## **ALTERNATIVE FUELS**

## by Jim Schwartz

As environmentalism grows and deteriorating affairs in the Middle East threaten America's petroleum supply, interest in the subject of "alternative fuels" mounts. Alternative fuels are those other than gasoline — e.g., electric or solar power, or natural gas — that reduce air pollution significantly. Some pundits predict that such interest will increase significantly as gas prices rise and that if the price reaches \$4 a gallon, alternative fuels will become feasible economically. To the American driver, spending about \$1.35 for regular unleaded gasoline and \$1.55 for premium (in October 1990), \$4 a gallon might seem in the realm of fantasy. But in many countries, including much of Europe and Japan, \$4/gallon is already the prevailing rate. Consequently, a look at the alternative fuel situation is in order.

Is American society ready for alternative fuels? Do consumers know about, understand and look forward to them? The answers, based on Newsweek's comprehensive study of 1990 New Car Buyers, are clearly "no". Familiarity with this issue in general is remarkably low, as is knowledge about specific alternative fuels. Moreover, the public is probably unwilling to pay significantly higher prices to get fuels that help solve the pollution problem.

### The Newsweek Surveys of Car-Buyers

Newsweek has been conducting surveys of carbuyers for over three decades. In the 1990 survey a seven page questionnaire was mailed to over 33,000 buyers of new cars and mini-vans sold in the United States early in the 1990 model year. Names were selected systematically from private sector, unrestricted state registration data supplied by R.L. Polk. The field period extended from March 6 to April 9,1990. The incentive enclosed with the questionnaire was a one dollar bill. Maritz Marketing Research in Toledo, Ohio, conducted the study. Over 14,000 usable questionnaires were returned (a response rate of 43%, considered very respectable by those familiar with the current difficulties in gaining cooperation from new car buyers.) The returns were weighted by model for each of the four U.S. census regions, plus California, to represent the total number of private sector registrations from the sample period. Accordingly, the results reflect the importance of each make and model in the marketplace.

#### **Findings**

How familiar are new car buyers with the issue of alternative fuels? Only a tenth of the buyers say they are completely (3%) or very (9%) familiar with this issue,

while another quarter (27%) are somewhat familiar. We might expect education to be highly correlated with familiarity, but this is not the case. The best educated group of new car buyers examined in this survey, those who are college graduates, are only slightly more familiar with this issue than those with some college, or those with high school education or less.

After respondents had been queried on their familiarity with the issue, they were provided with the definition of alternative fuels (cited at the beginning of this piece.) They were then asked whether the government should require automakers to build cars that run on alternative fuels. Half (48%) said yes, while only about a third as many (17%) responded negatively. Again reflecting lack of familiarity with this issue, even when provided with information permitting an informed response, a third (35%) responded "don't know."

If federal legislation calling for alternative fuels is passed, how much more would new car buyers be willing to pay for a car that significantly reduces air pollution? Not very much. A quarter (23%) of the buyers said "nothing," and over a third (38%) answered "don't know." Of those who indicated they are prepared to pay more, the median additional amount mentioned was \$191. Domestic buyers are willing to spend significantly less (\$111) than buyers of either Asian (\$377) or European (\$493) models. The additional amount new car buyers are willing to spend for a car that reduces pollution correlates positively with household income and education. Young buyers are more willing than their elders to say they would spend extra for a car that curbs pollution.

Willing to pay only a small additional amount for a pollution-reducing car, the buyers appear even less interested in paying extra for a fuel that significantly cuts air pollution. The median additional amount they are willing to pay is only 4%. A quarter (24%) of the respondents said they were not willing to pay any additional amount.

This unwillingness to pay more for either an improved vehicle or fuel may be interpreted in several ways: that buyers feel that manufacturers have the responsibility to absorb the costs; that the pollution caused by the current vehicle and fuel quality is not very serious; that the proposed options are not currently realistic or easily implemented; or, that the government should be, but is not now, providing the consumer with some incentive or trade-off to be more supportive of improvements.

