

# World Solar Challenge 20th anniversary

The World Solar Challenge continues its drive for future sustainable transport as international teams compete to design and race cars more than 3,000km across the Australian continent using only sunlight as fuel

## RACE ROUTE

START: Darwin Oct 21

800km

500 miles

### Stuart Highway

Cars must adhere to normal traffic speeds and regulations

● **Control point:** Cars pause for 30 minutes, with only limited maintenance allowed

**Driving time:** Between 0800 and 1700 hours each day

**CAR DESIGN:** New **Challenge** vehicle class introduced for 2007 to make solar cars more closely resemble "real" cars

Katherine  
317km

Tennant  
Creek  
986km

Dunmarra  
633km

Alice Springs  
1,494km

Glendambo  
2,430km

Cadney  
2,025km

Port Augusta  
2,719km

SOUTH  
AUSTRALIA

FINISH: Adelaide 3,021km

Cars must finish by Oct 29



**Nuna 4** car of Dutch Nuon Team, winners of last three races

**Driver:** Upright 27° seating angle. Must be able to enter and exit car unaided

**Safety:** Roll and impact bars protect driver if car overturns

## HOW SOLAR CARS WORK

**1 Solar cell:** Two layers of silicon – at their junction **electrons** can only pass in one direction (upwards)

**2 Sunlight:** Energy from light particles – **photons** – displaces electrons in lower layer

**3 Electrons:** Cross to upper layer but must travel through external **circuit** to return to lower layer

**4 Electric current**  
Produced by flow of electrons, provides power for motor to drive **wheels** or for storage in **battery**

