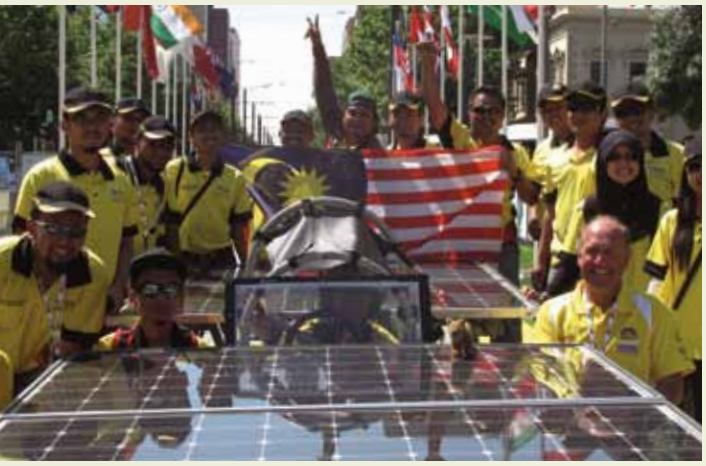

SOLAR CAR 'KILAU' CRISS-CROSSED AUSTRALIA

The solar-powered car is made of steel and monocrystalline silicon. It uses four motorcycle tires, is 5m in length, 1.6m wide and one metre in height.

It was worth the toil and hardship when UMP Solar Car Team succeeded in inventing a solar car with multi-purpose uses and environmental-friendly in less than six months. It also cost less than RM50,000.

The team consisted of a professor, nine researchers and engineers including eight undergraduates from Faculty of Manufacturing Engineering, Universiti Malaysia Pahang (UMP).

The car was named 'Kilau' which took after the name of a prominent Pahang warrior, Mat Kilau. His resilience and never-say-die attitude served as a strong reminder for the team to carry on with the project until it was completed.

Manufacturing Engineering Faculty dean and team manager Prof Dr Zahari Taha said based on the lecturers' experience and expertise, they managed to come up with a design that was movable and safe to drive.

"The team worked together with industrial experts to overcome obstacles faced while completing the project. Every team member also contributed ideas in designing, building, testing and racing a car powered by solar energy.

"The solar-powered car is made of steel and monocrystalline silicon. It uses four motorcycle tires, is 5m in length, 1.6m wide and one metre in height.

"It can sit in one person and is user-friendly," he said.

He added that the car worked on lead acid battery and had an overall weight of 40 kg.

UMP was also proud that the solar car had, for the first time, successfully criss-crossed Australia starting from Darwin until Adelaide, covering 3.021km during an international solar competition, '2011 Veolia World Solar Challenge'.

According to Dr Zahari, the race was a platform to showcase UMP green technology-related research works applied on the car.

It also opened up new grounds for more extensive researches to be carried out in the field, he added.

Third-year manufacturing engineering degree undergraduate Mohammad Irfad Ibrahim said there were a lot of incidents happened during the ride such as having to stop at Tennant Creek due to bush fires.

He also said the journey started from the Darwin Parliament House with stops at Mataranka, Renner Spring, Aileron, Cobber Peddy, Port Wakefield and Adelaide.

The race, held biennially, is based on distance covered using solar power.

A total of 37 teams from colleges and universities in 20 countries took part in the race including Malaysia, represented by UMP and Universiti Tenaga Nasional (UNITEN).

UMP's participation in the international event had it positioned among prominent universities in the world and it was something

to be proud when 'Kilau' managed to clock in solar usage for 229km, beating UNITEN's Solar Ranger team who registered 223km and Green Maniac from Korea with 73km.

The race was won by Tokai University from Japan, followed by Nuon Solar Team from the Netherland and University of Michigan of the USA took home the third prize.

The competition provided the exposure the undergraduates needed in learning about new dimensions and way of thinking in order to become globally competitive.

It also opened up a lot of opportunities in fostering cooperation in research and academic among the participants especially from renowned universities with established works in solar technology particularly from Japan.