Latest News

November 30, 2005

GOVERNMENT & POLICY

Push On Hill For Fuel Independence

Lawmakers seek to cut U.S. demand for oil, boost biofuels and alternative-technology vehicles.

Glenn Hess

TAXI New York is the first major city to approve the gas-electric Ford Escape Hybrid for use as a taxicab.

America's reliance on imported oil is receiving new attention on both sides of Capitol Hill as bipartisan groups of lawmakers have introduced legislation designed to curtail domestic petroleum consumption, particularly in the transportation sector, while increasing demand for renewable fuels and alternative technology vehicles.

“It's good common sense to reduce our dependence on foreign oil, and it's doable in the near term,” Sen. Sam Brownback (R-Kan.) remarked at a Nov. 15 press conference. “This dependence limits our foreign policy and national security options, and there is broad public support for reducing oil consumption. We can create market incentives to use technologies available today to deal with a problem that will only get worse unless we take action.”
The Vehicle & Fuel Choices for American Security Act would set specific oil-saving targets to reduce U.S. dependence and require the mass production of automobiles that can run on any combination of gasoline and alternative fuels or, alternatively, cars powered by efficient hybrid engines. "For far too long, the U.S. has been at the mercy of foreign nations for its fuel," said Rep. Jack Kingston (R-Ga.). "This dependence is one of our greatest risks because it not only threatens our national security but also our economic security. This legislation is a plan to help America realize its fuel independence from Middle East oil."

The plan would direct the federal government to use its policy-making authority to reduce U.S. demand for oil by 2.5 million barrels a day within 10 years, and by 10 million bbl per day by 2031. America currently imports about 2.5 million bbl of oil a day from the Persian Gulf region. Overall, the U.S. consumes 20 million bbl of crude daily. The bill provides tax credits and loan guarantees to encourage automakers to retool and produce "flexible-fuel" vehicles that can run on gasoline or alternative fuels, gas-electric hybrids, fuel-cell vehicles, and other technologies. The Senate bill would also boost the tax credit for ethanol production and distribution infrastructure to 50% and authorize $200 million in production incentives for ethanol from crop wastes and other cellulose over five years. The House proposal would increase R&D funding for ethanol, methanol, and diesel fuel from nonpetroleum sources and allow duty-free imports of ethanol.

“This is not a liberal issue or a conservative issue,” said Sen. Joseph Lieberman (D-Conn.). “Energy independence is a bipartisan goal.” In addition to Lieberman and Brownback, the Senate measure is cosponsored by Sens. Evan Bayh (D-Ind.), Norm Coleman (R-Minn.), Bill Nelson (D-Fla.), Lindsey O. Graham (R-S.C.), and Ken Salazar (D-Col.). Kingston and Rep. Eliot L. Engel (D-N.Y.) introduced the House bill. “We are reaching across party lines to achieve sound legislation that will benefit everyone,” Engle said. “American producers, farmers, engineers, scientists, entrepreneurs, and consumers have shown that they are ready to lead the world into an economy beyond oil. The time to adopt these comprehensive policies is now.”

Congress largely rejected proposals to curtail oil use in crafting energy legislation earlier this year, but lawmakers believe that there has been a significant shift in attitudes since back-to-back hurricanes in the Gulf of Mexico disrupted oil production and refinery operations this summer. “There was a mental sea change in America when gasoline hit $3.00 a gallon,” Brownback observed.

Lawmakers say the legislation also stems from growing concern about the risk of relying so heavily on foreign oil. Imports now meet 60% of U.S. demand. “Achieving energy independence is one of the greatest challenges of our generation, one that will impact everything from our national security to our economy,” Sen. Bayh said. “But we must find a way to reduce our dependence on foreign oil so that America is prepared for the future. We can’t afford to rely on countries like Saudi Arabia and Venezuela for our energy needs any longer.”

