



The Helia was unveiled at the London Science Museum in August | Photo source [Domininkas Photography](#)

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STUDENTS DEVELOP SMALLER, FASTER ELECTRIC CAR

 MOBILITY & TRANSPORT

The solar-powered car can transport four passengers at 80kph and has twice the range of a Tesla

Spotted: Cambridge University students have created a solar-powered electric vehicle that can travel from London to Edinburgh on a single charge. The battery has twice the range of a Tesla and is a fourth the size, the team says.

The student society, Cambridge University Eco Racing, worked with top manufacturing specialists to create the UK's "most efficient electric car". The team used computers to determine the ideal geometry of the design. That allowed them to create a car, dubbed the Helia, that maximised ride quality and reduced weight, the team says.

For example, the team used carbon fibre to make the vehicle's chassis and body panels. That makes them lighter than previous models. The improved batteries store surplus energy. These changes mean the Helia can travel longer between charges. It also uses energy more efficiently. The car can travel 80 kilometres per hour using the same amount of power needed to heat an electric kettle. It can reach motorway speeds and travel 900 kilometres on a single charge without using the solar cells.

The Helia was unveiled at the London Science Museum in August. The team will race the car in the Australian Bridgestone World Solar Challenge in October.

11th September 2019

Website: cuer.co.uk/helia

Takeaway:

Solar-powered vehicles have struggled to become a viable consumer car because for several reasons, including their weight, the size of their solar batteries and the distance they are able to travel. **Innovations in battery cells** are changing that, however. Toyota and Lightyear are both developing solar-powered vehicles for the commercial market. The Helia has the potential to push the market forward even more.