party?

"Only if I'm driving," said Siry.

FUELING A REVOLUTION

Biodiesel moves almost into mainstream in Bay Area

Michael Cabanatuan, Chronicle Staff Writer

S.F. Chronicle, Thursday, Feb. 22, 2007

About a year ago, Paul McNees chose to change his life by changing his fuel.

He sold his Saturn sport utility vehicle and bought a diesel-powered Mercedes-Benz. A mechanic whipped it into running order and replaced the soft rubber fuel lines with something sturdier.

Then the El Sobrante teacher started burning biodiesel -- a fuel cooked up not from petroleum but from vegetable oil, often waste oil from restaurants or food processing plants.

"I just couldn't justify filling up that tank with gasoline anymore for a multitude of reasons," said McNees, 43, citing global warming and the war in Iraq. "This has been great. It's totally cleaned out the engine. It runs great, has a lot more power. It sort of smells like french fries -- it doesn't have that noxious diesel smell."

A small but growing number of Bay Area drivers like McNees are trading their gasoline-fueled autos for biodiesel-powered cars. How many is hard to tell. The biodiesel industry is nascent, largely unregulated and informally organized. But experts agree that biodiesel use is growing.

Nationally, biodiesel consumption is up sharply -- from 500,000 gallons in 1999 to more than 75 million gallons in 2005. In the Bay Area, the number of customers filling up at Berkeley's Biofuel Oasis -- one of the region's few public biodiesel stations -- has climbed from about 200 three years ago to about 1,800 today.

Gov. Arnold Schwarzenegger and President Bush have mentioned the fuel in their respective plans to cut greenhouse gases and reduce petroleum dependence. The University of California recently signed a landmark deal with oil giant BP to develop biofuels.

Much of biodiesel's appeal stems from the fuel's ability to perform as well as petroleum diesel while emitting fewer exhaust materials that cause smog, particulate pollution and global warming. According to the U.S. Environmental Protection Agency, pure biodiesel emits 67 percent fewer unburned hydrocarbons, 48 percent less carbon monoxide and 47 percent fewer particulates but 10 percent more nitrogen oxides.

Yet, despite its benefits and growing popularity, biodiesel might not be the fuel of the future because, as demand grows, the amount of land needed to produce the oils could become untenable, experts say.

Biodiesel is created in a relatively simple process known as transesterification. Producers, including fuel companies or home brewers, start with clean or waste vegetable oil, then add methanol and a catalyst such as lye. A chemical reaction produces biodiesel and glycerine, which can be separated easily. The glycerine can be used in a variety of products, from soap to manufactured fireplace logs.

Biodiesel has been popular for years among farmers in the Midwest and in the South, where virgin soybean oil typically is used to produce the fuel. Yet its use in the West, until recently, was largely limited to hobbyists who brewed the fuel at home and people who prided themselves on not using oil.

The home brewers include people like Ben Jordan, who makes his own biodiesel and teaches an alternative fuels class at City College of San Francisco, in which students create a batch of biodiesel.

"It's very dangerous and potentially very problematic," he said. "You're dealing with methanol and lye, and when you mix it together, it is very explosive and toxic. It's not something to mess around with. However, if you know what you're doing, you can safely and easily make it in your own home."

Home brewers deserve much of the credit for the percolating interest in biodiesel, said Anna Halpern-Lande of Tellurion Biodiesel, a San Francisco marketing and distribution firm.

"The hobbyists make up a very small portion of the market," she said, "but they play a critical role: They capture the public's attention."

In the past couple of years, biodiesel and other so-called alternative fuels have moved out of garages and workshops and into the mainstream. On Wednesday, Safeway, which operates 300 fuel stations in the United States, opened a biodiesel test pump in West Seattle. The fuel also is becoming popular with celebrities: Country music legend Willie Nelson, for example, is a partner in BioWillie Diesel, which markets the natural fuel primarily to truck stops.

The change hasn't gone unnoticed by some of biodiesel's earlier adopters, such as Ahri Golden, 32, a public radio documentarian from Berkeley, who has burned biodiesel in her 1980 Mercedes for four years.

"It was kind of hippie-ish," Golden said as she filled up at Biofuel Oasis. "Now you see a lot more people with nicer cars and more money coming for the practicality and not just the ideology."

Yet it isn't practical for everyone. New diesel cars aren't sold in California because of air-quality regulations, and buying an older diesel can be competitive, biodiesel users say. No significant modifications are required to use biodiesel, but because it is a solvent, soft rubber gas lines need to be replaced with stronger tubing.

Biodiesel stations also are still hard to find: There are just nine in the nine-county Bay Area, according to the National Biodiesel Board. The small-scale operations usually have limited business hours.

"You can't just run down to the gas station," said biodiesel user Jonathan Austin of Oakland. "You've got to plan ahead."

Because fueling stations have limited hours, many biodiesel users fill their tanks, as well as one or more 5-gallon containers that can be stored in the trunk or stashed in the garage. Although the process of making it can be dangerous, the biodiesel itself is safe because it burns at a much higher temperature.

