

2016 SSC Competitor fact sheet

[Click here for photos](#) of the cars competing in the 2016 Sasol Solar Challenge.

Team name: Anadolu

Car name: Sunatolia'3

Country: Turkey

Class:

Anadolu was started a decade ago, and this will be the second time the Turkish solar team participates in the Sasol Solar Challenge.

In 2015, the Sunatolia'2 was the first ever Turkish solar car to cross the finish line at the World Solar Challenge. This year, the Sunatolia'3 will be competing against some of the best teams in the world, here in South Africa.

The Anadolu team has built five cars in total, and the newest is already on its way to South Africa for this year's competition. Their main focus in developing the Sunatolia'3 was on aerodynamics, and large parts of the car were 3D printed. They've changed much about the way they produce their solar cars – from the actual canopy to the process they use to produce composites.

This means that even for such an experienced team, the 2016 Sasol Solar Challenge will be a whole new experience.

Team name: DSJ Solar Car Team

Car name: Sonnenbrand III

Country: South Africa

Class: Challenger

The Deutsche Schule Johannesburg has entered the Sasol Solar Challenge for many years as one of the few high schools to attempt this enormous challenge. But as the learners graduate, the team changes, and every race is different.

In 2016, the DSJ Solar Car Team will compete in the Challenger class with Illanga 1.5, donated to them by the University of Johannesburg. Rebranded as Sonnenbrand III, the solar car has an updated battery and motor for its latest trial.

With new regulations governing the Sasol Solar Challenge, much of the array has had to be rewired, and the cockpit changed to accommodate the two teachers who are driving the students' pride and joy across the country this year.

Fifteen year-old team manager Aqeel Latib heads up the team of mostly Grade 8 and 9 students, many of whom dream of going on to study engineering at university. The Sasol Solar Challenge is an opportunity for them to get hands-on experience with engineering, but also to be exposed to a diverse group of world class universities and engineering experts from other teams.

Team name: GAMF Hungary

Car name: MegaLux

Country: Hungary

Class: Challenger

The MegaLux Challenger solar car will be competing in the Sasol Solar Challenge in South Africa for the first time, manned by the Hungarian Kecskemet University team, GAMF.

The GAMF Hungary team competed in the World Solar Challenge in 2015, placing seventh in the Challenger class. Their aim in South Africa is to proudly represent the only higher education institution in Hungary where solar research and engineering takes place. The MegaLux car is an opportunity for students to be part of a scientific project where experience and ideas can exchange hands, and the team has a large variety of sponsors supporting them on the trip.

Their team motto is: "Knowledge is the fuel of the future" – A team to watch as they debut in on South African roads.

Team name: Maragon Olympus

Car name: Solar Eagle

Country: South Africa

Class: Challenger

The Maragon Olympus is one of only two vehicles entered by high school teams, competing against world class cars in the Challenger class.

Established in 2013 to motivate students to follow science and engineering careers, the Olympus team forms part of the Maragon Solar Education Programme. It brings together elements of engineering, communication, marketing, logistics and project management.

The Solar Eagle weighs 280 kg and goes from 0 – 100 km/h in only seven seconds. It's made of carbon fibre and resin, and the project has the biggest team in the Sasol Solar Challenge with 45 members.

A six square metre solar array slightly thicker than paper will soak up the sun and charge the 74V battery to power the electric motors driving its two front wheels.

The 2016 car has had many improvements made to it, including improved solar panels, suspension, aerodynamics (through extensive 3D modelling), telemetry (to allow the team to monitor the Solar Eagle's vitals) and safety.

Follow this young but well-staffed and motivated team on their journey on Facebook, [here](#).

Team name: MUT Solar Team

Car name: MUT Green Car

Country: South Africa

Class: Challenger

The Mangosuthu University of Technology based in KwaZulu-Natal has entered the Sasol Solar Challenge for the first time this year, and is a newcomer to solar car competitions.

They will compete in the Challenger class against some of the best solar cars in the world.

Team name: Near East University (NEU) Solar Car Team

Car name: Ra27

Country: Turkish Republic of Northern Cyprus

Class: Challenger

The NEU solar team is unique among competitors. Unlike most entries, the 14-member team that built the Ra27 are actually part of a robotics laboratory at their university, and don't specialize in automobiles or renewable energy.

In 2014 the team competed for the first time with Ra25, a solar car that won the Adventure class in the Sasol Solar Challenge. This year they are back with Ra27 – an entirely new vehicle, competing in the Challenger class.

The car is called the Ra27 – 'Ra' for the sun god and 27 for their university's 27th anniversary.

Unlike its predecessor, Ra27 has four wheels instead of three. The carbon chassis makes it ultra-light, and two NEU team members were sent to London for an intensive course in using carbon fibre in order to acquire the skills to build this new frame. The car is also now 24% more efficient. 3D printing was used for some internal parts, and the car was launched and celebrated at the recent national Republic Day parade in the country's capital, Nicosia, to celebrate the team.

Follow the robotics team's journey in South Africa on their Facebook page, [here](#).

Team name: Nuon Solar Team, Delft University of Technology

Car name: Nuna 8S

Country: The Netherlands

Class: Challenger

The Nuon Solar Team from the Delft University of Technology are the current world champions as well as the title defenders of the Sasol Solar Challenge in South Africa.

The 2016 team consists of eight students from different engineering backgrounds, working full time in order to participate in different Solar Challenges. The Nuon team has been competing since 2001, and has won the World Solar Challenge six times. In 2014 they competed in the Sasol Solar Challenge in South Africa for the first time and won, and will be back in 2016 to defend their title amidst high-calibre competition.

