The Institute  In an attempt to reduce its electricity costs and carbon footprint, IEEE's Operations Center, in Piscataway, N.J., has installed 300 rooftop photovoltaic solar panels. The panels can produce 50,000 kilowatt-hours per year, or about 20 percent of the building's electricity demands. The panels were installed flat on the roof to maximize the number of panels in the system.

IEEE contracted with ASM Solar of Kenilworth, N.J., to manage the design and installation.

An LCD screen in the building's lobby reports real-time data such as how many watts the panels are producing, how much electricity the system has generated since it was brought online, and how many pounds of greenhouse gases IEEE has kept out of the atmosphere since launching the system.

IEEE's solar project is one of many initiatives made by organizations worldwide in recent years in an effort to save money and help the environment. World solar photovoltaic panels generated 7.3 gigawatts in 2009, representing a 20 percent growth from 5.95 gigawatts over the previous year.

The Piscataway installation is the first phase of a plan to mount panels on IEEE-owned buildings in the United States, including more panels at the Operations Center and an installation on the IEEE Computer Society building in Los Alamitos, Calif.

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