



## SunSource® Home Energy System

Your easy  
entry into  
the virtually  
untapped  
and highly  
profitable solar  
energy market

# SunSource<sup>®</sup> Home Energy System. Money-saving solar power for your customers, and sky's-the-limit growth opportunity for you.

A case for SunSource: [How it can impact your sales and business](#)



Dave Lennox *Signature*<sup>®</sup> Collection air conditioners and heat pumps with SunSource<sup>®</sup> Solar-Ready design for easy solar upgrade

	What it Means to You	What it Means to Homeowners
	<ul style="list-style-type: none"> <li>• Sets you apart from your competitors</li> <li>• Gives you easy entry into the solar market</li> <li>• Transitions you from HVAC contractor to home energy contractor</li> <li>• Expands your customer base</li> <li>• Provides followup opportunities and upgrade sales</li> </ul>	<ul style="list-style-type: none"> <li>• Provides easy access to money-saving solar power from a trusted brand</li> <li>• Allows them to add the solar option now or in the future</li> <li>• Gives them the ability to start small and add more solar modules later</li> <li>• Addresses their environmental concerns</li> <li>• Delivers exceptional comfort and energy efficiency even without the solar upgrade</li> </ul>

Lennox' long history of innovation reaches a never-before-imagined milestone with the introduction of the SunSource<sup>®</sup> Home Energy System. It starts with an air conditioner or heat pump from the Dave Lennox *Signature*<sup>®</sup> Collection. These units now come solar-ready, which means they can be easily upgraded—at the time of installation or in the future—by adding as few as one or as many as 15 solar modules to create a complete system that uses the sun's energy to heat or cool your customers' homes. When the heating and cooling system is not in use, the solar power can operate other appliances and electronics in the home. And in some locations, surplus power may go back to the utility company for a possible credit on the homeowner's utility bill.

## Give your customers what no one else can—a simple way to bring money-saving solar power into their homes

The SunSource Home Energy System gives consumers the power to take control of their utility bills. And thanks to a variety of tax incentives now available in many areas, a homeowner's investment in a SunSource<sup>®</sup> Solar-Ready system may be no more than the cost of a high-efficiency home comfort system without solar capabilities.

The SunSource® Home Energy System provides an affordable solution to the high cost of utility bills. According to the U.S. Department of Energy, heating and cooling account for 56%\*\* of energy consumption in typical U.S. homes.

## High utility bills have homeowners looking for energy-efficient solutions

- According to the U.S. Department of Energy, the average retail price of electricity for residential consumers has increased nearly 40% in the last 10 years
- 56% of homeowners surveyed in the 2008 American Home Comfort Study by Decision Analyst listed greater energy efficiency as the most-desired improvement to their home comfort system
- 28% of homeowners surveyed in the 2009 Energy Pulse Survey by the Shelton Group said they would be likely or very likely to purchase a solar electricity system for their home

## The upswing of solar

As energy costs rise, the U.S. solar industry is growing by leaps and bounds.

- In 2008, net additions of utility-tied solar in the U.S. grew 81% over the previous year
- A decrease in the cost of photovoltaic solar modules is reducing overall installation costs and helping to drive demand for solar

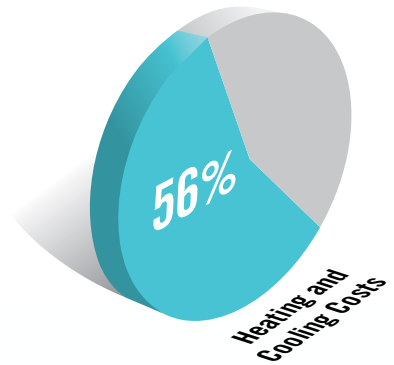
Source: Solar Energy Industries Association

Tax incentives are also driving U.S. solar growth.



- The 2008 Emergency Economic Stabilization Act extended the 30% solar investment tax credit until 2016 and lifted the \$2,000 cap on residential electric installations
- SunSource® Solar-Ready air conditioners and heat pumps are eligible for a tax credit equal to 9% of the total retail cost
- Many state and local governments and local utilities are offering solar incentives, including tax credits and rebates

## U.S. Household Energy Consumption



30% of the cost of solar modules, including installation, can be offset by government tax credits.\*

52% of HVAC contractors believe solar products will become a significant category in the short term.

