

# 'Boozer' EV sets 1,000 miles-plus record on single charge

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(PhysOrg.com) -- An experimental electric vehicle called "Schluckspecht" ("boozer," or "tippler" in German) has set the record for achieving the longest drive in a battery-powered vehicle on a single battery charge. Its record-breaking distance was 1,013.8 miles (1,631.5 km). The trip lasted 36 hours and 12 minutes. The Schluckspecht E, as the winning machine is called, was developed at Germany's University of

Applied Sciences, Offenburg, in collaboration with other academic groups. The test drive took place in Boxberg at the Bosch corporate test track, where a team of four drivers made the trip, as they took turns navigating over the long stretch of hours.

While nothing beats a world record, this is not the first time Team Schluckspecht has made the EV design scene sit up and take notice. They also won attention at the South African Solar Challenge last year, driving 389 miles on a single charge.

The team was founded in 1998. Their name Schluckspecht was taken because of their first car, a prototype gasoline vehicle that devoured too much fuel to be effective in competitions. After successive models with successive improvements, the team switched its technology focus.

The aerodynamic design and weight efficiencies of the vehicle are singled out as reasons for the team's success.

Those features are considered important because electric cars have tried to resolve the hurdle of range. Attempts have included charging station networks, and special range-extending engines, but the Schluckspecht team came up with a more optimal design to address range.



They traded off comfort, being a single-seat experimental car, for reduced weight. The designers made use of two wheel-mounted hub-motors. There was no need to accommodate an internal engine or transmission. Their design represents a lighter vehicle with an efficient battery management system which evenly divides the load among 14 individual lithium-cobalt battery packs.

The Schluckspecht victory beats a previous record of 1,003 km (623.23 miles) held by the Japan Electric Vehicle Club in May 2010. The Schluckspecht E achieved an average speed of 45 km/h (28 mph), while the Japan Electric Vehicle Club's Daihatsu Mira averaged 40 km/h (25 mph) on a single charge. The Japan club's car achieved 1,003 km, approximately 623 miles, on a single charge, in a 27.5-hour timeframe.

**More information:** Project page:  
[www.schluckspecht.net/index.php?page=home-eng](http://www.schluckspecht.net/index.php?page=home-eng)

via [Gas 2.0](#)

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