Fans of Diesel Dream of a Return to California of the Fuel-Efficient Cars

Pollution rules keep the engines out of the state's new passenger vehicles despite some advances.

By John O'Dell, Times Staff Writer

Robert DesRoches has fond memories of his diesel-powered 1984 Mitsubishi Mighty Max pickup. It required minimal maintenance and gave him 22 miles to the gallon, whether hauling groceries from the supermarket or towing his sailboat.

So when President Bush signed an energy bill this month that gives diesel car buyers a tax credit of up to $3,400, DesRoches was all for it. The 43-year-old computer networking specialist would love to buy a new diesel car or sport utility vehicle.

But because he lives in California, the tax break won't do him much good. Thanks to state emission regulations that are tougher than federal standards, sales of new diesel passenger cars and SUVs have essentially been barred here since 2003.

Soaring gasoline prices are rekindling Americans' interest in diesel-powered passenger vehicles — they're already hugely popular in Europe — but the pollution problem remains a barrier to their widespread acceptance in the U.S. No matter how reliable and fuel-efficient a diesel car may be, it is still dirtier than its gasoline counterpart.

Automakers say the technology exists to bring diesels into compliance with tough pollution laws. But air quality regulators say that even with emission treatments under development, it is likely to be 2008 or so before California sees diesel cars that can meet its standards.

Solving the diesel emission quandary could be a key component of a national energy strategy. A number of auto industry leaders, government officials and even environmentalists have come to believe that cleaner-burning diesels could be an effective addition to the arsenal of hybrids and other advanced fuel-saving technologies.

Dieter Zetsche, Chrysler Group's chief executive, has estimated that if 20% of the passenger cars in the U.S. were diesels, 350,000 barrels of crude oil would be saved each day.

"I'd love to see [diesel passenger cars] in California's light-duty fleet," Alan Lloyd, state Environmental Protection Agency secretary, said in an interview. "But only when they attain our standards."

Lloyd added that he has "seen growing confidence in the auto industry that those standards can be met."

A number of automakers are looking to diesel as a way to gain an edge in the hypercompetitive U.S. auto market while at the same time improving their overall performance in fuel economy standings.

"The fact of the matter is simple: Any significant reduction of fuel consumption under all conditions requires diesel technology," Volkswagen Chairman Bernd Pischetsrieder said in a speech in Los Angeles this year. VW sells more diesel cars in the U.S. than all of its competitors combined.

But despite diesel's acknowledged advantages, there are just six diesel passenger vehicle models sold in the U.S. — Volkswagen's New Beetle and Golf coupes, its Jetta and Passat sedans, a Jeep Liberty SUV and a Mercedes-Benz C-Class sedan. (The diesel Passat is being phased out of the U.S. market next year because European demand is going to account for every model VW can make, a company spokesman said.)

With California, New York, Vermont, Massachusetts and Maine adopting tough
emission laws, sales of new diesel cars are effectively banned from about 20% of the U.S. market. California alone accounts for almost 12% of all passenger vehicle sales.

Developing diesels that could be sold in those states would spur sales, something carmakers including Ford Motor Co., General Motors Corp., Chrysler and BMW are looking forward to as they prepare to launch diesel passenger vehicles.

Chrysler, which already sells the Jeep Liberty diesel, is considering a diesel version of the Grand Cherokee and perhaps a diesel Chrysler brand passenger car; BMW reportedly has a small diesel SUV on tap; Ford is looking at a U.S. version of the successful diesel Focus it sells in Europe; and Mercedes-Benz hopes to be able to expand beyond the C-Class and recently has tested a diesel M-Class SUV.

Until emission issues are resolved, the only diesel car market in California is in used models, and it is a pretty lucrative one. Used diesel cars and SUVs can be brought into California and sold and registered if they have at least 7,500 miles on their odometers.

From his office in a Fullerton industrial area, Wild Rose Motors owner Leonard Harview sells 70 to 90 used diesel cars a year. He buys mainly from out-of-state sellers, brings the cars to his storage yard and markets them on his website.

At a large auction with lots of competition, Harview said, he'd have to pay as much as $19,000 for a 2-year-old diesel Jetta with an automatic transmission. That's a car for which the blue book says a dealer ought to be paying only about $16,000. The extra cost is passed onto the retail customer, but Harview said he had no problem finding buyers.

Whether they are new or used, diesels have drawbacks that go beyond emissions.

For one, they suffer from an image problem that dates back to an ill-conceived effort by GM in the 1970s to convert a gasoline engine design to diesel. The result was clattering, smoky and unreliable — and made diesels anathema to a generation of car buyers. Polishing the image will simply take time and exposure to modern diesels, which are far cleaner and more reliable than those of the past.

Diesels also cost more than gas engines: Automakers typically charge about $1,000 more for a diesel than a comparable gasoline-powered vehicle. Diesel backers believe the new tax credit should help alleviate the cost barrier.

Indeed, even without the credit, diesel sales in the U.S. were up 33% last year — although still accounting for a scant 3% of the passenger vehicle market. The vast majority of those sales were diesel pickups, which can be sold in all 50 states because of lesser emission restrictions on trucks. Diesel cars represented only 0.2% of the passenger car market.

Market researchers at J.D. Power & Associates predict that diesels, including pickups, will account for about 7.5% of the U.S. passenger vehicle market by 2012.

Although diesel fuel prices have soared recently in step with crude oil prices, diesel is still more economical than gasoline. Diesel engines deliver 20% to 30% better fuel economy than gasoline engines, so even paying $3.10 a gallon for diesel versus $2.70 for regular gas, a driver could still save up to 2 cents per mile.

That extra mileage also makes diesel a potential ally in California's fight against emissions of carbon dioxide, which are linked to global warming.

Rather than using electric sparks to ignite their fuel like gasoline engines, diesels use very high compression to superheat the intake gases, which ignite the fuel as it is sprayed into the cylinders. This burns less fuel than a gas engine per mile traveled and therefore creates less carbon dioxide.

But this combustion method also leads to diesel's own particular pollution problems, which occur because the extremely high temperatures in the cylinders form oxides of nitrogen while sulfur residue from unburned fuel forms particulate matter, or soot.

Filters and high-pressure diesel fuel injection that ensures that most of the fuel is burned have pretty much cured the soot issue. And several automakers are developing chemical treatments to deal with the nitrogen oxides. Volkswagen's technology, for example, includes filters for particulate matter and a "storage catalyst" that collects and destroys the oxides before they can be emitted.

California air quality regulators, once openly anti-diesel, say it now appears likely that the industry can meet the state's emission standards with a variety of particulate filters and chemical treatments now being used in Europe.

"We have seen evidence … they can probably meet our standards," said Steve Albu, assistant chief of the state air board's Mobile Source Control Division.
Albu and other California air board managers said they didn't expect to see California-approved diesel cars until 2008 or 2009. But Volkswagen expects "to begin selling our Jetta and Golf diesel models at the end of 2006" in all 50 states, said spokesman Tony Fouladpour.

Meantime, California diesel enthusiasts wait.

DesRoches, who drives a Honda Odyssey minivan, says that with the federal tax credit easing the diesel premium, he'd buy one again if they could be sold here. The Simi Valley resident gets just 15 miles to the gallon in his gasoline-using Honda when towing his sailboat to Castaic Lake, about one-third less than he got 15 years ago with his diesel-powered Mitsubishi mini-pickup.

"It's not just the [economic] payback," said DesRoches. "Part of it is that I feel good using less fuel, and part is having the best motor to do the job. If it also saves enough money to pay back the extra cost of the diesel [engine] then that's just gravy."

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