And while some users don't like to use petroleum diesel, the fuels can be mixed or used interchangeably. Many biodiesel users fill their tanks with blends -- B-20, a blend containing 20 percent biodiesel, is common.

Filling up with biodiesel can also be more costly depending on fuel prices and a vehicle's fuel efficiency, although many experts believe the price will drop as use of the fuel becomes more widespread. At Biofuel Oasis, the current supply of B-99 biodiesel, made from reclaimed soy oil from a potato chip factory, sells for \$3.65 a gallon. Gasoline sells for around \$2.79 a gallon nearby and petroleum diesel for about \$3.01 a gallon. However, cars that run on diesel -- including biodiesel -- can get 40 to 50 miles per gallon.

Many biodiesel users say they care less about the cost and more about cutting America's dependence on oil and combatting climate change. Their bumper stickers reflect those opinions. "Biodiesel -- no war required," read one on a car waiting to fill up at Biodiesel Oasis. "This car powered by vegetable oil," read another.

Jennifer Radtke, one of the five women who own Biofuel Oasis, thinks growing concern about climate change and the diminishing oil supply is driving the popularity of alternative fuels.

"A lot of our customers switched to biodiesel because of the war," she said. "That's probably common in the Bay Area, but across the country, it's probably because of concern about climate change and renewable energy. And that it's so cool."

Yet biodiesel faces serious obstacles before it can become the fuel of the future.

A current challenge is availability. Interest in biodiesel may be rising, but so far local production isn't. Just one firm manufactures biodiesel in the Bay Area, according to the National Biodiesel Board, but two Bay Area plants are under construction and are expected to be producing the fuel later this year.

Yokayo Biofuels in Ukiah (Mendocino County) has produced biodiesel from waste vegetable oils for five years. The company only recently began making enough to supply Biofuel Oasis, in addition to three stations in Mendocino County.

Kumar Plocher, Yokayo's president and founder, said that although the process of making biodiesel is relatively simple, it can be difficult to efficiently and consistently produce high-quality fuel. Some firms, he said, have invested in top-of-the-line equipment and hired petroleum and chemical industry experts but still failed to produce and distribute the fuel.

Yokayo has grown slowly and learned along the way, he said. The company is still a small producer, he said, making about 15,000 gallons a month.

"Biodiesel has a lot of interesting little nuances that you need to get to know," he said. "It's its own beast, its own molecule."

Like oil, biodiesel may have its limits because of the sources of the vegetable oils used to produce the fuel.

"People are really excited about biofuels now," Plocher said. "But there isn't much knowledge about them. For instance, the issue of sustainability."

Much of the Bay Area's biodiesel is produced from waste vegetable oil that comes from restaurants -- including burger joints and Chez Panisse. Although that supply is now plentiful, it won't always be, especially if biodiesel use and healthier eating habits become more popular.

"It's extremely attractive and cost-effective, but it's very limited," said Severin Borenstein, head of the Energy Institute at UC Berkeley.

Most of the biodiesel produced and used nationally is made from soybeans, which yield 50 gallons of biodiesel per acre, Plocher said. Sunflowers can produce up to 100 gallons an acre and canola (rapeseed) as much as 150 gallons an acre.

The huge amount of land required to grow biodiesel oil could crowd out food crops. Aware of that concern, some biodiesel producers have started importing palm oil from the tropics. But the growing popularity and production of palm oil for purposes including biodiesel has caused the destruction of rain forests in Malaysia and Indonesia, according to environmental groups, including Friends of the Earth.

Researchers are looking for more productive, and sustainable, sources of biofuel -- including algae. They're focusing primarily on four types of high-oil algae -- diatoms, green algae, blue-green algae and golden algae -- that could be cultivated in farms or ponds. Oils could be extracted using chemical solvents, enzymes, expeller presses, osmotic shock or ultrasonic shock waves.

But whatever its future, biodiesel has already generated a fleet of loyal fans who say they would never go back to petroleum diesel.

"It feels good to be living your own ethics," McNees said after filling his tank at the Biofuel Oasis. "It is a little bit of a hassle, but knowing that I'm not adding to the problem makes it so worth it."

New life for old grease

Used frying oil is one source of vegetable oil that can be made into biodiesel. A common method called transesterification breaks down cooking oil, resulting in two valuable products: glycerine, an additive to soaps, and methyl esters, the chemical name for biodiesel, which can fuel a diesel engine.

1. PREPARATION

- Vegetable oil poured into processor
- Oil is heated to 120° Fahrenheit
- Acidity level is checked

2. REACTOR

- Lye (alkaline base) and methanol (alcohol) are mixed in a separate container
- Solution is mixed with oil

3. SETTLING

- Oil is separated into glycerine and unwashed biodiesel
- Glycerine removed

4. WASHING

- Biodiesel is washed with water

5. PURIFICATION

- Oil is separated from water
- Water removed
- Processed biodiesel transferred to storage container

6. DISTRIBUTION

- Biodiesel is "dried" or allowed to settle
- Ready for fueling

Source: National Biodiesel Board

EU ministers agree on cutting greenhouse gases

Goal is for emissions to be 20 percent below 1990 levels by 2020

By Aoife White, Associated Press

In the Tri-Valley Herald, Thursday, Feb. 22, 2007

BRUSSELS, Belgium — European Union environment ministers agreed Tuesday on an ambitious target to cut greenhouse gas emissions by 2020 in one of the boldest moves yet to contain global warming — a goal likely to lead to mandatory limits for cars and pollution allowances for airlines.

