

Pluss Polymers & Team Shunya promotes Indian participation at Solar Decathlon Europe 2014

Pluss Polymers, the leader in research, development and manufacture of specialized polymers and phase-change materials (PCMs) aided Team Shunya, India's entry at the Solar Decathlon Europe 2014, get closer to their goal of a zero energy house.

The project of Team Shunya is to demonstrate zero energy homes at the Solar Decathlon Europe 2014 in France. Team Shunya is the first team from India to be selected for this prestigious event. This inter collegiate platform will witness 20 international teams competing to design, construct and demonstrate full scale houses with minimal energy consumption and powered by renewable energy.

The partnership between Pluss and Team Shunya is to integrate Phase Change Material (PCM) into its solar thermal system for water heating contributing to other solar powered sustainable solutions in the house. The participating teams will be judged across 10 categories, each carrying different weightage; hence the name Decathlon.

The hot water requirement of such houses is usually up to a temperature of 45-50 degree celsius. However, in conventional solar thermal systems, the water is heated up to 60-70 °C. This excess heat can rather be stored in Phase Change Materials (PCM) which can be tapped when enough solar energy is not available.

Pluss Polymers has provided extensive support and technical assistance during trials to help choose the right PCM which effectively eliminates the need of a back-up electric heater.



Team Shunya

Samit Jain, Managing Director, Pluss Polymers commented, "It is a matter of pride for us to be associated with Team Shunya that shall be working towards safeguarding the environment at an international platform. It has been our constant effort to contribute in the preservation of nature and the energy resources derived from it and therefore this alliance is another initiative towards the same. We couldn't have asked for a better platform than the Solar Decathlon to highlight this cause."

IIT Bombay and the Academy of Architecture joined hands in November 2012 to form interdisciplinary teams of architects and engineers working hand-in-hand to find the perfect synergy for homes.

The team, named Shunya to reiterate the goal of a zero-energy

house, became the first team from India to ever be selected in the Solar Decathlon, whose previous participants include MIT, Purdue, Cornell, CMU, TU Darmstadt, among others. The team consists of over 70 students.

The Solar Decathlon was started as a biennial event by the US Department of Energy in 2002 and has since expanded to Europe and China. Collegiate teams from across the world will build solar energy powered houses, complete with all amenities from a dish washer to a building automation system.

The houses are judged on 10 extensive criteria namely architecture, engineering and construction, energy efficiency, electrical energy balance, comfort conditions, urban design, transportation and affordability, sustainability and innovation.



Home by Team Shunya

