



solar electricity

SHARP SOLAR POWER SYSTEM INSTALLED ON FEDEX'S OAKLAND INTERNATIONAL AIRPORT



PROJECT

FedEx's Oakland International Airport hub employs 1,700 people and processes more than 260,000 packages daily. Along with labor and the price of fuel, electricity is one of the facility's major costs. It was no surprise when they announced plans to construct a 904-kilowatt (kW) solar electric system to reduce the effect of fluctuating energy prices. Working with Sharp, the project showed how corporate partnerships can help an organization like FedEx realize its environmental vision.

SOLUTION

FedEx flew more than 300,000 Sharp solar cells from Japan to Sharp's manufacturing facility in Memphis, Tennessee, where they were assembled into 5,769 photovoltaic modules. Berkeley-based PowerLight Corporation then designed and built the overall system using the Sharp solar modules. When completed, the 904-kW system covered 81,000 square feet of roof space and provided 80 percent of the facility's peak-demand electricity needs. "FedEx is proving that solar power works for business," said Oakland mayor Jerry Brown.

OVERVIEW

LOCATION:

Oakland, CA

INSTALLER:

PowerLight Corporation

DATE COMPLETED:

Summer 2005

PEAK CAPACITY:

904 KW

NUMBER OF MODULES:

5,769

PV SURFACE AREA:

81,000 square feet

SOLAR CELLS:

306,768

BECOME POWERFUL



“With this project, FedEx will deliver more environmental innovation to California.”

– Mitch Jackson, managing director,
Corporate and International
Environmental Programs

The Oakland solar project is one of many environmental initiatives FedEx has undertaken. FedEx Express was the first company to make a long-term commitment to develop and use hybrid-electric delivery trucks. FedEx Kinko's initiatives include energy conservation, buying renewable power, using and promoting the sale of recycled products, and minimizing and recycling waste.

At peak output, the system will produce the equivalent of power used by more than 900 homes during the daytime. In addition to generating electricity, the solar modules help insulate the buildings, reducing heating and cooling costs. The 904-kW array is expected to cut the Oakland hub's electricity costs by 30 percent.

THE NAME TO TRUST

When you choose Sharp, you get more than well-engineered products. You also get Sharp's proven reliability, outstanding customer service and the assurance of our 25-year warranty. A world leader in solar electricity, Sharp has more solar modules currently in use than any other company worldwide.

Design and specifications are subject to change without notice.
05L3083

SHARP®

SHARP ELECTRONICS CORPORATION
5901 Bolsa Avenue, Huntington Beach, CA 92647
1-800-SOLAR-06 • Email: Sharpsolar@SharpUSA.com
www.SharpUSA.com/solar

SYSTEM BENEFITS

- Over 30-year lifespan, system will replace 85,000 barrels of oil, 39 million pounds of coal, or 500 million cubic feet of natural gas.
- Reduction of carbon dioxide emissions by 10,800 tons, nitrogen oxide emissions by 17,000 pounds, and sulfur dioxide emissions by 15,000 pounds.
- Peak output production by system will be equivalent to power being used by more than 900 homes during the daytime.
- Oakland hub's electricity costs will be cut by 30%.
- System will provide 80% of the hub's peak-demand electricity needs.