

## Brac students make solar car

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- *A solar-powered, lightweight car made by Brac University students is on display at the power and energy week yesterday*

Teachers and students of Brac University have made an eco-friendly and economically affordable light weight solar powered electric car, which they showcased at the three-day power and energy week ending yesterday.

The project was accomplished under the supervision of Professor Md Mosaddequr Rahman, Department of Electrical and Electronic Engineering of Brac University, and led by Imran Bin Jafar, teaching assistant of the department.

The other members of the project are: Ahmad Tausif Choudhury, Dewan Nawshin Atiya, Ummay Honey Sara, Rafia Islam, Rizvan Nahif, Md Billal Hossain Rony, Chowdhury Rabib Rubayet, Sayeef Asrar, Shoummo Ahmed and Mahmud Abdullah.

“Solar powered clean cars can be of great advantage to the public and environment, especially in Dhaka city, which is registered as one of worst polluted cities in the world,” Mosaddeq told the Dhaka Tribune yesterday.

“Automobiles that run on petrol or gas pose serious threats to the environment as well as public health. With dwindling fossil fuel, rising fuel prices and deteriorating environment, electric cars powered by solar and other forms of renewable energies are gaining increasing popularity all over the world,” he said.

On September 15, 2009, the Power Division of the Ministry of Power, Energy and Mineral Resources of Bangladesh pushed for vital action to be taken to perk up the country’s energy outlook. A safe, clean and emission free vehicle is required by which mankind will be served by its benefits.

“In Dhaka city, a major use of cars is for daily commuting to and from office. The mathematical calculation and practical demonstration performed by a team of Brac University shows that the solar power alone harnessed by the Solar Car will be sufficient for daily commute to and from workplace even if Uttara to Matijheel – one of the longest routes covering a distance of about 35km for the round trip – is considered,” Mosaddeq said.

“The two-seated compact light-weight four-wheeler solar car is also contemplated with a provision for external plug in to charge batteries from conventional power supply line during periods of insufficient solar energy due to cloud, rain and fog,” he added.

“In estimating the system size, the overall weight of the car 530kg, maximum speed 60km/h and an acceleration of 30km/h/min are assumed. Brac University authority has been helpful and cooperative by giving respective Solar Car team students a well-equipped lab, workshop and necessary fund to perform the research,” he said.

By using local equipment and materials, the students could develop the Solar Car with all facilities such as the gear system, brakes, accelerator, wind shields etc for only Tk1,60,500,” he said. “They have also estimated only Tk3,000 for maintenance per year.”