

# GreenSmart

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## Oregon Sees Bright Future in Solar Manufacturing

By Amy Rose Davis



Solar panel manufacturers are expanding into Oregon, thanks in part to the State's interest in renewable energy. (Photo by Amy Rose Davis)

Solar technology manufacturers continue to eye Oregon as an ideal place to do business, and several companies are in various stages of building or renovating plants for solar technology production.

"A big part of the driver for why [companies come to Oregon] is the existing high-tech workforce and small companies that are used to working with ultrapure materials," says Chris Robertson, vice president of public affairs at Peak Sun Silicon, a manufacturer of granular, electronic-grade polysilicon for photovoltaic system manufacturers.

Peak Sun Silicon is currently building two

facilities on approximately 8 acres in Millersburg, Ore., about 60 mi south of Portland.

One building will house a production operation for phosphorous chloride, a chemical used in the manufacture of PV panels. The building was scheduled to begin shipping product in late summer.

The second building is a 6,500-sq-ft pilot production plant for polysilicon. It will begin shipping product in early 2009.

Total capital budget for the two buildings is \$18 million. The general contractor is R. L. Reimers Co. of Albany, Ore.

XsunX, a manufacturer of thin-film pho-

tovoltaic panels based in Aliso Viejo, Calif., is also planning to open a manufacturing plant in Oregon. The company entered into a sublease with a high-tech firm for an existing 90,000 facility in Wood Village, Ore., and began renovating it in the spring.

XsunX anticipates production beginning in early 2009 at approximately 25 megawatts, and anticipating ramping up to 35 to 45 megawatts in time.

XsunX manufactures amorphous silicon thin-film panels, one of three different kinds of thin-film technology. The major advantage of thin-film technology is its greater capacity for producing energy in low-light conditions. The panels are ideal for cloudy or hazy days and are nontoxic.

According to a company representative and company press releases, XsunX looked at a number of locations around the country before selecting the Wood Village location, a former Merix facility. The opportunity to refurbish an existing facility allowed XsunX to begin production at a lower cost than building a new facility. The facility also is close to Portland International Airport and other Port of Portland facilities.

Intel spin-off SpectraWatt recently announced plans to build a 60,000-sq-ft photovoltaic cell manufacturing plant in Hillsboro, Ore. The company expects to begin product shipments by mid-2009.

In late 2007, Solaicx, which is based in Santa Clara, Calif., opened its silicon wafer plant in North Portland. The company expects to eventually employ approximately 180 people and produce 180 megawatts per year of solar ingots and wafers at the facility.

