

Congratulations and Support to De La Salle University, Engineering Department on its Participation at the World Solar Challenge in October 2013.



Start of Solar Car Race – 6 October 2013 from Darwin NT.

Compulsory Brief Stop Over at

- **Katherine, NT on 7 October 2013**
- **Tennant Creek on 8 October 2013 and**

Compulsory Overnight at

- **Alice Springs on 9 October 2013**

Finish in Adelaide, South Australia by 11 or 12 October 2013

The Philippine Honorary Consulate General in Darwin and Adelaide urge the Filipino Community at these places to extend our hospitality to our Philippine Solar Team and give them enthusiastic support. Wave the Filipino Flag in welcoming the Philippine Solar Team.

PROFILE OF De la Salle University Sikat II Solar Car Team competing at the World Solar Challenge starting at Darwin, NT on Oct 6, 2013 and finishing at Adelaide, SA on Oct 11/12, 2013 World Solar Challenge

In 1987, the first World Solar Challenge invited bright young engineers and scientists from around the world to pursue the ideals of sustainable transport. The event posed the ultimate challenge: to design and build a car capable of traveling across the Australian continent on the power of sunlight and prove it by undertaking the 3,000 km journey in the spirit of friendly competition against other teams.

Since then, the event has been held biennially and has attracted world class teams from every continent. The Philippines sent its first entry with *Sinag* on 2007 where it finished 12th place. The country's second entry, *Sikat II*, joined in the 2011 World Solar Challenge and finished 19th place.

Now on its 26th year, the 2013 World Solar Challenge will have 47 teams from 26 countries. It will be held from October 6 to 13. The teams will have to complete the 3,000 km race from Darwin to Adelaide. There are three classes in the WSC: Challenger class, Cruiser class, and Adventure class.

Team Sikat Solar Philippines

This year, a core group of 20 mechanical and electrical engineering students and six faculty members from De La Salle University modified and made some improvements to the 2011 *Sikat II* car. The development and modifications took seven months to complete.

The car had a series of tests runs at Basa Airbase and at SCTEX from April to June 2013. Based on the tests, the modified *Sikat II* performed better and was more reliable than its earlier version. The car was able to run with higher speeds at lower power consumption. With a race-ready car, the team decided to join the 2013 World Solar Challenge adventure class and their objective is to land in the Top 3.

By the third week of September, the 14-man race team will depart for Darwin in preparation for the race which will kick off on October 6.

Sikat II General and technical specifications

Name of Car: Sikat II

Year: 2013

Speed: Average = 80 kph Max = 110 kph

Weight: 175 kg (without driver)

Solar Array: Sunpower Silicon. Efficiency = 22% Max. power output = 1300 W

Modifications to the 2011 Car

1. Aerodynamics: Lower coefficient of drag/better aerodynamic design through modifications in the fairings, lower ride height and smaller canopy
2. Mechanical: New brake design, new suspension system
3. Tires: New high performance Schwalbe Sleek tires with low coefficient of rolling resistance.
4. Electrical systems: New battery management system, improved telemetry and wiring, cruise control

Race Team

1. Sam Gavinio: Telemetry, electronics asset
2. John Anthony Jose: Weather monitor, telemetry, inventory assistant
3. Karlo Matriano: Wiring, auxiliary electronics, back-up driver
4. Elijah Romey: Solar car driver
5. Kenneth Navarro: Solar array, back-up driver
6. Francis Pulmano: Battery management, scout driver
7. Ferdyn Rañosa: Scout driver, logistics assistant
8. Leonard Ambata: Battery safety officer and first aid officer
9. Jingo Badillo: PR and media officer
10. Jack Catalan: Electrical team adviser
11. Carl Mamawal: Main driver, Logistics
12. Isidro Marfori III: Mechanical team adviser
13. Conrad Pantua: Safety officer
14. Richard Li: Project Manager
15. Dr. Alvin Culaba: Team Manager

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