Student team unveils world's first solar-powered family car

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Stella, world's first solar-powered family car. Credit: Bart van Overbeeke.

The Solar Team Eindhoven (STE) of TU/e in the Netherlands presented the world's first solar-powered family car today. 'Stella' is the first 'energy-positive car' with room for four people, a trunk, intuitive steering and a range of 600 kilometers. This is the car being entered by the student team in the Cruiser class of the World Solar Challenge that starts in Australia in October 2013.

The solar cells of 'Stella' - Latin for star – generate more electricity on

average than the car uses and that means the surplus electricity can be returned to the power grid, thereby making the car 'energy-positive'.

Solar Team Eindhoven has set itself the goal of developing the car of the future. By combining aerodynamic design with lightweight materials like carbon and aluminum, a very fuel-efficient car has been designed, which also has ingenious applications like a LED strip and touchscreen that make all the buttons and knobs we know today superfluous. Intuitive driving is enabled by a steering wheel that expands or contracts when you are driving too fast or too slowly. STE will have the car officially certified for road use to prove that this really is a fully-fledged car.

University teams from all over the world will be competing in a 3,000 km long race through the Australian outback. Solar Team Eindhoven is taking part in the Cruiser class in which the emphasis lies on practical and user-friendly solar cars rather than on speed. The 'solar race' takes place from 6 to 13 October 2013. Back in the Netherlands there will be a tour of high schools to promote engineering and science in education.

Thanks to Solar Team Eindhoven entry, TU/e is represented for the first time in the Solar World Challenge. A multidisciplinary team (with 22 students from six different TU/e departments) has spent a year on this project that involves challenges from the fields of energy and mobility. Cooperation with industry has given the students an opportunity to become familiar with top-notch entrepreneurship, thereby underlining TU/e's vision of educating the engineer of tomorrow.

More information: www.solarteameindhoven.nl/

Provided by Eindhoven University of Technology

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