

- MAY 26, 2009

# Obama Administration Sparks Battery Gold Rush

## Companies, States Vie for \$2.4 Billion in Funding Aimed at Turning U.S. Into Top Maker of Fuel Cells for Electric Cars

By [WILLIAM M. BULKELEY](#)

The Obama administration has set off a gold rush to power new environmentally friendly cars.

In one of the government's biggest efforts at shaping industrial policy, the Energy Department has been soliciting applications for \$2.4 billion in funding aimed at turning the U.S. into a battery-manufacturing powerhouse. At the deadline last week, the department said it had received 165 applications.

Companies vying for the federal money include [General Motors](#) Corp., [Dow Chemical](#) Co., [Johnson Controls](#) Inc. and A123 Systems, a closely held battery maker backed by [General Electric](#) Co. and others. States including Michigan, Kentucky and Massachusetts are also weighing in with applications, usually in alliance with their favored battery makers.

[View Full Image](#)



*Reuters*

GM approached a Korean firm about batteries for the Chevrolet Volt, above, but U.S. firms are keen to join the business.

When the winners are decided, as soon as the end of July, the Energy Department may anoint Livonia, Mich., or Indianapolis or Glendale, Ky., as the future U.S. hub of car batteries. A 2008 study by researchers at Alliance Bernstein forecast the current \$9 billion-a-year auto-battery market, based on lead-acid batteries, could reach more than \$150 billion by 2030.

The companies and state governments are proposing sites for plants that will make lithium-ion batteries, the technology that has emerged as the leading choice to power future electric cars.

The world-wide market for these types of power cells is now dominated by four big Japanese and Korean companies -- including [Sony](#) Corp. and [Panasonic](#) Corp. -- but their batteries are chiefly small ones used in laptops and cellphones.

Car makers currently use another technology -- nickel-metal-hydride batteries -- in hybrid vehicles such as [Toyota Motor](#) Corp.'s Prius because they aren't as prone to fire as lithium-ion batteries are.

Lithium-ion batteries are lighter and more powerful than lead or nickel-metal hydride batteries. Several American companies have demonstrated technological improvements that make big versions safe and practical for use in cars and trucks.

While mass production of such batteries hasn't been demonstrated, U.S. companies "seem close to building a facility and getting a product out there," said Kent Furst, battery analyst for Freedonia Group, a market-research firm in Cleveland.

States are desperate to attract manufacturing plants that would boost employment while reducing greenhouse gases. Some officials argue a big battery factory will attract or preserve job-heavy auto assembly plants.

"If you're the place where the batteries are made, there's an opportunity to spin it into other things as well," said D. Gregory Main, president of the Michigan Economic Development Corp., a state agency that has committed up to \$400 million in incentives for battery manufacturers.

Kentucky is promising \$110 million in aid and a 1,550-acre site, in Glendale, that it assembled in an unsuccessful effort to land a Hyundai plant several years ago.

"We're not in that financial league," said Ian Bowles, the Massachusetts secretary of energy and environmental affairs. But Mr. Bowles said Massachusetts has a chance of landing federal funding because it has several in-state battery makers such as [Boston Power](#) Co.

Manufacturers are proposing to build four plants in Michigan that would require a total capital investment of \$1.7 billion, though not all are likely to be funded.

Among them is A123, a Massachusetts company that makes batteries in China for Black & Decker power tools. It wants to build a \$600 million lithium-ion plant in Livonia, outside Detroit. GM said it was working with A123 on batteries for the planned Volt electric vehicle, raising the small company's profile. But earlier this year GM said it was working exclusively with LG Chemicals, a Korean battery maker.

A123 now says it has an agreement to supply batteries for future Chrysler cars.

"We think they're qualified, if you get past the notion of bankruptcy" for Chrysler and focus on its plan to be acquired by Fiat, said Michigan's Mr. Main. A123, which recently raised \$70 million from GE and other investors, declined comment.

Meanwhile, Johnson Controls, the Wisconsin auto supplier that is currently the industry's leading lead-acid battery supplier, has allied with Saft LLC, a French battery maker, with plans to build lithium batteries in an existing plant in Holland, Mich.

In Kentucky, part of the proposed 1,550-acre site, in Glendale site will be occupied by the National Alliance for Advanced Transportation Batteries, a 51-company consortium, which plans a research campus.

"It's been a strategic decision to move in the direction of creating Kentucky as what we hope will be the epicenter of battery development," said Larry Hayes, the state's economic development secretary.

The consortium was started by Chicago lawyer James J. Greenberger, the head of the energy and project-finance team at Reed Smith LLP. He calls the venture a "law-firm-marketing exercise that got out of control."

After he ran a conference last year, companies signed up to form a group that would develop tools and manufacturing expertise to be ready when the technology is. He said the federal funding is "almost too much money," considering the early stage of the market. But he said winning a DOE grant is crucial to the prospects of building the research center

In Indiana, battery maker [Ener1](#) Inc. has applied for a grant to expand a lithium car-battery plant it already operates in Indianapolis. The company has an agreement to supply batteries to closely held Fisker Automotive, a California company with plans to build and sell \$88,000 luxury-hybrid cars in 2010.

Ener1 Chairman Charles Gassenheimer said the Energy Department grants would help it expand, but "it's not life or death," for the company, which has raised some \$250 million on its own. He said the grants can "accelerate the industry to develop two or three years faster" than it would on its own.