

Solar Cars Driving Towards A Hydrogen Future

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Competitors in this week's Panasonic World Solar Challenge will be demonstrating some of the fundamental technical innovations driving us towards the hydrogen economy, according to event partner, CSIRO.

"The World Solar Challenge acts as a live laboratory for the development and evaluation of advanced electric drive systems," David Lamb of CSIRO's Energy Transformed Flagship said.

"These systems are required for both hybrid electric vehicles (also known as HEV's) in the near term and ultimately for the electric or hydrogen-powered fuel cell vehicles in the longer term."

Competitors in the bi-annual event use energy efficient electric motors that are integral in the development of a more sustainable transport sector. In the current climate of rising fuel prices, improvements in engine efficiencies not only lower fuel costs but also reduce vehicle pollution.

CSIRO scientists Dr Paul Gwan, Dr David Rand and Dr John Ward will keep a close eye on competitors to ensure their vehicles meet the stringent rules of the Challenge.

Competitors begin the race with a nominal 5kWh of stored energy, but after that it's up to the sun to power them on the 3000km journey from Darwin to Adelaide.

The race started Sunday, September 25.

One of the aims of the Energy Transformed Flagship is to provide vehicle technology innovations that will reduce greenhouse emissions from the transport sector.

Technologies currently being researched include advanced drive trains for hybrid vehicles and new energy storage systems based on advanced batteries and supercapacitors that are preparing the way for the longer term introduction of hydrogen fuel cell-powered vehicles in Australia.

Dr John Wright, Director of the Energy Transformed Flagship, will present the Panasonic World Solar Challenge winning team with their award in Adelaide on Sunday, October 2.

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