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Article

G.M., Ford, Toyota, Others Boast New Cars; Key Uncertainty amid Higher Gas Prices ... Consumers

By [Julie Halpert](#) on Apr 4, 2011



Tuesday, April 19, 2011

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Rising prices for gas at the pump have more consumers looking at energy-efficient vehicles and other ways to stretch their dollars. Auto show celebrations of new environmentally friendly cars are the talk of the town the big question remains whether enough consumers will want to buy them.

General Motors' new Chevrolet Volt fetches "Car of the Year" honors at this year's North American International Auto Show in Detroit.

Ford uses the annual extravaganza to tout its upscale gas-sipping gasoline cars while unveiling its upcoming Focus Electric.

Toyota announces expansions to its Prius line of hybrids.

It's been just over two years since the Obama administration pushed automakers to develop environmentally-friendly cars as a condition of bailing out both Chrysler and General Motors. So are efforts now beginning to bear fruit?

Auto shows, after all, are known for hype and fanfare, and it's difficult to predict from the showcased vehicles just how committed automakers really are to this strategy — and how many of those concept cars and others on drawing boards will actually hit showroom floors. With the initial buzz about new models winding down, critical questions remain: Which of these vehicles will ultimately result in meaningful reductions of carbon dioxide and make the most significant inroads on climate change?

And, critically important, will consumers buy them?

Electric Vehicles' Carbon Footprint

Nissan and General Motors are pinning hopes on the all-electric Nissan Leaf and the hybrid electric Chevrolet Volt respectively. But an understanding of the full life cycle of electric vehicles shows they are hardly carbon-neutral. Charging them, after all, still relies on the electric power grid, and in much of the country, that power is coming from plants that burn coal.

A report issued in February by the Indiana University School of Public and Environmental Affairs, "[Plug-in Electric Vehicles: A Practical Plan for Progress](#)," found that producing electricity for these vehicles "will generate risks to the environment" that vary based on the source of power. While noting that the potential impacts of electric vehicles can't be ignored, the report indicates that an electric vehicle will "emit far fewer greenhouse gases than the current average gasoline engine."

Energy experts say that electric vehicles' total demands on the electricity grid will be small, at least initially, simply because there will be so few of the vehicles on the roads compared with the proportion of conventional vehicles.

"I don't see electric cars growing rapidly," John DeCicco, senior lecturer at The University of Michigan's School of Natural Resources and Environment and former senior fellow for automotive strategies at the Environmental Defense Fund, said in a phone interview. He predicts electric vehicles, at least for the foreseeable future, will appeal primarily to niche buyers representing less than 1 percent of the market.

Even so, Steve Plotkin, a transportation and energy analyst at Argonne National Laboratories' Center for Transportation Research, said in a phone interview that "there's no doubt that a chunk of the demand for power from electric cars will be coal-based power." He says that while electric vehicles will run cleaner than gasoline-powered vehicles, as long as half of the country's grid is powered by coal, "It's not really going to be a major benefit to buy EVs unless you clean up the grid."

"If we don't see significant improvement in the mostly coal-based grid, a lot of environmentalists will be hesitant" to endorse buying electric vehicles rather than hybrids, environmental activist Daniel Becker, head of the Safe Climate Campaign, part of the Center for Auto Safety, told *The Yale Forum* by phone.

Hedging Bets on Hybrids

Underlying Toyota's positioning is its confidence that hybrids, at least for now, offer a better option for reducing greenhouse gas emissions. The company has announced it will add 11 new or redesigned conventional hybrids to its global lineup by the end of next year.

"We would do more for the environment to sell more Prius vehicles," said Paul Williamsen, Lexus College National Manager, a division that provides technical support. With hybrids, "each generational change of technology allows us to improve performance and efficiency, lowering the weight and cost," he said, so fuel economy can improve independent of price increases. The "Prius v," scheduled to reach consumers this summer, has twice the interior space as the current Prius and will get 40 miles per gallon, about 10 miles per gallon less than the existing Prius, the company says.