Nuna 8S is a high-end solar car funded by over 50 sponsors.

Team name: NWU Solar Car Team

Car name: Sirius X25

Country: South Africa

Class: Challenger

The North-West University Solar Car Team has come a long way since they first competed in the Sasol Solar Challenge in 2012. By 2014, their second solar car doubled the distance covered in the first competition, finishing fourth in their class.

In 2015, the team became one of two South African teams (with UKZN) to be the first African teams to ever cross the finish line at the World Solar Challenge, where they competed with the same car that we will see in the challenge this year.

Sirius X25 has a top speed of 120 km/h, weighs 270 kilograms and has a 6 m² solar panel array. In 2014, it was awarded for covering the most distance on a single day – over 400 km. In 2015, they completed the 3,000 km World Solar Challenge in 47 hours and 22 minutes, representing South Africa against 46 other cars from 25 countries. Sirius X25 crossed the line in 11th place, with the only other South African team to ever compete, UKZN, behind them in 13th.

Find out more about Sirius X25 and its preparations for the 2016 challenge [here](#).

Team name: PI 21 Solar Team

Car name: Desert Lizard

Country: South Africa

Class: Challenger

The Desert Lizard is a newcomer to the Sasol Solar Challenge, competing in the Challenger class and built by an entirely new team.

The private team from Pretoria, South Africa, recently embarked on this journey, learning along the way. The Desert Lizard, unlike many challengers, has no composites in its shell and is made of steel, aluminium and wood.

It's driven by an electric engine which sends power through a small bicycle gearbox to the single rear wheel. Behind the wheel will be drivers from various backgrounds and of different ages, all brought together by an interest in alternative energy.

Team name: Lodz Solar Team

Car name: Eagle One

Country: Poland

Class: Cruiser

The first ever Polish solar car built by students, Eagle One is the only competitor in the Cruiser class in the 2016 Sasol Solar Challenge, and is only a little over a year old.

The Lodz team competed for the first time last year in the World Solar Challenge, where they covered 3,000 kilometres and successfully crossed the finish line in sixth place in their class. The team was also awarded the Safety Award for the safest car and best prepared team.

Eagle One was designed to resemble a water drop, and will stand out among the other solar vehicles on the challenge this year. The uniquely designed car can be driven in traffic and is one of only two competitors on the Sasol Solar Challenge that can carry a passenger.

The 21-member team began improvements on Eagle One for the 2016 Sasol Solar Challenge almost immediately after returning from the global event, and will use this experience to build a completely new car to compete with in 2017.

Follow the newcomers online on Facebook, [here](#).

Team name: Tokai University Solar Team

Car name: Tokai Challenger

Country: Japan

Class: Challenger

The Tokai University Solar Team are former world champions, and the Tokai Challenger taking part in South Africa this year won bronze in the World Solar Challenge in 2015.

The car is designed and tested in collaboration with students from Tokai University and several Japanese companies in the automotive industry.

The Tokai Challenger has been improved since last year, incorporating new technologies, increasing power generation efficiency, decreasing drag, weight and resistance and optimising mechanical design. It is fitted with Panasonic solar cells, a Toray and Toray Carbon Magic ultra-light body, Mitsuba motors, and Bridgestone resistance tyres.

Team name: TUT Solar Car

Car name: Sun Chaser 2

Country: South Africa

Class: Challenger

The Tshwane University of Technology team are returning to the Sasol Solar Challenge to once again compete in the Challenger class. Their 2016 car is the Sun Chaser 2 – building on lessons learnt from its predecessor.

The TUT team has won several awards in the past at the South African event, in several classes. In 2012, their car Fire of the Dawn was built in only two weeks and still managed to win an award for completing the longest distance in a single day.

This year will be a whole new challenge with them as they pilot a brand new vehicle.

Follow the team's progress in the 2016 Sasol Solar Challenge on Facebook, [here](#).

Team name: UJ Solar Team

Car name: Illanga II

Country: South Africa

Class: Challenger

The UJ solar team consists of 20 mechanical and electrical engineering students, and has been competing in the Sasol Solar Challenge since 2011.

Illanga II has been upgraded since its last race in 2014, and is capable of doing up to 130 km/h and cruising at 75 km/h on its lithium-ion batteries alone.

The Illanga II will compete in the Challenger class. It has a R5 million gallium arsenide solar panel array, a max speed of 100 km/h, can carry drivers of up to 80kg and 1,7m tall, and weighs less than 200 kg in total. The steering wheel and other integral parts were 3D printed, and the car is one-wheel drive.

The UJ Solar Team is part of the UJ Energy Movement, which promotes the study of alternative energy, energy management and sustainable engineering design.

Follow the second rising of Illanga II on Facebook, [here](#).

Team name: ZingCO Electric Vehicle

Car name: ZingBug 1

Country: South Africa

Class: Sustainability

The ZingCo team is a group of green-entrepreneurs who each have their own initiatives in clean technology. Entered into the Sustainability class, the ZingBug will be the only vehicle on the Sasol Solar Challenge that isn't fitted with solar panels.

The ZingBug is a converted electric Volkswagen Beetle, allowed to recharge along the way. It has a retro interior, and a modest range of 30 – 75 kilometres.

They will be driving on solar power as much as possible by powering the electric car's batteries with a mobile solar panel unit at stopping points. The team will also be using solar power to cook all their food during the eight-day race.

The 11-member team's aim this year is simply to finish the race, and they are the only competitors in the Sustainability class.