

"Renewable Energy in Urban Settings"

October 6th, 2008 at United Nations Headquarters

NGO Sustainability held a meeting on "Renewable Energy in Urban Settings" on October 6th, 2008, at the United Nations, New York.

Ms. Roma Stibravy, NGO Sustainability New York representative, introduced the American Solar Energy Society (ASES), which was founded in 1954. The mission of ASES, which is the national branch of the International Solar Energy Society, is to increase Americans' use of solar energy, and promote energy efficiency and sustainable technologies. NGO Sustainability, the parent organization a UN-accredited NGO with members in over 110 countries, promotes renewable energy technology, research implementation and education across the globe.

In her introduction, Ms. Stibravy referred to Thomas Friedman's new book, "Hot, Flat, and Crowded." Friedman mentioned the need for Lincoln and Roosevelt's type of leadership, which would command enough authority to face down the fossil fuel lobbyists and create a single, national system that would instantly release pent up innovation and creativity, cleaning up America's energy supply and reducing energy demand. He stated that once the United States has done that, and shown that there's money to be made from the "green" industry, the rest of the world will, as a matter of self interest, follow suit. Ms. Stibravy pointed out that the October 3rd congressional bailout plan included \$17 billion in tax credits for clean power and renewable energy, which hopefully indicates that there will be a rise in tax credits and subsidies in the future.



In introducing Anthony Pereira, Ms. Stibravy stated that he has had more than 14 years of experience building renewable energy projects throughout the New York Metropolitan

area. Mr. Pereira has worked with some of the world's leading architectural, engineering and construction management firms. In 1998 he founded altPOWER, a renewable energy design and construction firm, the primary focus of which is solar electric systems.

Throughout his presentation Mr. Pereira argued that renewable energy is a dependable, viable energy source compatible with current power grids. Mr. Pereira also noted that energy demand and solar energy generation both peak at the same time of day, making solar a particularly useful power source in the summer. He also mentioned that conventional power generation causes poor air quality in places like New York City, which has the highest rate of childhood asthma in the United States.

Mr. Pereira stated that "we need to address this problem," and continued, "we don't need to build 12 square mile, huge, solar fields in the desert to do this; we can do this locally." In big cities, we can meet 10-20 % of our current energy demand simply by placing solar panels on rooftops. Among all the known

renewable estimates of energy generation, solar is at the top with an annual capacity of 350 million kilowatt-hours.

Mr. Pereira stressed the fact that these projects were funded by supporters of “green” buildings, because those green buildings are recognized as trademarks. “People want to live in green buildings,” said Pereira. Examples of altPOWER’s work include ‘Tribeca Green’ in Battery Park City, the Department of Energy building in Washington D.C., Roche Pharmaceuticals in New Jersey, General Electric’s Headquarters in Connecticut, The Bronx High School of Science, and Monmouth University in New Jersey. He concluded with a quotation from inventor Thomas Edison. In 1931, Edison said: “I’d put my money on the sun and solar energy. What a source of power! I hope we don’t have to wait until oil and coal run out before we tackle that.”

When asked a question about storage of solar power via battery during the question and answer part of the meeting, Mr. Pereira stated that since there is a reliable electrical grid providing backup power, there is no need for batteries. He mentioned that buildings with big roof areas, such as warehouses and parking spaces, would be a good place to start installing solar panels. As to the question of whether snowfall affects the ability to generate solar energy, Pereira said that it is all about design, and that solar power is used in very cold climates such as northern Sweden. Design and location of panels on the building would solve such problems. He added that it is less of a problem in winter time when cost of electricity and demand for power is less. Pereira also added that passive solar, which involves constructing buildings facing south so that the maximum amount of

sunlight reaches indoors, is also very important as a basic energy conservation method.

Professor Richard Perez, who is a member of ISES and ASES, is currently working on solar energy in cooperation with the University of Albany, added that solar energy will pay back in about 4 years. In its lifetime, solar technology will produce 7 to 10 times more energy than it takes to install, which makes it a natural 'energy breeder.'