Move over solar: Big batteries 'sexiest' now

Early adopters of rooftop solar and electric cars are finding a new obsession in energy storage as the first generation of consumer-friendly batteries capable of supporting household circuits comes to market.

Rob Wilder ... has a lithium-ion battery mounted on his garage wall at an Encinitas home overlooking the San Elijo Lagoon estuary.

"The batteries are what are the newest, coolest, sexiest," said Wilder, a devoted environmentalist — and capitalist — who in 2004 founded a socially responsible investment fund for low-carbon energy technology companies.

Wilder's new battery, cloaked in a grey metal box the size of a large gym locker, is a trial version of the household "Powerwall" battery developed by plug-in carmaker Tesla Motors. It ties into several electrical circuits in a house equipped with rooftop solar and charging stations for two plug-in cars. In the event of a rare power outage, the new battery keeps lights on and the kitchen fridge cool for several hours. Other California solar customers currently lose all power, including solar, during outages.

Wilder is heralding his experience as an early

breakthrough for households that want to use more of their own renewable energy, or even cut ties with the power grid altogether.

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Big batteries make immediate economic sense for many businesses trying to control special billing charges based on the timing of energy use. Time-base rates are coming soon to small businesses and later households in California.

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For California's major investor-owned utilities, which derive most profits from investments in traditional grid infrastructure, the prospect of customer-owned batteries paired with rooftop solar power presents a business challenge.