

The Street

[Try Jim Cramer's Action Alerts PLUS](#)[Tech](#)[Return to Article](#)

Forget Electric Cars, Electric Roads are the Future

Business Insider

09/14/11 - 04:00 PM EDT

If electric cars never really take off in popularity, how about the flip side? Electrified roads.

Previous ideas with electrified roads required a coil to be attached to the car, which is unreasonable if the car is moving. Now, researchers at [Toyota](#) Central R&D Labs and Toyohashi University of Technology are looking into a method where the energy would enter the car from the road through the tires, which are always in contact with the ground. [New Scientist](#) has more on the research:

Such technology would allow electric cars to forgo their heavy batteries, which not only add to a vehicle's weight, increasing the energy needed to move it, but also force it to sit idle while recharging.

...

To test how much energy would be lost as electricity travelled through the tyres' rubber, [Masahiro] Hanazawa and [Takashi] Ohira set up a lab experiment in which they put metal plates on the floor and inside a tyre. "Less than 20 percent of the transmitted power is dissipated in the circuit," says Ohira.

With enough power the system could run typical passenger cars, says Ohira, and the team are now developing a small-scale prototype to prove it. He admits, however, that the system's energy loss is "much higher than regular batteries."

Electrified roads pose an obvious problem for pedestrians — there's no rocking on this electric avenue. [New Scientist](#) reports John Boys, an electrical engineer at the University of Auckland, New Zealand, as saying that as much as 500,000 volts would be needed to power cars in the way Ohira and Hanazawa would like.

"You wouldn't want to step on that," he says.

[New Scientist](#) also notes infrastructure investment and radio-frequency interference as limitations to this idea.

This [post](#) originally appeared at [The Blaze](#).

Please follow [SAI](#) on [Twitter](#) and [Facebook](#).

[Join the conversation about this story »](#)

See Also:



- [Obama Sends Out Creepy Email: 'Sometime Soon, Can We Meet For Dinner?'](#)
- [RUMOR: Sarah Palin Had A One-Night Stand With A Future NBA Star When She Was A Sports Reporter In 1987](#)
- [Microsoft, AOL, And Yahoo Announce Huge Ad-Selling Partnership](#)

Visit TheStreet for more great features

THESTREET PREMIUM SERVICES

From the action-oriented investing ideas of *Action Alerts PLUS* by Jim Cramer to the expert technical trading strategies of Helene Meisler's *Top Stocks*, TheStreet.com offers a range of premium services to help boost your portfolio's performance. [View now](#).

EXPERT ADVISORS ALERTS DELIVERED TO YOUR INBOX

Action Alerts PLUS: Cramer's personal portfolio, emails before he acts.
RealMoney: 70+ experts share their top investing ideas and analysis.
Stocks Under \$10: Alerts identify undervalued stocks with profit potential.

FREE NEWSLETTERS

Get an edge on the market with the help of free email newsletters like Jim Cramer's *Daily Booyah!*. Learn about the day's major market events, companies that sizzled or fizzled and lots more that can help you make more profitable investing decisions. [Sign up](#).

Brokerage Partners

[TheStreet Corporate](#) | [Home](#) | [About Us](#) | [Advertise](#) | [Reprints](#) | [Customer Service](#) | [Employment](#) | [Privacy Policy](#) | [Sitemap](#) | [Topic Archive](#) | [Video Archive](#) | [Stock Quotes Online](#) | [Terms of Use](#)

TheStreet's enterprise databases running Oracle are professionally monitored and managed by [Pythian Remote DBA](#).

Quotes delayed at least 20 minutes for all exchanges. Market Data provided by [Interactive Data](#). Company fundamental data provided by [Morningstar](#). Earnings and ratings provided by Zacks. Mutual fund data provided by Valueline. ETF data provided by Lipper. [Terms & Conditions](#). Powered and implemented by [Interactive Data Managed Solutions](#).

TheStreet Ratings updates stock ratings daily. However, if no rating change occurs, the data on this page does not update. The data does update after 90 days if no rating change occurs within that time period.

IDC calculates the Market Cap for the basic symbol to include common shares only. Year-to-date mutual fund returns are calculated on a monthly basis by Value Line and posted mid-month.

*Oil Data in Market Overview is Brent Crude Pricing

The Street

© 2011 TheStreet, Inc. All rights reserved.