Print News Clips

Phil. Star, Jan 28

DLSU students unveil ‘Sinag,’ RP’s first solar-powered car

By RHODINA VILLANUEVA

The first Philippine solar-powered car, dubbed “Sinag,” was launched yesterday to highlight the country’s efforts to promote the use of alternative sources of energy.

Students and faculty members, mostly from the engineering department of De La Salle University (DLSU) Manila, are responsible for developing Sinag. The car resembles a pair of wings on wheels, with its solar cells-covered top surface stretching a little over six square meters. It is made out of carbon fiber and Nomex (aramid fiber) in order to keep it light—only 50 kilograms—and fast.

“This first Philippine entry to the annual solar car racing event is a fine example of how the country can rise and stand with the rest of the world in meeting such a challenge, which requires superior technology and skill,” a representative of the team developing the car said.

Sinag will be using solar cells from Sunpower, the highest efficiency solar cells in the world, also made in the Philippines, he added.

Sinag was launched at the NDC tent in Fort Bonifacio, Taguig City.

Chronicle, Jan 28

ONE HOT CAR!

Students and faculty members of De La Salle University in Manila show off the solar car prototype they built and named Sinag during its inauguration run at Fort Bonifacio in Taguig City. Sinag, believed to be the first solar car built in the country, aims to promote the use of alternative sources of energy. Its makers are joining the World Solar Challenge 2007 to be held Oct. 21-28 in Australia. (EJ Llaguno)
Print News Clips

Mla Bulletin, Jan 29

FIRST PHILIPPINE SOLAR CAR UNVEILED. To highlight the country’s effort to promote the use of alternative sources of energy, SINAG, the first Philippine solar car, was unveiled by Ford Group Philippines last Saturday at the NBC Tent, Fort Bonifacio, Taguig City. Photo shows US Ambassador Kristie Kenney (3rd, left) and Energy Secretary Raphael Lotilla (6th left) and Ford Group Philippines Chairman Henry Co (6th, left) lead the unveiling of the scale model of the first Philippine solar car. Also in photo (from left) are: Australian Government Senior Trade Commissioner Alan Morrell; lawyer Carlo Estavillo of San Miguel Corp; Dr. Carmelita Quebranco; Edgar Chua of Shell; former energy secretary Vince Perez and Greg Reichow of SunPower. The SINAG will participate in the World Solar Challenge 2007 which will be held in Australia on October 21-29, 2007. (Photo by Richard Viñas)

Business Mirror, Jan 29

First RP solar-powered car a model of the would-be first Philippine solar-powered car was on display Saturday in Makati City. The solar-powered car named “Sinag,” or ray, is now being built by a group of students and will be the country’s entry to the World Solar Challenge 2007 to be held in Australia. NORM REYES
Philippines is not to plunge into an active international car challenge could mean a lot in its continuing in an alternative source of power and up Philippines, CTV, together with an Atlantean University-Manila, that provides a very promising solar igniting the first Panamanian World image to be held from October 23 to 25.

The team, which will represent the country, is joining the biennial event for the first time and aims to “pursue the ideals of sustainable transport in the future.” The 1,222-km challenge from Darwin to Adelaide showcases various solar cars designed and made from all over the world.

On January 27, Sino, the first Philippine solar car, was inaugurated in an elaborate presentation at the Fort Bonifacio in Taguig City attended by 15 Ambassadors, Kristine Roncy, OLSU-Manila executive president Dr. Ciriellez Quevarco and representatives of various organizations that helped in the realization of the project.

Henry C. Koo, chairman, welcomed participants and introduced the team. He said that the “main objective of the project is to create a commercial solar car for the Philippines.”

He elaborated, “A truly commercially viable solar car is not anywhere in the immediate horizon. We will see many different kinds of alternative fuel cars like flexible fuel cars, hybrid and hydrogen fuel cell vehicles before a commercial solar car becomes a reality. It looks like our primary objective is to be the fastest car or to be the first to the finish line at the World Solar Challenge. Our objective is very simple and very humble. If we can build the solar car, participate in the World Solar Challenge and finish the 3,000 km from Darwin to Adelaide, I would call this project an outstanding success.”

The World Solar Challenge is not a race in the normal sense of the word.

That is why it is called a challenge and not a race. It is not about speed. It is about teamwork, creativity and innovation. It is about taking up the challenge of sustainable clean energy. It is the thinking man’s version of the Grand Prix.

Co-added that “In building the car and participating in the event, they hope to achieve a number of things such as promoting the Filipino capability in solar power, raising public awareness, encourage academic research and development in practical uses, and raise the interest of the youth in an engineering career.”

To promote the image of the Philippines and the capability of the Filipinos and to show the fact that man power in the Philippines produces the most powerful, non-initially visible solar cells in the world today is something that very few people know. We also need to raise public awareness, especially of the youth, on the potential of solar energy as the ultimate clean energy. Yes, we do not have oil but we have lots of solar energy. With the cost of power and amount of sunlight where we can’t have electric and not more solar water heater in our homes,” he added.

On the other hand, there is a need to encourage academic research and development in the practical applications of solar energy in the country. Our engineers need to build up the confidence that we can be as good as the best in the world. We may not have the financial resources to have the world’s top capital if we really focus on one thing like solar energy, we may just one day be in the position to become the best in the world. And lastly, to raise the interest of the youth in an engineering career.