But the goal — to cut emissions to 20 percent below their 1990 levels — could put a heavy burden on the EU's newest members, and it was unclear how much of the load wealthier nations would shoulder.

The ministers said the target could be pushed up to 30 percent below the 1990 levels if other industrial countries sign on to a global effort.

German Environment Minister Sigmar Gabriel said many European colleagues had spoken of a moral duty toward future generations during the talks.

"Those who took the floor said that their daughters asked them exactly what they did when they came to such meetings, and did they come home with good results," he said. "I think that's a pretty good incentive."

The target, which must be approved at an EU summit next month, is a critical first step in a global warming strategy that must be in place by the time the Kyoto Protocol expires in 2012. The protocol requires 35 industrial nations to cut carbon dioxide and other harmful gases collectively by 5 percent from 1990 levels.

The EU ministers called for U.N.-led talks to finish by 2009 to fix a new climate change goal after Kyoto expires. The next agreement should include the United States — which rejected Kyoto — and other less developed polluting countries like India, China, Mexico, Brazil and South Africa.

President Bush has kept the United States — by far the biggest emitter of carbon dioxide and other gases blamed by scientists for global warming — out of the Kyoto treaty, saying it would harm the U.S. economy.

The Bush administration has said it is committed instead to advancing and investing in new technologies to combat global warming. It has set a goal of reducing "greenhouse gas intensity," which measures the ratio of greenhouse gas emissions to economic output, by 18 percent by 2012.

A U.N. climate official praised the new European target as "a milestone" in efforts to bring down emissions from industrial countries by 60 percent to 80 percent by mid-century, which scientists say is necessary to curb the Earth's potentially disastrous rising temperatures.

The decision is "quite dramatic," said John Hay, spokesman for the U.N. Climate Change Secretariat in Bonn, Germany. "But it cannot be a stand-alone target." If other nations don't follow suit, he said, "it won't have the desired effect."

Gabriel, who led the talks, said all countries agreed they need to act urgently just to hold down temperature increases below 3.7 degrees by the end of the century.

EU officials said they would now work on the details of how their target would be shared and reached.

The ministers gave broad support to a plan that would bring airlines into the trading program in which industries that emit too much carbon dioxide must buy credits from energy-efficient industries that meet their own targets. That would include airlines operating flights to European airports, although the United States has warned that such rules could be illegal.

EU ministers voiced concern that emissions trading might push up the cost of flights to remote parts of Europe.

Discussions also were advanced on imposing limits on carbon emissions by new cars and encouraging more reliance on wind, solar and possibly nuclear energy rather than on carbon-rich fossil fuels.

"There's an urgent need for improvement in the passenger cars category. Voluntary agreements won't be complied with. We must push for binding standards," Gabriel told the meeting. The ministers will debate the issue in June.

Only when there is a global agreement can EU nations fix a final figure for the amount of carbon dioxide emissions each nation must cut. Those discussions on the EU's internal targets could set a base year other than 1990, Gabriel said.

U.N. figures show Europe is on track to meet its goal of slashing greenhouse gas emissions under the Kyoto plan by 8 percent. But that figure was accepted by the EU when it only had 15 members, and its expansion to include former East bloc countries with less-developed economies has complicated post-2012 plans.

Even old EU members such as Finland, Spain and Denmark said they were concerned about the burden sharing.

Gabriel said the EU was facing a "historic decision" on climate change. He said Germany's parliament was ready to set the pace — with a cut of up to 40 percent.

"There will be some countries like Germany who will see a steeper reduction in greenhouse gases, and other countries, some of them no doubt in eastern Europe, that will have to achieve a lesser reduction in greenhouse gases because of the need to catch up economically," Gabriel said.

EU Environment Commissioner Stavros Dimas said EU nations had come a long way since March 2006, when leaders gave only vague direction to environmental officials, telling them to look at a cut in global carbon dioxide emissions of between 15 percent and 30 percent.

"Not even the word 'target' was there," he said.

[Letter to the Visalia Times-Delta, Thursday, Feb. 22, 2007:](#)

More respect should be given to bike riders

I thought we lived in a country that guaranteed fair and equal treatment to all? Apparently, this is only true if one drives a car. Neither pedestrians nor cyclists appear to have any rights to the streets of our counties or cities. A pedestrian's recent death in Porterville and a cyclist's death here in Visalia seem to elicit no interest, least of all in prosecution of the offenders.

Are we who do not drive supposed to be marooned in our homes? If that is the case, why then are we expected to pay our share of the upcoming road sales tax?

For those who would say that my concerns are invalid, I would challenge you to live one week without once getting into your car, yet meeting all of your obligations. And as a bonus, you'd be doing your bit for the fight against pollution and global warming.

So do I have any takers?

David McElroy, Visalia