SolarWorld, a German-based manufacturer of solar ingots, wafers and cells,

## Energy Sources

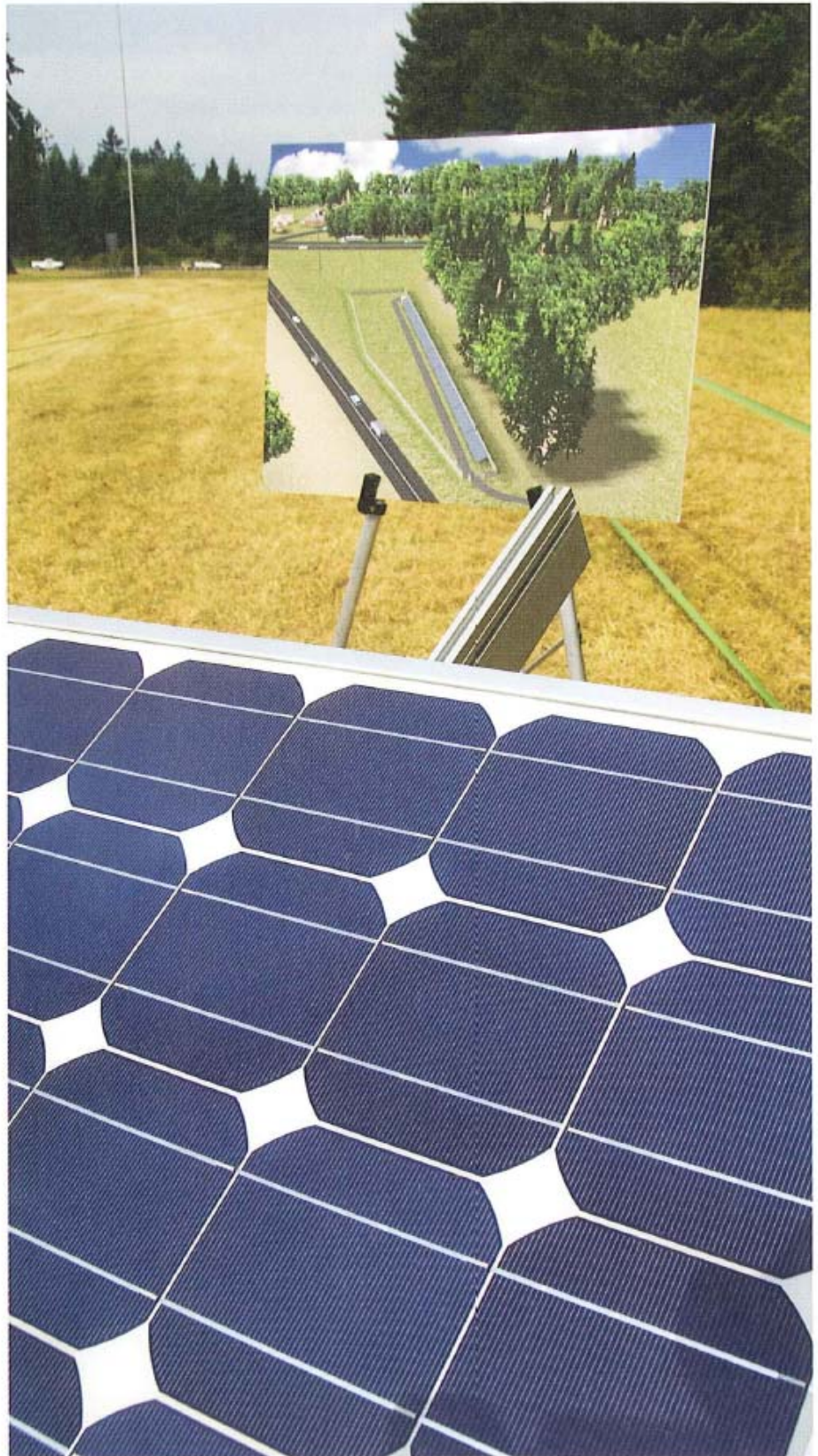
also recently opened what it is billing as the largest solar factory in North America in Hillsboro after purchasing an unused silicon wafer product plant. The company expects to increase production to 500 megawatts by 2009.

SolarWorld and PV Powered, a manufacturer of solar inverters in Bend, Ore., are suppliers for Oregon Gov. Ted Kulongoski's solar highway project – a demonstration project at the intersection of Interstates 5 and 205 containing 594 solar panels that is projected to produce 112,000 kilowatt-hours annually.

The power generated by the solar panels during the day will become part of the Portland General Electric grid. In return, PGE will supply an equivalent amount of energy to light that section of the highway at night. The energy produced by the project represents about 28% of the 400,000 kilowatt hours needed to light the interchange.

The project will cost approximately \$1.3 million and is expected to be online in December 2008. Design, construction, and installation services are provided by SolarWay, a "turn-key" solar energy engineering, procurement, and construction consortium. The consortium consists of four Oregon firms; Aadland Evans Constructors of Portland serves as the general contractor as part of the consortium.

More possibilities are on the horizon. "I think there are about six manufacturers kicking tires in and around Washington County," says Desari Strader, executive director of the Oregon Solar Energy Industries Association, based in Portland. "I don't know all of the names, but there are several looking at locating out in Hillsboro."



The highway is part of the state's efforts to bring renewable energy to the fore.