

THE GREEN RALLY OF LATIN AMERICA TAKING PLACE IN CHILE ON APRIL 2016

[Carrera Solar Atacama](#) is the first Latin America's solar car race taking place in the Atacama Desert in Chile, from 21 to 27 of April 2016.

The rally involves 20 teams from universities, technical institutes, from the private sector of all over the world, in particular from Bolivia, Chile, Colombia, India, Italia, Peru and Venezuela.

The race develops along 2.300 Km through Atacama Desert, the most arid with the highest levels of solar irradiance in the world, travelling by the cities of Iquique, Calama, Antofagasta and Chañaral. The race develops for a length of 2.300 Km for the Evolution class and 750 Km for the Hybrid one.

The Hybrid class incorporates hybrid vehicles propelled both by solar energy and human traction. They are low cost and environmentally friendly, counting with a charging station/unit and the possibility to carry on two occupants. The Evolution class is dedicated to vehicles powered exclusively by solar energy. They typically present a very aerodynamic design for one driver and they use components that enable high velocity on four wheels.

The competition Carrera Solar Atacama 2016 is organized by [La Ruta Solar](#), a non-profit organization that seeks to encourage the sustainable technological changes in society through initiatives that stimulate innovation and the use of renewable energies. Carrera Solar Atacama is also sustained by [International Solarcar Federation](#) (ISF).

Carrera Solar Atacama aims to generate a cultural change on society towards sustainability.

As underlined into the website of the initiative, Carrera Solar advocate international teams to generate innovation and research in photovoltaic, along with contributing to electric mobility and the emergence of entrepreneurs which are aware of the important role that renewable energy sources can play towards a more sustainable society.

It also seeks to produce an environment of collaboration and networking among students and professionals sharing interests on the different



topics that drive the development of sustainable transport.

In particular, the Race of the Híbridos can also involve young people in the design and construction of this type of vehicles. It is an example the vehicle designed and assembled in Ecuador to compete in the Race of 2014 that functions with electric energy, mechanic and solar, with two solar panels that form its cover and drive it. It was designed and made by students and teachers in a workshop of the Centre for Renewable and Alternative Energies of the High Technical School *Litoral*.



To know more

[Carrera Solar Acatama 2016 website](#)

[Article in elcomercio.com](#)

[Article in latinaamericarenovable.com](#)

[Article in eluniverso.com](#)

Vehículo híbrido fabricado por estudiantes

- 1 Carrocería aerodinámica en fibra de vidrio
- 2 Estructura de aluminio tipo cercha
- 3 Paneles solares (240 W c/4)
- 4 Parabrisas de vidrio micado
- 5 Regulador solar MPPT 45 A
- 6 Banco de baterías selladas 48 V 7 Ah
- 7 Motor eléctrico DC 24-36-48 V-1.000 W
- 8 Neumático 700 mm
- 9 Sistema de amortiguación monoshock
- 10 Chasis tubular
- 11 Asiento de fibra de vidrio tapizado
- 12 Sistema de dirección por palancas laterales
- 13 Sistema de frenos hidráulico con disco ventilado de 200 mm (3 ruedas)

El acelerador está en el manubrio derecho del vehículo

Ruta de competencia

Salta y Repollo

BOLIVIA

CHILE

Argentina

San Pedro de Atacama

Tocopilla

Antofagasta

ARGENTINA

Datos

1,4 metros de alto

3,9 metros de longitud