

Supercapacitors poised to help boost vehicle fuel efficiency

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Unlike slow and steady batteries, supercapacitors gulp up energy rapidly and deliver it in fast, powerful jolts. A growing array of consumer products is benefiting from these energy-storage devices, reports *Chemical & Engineering News*, the weekly newsmagazine of the American Chemical Society, with cars and trucks—and their drivers—poised to be major beneficiaries.

In the article, Marc S. Reisch, a senior correspondent at C&EN, points out that [supercapacitors](#) were first developed in the 1960s. Researchers have since been pursuing new ways to improve them, but they still can't store as much energy as batteries. They're mostly used in windmill blade control, [solar energy systems](#) and other niche applications. But recent advances have allowed automakers to introduce start-stop cars such as hybrids and gasoline-powered vehicles that shut down their engines rather than idle and start up again when a driver hits the gas pedal. This type of system can help boost a vehicle's fuel efficiency.

Industry projections and investments suggest the future looks solid for these devices even in an uncertain economy. Supercapacitor sales are expected to more than double over the next five years, and automakers are continuing to invest in supercapacitor research. Outside the auto industry, the technology is also making headway in consumer electronics.

More information: Power Savers - cen.acs.org/articles/93/i5/Sup...rs-Charge-Ahead.html

Provided by American Chemical Society

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