Driving legend, the late Peter Brock (1945 - 2006) made a few dreams come true when he presented the inaugural Greenfleet Energy-efficient Concept Car Competition trophy to a group of seven students from Westbourne Grammar earlier this year. Meeting Peter Brock was just part of an exciting prize package which also included joining the Greenfleet Technology Trial as passengers on a hydrogen fuel cell bus which was in Melbourne for the first time, and receiving passes for the 2006 FORMULA1™ Foster's Australian Grand Prix where their winning entry was on display for thousands of visitors to see.

As a member of the judging panel for the competition organised by not-for-profit Greenfleet Australia in conjunction with the STAV, Peter Brock said the designs entered were generally practical, extremely creative and showed potential for taking to the next stage of development.

“The key to our future transport solutions lies somewhere in this up-and-coming generation and the sooner we can get them thinking about the problem, the better”.

Climate change caused by excessive burning of fossil fuels is one of the most pressing issues faced by us today. Transport is the fastest growing source of global greenhouse gas emissions. There are over 11 million cars on Australian roads, with each one producing an average of 4.3 tonnes of CO$_2$ per year. That is more than 47 million tonnes of CO$_2$ being added to our atmosphere every year.

The competition, launched at the beginning of the school year, was developed to encourage students to think about sustainable transport issues including the effect of transport on the environment, the need to reduce emissions, and possible solutions. Students were asked to develop a concept plan for an energy-efficient, low carbon emission car using currently available technologies and fuels. It had to provide occupant

“We were greatly encouraged by the interest that students had taken in tackling the challenge of developing a new breed of car that will have less impact on the planet” he said. The Greenfleet Technology Trial showcased the huge variety of environmentally friendly cars available on the market – and a few others besides! On display along with the record-breaking solar car ‘Aurora’, was ‘TREV’ a prototype electric commuter car developed by the University of South Australia.

‘TREV’ - The 2 seater Renewable Energy Vehicle
safety, performance and comfort, demonstrate excellent fuel efficiency and low net carbon emissions.

“This competition posed a wonderful opportunity for students to be in an extra curricular activity which allowed them to be engaged both academically and creatively” Westbourne Grammar teacher Ingrid Smolka said. “It really tested their skills in research, team work, communication and collaboration.”

“It was very rewarding to observe the students come together with the information they had collected and then discuss which ideas were most feasible in their design. They considered both the shape of the car and the compatibility of the technology. They found the experience very rewarding as they were very pleased with their final product and learnt a lot along the way”.

Tas Anastasiou from Kew High School agreed. “The competition was a great learning experience for the students, that showed them a side and depth to design and the design process that would otherwise have not been possible.

It also allowed a certain group of students who had a certain passion for all things car related to really get stuck into it.”

Greenfleet and the STAV plan to run the competition again next year - this time with a longer lead-in time and a few changes to the criteria. “We were very much encouraged by the response to the competition this year” said Greenfleet CEO Henry O’Clery. “The teachers involved were very committed and we received wonderful support from the STAV, particularly Ellen Finlay without whose help the competition would not have happened”.

“We’re all revved up to make the competition bigger and better next year – watch this space for more news!”

Greenfleet specialises in reducing the environmental impact of transport by promoting fuel efficient transport technologies, and offsetting greenhouse gas emissions for transport and other sources through its native tree planting program. www.greenfleet.com.au. See also our Research Archive with search engine to find all sorts of useful stuff at www.greenfleet.com.au/search

For information about future competitions check the STAV website www.stav.vic.edu.au/home/studentactivities

“I think that from this project we all learnt many things about energy efficiency and car designing in the future. If anything like this ever came along again, I’m sure we’d all be glad to participate” - winning team member Rhiannon Kaminski.

The Westbourne Grammar team, pictured here with the hydrogen fuel cell bus that they rode on as part of the prize package, also included Zoe Loh, Michael Moso, Patrick Molloy, Mehmet Ata, Russell Hughes and Jason Velardo.