Trucker dreams of water hauling

Selma businessman plans intrastate freight via the Pacific Ocean.

By E.J. Schultz / The Fresno Bee
Updated Wednesday, June 15, 2005

As big transportation ideas go, it doesn't get much bigger than the one a Selma businessman is pushing.

Trucking company executive Ron Silva wants to build a multibillion-dollar Pacific Ocean shipping system to move freight between the Bay Area and Southern California.

The system would remove 4,200 trucks a day from central San Joaquin Valley highways, he says, resulting in cleaner air and more pleasant commutes.

"I know it's a better way to move freight," said Silva, CEO of 65-employee Westar Transport in Selma.

However determined, Silva could be a long way from making his ambitious plan a reality. He still must raise $1.5 billion to $2 billion in startup capital, get state government buy-in, find land for two ports and build a fleet of six $250 million ships.

Here's his plan:

Instead of driving though the Valley on Interstate 5 or Highway 99, trucks would stop at two ports, in Northern and Southern California. Freight would be moved onto 950-foot-long ships, then delivered to opposite ends of the state via Pacific Ocean shipping lines.

Initially, six vessels would make daily runs, with the capacity of transporting 700 trailers each. Silva projects that one-way trips would take 14 hours.

The system would not change the delivery system to the landlocked central San Joaquin Valley. Instead, it is aimed at the thousands of trucks that drive daily between the Bay Area and Southern California.

Silva has been working on the plan for a year and says he has spent about $150,000 of his time and money on the effort. He hopes to pay for half or more of the system with public money, possibly using funds that would otherwise be spent building highways.

"I'm going to prove to the state of California that this is a better investment," he said.

Silva has pitched the idea to politicians and state agencies but is disappointed in the lack of feedback.

"I really didn't believe it would be this difficult to build energy behind it," he said.

To build credibility, Silva is planning to contract with research firm Manalytics International of San Francisco to lead a financial and logistical study of the initiative.

To pay for the study, he hopes to get a $600,000 grant from the Center for the Commercial Deployment of Transportation Technologies. Based at California State University, Long Beach, the center researches commercial and military maritime transportation issues.

Center Director Stan Wheatley said funding approval "should be forthcoming," though he would not confirm an amount.

20,000 drivers short

Silva, 45, came up with his idea 10 years ago while fishing in the Sacramento Delta. He watched a ship pass by and thought "wouldn't it be neat if we could just put trailers on those ships?"

He began pursuing the idea partly to solve the truck-driver shortage plaguing his industry. Long-haul trucking has a national shortage of 20,000 drivers that is on track to reach 111,000 by 2014, according to a recent study by the American Trucking Associations.

Silva's plan would allow more drivers to make shorter hauls, keeping them home at night — a benefit that would help recruiting, he said. Under the proposal, truckers would haul goods back and forth within a 100-mile radius of the two ports.

Stephanie Williams, senior vice president for the California Trucking Association, said Silva's idea has potential. And she is not worried that it would hurt the trucking industry.

"There will always be a truck somewhere in the picture," she said.

Silva's idea is not new.

So-called "short-sea shipping" refers to the movement of domestic freight between coastal ports via waterways. Europe has embraced the concept. But it has been slow to take hold in the United States.

Six percent of U.S. freight is moved via water, compared with 44% in Europe, according to the 2003 Marine Transportation System Short Sea Shipping Conference Report. The U.S. short-sea shipping industry must overcome numerous hurdles, including massive start-up costs.

Another obstacle is that "every port in the United States now wants to be a hub port. Nobody want to be a feeder port," said Kathy Metcalf, director of maritime affairs for the Chamber of Shipping of America, which represents 25 U.S.-based shipping companies.

But there is some interest.

The Bay Area city of Pittsburg is in discussions with the busy Port of Oakland about building a "subport" to handle overflow, said Brad Nail, the city's director of economic development.

Barges would move freight between Pittsburg and Oakland, keeping trucks off roads.

Nail said the city has talked with Silva.

"His concept fits right in with what we've been talking with the Port of Oakland about."

Pushing the benefits

Silva has made less progress on finding land for a southern port. Possibilities, he said, include sites at Camp Pendleton or near Seal Beach.

As he pushes the plan, Silva is intent on highlighting its social benefits, including pollution reduction and road relief.

In Fresno County, the number of vehicle miles traveled per day is expected to grow by 57% in 20 years, according to the Council of Fresno County Governments.

"This is not a silver bullet," Silva said of his plan. "It's not going to get all the trucks off the highway."

But it would reduce the nonstop traffic through the central San Joaquin Valley, he said.

