

# Toyota developing alternative electric motor

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Toyota Motor Corp., maker of the popular Prius hybrid car, is developing a new type of electric motor to cut its dependence on rare earth metals and lower costs, a company spokesman said Monday.

The new technology will help free the world's No. 1 automaker from relying on China, which produces 97 percent of the global output of rare earths needed for many high-tech products, including the current generation of hybrid gasoline-electric motors.

Beijing sent shock waves through Japan's high-tech sector late last year when it blocked exports of the exotic metals after a diplomatic spat, and prices have soared as China gradually tightens its output.

"Toyota is always looking for a reduction in resources and in terms of costs," said spokesman Paul Nolasco.

The company has not released any specific uses or timeline for the new motor, he said.

Toyota has bet big on gasoline-electric [hybrid technology](#), and an executive said last year it will begin selling a completely electric vehicle in 2012 in the U.S., Japan and Europe. The company is also working on an electric sport-utility vehicle with U.S. luxury electric [car maker Tesla](#).

Analysts said production of such vehicles was still small enough that there was little short-term risk from a shortage of rare earths, but this could change quickly.

"This isn't a major issue right now, but as these types of cars become more popular, it becomes a big risk if supply is limited or cut off," said Mizuho Investors Securities auto analyst Ryoichi Saito.

He said it made sense for companies that make high-tech products to be developing alternatives, given trade uncertainties with China. Japan has also actively pursued deals around Asia to develop alternative sources.

In November, China resumed exports to Japan of rare earths after a two-month de facto ban amid a diplomatic row over disputed islands.

China has been gradually reducing the amount of rare earths it sends overseas. Earlier this month a state newspaper said the country would toughen environmental standards, which could raise prices globally. China's 2010 export quota of 24,280 tons was a 30 percent reduction from the previous year.

The U.S., Canada and Australia have rare earths but stopped mining them in the 1990s as lower-cost Chinese supplies became available. China has about 30 percent of global [rare earths](#) deposits.

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