

Taking advantage of the New Jersey Clean Energy Program

A good corporate citizen leads the way with solar.

Cordis® of Warren, the latest Johnson & Johnson affiliate to choose solar electricity

For more than 40 years, Cordis Corporation, a Johnson & Johnson company, has been a pioneer in technology for the treatment of vascular disease. Now, Cordis has applied this pioneering spirit to a solar electric system installation. It's the first Johnson & Johnson company in New Jersey to "go solar," a move also made by Neurogena in California and PSGA/Ortho-McNeil in Pennsylvania.

"Part of the Johnson & Johnson Credo is to be environmentally conscious in the way it runs its business," said Steve DuBarry, Senior Facility Engineer at Cordis. As an example, he cited the corporation's goal to, by year 2010, reduce its carbon dioxide emissions by 7% from their 1990 levels. "Solar is one of the technologies that helps us live up to our Credo," DuBarry said. "It also helps our bottom line, and helps us be a good corporate citizen."

The New Jersey Clean Energy Program helped Cordis switch to solar with a rebate that covered approximately 60% of the system's purchase and installation costs. The company also benefitted from an investment tax credit and a 5-year accelerated depreciation.



The 107,000 square foot Cordis facility consists of labs, administrative offices and warehousing. Constructed in the late 1970s, the site is home to a staff of 260.





When Cordis sized the system, it became apparent that roof size was the biggest constraint. "We originally wanted to install a system with a peak output of 100 kW," said Steve DuBarry, "but the roof couldn't accommodate the necessary size solar cell array." Cordis opted for a 72 kW system that, when running at peak output, can provide 8% to 10% of the facility's total power.

Prior to installation, Cordis worked with its property insurance carrier and a structural consultant to confirm that the roof could accommodate the weight of the 50-ton system. To avoid surprises, DuBarry advises prospective system buyers to have a licensed engineer perform a roof study early on in the process.

The system consists of 1,680 thin-film solar cells manufactured by PowerLight Corporation using BP Solar Millennium modules, and covers a 15,809 square foot area. Although generating slightly less than crystalline technology, thin-film presented a more cost-effective choice for Cordis. The physical installation process took six weeks. "The system matches the company's load profile perfectly," DuBarry said. "It produces maximum output when the building has maximum electrical demand."

The power of incentives

The 60% rebate from the New Jersey Clean Energy Program was the deciding factor in Cordis' system purchase. To obtain the incentive, Cordis and PowerLight followed the New Jersey Clean Energy Program installation guidelines and worked with JCP&L, the administrator of the program. Cordis also received a significant incentive from VASE (the Virginia Alliance for Solar Electricity), available to qualifying businesses in New Jersey and other mid-Atlantic states.

Savings on electric costs and more

Cordis anticipates that the system will provide an annual savings of \$7,000 to \$8,000 in electric costs alone. Additionally, the 2-inch thick solar panels with an R19 insulating value are expected to provide HVAC savings. The solar array may increase roof longevity by shielding a large area from typical degradation by UV rays and the elements. The system is also covered by a 20-year manufacturers warranty.

The anticipated return on investment for the system is five to six years. According to DuBarry, "Other energy options may deliver a faster return, but none will give you sustainable power like this." Also satisfying is the fact that the system produces no CO₂, SO₂ or NO_x emissions, and alleviates the burden on electric utilities, especially during peak times. "All in all," DuBarry added, "everyone can benefit from solar electricity."

Visit njcep.com or call 1-800-823-6462 for more information about the New Jersey Clean Energy Program and to learn how your company can benefit from a solar electric system.



Solar electric technology has its rewards

Johnson & Johnson was recently honored with the EPA Green Power Award for on-site power generation. Pictured at the Washington, DC event are, from left to right: David Garman, DOE; Steve DuBarry, Senior Facility Engineer, Cordis; Kathleen Hogan, EPA; Rodney McKenna, Facility Engineer, PSGA; Harry Kauffman, Corporate Energy Director, Johnson & Johnson; Robert Barnes, Site Manager, PSGA.