"The Valley gets the biggest benefit," he said. "There's no doubt."

Shafter keen on transport by rail

City plans rail line to connect to distribution center for project to aid shipping needs

By MATT PHILLIPS, Californian staff writer
Bakersfield Californian, Wednesday, June 15, 2005

SHAFTER - The city of Shafter plans to add a fish hook of a railroad track into its International Trade and Transportation Center in an attempt to reel in more transportation and logistics employers.

"The contract is being awarded now," said R. Brent Green, business development director for the city 18 miles to Bakersfield's northwest. The new rail line should be completed by the end of summer, Green said.

The railroad connection, which will be built on city land that formerly served as part of an almond farm, will connect into the International Trade and Transportation Center.

The 700-acre center is home to a 1.7 million-square-foot distribution center for retailer Target. The center also has a distribution center for fastener distributor The Hillman Group.

The new rail line is part of a broad, long-term city plan to turn Shafter into a kind of inland port that would be linked by rail to the port of Oakland.

Here's how it would work: Ships arrive in Oakland with freight. Instead of trucking them away, they are loaded on trains, sent to Shafter and parceled out to distribution centers there. Empty containers are then filled with exports, primarily valley agriculture products, and shipped by rail back to Oakland for export to Asia.

Shafter leaders say the plan, called The California Integrated Logistics Center, would cut pollution by taking trucks off the road and improving efficiency of the shipping process by filling empty containers will valley farming exports. Now many containers are sent back to the ports empty, Green said.

Railroad access to industrial sites is a key requirement for many companies that need to bring bulk loads of raw materials in, said Patrick Collins, president and CEO of the Kern Economic Development Corp.

Highway congestion in California is going to continue to make railroad transportation an important business requirement. And though Kern County has two of the country's main freight railroads running through it - Burlington Northern Santa Fe and the Union Pacific - there are not enough access points to meet demand for freight service, Collins said.

Homegrown Fuel Supply Helps Brazil Breathe Easy

By Marla Dickerson, Times Staff Writer
LA Times, Wed., June 15, 2005

SAO PAULO, Brazil - While Americans fume at high gasoline prices, Carolina Rossini is the essence of Brazilian cool at the pump.

Like tens of thousands of her countrymen, she is running her zippy red Fiat on pure ethanol extracted from Brazilian sugar cane. On a recent morning in Brazil's largest city, the clear liquid was selling for less than half the price of gasoline, a sweet deal for the 26-year-old lawyer.

“You save money and you don't pollute as much," said Rossini, who paid about $18 to fill her nearly empty tank. "And it's a good thing that the product is made here."

Three decades after the first oil shock rocked its economy, Brazil has nearly shaken its dependence on foreign oil. More vulnerable than even the United States when the 1973 Middle East oil embargo sent gas prices soaring, Brazil vowed to kick its import habit. Now the country that once relied on outsiders to supply 80% of its crude is projected to be self-sufficient within a few years.

Developing its own oil reserves was crucial to Brazil's long-term strategy. Its domestic petroleum production has increased sevenfold since 1980. But the Western Hemisphere's second-largest economy also has embraced renewable energy with a vengeance.

Today about 40% of all the fuel that Brazilians pump into their vehicles is ethanol, known here as alcohol, compared with about 3% in the United States. No other nation is using ethanol on such a vast scale. The change wasn't easy or cheap. But 30 years later, Brazil is reaping the return on its investment in energy security while the U.S. writes checks for $50-a-barrel foreign oil.

"Brazil showed it can be done, but it takes commitment and leadership," said Roland Hwang, vehicles policy director for the Natural Resources Defense Council in San Francisco. In the U.S. "we're paying the highest prices at the pump since 1981, and we are sending over $100 billion overseas a year to import oil instead of keeping that money in the United States…. Clearly Brazil has something to teach us."

Much of Brazil's ethanol usage stems from a government mandate requiring all gasoline to contain 25% alcohol. Vehicles that ran solely on ethanol fell out of favor here in the 1990s because of an alcohol shortage that pushed drivers back to gas-powered cars. But thanks to a new generation of vehicles that can run on gasoline, ethanol or any combination of those two fuels, more motorists like Rossini are filling up with 100% alcohol again to beat high gas prices.

The exploding popularity of these so-called flex-fuel vehicles is reverberating across Brazil's farming sector. Private investors are channeling billions of dollars into sugar and alcohol production, creating much-needed jobs in the countryside. Environmentalists support the expansion of this clean, renewable fuel that has helped improve air quality in Brazil's cities. Consumers are tickled to have a choice at the filling station.

