Salem elevates solar energy's prominence

TIMM COLLINS | Statesman Journal
Solar panels on the roof of the Salem Conference Center could power 10 homes for one year.

By Timm Collins

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Slightly visible from the sidewalk across Trade Street SE, solar panels on the roof of the Salem Conference Center collect power and help save on energy costs.

"There is not much to see — no big moving parts — but we intentionally put a few of these where they could be seen from the street," said Cory Murman, project manager for InSpec Energy Solutions.

In an advancing movement toward renewable sources of energy, the conference center and the city of Salem want people to see what is happening, Murman said.

The average annual electricity consumption for a residential customer in 2008 was 11,040 kilowatt-hours, according to the U.S. Energy Information Administration.

By the numbers

450: number of 61-inch by 31-inch solar panels installed on the Salem Conference Center

14,000: square feet of roof space used

11,040: average number of kilowatt-hours used by residential customers in 2008

110,000: estimated kilowatt-hours the solar array can produce in a year

$1,800: Estimated annual savings for Salem Conference Center electricity

Assuming it is working to the best capability, the 450 panel array will produce 110,000 kilowatt-hours of electricity — enough to power 10 homes for one year, Murman said.

The project was made possible as a result of the Oregon Legislature's "feed-in-tariff" program, which encourages development of solar projects by requiring utilities to buy power from customers. In this case, Portland General Electric buys power from InSpec.

InSpec estimated the project would cost less than $618,000 from design to completion. The city has paid nothing out of pocket.

In exchange, the company provides the conference center power at a reduced rate, and receives payments from the utility for the energy put back on the grid. The city estimates the array will generate enough power to save the conference center a minimum of $27,000 during the course of the 15-year contract with InSpec.

At the end of the agreement, the Salem Urban Renewal Agency has the option to purchase the system or renegotiate with InSpec.

Murman estimates the array could produce 10 percent of conference center's annual electricity, based on consumption from 2009.

Chrissie Bertsch, manager of the Salem Conference Center, said the electricity bill has been consistent at about $9,000 per month.

"It is a small part of the bill, but I am trying to be optimistic and the panels will produce more," Bertsch said. "In this day and age, it is good to save on anything."

An Oregon endeavor

The panels were purchased from Sanyo Solar in Salem. The framework installed on the roof of the Salem Conference Center was built by Sun Storage based in Joseph.

The inverter, an elevator-sized power transformer located next to the conference center's loading dock was purchased from PV Powered of Bend.

"The real advantage to the conference center is that this is just one more piece of a highly efficient building that brings commerce to the city," Murman said.

In the coming weeks, visitors will be able to monitor the production of energy through the use of a video kiosk in the conference center lobby.

tdcollins@StatesmanJournal.com, (503) 399-6750 or follow at twitter.com/TimmCollinsSJ