

Vatican unveils ambitious solar energy plans

VATICAN CITY (Reuters) - And then there was light -- and it was powered by the sun.

Task: Read the text and give its main idea:

The massive roof of the "Nervi Hall" where popes hold general audiences and concerts are performed, has been covered with 2,400 photovoltaic panels to provide energy for lighting, heat and air conditioning.

After weeks of tests, the system went on line at full throttle hours before Pope Benedict held what officials called the "first ecological general audience in the Vatican."

The new system on the 5,000 square meter roof will produce 300 megawatt hours (MWh) of clean energy a year for the audience hall and surrounding buildings.

The 1.2 million euro (\$1.6 million) system, devised and donated by German companies SolarWorld and SMA Solar Technology, will allow the 108-acre city-state to cut its carbon dioxide emissions by about 225 tons and save the equivalent of 80 tons of oil each year.

"This is a very courageous initiative," said Carlo Rubbia, the Italian who won the 1984 Nobel Prize in physics and attended the unveiling ceremony in the Vatican.

"The sun has 100,000 times the energy produced by traditional sources of energy on earth. This why we need so much science, so much investment in research for the future," Rubbia said at the unveiling.

FIELDS OF SOLAR PANELS

Cardinal Giovanni Lajolo, the governor of Vatican City, said the Vatican was thinking of a much more ambitious project at a huge tract of land it owns north of Rome which is used as a transmission center for Vatican Radio.

"We are thinking of a solar energy system on 300 hectares (740 acres) at the site," he said. Pier Carlo Cuscianna, head of technical services for Vatican City, said such a project could produce six times the amount of energy needed to power the transmission antennas.

"The rest could be transferred to the (Italian) national grid for power for surrounding communities," Cuscianna said.

The site, called Santa Maria di Galeria, is owned by the Vatican and such a project would make it an exporter of alternative energy.

Cuscianna said it was "just an idea" for now but that he expected it to move on the project stage eventually.

Officials said the Vatican planned to install enough renewable energy sources to provide 20 percent of its needs by 2020, broadly in line with a proposal by the European Union.

The Nervi Hall has a sweeping, wavy roof and the solar panels are virtually invisible from the ground. Church officials have said the Vatican's famous skyline, particularly St. Peter's Basilica, would remain untouched.