Officials from other nations are flocking to Brazil to examine its methods. Most will find Brazil's sugar-fuel strategy impossible to replicate. Few countries possess the acreage and climate needed to produce sugar cane in gargantuan quantities, much less the infrastructure to get it to the pump.

Still, some Brazilians said their government's commitment to ditching imports and to jump-starting homegrown energy industries were the real keys to Brazil's success.

"It's a combination of strong public policy and the free market," said Mauricio Tolmasquim, president of a federal energy research agency based in Rio de Janeiro. "That's the Brazilian secret."

Brazil's fortunes have been tied to sugar since the Portuguese conquerors found that their tropical colony boasted ideal conditions for cultivating the tall, grassy plant. Brazilians produce and eat more cane sugar than any people on the planet, so the notion of using it to power their vehicles was a natural. After all, Henry Ford once viewed ethanol, which can be made from corn, barley and other crops, as a strong contender to fuel the Model T.

But the discovery of cheap, abundant petroleum changed everything. Like much of the rest of the world, Brazil guzzled imported crude until the 1970s oil shocks put its economy over a barrel. So totally reliant was Brazil on foreign oil that surging prices wreaked havoc on its balance of trade. That led to massive borrowing, huge deficits and, eventually, hyperinflation and a devaluation of its currency.

Thus the Brazilian government, then a military dictatorship, launched efforts in the mid-1970s to wean the nation off imports. Those efforts included its National Alcohol Program, known as Proalcool.

"To become less dependent was a matter of life and death," said Jose Goldemberg, secretary of the environment for the state of Sao Paulo.

With the help of public subsidies and tax breaks, farmers planted more sugar cane, investors built distilleries to convert the crop to ethanol and automakers designed cars to run on 100% alcohol. The government financed a mammoth distribution network to get the fuel to gas stations and kept alcohol prices low to entice consumers. It worked. By the mid-1980s, virtually all new cars sold in Brazil ran exclusively on ethanol.

But a 1989 shortage coupled with low gas prices soured many on the renewable fuel. Sales of

alcohol-only cars tumbled in the 1990s, and the government gradually withdrew its subsidies and lifted price controls on ethanol. Demand stalled.

Some critics at the time chalked it up to the inevitable consequences of government meddling. But today many laud Brazil's Proalcool program for creating a viable domestic market for ethanol, and for spawning an industry with tremendous export potential that now employs more than 1 million Brazilians.

Meanwhile, ethanol remains little more than a boutique fuel in the United States. Although the U.S. is the world's second-largest ethanol maker, producing 3.4 billion gallons last year compared with around 4 billion gallons for Brazil, ethanol's main use is as a gasoline oxygenate to boost air quality rather than as a serious replacement for foreign oil. However, high gas prices have some farm belt legislators pushing Congress to mandate greater use of domestic corn-based ethanol in the nation's fuel supply to reduce oil consumption.

Virtually all cars sold in the U.S. since the early 1980s can run on gasoline containing as much as 10% ethanol. In addition, there are an estimated 5 million flex-fuel vehicles already on U.S. roads that can burn a mixture as high as 85% ethanol. But big logistical and political hurdles remain. Only a few hundred of the nation's approximately 169,000 retail gas stations are equipped to sell so-called E85 fuel. Nationwide distribution would require station owners to invest hundreds of millions of dollars in special tanks and pumps.

Although U.S. ethanol makers say they could easily double their output to meet any increase in demand, experts say that's still a drop in the bucket compared with the tens of billions of gallons that would be needed annually to displace meaningful amounts of oil. The U.S. industry is loath to give up tariffs that protect it from cheaper alcohol from Brazil.

Meanwhile, some environmentalists say feedstock such as grasses and municipal waste offer much more promise than corn. But huge investments in research are needed to get the costs down for this so-called cellulosic ethanol.

What most can agree on is that Brazil is an example of what might have been if America had seriously committed itself 30 years ago to renewable energy.

"If we would have spent one-hundredth of the money that we have spent to send tanks around the world to protect our oil supplies … we would already be using cellulosic ethanol," said Michael Bryan, chief executive of BBI International, a Colorado-based bio-fuels consulting company.

Although public support was crucial in getting Brazil's program up and running, the private sector is now driving growth with flex-fuel cars.

At Volkswagen's sprawling Anchieta plant near Sao Paulo, the gleaming Fox and Polo models inching down the assembly line look just like regular cars. The only immediate clue that they are revolutionizing the Brazilian auto market is the TotalFlex logos on their back windshields.

The company was the first to unveil dual-fuel vehicles in Brazil in March 2003. The technology has proven to be such a hit with consumers that in a little more than two years the company has shifted nearly 90% of its domestic production to flex-fuel capability.