Our growing export capability in manufacturing, especially in the semiconductor industry, cannot be sustained if we do not continue to train more engineers.”

Aside from PGE, the other companies that have pledged their support are San Miguel Corp., Shell, Sunrep, Philippine Airlines, Espana, J Walter Thompson, Everex, Tidom Racing School, Cebuana Lhuillier & Associates, and Aurora.

Sino is described as a pair of sprinter wheels with a solar cell-covered top surface of a 12-inch diameter in size and made up of carbon fiber and resin (framed foil) in order to keep it lighter at 50 kg in order to achieve a higher running speed. As Sino faculty members who are working on the project include Bautista, Reive Fernandez, Martin Ernesto Balao, Anthony Erubay, Jose Antonio Catalin and Radz Mardz.

The car will use solar cells from Sunpower, considered as most efficient in the world and are proudly Philippines-made. Sunpower solar cells have a rated power value of 3.1 watts and are able to capture more sunlight and convert it into energy. Since Sunpower’s solar cells are more efficient relative to conventional solar cells, they can be assembled into panels that can generate more power and incorporated into a given size package.

The World Solar Challenge, which celebrates its 25th anniversary this year, has already attracted 200 solar car participants from around the globe over the last 20 years.

Started and created by Danish adventurer and renowned solar car expert Hans Tholstrup in 1987, the Challenge “encourages research and development into harnessing solar energy for future transport needs for many years.”

Tholstrup is the same person who circumnavigated Australia in a 16-foot open boat several years ago. He also championed the holding of economy runs all over the world and inspired “how fast you can go on a liter of petrol.”

The first World Solar Challenge was staged in 1987, with a field of 23 fantastic cars led by the GM Australia which completed the trip with an average speed of 67.9 km/h.

The goal of finishing the Challenge in four days was realized in 1998, when this record was achieved by the Solar Stream IV, which completed the trip in 4 days and 12 hours, recording a speed of 97.9 km/h.

Following the 1998 event, Tholstrup added another event to the South of Australia, which is known as the World Solar Challenge, and announced an event in 1998. But it was not only to 1998, under the leadership of Chiki School, that the event returned and 48 teams from 14 countries participated.

A new committee was created during the construction of Solar Energy Society World Congress in 2001. The event was staged once more, with news reports set. 2001. Hans was also the president of the “Demonstration Class,” which was designed to showcase vehicles exhibiting practical technology that has evolved from the World Solar Challenge.

In 2005, Panasonic entered as a major corporate sponsor of the event.
Print News Clips

Business World, Feb 7

Ford-backed Philippine-made solar car initiative to face Australia challenge

Ford Group Philippines has teamed up with De La Salle University for an ambitious bid to create the first Philippine-made solar car. The vehicle, aptly named Sinag, will compete in the World Solar Challenge in Australia from Oct. 21 to 28.

"Our aim is not to be the fastest or be the first. Our objective is very simple. If we can build and participate, and finish the 3,000-kilometer stretch from Adelaide to Darwin, then that would be outstanding success," Ford President Henry Co said during the unveiling of a scale model last Jan. 27.

The solar-powered car was unveiled during Ford Philippines' 2007 Ford Day celebration under the theme Save Lives, Save Earth. More than winning the competition, said Mr. Co, is the challenge of creating a greater awareness on solar power, which should be taken advantage of in a sun-scorched country like the Philippines.

"We want to encourage academic research and development on clean energy. We might not have the financial muscle for this but we do have the intellectual capital," he said, adding the project also aims to develop the youth's interest in pursuing a career in engineering.

"I know very clearly that it's good for the country, for the academe and the environment." Mr. Co refused to divulge Ford's investment in the project, but said the solar-powered vehicle could cost more than P5 million.

"It's an expensive initiative but we believe it's worth it. We're probably one of the few developing countries participating in the event. The publicity this will attract will create awareness for solar energy as a sustainable long-term solution," he said.

As of the launch, Technical Working Team head Rene Fernandez, an engineer and De La Salle faculty member, said Sinag was about 20% complete. It is expected to be ready to run by the end of July.

Sinag measures 1.7 meters wide, 4.7 meters long, and 0.8 meters tall. It will run on 1,200 watts of power at 168 volts.

"We are aiming for a maximum speed of 110 kilometers per hour but during the race, it will be dependent on the condition of the sun," Mr. Fernandez said.

Even in cloudy conditions, the vehicle can still run with 20-30% of power, he said.

"Kaping makulimom (For overcast conditions), we have a power optimization strategy, a software that can predict much power goes in to the motor and how fast we should go," Mr. Fernandez said.

Sinag's shell will be made of ultra-light and ultra-strong carbon fiber composites topped with silicon solar shells that will charge lithium polymer batteries.

The car will be driven across Australia by students Chris Kho, Ivan Porcalla and Eric Tan.

"The Australian outback is a tough terrain to beat. The extreme heat is going to wear us down. But we will be ready. We believe in the technology that is built into this car and the passion to excel of those who made it," Mr. Fernandez said.

Sinag is also supported by Filipinas Shell, San Miguel Corp., Sunpower, Philippine Airlines, and Ventus. — Anna Barbara L. Lorenzo