

Smart Energy House Opens at Farmingdale State College

April 30, 2015



Perfect weather graced Farmingdale State College's Smart Energy House (SEH) ribbon cutting. Energy leaders, legislators, students and college officials cheered as the house opened for tours.

The Farmingdale State College Smart Energy House officially opened on Thursday, April 30. The SEH contains a number of energy conservation, renewable, and cost-saving elements as part of a demonstration project designed to inform the public about existing and potential devices that can be used in residential buildings.

External window louvers can be programmed to automatically tilt with the sun allowing daylight to enter the room while still providing privacy and energy savings. These louvers adjust to deflect heat in the summer, allow more sunlight in the winter and become a shutter in a storm. An AMI (Advanced Metering Infrastructure) meter provides an understanding of the house's hourly usage. The homeowner can use this information to manage energy consumption and save money.

The Smart Energy House also uses an inverter that can be controlled via a personal computer or mobile phone. In case of a power outage, the inverter has a backup system.

The SEH also features 20 solar roof PV panels and a plug for electric or hybrid vehicles in the garage. Temperature from a thermostat can be viewed on line or with a mobile app and can be adjusted remotely by the home owner. The house is also equipped with solar thermal system that provides the house hot water from sun.

The 2,000 square foot research facility is composed of two floors and boasts devices that monitor energy usage to show how energy can be saved. For example, an energy-saving kitchen refrigerator can be plugged into a smart plug which can tell the homeowner which setting is the most energy efficient.

"The Smart Energy House provides visitors with an understanding of how easily they can live in an energy efficient house, offering convenience and comfort, said President Hubert Keen. "This effort on the part of the campus reinforces Farmingdale's mission that has been apparent since its beginnings in 1912 – and, as we say, Green Then. Green Now."

PRINTED ON 12/28/2022

“PSEG Long Island is proud to be working with Farmingdale State College, Stony Brook University, the Long Island Power Authority, and the Department of Energy on this Demonstration Project. We fully support the College’s mission to educate students, businesses, and our communities on the technologies that will provide a cleaner and more sustainable environment for the next generation,” said Daniel Eichhorn, Vice President of Customer Services. “We urge everyone to visit Farmingdale State College’s Smart Energy House and experience the way of the future.”

Director of the Renewable Energy and Sustainability Center Marjaneh Issapour said, “Just as school children visited the campus years ago to watch chickens hatch, school children can visit the Smart Energy House today to learn how to lessen their carbon footprint. Farmingdale’s Smart Energy House shows people how easy it is to save energy and money using tools that are available now.”

Designed by the faculty and staff of the Renewable Energy and Sustainability Center at Farmingdale and constructed with the help of the college’s physical plant staff, the Smart Energy House is a collaborative effort involving Farmingdale State College, the U.S. Department of Energy, PSEG Long Island, Long Island Power Authority, and Stony Brook University.