



Can You Afford Free Heat?

A WHOLE lot of progress is happening in alternative fuels these days, all around this great country of ours. The number of growers who have gone from researching to actually installing biomass boilers keeps rising, and the savings are no doubt significant no matter the fuel used. However substantial these savings have been from burning corn, tires, oat pellets, beans and the like may be, all can agree that they cannot compete with free heat.

Underground Sunshine

One of the most interesting ideas to bubble to the surface lately has been aquifer heat storage. The diagram below shows how solar energy is being converted into hot water by running it through fine wire (FiWiHex) heat

“If labor is not considered, we came very close to recuperating the cost of our Heatmor in one year through our propane savings.”

— Ben Cecil, Oldham County Nursery

exchangers, and then stored in the ground for heat season. Obviously, your groundwater must be static, not too shallow, etc., but if conditions are right...presto! Free heat.

Feeding The Beast

Ben Cecil, propagation and container production manager at Oldham County Nursery in Crestwood, Ky., has watched as that business installed and used a Heatmor wood-burning boiler last winter. Although he says, “the work it takes to feed the beast is fairly significant,” he also estimates

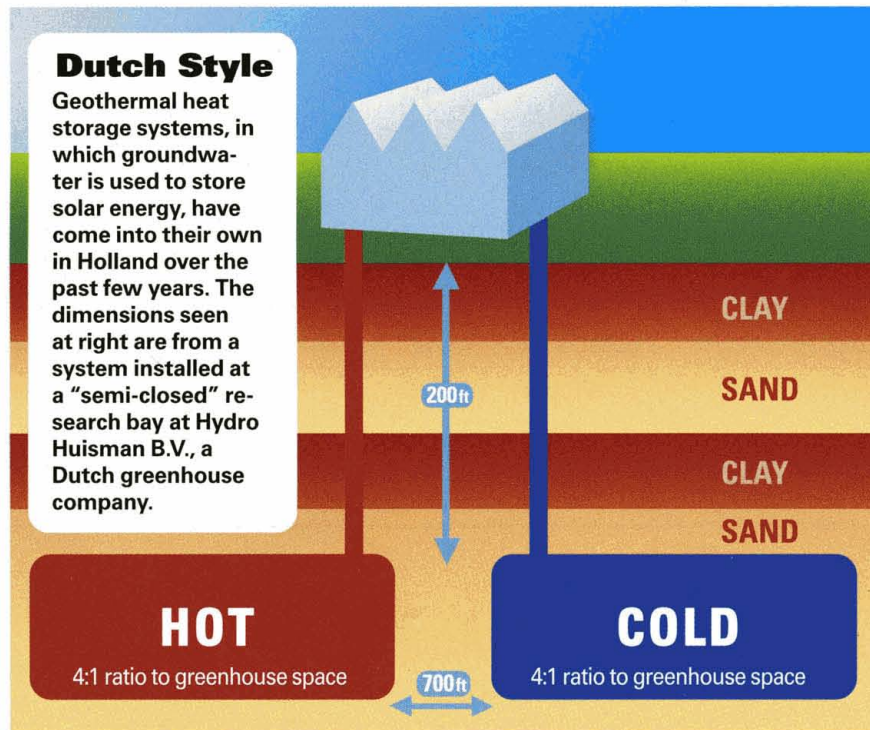
that, because they have worked out a good fuel source, they will achieve ROI within three years.

“Our wood is acquired through local arborists,” Cecil explains. “They have to pay for dumping their waste in other places, but we allow them to bring it here for nothing. While we have no control over the quality of wood, and the occasional nail, sign or piece of 1910s farming implement in the wood, those instances are few and far between.”

For those a little less likely to crank up the chainsaw, a number of companies

Fuel Cost Comparison (Per Therm)

Edible Beans (/Ton)	\$.44
Coal (/Ton)	\$.63
Corn (/Ton)	\$.64
Oat Pellets (/Ton)	\$.68
Wood Pellets (/Ton)	\$.74
Natural Gas (/ft3)	\$1.20
#2 Oil (/gal.)	\$1.38
Waste Wood (/Ton)	\$0
Solar Heat	\$0



are competing to offer the closest thing to an all-natural experience that a greenhouse owner/operator could desire. By providing all the pieces of the puzzle – everything from the storage bin, grinder, disc separator and fuel transfer auger to the combustion unit and emissions control equipment and even the heat storage buffer tank – companies like St. Mary’s, Penn.-based Advanced Recycling Equipment are attempting to fill in the gaps for busy growers looking for a hassle-free alternative.

Implementation

Bloomsburg, Penn.-based Dillon