"It was a big bang in the market," Volkswagen spokeswoman Junia Nogueira de Sa said.

Equipped with a single fuel system, these vehicles employ sensors that allow the engine to adjust to gasoline and alcohol in any combination. Flex-fuel vehicles don't cost any more than regular gasoline-powered models. The only visible difference under the hood is a tiny auxiliary fuel tank that holds a bit of gasoline to aid starting on cold days, a common problem with the old alcohol-only models.

Today, a half dozen carmakers, including General Motors Corp. and Ford Motor Co., offer dual-fuel versions of their vehicles in Brazil, and more are on the way. Consumers bought around 48,000 of the vehicles the first year they were available in 2003, representing about 4% of total car sales. That figure quickly jumped to 328,000 cars, or 22% of the total volume, in 2004, and last month nearly half of the new cars sold were flex vehicles. Analysts predict that dual-fuel technology will easily dominate the market within a few years.

Cars aren't the only things being powered by ethanol in Brazil. Small planes such as crop-dusters are converting to alcohol. And Brazil's electrical grid, which experienced a severe shortage in 2001 because of a drought in its vital hydroelectric sector, is getting a charge from sugar.

In contrast to U.S. corn-based ethanol, which requires substantial amounts of fossil fuel to plant, harvest and distill, Brazil's industry uses crushed sugar cane stalks known as bagasse to feed the steam boilers that power its mills and distilleries. The process is environmentally friendly and so efficient that these centers are generating more energy than they can use. Ethanol producers are supplying Brazil's grid with more than 600 megawatts of electricity. The near-term potential is at least 10 times that.

Near the city of Ribeirao Preto in northeastern Sao Paulo state, the harvest is underway in Brazil's richest sugar-cane-producing region. Trucks lumbering under mounds of fresh-cut cane creep into Jardest Sugar & Alcohol. The vast milling and distilling complex, owned by Brazilian sugar trading giant Crystalsev, will run 24 hours a day nonstop until the season ends in December. The air is fetid with char from the fires that are clearing the fields of debris and vermin in preparation for the arrival of teams of scythe-wielding cutters. A lush emerald sea of cane rolls toward the horizon in every direction.

And there is a lot more where that came from. Brazil has about 13.5 million acres planted with sugar cane. More than 200 million dormant acres lie ready to cultivate.

"Oil is running out. The world needs more clean, renewable fuel," Crystalsev executive Maurilio Biagi Filho said. "And we are going to be there to supply it."

Fledgling State Ethanol Industry Faces Hurdles

Valley Voice, Wed., June 15, 2005

Goshen - The up-start California ethanol industry remains in a pitched battle for survival this summer getting mixed signals from the government and market forces whether to build a home-grown fuel industry starting with several plants in central California or sound a retreat.

This past week, for example, as a Senate committee passed a bill to double the amount of ethanol produced to mix with gasoline over the next seven years, Senator Dianne Feinstein was able to get a them to agree to allow California to put a waiver on a mandate for ethanol in summer months for fear mixing of the fuel would boost summer pollution.

“We can’t build an industry based on an eight month schedule,” shrugs Pacific Ethanol’s Tom Koehler who strongly disagrees with Feinstein’s assessment. “Either she is badly misinformed or she’s doing the bidding for Chevron,” suggests Koehler, hoping the Feinstein waiver idea will die in conference when the bill moves forward. Chevron is a big contributor to Feinstein’s campaigns.

“California has the best air quality ever in the first year that ethanol was added to our fuel supply in California,” says Koehler, arguing that big oil wants to limit the volume of non-petroleum ethanol with gasoline.

The Senate Energy Committee last week gave their blessing to increase the use of ethanol to six billion gallons next year and eight billion gallons in 2012. Today the industry produces about 3.4 billion gallons. One Senator predicted the high volume of domestic ethanol would displace two billion barrels of imported crude between 2006 and 2012.

“This is about fuel in our farm fields and not under sands in Saudi Arabia,” Senator Byron Dorgan, D-N.D., said. Feinstein recently argued that increasing the use of ethanol will cost consumers more money - adding 2.4 cents per gallon to consumers, citing a study. But ethanol supporters counter the study was based on $25 per barrel oil - now double that. Ethanol costs have fallen since then, the study says as well.

Feinstein says California doesn’t need the ethanol mandate. “You are forcing something that isn’t necessary,” citing state studies that show during hot summer days emissions increase when ethanol’s blended.

