

Let The Sun Shine In! Rushforth Leads The Way For Solar Hot Water Systems

Alan Rushforth was well ahead of his time. As an example, he began studying solar hot water 30 years ago – when most people were interested in using the sun for its tanning effect. Armed with an engineering education from Drexel, Rushforth experimented with the process at apartment buildings he owned in the Philadelphia region.



Along with his wife and business partner Jan Marie, the couple decided they either needed to go way bigger or way smaller. They opted for the latter and sold their 100-plus apartment units spread around a few buildings in the area, and Alan entered what Jan refers to as semi-retirement.

For Alan, this meant he had the time to learn everything there was to know about solar hot water systems. Fast-forward to 2007, and you have Rushforth Solar LLC, the company Alan and Jan started, and continue operating today.



Alan Rushforth has been a passionate proponent of solar hot water, Here he provides a detailed tour of another installation he has designed

It was at that time that Alan, who dabbles as an amateur inventor, became a certified Solar Thermal Installer – at the time he was the first in Eastern Pennsylvania, New Jersey and Delaware. The company received awards and grants that helped attract new business.

The scientific process, Jan explains, is really very simple.

“Think of a black garden hose on a hot summer day. The water that comes out of the hose first is hot – that’s the whole idea of solar hot water. We’re heating water, not making electricity.”

It works like this: solar panels are installed on roof-tops and the sun heats the water for that building. Producing photovoltaic (PV) electricity is a more popular industry, but the Rushforths have perfected the solar water business, and it’s been good to them.

Lindy Property Management and The Galman Group are two of Rushforth’s biggest customers. But not every building lends itself to solar hot water.

“A building 5 stories or less is ideal,” Jan explains. “Flat roof is ideal. Central hot water is best. On sunny days, the solar panels can produce more than 90% of a building’s hot water.”

The cost to convert most 30 to 100 unit apartment buildings from traditional to solar hot water ranges from roughly \$60,000 to \$150,000, which often includes a new ultra-high-efficiency hot water heater. Pennsylvania state and federal subsidies have helped offset 65% of that cost – a significant amount and a big boost for new business.

30% of that was federally funded, and 35% state funded, up to



Alan and Jan Marie Rushforth at Academia Suites with Alan and Jacob Lindy and members from Lindy Property Management, AAGP Government Affairs Director Christine Gertz, Esq. and invited guests as they tour the installation at the East Oak Lane apartment community

\$50,000. Well, late this past summer, the state money dried up, meaning no more state subsidy. Jan blames it on budget issues and a new Pennsylvania Governor Tom Corbett. “He’s a fan of dirty energy,” she says without emotion.

Regardless of who’s to blame, losing the state subsidies is a big blow to Rushforth and all solar hot water companies working in Pennsylvania.

“It’s pretty frustrating,” Alan admits, but he says efforts are underway to get other money for industry projects.



Alan and Jan Marie Rushforth with DEP Secretary Krancer

“We’re going to really beat the bushes to see what other kind of replacement subsidies there could be – they won’t be as good as the 35 % but I do have hope that they will return.”

Alan and Jan are consummate optimists with boundless energy and passion for their industry. The Haverford Township couple works tirelessly to improve the environment while also earning a living. Jan has also focused on civic and social causes, and has dabbled in local politics. and education. They’re hoping their varied skill-sets will help drum-up more support for tax-breaks and subsidies related to solar hot water.

Going into solar water heating commercially has been really satisfying,” Alan says. “I’m totally into clean, renewable energy, into doing something positive, even if it’s relatively a drop in bucket. I like to participate in positive solutions. To look at these heaters on a sunny day – pretty much supplying all hot water with sunlight – it’s great.”

Rushforth has several installation projects on the schedule before the state subsidies run out, so they’ll be busy through the spring of 2012. Beyond that, the Rushforths say they may need to shift some focus to the Delaware and Maryland markets, where better state subsidies exist. But in Pennsylvania, the state of the solar hot water industry is most uncertain. A word to the wise though: don’t bet against the forward-thinking Rushforths.