



SunSource® Home Energy System

ET Open Forum

July 8, 2010 - Monrovia, CA

Product Overview

- The Lennox SunSource[®] Home Energy System is a high-efficiency heating & cooling system that integrates photovoltaic modules, offsetting the electrical consumption of the HVAC system. It can additionally provide power to the rest of the home or back to the grid.
- The target market of the SunSource product are residential homeowners.
- The SunSource addresses the following consumer needs:
 - Reduces home utility consumption using renewable energy
 - Reduces cost of entry into solar use: 1-15 Modules at once or gradual
 - Monitoring of power generated by solar modules & environmental benefits
- The technology was originated and is owned by Lennox Industries. It was developed in 2009, thru R&D of the integration of renewable energy into HVAC systems.

Competitive Landscape

- In 2009 Lennox SunSource[®], the industry's first solar assisted heat pump, was introduced using a single solar module to drive the outdoor fan motor and reduce electrical consumption. This is the second phase.
- At this time, the SunSource has no major HVAC manufacturer competitors; however, some HVAC distributors are entering the solar panel market (no integration)
- Competitive strategy to gain market share for SunSource:
 - Lennox, an established HVAC brand, sells and trains direct to dealer
 - Simplification and pre-engineering of system to take guesswork out of installation
 - Working with cities/mayors to retrofit neighborhoods
 - Enabling other products with Solar Ready technology for future solar integration
 - Spring & fall manufacturer rebates combined with consumer messaging of solar and energy-efficiency tax credits

Product Impacts and Limits

- Energy and demand (kW): Using Climate Region 4, a system can offset 1.2-2.25 times the annual energy consumption of a standard AC system (kWh). This system would also offset a max. of 2.6 kW (based on 15 panels)
- The product was officially released May 2010
- Since new to the market, projected units sold in 2010 is set at 65. Solar modules are estimated at 400+ (6.4 avg per home)
- Lennox would not recommend installing this technology on homes with roofs in poor condition, poor sunlight exposure (north facing or heavy foliage), or that use 3-phase service

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