But there are also two schools of thought in the state on this with Governor Schwarzenegger calling this week for increased efforts to limit CO2 emissions to fight global warming. Ethanol produces far fewer CO2 emissions than gasoline.

Pacific Ethanol’s first plant broke ground in recent weeks, says Koehler at a former mill site in Madera making it the second ethanol plant to move to production in the state. The first, operated by Phoenix Biosystems in Goshen, is expected to make fuel this summer. (See front page)

The fledgling ethanol industry here wants California to follow the lead of every other state and allow blenders to mix 10% ethanol to the 90% gasoline mix. Right now because of air quality concerns, the state set the bar at 5.7%. Despite that, Valero Oil this past week confirmed that they are blending ethanol at a 7.7% rate without breaking any state pollution level mandate.

Valero is doing this at their Benecia refinery adding more ethanol in the fuel mix at a substantial cost saving compared to gasoline. Ethanol is now priced on the wholesale market at $1.25 a gallon - 25 cents cheaper than CARB gasoline. On top of that because of federal tax incentives the ethanol earns an extra 52 cents subsidy. The net cost adds up to about half the price of gasoline - a strong incentive to blend more ethanol even for an oil company.

But a Valero spokesman suggested to the Voice that their move while saving the oil company money did not extend the state fuel supply - contrary to what ethanol advocates claim. For every gallon of mostly foreign made gasoline you displace corn based, home-grown ethanol its net plus for energy security they have argued.

But Valero says to make room for ethanol the refinery has to remove lighter components found in gasoline and the net supply of fuel is about the same. But Koehler notes that the removed lighter components are put to use elsewhere. In the “big picture ethanol is clearly expanding the US fuel supply.”

The point is a critical one because of the tight gasoline situation in the US and the state. Adding a few percentage points of fuel could mean a big difference in supply meeting demand for gasoline or causing lines at the pump.

But ethanol production advocates have to face the downside of lower prices - it gives them a lower return even as they seek monies to finance more plants in the state. The price of ethanol has dropped from over $2 per gallon to the $1.25 today since last fall.

Still, Pacific Ethanol is preparing to file their building permit application in the next few weeks at a Visalia site across from the airport. The company contacted county officials last week saying the application was coming.

Nearby another company, Calgren is hoping to begin construction on a plant near Pixley late this summer.

That would mean four such ag based plants would be making the fuel in the central valley in the birth of an industry in the state. Although it will mean millions in new investment, displacement of foreign oil and jobs for our economy, this birth is having its labor pains.

Ethanol supporters have also been doing battle with the state ARB over whether the increased use of ethanol in the state’s motor fuel would be a good thing or not. On the one hand the Energy Commission and CARB have set a goal that 20% alternative use here by 2020 other than petroleum. The state wants to meet a goal of reducing CO2 emissions.

Already the state uses 900 million gallons of ethanol annually to blend with gasoline replacing the use of an oil based oxygenate MTMB now found to cause ground water pollution. Ethanol advocates say California ethanol use could double to 1757 million gallons a year if regulators would allow helping to clean the air.

But barriers exist to the plan a new California Energy Commission report suggests. The report says that “Recent studies estimated that ethanol blended in gasoline has increased volatile organic compounds (VOCs) in the South Coast Air Basin between 19 and 25 percent because VOCs can permeate and escape through the “soft” components of a gasoline vehicle, such as rubber hoses. Furthermore, CARB’s Predictive Model forecasts an increase in NOx emissions if the ethanol content is greater than 5.7 percent by volume. As a consequence, CARB has asked the federal government to waive the requirement for minimum oxygen content in gasoline due to these projected emission impacts.”

Advocates like the California Renewable Fuel Partnership say newer cars eliminate the emissions and deny that ethanol in higher blends are a pollution problem.

The report says to boost ethanol use more E85 fueling stations would need to be built for use in flexible fuel vehicles at a value of 85% ethanol and 15% gasoline. There are already 200,000 such vehicles in the state right now.

The report says more studies of air quality issues relating to ethanol are needed.

Meanwhile, the state following Feinstein’s lead, continues to seek a waiver from the federal government to end the use of ethanol as a mandatory oxygenate suggesting oil companies can make gasoline that is clean enough without it.

But how can they argue with both an increase in fuel supply at half the cost?

Valero who sells gasoline to many of the independent gas stations in California apparently passes on the lower cost to its suppliers. The trade group representing the independent stations have urged the state to allow a 10% blend to help lower gas prices even more.

Meanwhile, local agribusiness interests who want to build this new industry are having to fight to get financing even as some like Senator Feinstein appear to want to pull the rug out from under them. “She is essentially saying that Midwest ethanol producers should supply California,” says Koehler.