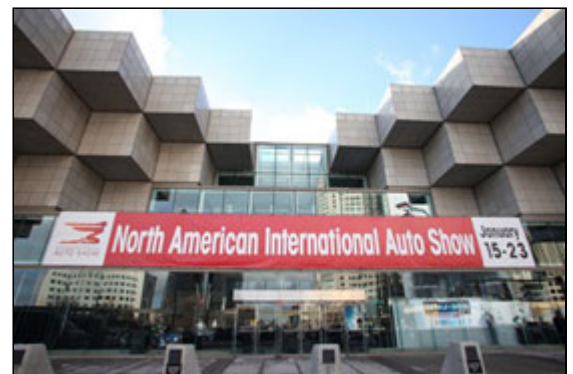
Fuel Cell Fervor

At the Detroit auto show this past January, Mercedes announced it will take its B-Class, F-CELL, fuel cell car on a 125-day, four-continent, 20,000-mile test drive to demonstrate its durability. The car gets 240 miles on a charge. Speaking at the Detroit show, Thomas Weber, a member of the Board of Management of Daimler AG Group, Research and Development for Mercedes-Benz, said the car will be a "global ambassador" for zero-emission mobility.

Argonne Lab's Plotkin said that a big selling point of fuel cell cars is that they can go a good distance on a charge. But fuel cell cars present environmental problems of their own, since generating the hydrogen they run on creates a lot of carbon dioxide, he said. And Williamsen said that while Toyota also has fuel cell cars in development, creating the needed hydrogen infrastructure would require a huge investment. And, he pointed out, most hydrogen is still derived from petroleum feedstocks.

Going Further On a Tank of Gas

Automakers are also heralding their progress squeezing more fuel efficiency out of gasoline cars. Ford used the Detroit auto show to showcase its 2011 Ford Fiesta, which gets 40 mpg highway, and the Focus, which gets 35



miles per gallon, while GM boasted about the 2011 Chevrolet Cruz Eco, which gets 42 miles per gallon highway. Advances involving improved aerodynamics and new engine technologies are allowing some gasoline powered cars to achieve the same fuel efficiency as hybrids, says Charles Griffith, Clean Vehicle and Fuels Director at The Ecology Center. Because those advances don't require a change in how the cars are powered, more Americans are likely to buy them, so they could make significant environmental inroads, he says.

But based on January auto sales that showed pick-up trucks and other large vehicles as the biggest sellers, that may not be the case. The government can mandate high mileage and automakers can showcase small cars, "but people don't want them," Jonathan Linkov, managing editor, autos, for *Consumer Reports*, told *The Yale Forum*.

Even though recent sales data for the first quarter of 2011 showed that sales of new hybrid and electric cars climbed 37 percent from the first quarter of last year, J.D. Power and Associates forecasts that hybrid and electric vehicle shares will remain below 3 percent this year, and in 2018 will still amount to less than 10 percent of new vehicle sales. Part of the 2011 first quarter increase reflects the introductions of the Volt and Leaf vehicles, neither of which was available a year ago.

Also, "the vehicles are still too expensive," despite early-April gas prices averaging more than \$3.76 a gallon nationally, Michael Omotoso, senior manager of global power train for J.D. Power, said in a phone interview.

Becker said he expects that as automakers roll out a bigger variety of small cars, consumers will start to embrace them. And Wade Newton, speaking by phone for the Alliance of Automobile Manufacturers, said "we're very hopeful that they will respond to these offerings."

Nonetheless, some environmentalists and energy experts say it will take a gas tax or national energy tax — or further increases in the price at the pump — to really move consumers in that direction.

"The only way you make consumers want fuel efficient vehicles is to make it financially painful to drive gas guzzlers," says John O'Dell, senior editor of Edmunds' AutoObserver.com.

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