

European Solar Challenge (ESC)

The European Solar Challenge will take place from October 10 to 12, 2014 at former Formula 1 race track of Zolder in Belgium. The ESC is a competition on solar-powered electric vehicles. The top European Teams of this scene will thus have for the first time the chance to compete in 3 different disciplines on the European continent. The driving energy is exclusively taken from the solar collectors mounted on the vehicle. The technical focus of the participating solar cars is in the efficient interaction of all system components (battery, electric motor, and power electronics). In addition, aerodynamics, lightweight construction and reliability play a fundamental role in this competition. Technology of Future is integrated. The worldwide successful and famous Solarcar Events (Australia, USA and Japan ...) are often referred to as „Brain-Sport“. Compared to conventionally known racing series here the strategy with all its many parameters to be considered has a much higher impact. These include, for example, to budget with the energy of the sun and other weather influences.

Short facts about solar-powered vehicles:

- ✓ Speeds over 140 km/h are no problem
- ✓ The consumption of such vehicles is about the same as a hairdryer at 70 km/h
- ✓ They can reach with only the energy of the sun, ranges of more than 1000 km
- ✓ Without sun ranges of 700 km are possible with a battery capacity of 15 KW/h
- ✓ The vehicles are largely driven by highly efficient wheel hub motors
- ✓ Regenerative braking systems are used to minimize loss of energy

Fringe Event program:

The organizers also focus on an interactive fringe event program. On this platform, designers and manufacturers are given the opportunity to present a wide variety of electric mobility concepts from all application areas. A congress on the topic of electric mobility takes place where reputable companies of the scene recite. In addition, there is also the option for the exhibitors to drive their cars on the race track on Sunday.

Quote: Frans Josphf Joosten (President of Green Technology Events VZW & Organizer):

„In medium terms, we want to promote the solar car scene in Europe and establish a sustainable event. The fringe event program should further fascinate the spectators/public for electric vehicles and constitute a network for exhibitors and participants of the Congress. They can all take part at the creation of something new, whether as spectator, as a helper, as a marshal, as a sponsor, as an exhibitor or as a speaker“.

Schedule of events:

Friday 10.10.2014: 18h00 – 20h00 - Short Run:

A fast lap on the race track Zolder elects the winner of the first discipline.

Saturday 11.10.2014: 8h30 – 19h00 – Long Run

The main event, the “Brain-Sport”-Discipline. A long-distance run over 9 hours driving time. Charging only done through the energy of the sun. A strategic master task. Winner of this discipline is the team that completes the most laps.

Sunday 12.10.2014: 9h00 -12h00 – Sprint

In this discipline we will see who can best accelerate and brake. Driving on a knock-out basis. It will be determined over a distance of 300m length in less than 1 minute who wins.