For alternative fuels to succeed in the marketplace, they will have to meet a variety of consumer needs. At least three-quarters of the new car buyers say the following factors are extremely or very important to them if they are

to use an alternative fuel: safety, availability, performance, ease of use in refueling, and the absence of costly modifications of their present cars. In addition, two-thirds mentioned the price must not exceed that of gasoline.

If consumers are going to purchase alternative fuels, they need to know about and want them. However, no alternative fuel is currently considered "most appealing" by as many as a fifth of new car buyers. Among the options, solar power (17%) and gas blends (i.e., gas mixed with alcohol and ethanol - 16%) are the leaders. No more than a tenth mentioned electricity (battery powered), methanol (a form of alcohol), or methane (natural gas). Two-fifths of respondents (42%) didn't select any specific alternative fuel as most appealing. Half of all respondents failed to name any alternative fuel they would *not* use. Methane (mentioned by 16%) and electricity (15%) are the two fuels that generate the greatest resistence.

As an aid to understanding the factors that drive car purchases, a battery of 40 statements concerning cars, petroleum and other auto issues was prepared. Fourteen of those statements have direct bearing on the issue of alternative fuels. Foremost among the concerns of many buyers are good gas mileage, energy conservation and air pollution.

They recognize air pollution as a significant problem in their area, and give at least nominal backing to the idea that the use of alternative fuels should be mandated in cities with high pollution levels. However, buyers see that there are trade-offs in the use of alternative fuel vehicles, including performance questions, safety issues and limits on distances such vehicles may be driven. While many buyers provide the socially approved response on willingness to spend more for pollution-reducing fuels, they waffle and backslide when asked to be specific on the amount.

What does this study teach us about alternative fuels, in sum? The American driver, operationalized by perhaps its most "successful" segment, the new car buyer, is not yet an advocate for alternative fuels. Knowledge of the alternatives in general, and of specific fuels, is remarkably low. The pollution problem gets high recognition, in contrast to the very low recognition of possible solutions. Support exists for some action, but government is expected to take the lead. The Middle East crisis may now be the catalyst for changing public opinion on these issues, and forcing the government to act.

Jim Schwartz is market research manager, Newsweek

# INDEPENDENTS AND THE NEW AMERICAN POLITICS

## By Patrick Reddy

America's two major parties have been in decline since the 1950s: The Democratic-Republican competition which began in the Civil War era with the GOP dominant and was reshaped during the Depression as Democrats achieved majority status, has eroded considerably. At the same time, the number of "independent" voters — those declining adherence to either major party — has grown steadily. While the Democrats have certainly declined (from 48% in 1960 to 34% in 1988, according to Gallup's final pre-election polls), the Republicans have not gained all that much. Independents have been the big winners.

After World War II, rising levels of education and real income caused partisan ties to weaken significantly. In 1937, fully 84% of all voters choose a major party (Democrats 50%, Republicans 34%) according to Gallup surveys, and 75% did in 1952. The number of independents hit an all-time high in 1975 and 1979 at 33%. While independents have leveled off at about a third of the electorate, and the Republicans under Ronald Reagan gained in the 1980s, it's unlikely that partisanship will recover its 1930s strength. Today's "more sophisticated" voters, especially those under 40, don't really identify with either the Donkey or the Elephant. They "vote for the person, not the party," as the saying goes.

#### The Two Independents

A demographic profile of independents would reveal two kinds of voters. The dominant type are mostly under 40 years old, have some college education and are slightly above the average family income. They are overwhelmingly white (most blacks and non-Cuban Hispanics are Democrats), secular Protestants, and likely to vote. In short, they're Yuppies. The other group of independents are persons of lower socio-economic status, are generally apathetic about politics. Among the latter are moderate to conservative former Democrats in the South and Southwest, fed up with liberal domination of the national party but not quite ready yet to embrace the Republicans. Political scientists have long recognized that there are two independent types: the "I'm very engaged, but the parties can't command my loyalty" crowd, and the "I'm not interested, thank you" bloc. (The cynical and the apathetic, one might say). This is still true, but the former seems to be the one whose ranks are growing rapidly.