Lieberman noted that experts have warned Congress that the nation’s reliance on imported oil has left the U.S. vulnerable to a supply shock should terrorists succeed in disabling a major production facility in the Middle East. “We’re one well-orchestrated terrorist attack or political upheaval away” from $100-a-barrel oil, he warned. Environmental groups, labor unions, and other traditional critics of the oil industry support the legislation. But it is also backed by Set
America Free, a conservative coalition that views the country’s growing dependence on foreign oil as a threat to national security. Among the group’s members are former CIA director R. James Woolsey and Robert C. McFarlane, former national security adviser to President Ronald Reagan.

In a speech at the National Press Club in Washington, D.C., on Nov. 22, Ford Motor Co. Chairman and Chief Executive Officer William C. Ford Jr. urged Congress to dramatically increase the R&D tax credit to aid companies working on advanced vehicles and fuel technologies and to consider tax incentives to help U.S. automakers convert outmoded plants into high-tech facilities.

"I believe that with the right investments, America—and the American manufacturing sector—can win," Ford declared. "It can maintain its leadership stature in the world, and we can reduce our dependence on foreign oil. But we can't get there alone." U.S. automakers are struggling to close a widening technology gap with Japan, while facing steep increases in health care and raw material costs.

Ford, the great-grandson of Ford founder Henry Ford, noted that upon assuming leadership of the company in 2001, he made a conscious decision to invest in new products that were more fuel-efficient. "I believed back then that the days of cheap gasoline were numbered," he said. "That led to the creation of the world's first hybrid-electric sport utility vehicle—the Ford Escape—and inspired our decision to build up to 250,000 hybrids a year by 2010."

The oil industry, which opposed the inclusion of a renewable fuels standard in energy legislation President George W. Bush signed into law in August, has made clear that it will fight any additional federal commitment to alternative fuels. "We need to rely on market forces to shape our energy future rather than attempt to dictate what fuels are to be used," American Petroleum Institute President Red Cavaney told the Senate Environment & Public Works Committee last month.

"Those who write off gasoline and diesel fuels fail to recognize how advanced technology is providing new and more efficient ways of using these time-tested products," Cavaney remarked. "For example, [gas-electric] hybrid vehicles are a star that has arrived. Already, they are moving aggressively into the market, and their rate of growth will depend, in large part, on their price and performance."

He said oil companies have also spent millions of dollars researching new fuel-cell technologies, which "hold the potential for up to double the fuel efficiency of current gasoline powered autos, with essentially zero tailpipe emissions." But Cavaney stressed that the time and costs involved in transitioning to the next generation of fuels should not be underestimated. "Consider what would be involved in replacing the dominant role of oil with a substitute like hydrogen or solar power," he told the panel. "Most experts agree that such a transition will require dramatic advances in technology and massive capital investments—and take several decades to accomplish, if at all."

Cavaney acknowledged that oil will be replaced when cost-effective alternatives are found. "We expect that the dominant transportation fuels will remain gasoline and diesel for at least two or three decades," he said. That’s the minimum amount of time it will take to fully retire the still-growing fleet of vehicles powered by these fuels and to deploy a replacement...
fuel source throughout the U.S., according to the industry official. “We cannot afford to prematurely retire these century-old champions, without full and complete assurances that worthy successors are in place,” he testified.

Senator Energy & Natural Resources Committee Chairman Pete V. Domenici (R-N.M.) has indicated that he plans to work on legislation next year to encourage the construction of new refineries, allow more offshore drilling for oil and gas, and promote greater energy efficiency. At their news conference, Salazar and Lieberman expressed hope that Domenici would hold a hearing on the oil-saving proposal and incorporate it into his new energy bill. Meanwhile, Kingston said he is optimistic that the House will ultimately support the oil alternatives plan, noting that it avoids controversial subjects that have drawn bipartisan opposition in the past, such as drilling in Alaska’s Arctic National Wildlife Refuge and raising fuel economy standards.

Chemical & Engineering News
ISSN 0009-2347
Copyright © 2005 American Chemical Society