## Better Energy for a Better World

by Cliff Barre, a responsible, green tourist and co-blogger with the love of his life Tiffany on their Blog : <u>Peace Love & Travel, with Cliff & Tiff.</u>,

With new technologies and developments, organizations can lower their carbon emissions. From Chicago to San Francisco, cities are creating new ways to save money and be more eco-friendly. New kinds of power plans, enhanced refrigeration and solar panels are gathering steam as organizations prepare for a greener future.

## **Greener Power Sources**

One company that has made noteworthy progress in environmental awareness is Destiny USA. <u>Destiny USA</u>, the top new entertainment destination in Syracuse New York, is the 6th largest shopping mall in the world. Their recent changes to refrigeration help to lower ozone depletion. Destiny USA follows the Montreal Protocol and uses refrigerants that either lower or eliminate emissions. These refrigeration management systems help to lower the chemicals that cause climate change. Another exceptional change made by Destiny USA is with green power. The company purchased 26,000,000-kilowatt hours of green power. These certificates are for renewable energy sources that are produced from the grid on a net zero pollution bases. Due to their progress toward greener power sources, Destiny USA was granted Exemplary Performance recognition from <u>The U.S. Green</u> <u>Building Council</u>, and certified Gold by LEED standards.

## New Power Sources in Chicago

One by-product of power plants is heat. In a gas-combustion plant, the electricity that is produced gives off heat. Since this heat is lost to the environment, the power plant ultimately loses two thirds of the energy it creates. In Chicago, government officials have been working on ways to remedy this problem. They are now using a cogeneration plant to harness the lost heat and transform it into useable power. The city of Chicago has set a goal of having 1.5 billion kilowatt hours of electricity from this source. This would equal to about 25 percent of the city's energy demands. Cogeneration basically works by channeling the steam in pipes. Once it has been piped through a building, the steam radiates the heat so that the household is warmed up. This cuts heating costs and provides an added heat source for cooking or hot water. The steam can also be used to create actual electricity through the use of a turbine and generator.

## Solar Panels in California

Cogeneration is not the only way that cities are creating electricity. In San Francisco, officials are working on harnessing the sun. The <u>Moscone Convention Center</u> in San Francisco recently had solar panels installed on its rooftop. When the convention center has an event, these solar panels can completely supply the electricity

demand. If the center is closed, the electricity produced can be used to power 8,000 households in the area. After the program was successfully implanted, San Francisco decided to take it a step further. Every government building will soon have solar panels installed on their rooftops. These solar panels are made out of silicon semiconductors. When sun shines on the cells, the panels absorb the photons. As this occurs, electrons are set in motion and an electrical current is started.

Cities and companies across the United States are starting to focus on lowering energy costs. Along with the decreased demand and cost of electricity, the entire world can benefit from the environmental impact. Switching to different power sources and better refrigeration management can lower emissions and reduce everyone's carbon footprint.