Source: Online survey, TheNEWS, June 2009

\*The SunSource® Home Energy System meets the requirements for federal tax credits listed under the U.S. Emergency Economic Stabilization Act 2008, covering 30% of the cost of the solar modules, including installation.  
\*\*U.S. Department of Energy statistics.

## Consumer insights—Lennox market research

In November, 2009 Lennox conducted focus groups to gauge homeowners' knowledge of and interest in residential solar power.

**Our market research provides significant evidence of the exciting opportunities that exist for Lennox Dealers who choose to transition from being HVAC contractors to becoming home energy contractors selling cooling and heating systems powered by solar energy.**

- Not one participant in any of the focus groups could identify a **brand name** currently associated with solar power
- The majority of participants said it was meaningful for them to know that Lennox would be entering the solar market because Lennox is a brand they know and trust

### Credibility counts—Lennox is a brand consumers can trust to bring solar into their homes

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*"With a new technology, I would rather have a proven name rather than someone that I don't know, a fly-by-night, because of the technology risk."*

*"Before they put their name on it (a solar product), Lennox would have researched it because they are well known and they don't want to jeopardize their image."*

– Focus group participants, November 2009

### Feedback from the inside—Make SunSource better

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Following the launch of the SunSource XPG20 heat pump, input from Lennox Dealers, along with homeowners and even utility companies, provided a greater understanding of the features and benefits required for our next-generation solar product offering.

The feedback we received was all about making SunSource better by creating a complete solar-powered home energy system.

- **MORE** than just a heat pump – with an upgrade option on both air conditioners and heat pumps
- **MORE** solar modules – in a system that's expandable
- **MORE** solar-generating capacity – to power MORE than just HVAC systems
- **MORE** savings – so homeowners can enjoy even lower utility bills and qualify for MORE tax incentives and utility rebates

**The convergence of rising electric rates, consumer demand for energy efficiency, available tax incentives, and growing interest in the wide-open market category of residential solar power generation makes the SunSource® Home Energy System your best opportunity yet for substantial sales growth.**

# SunSource® Solar-Ready HVAC—An industry first

Since 2005, televisions capable of processing and displaying a high-definition signal have been labeled “HD Ready.” **Beginning in 2010, Lennox introduced the SunSource® Solar-Ready label, differentiating the entire line of high-efficiency Dave Lennox Signature® Collection air conditioners and heat pumps as specially enhanced to serve as a platform for solar power generation.**



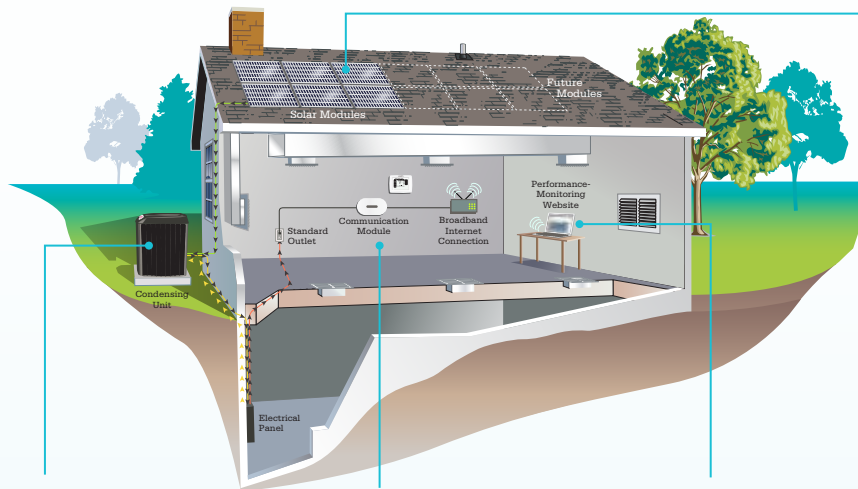
Homeowners who purchase a SunSource Solar-Ready unit will enjoy industry-leading efficiencies “inside the box.” And now they can reduce their utility bills even further with an upgrade package that adds solar power generation “outside the box.”

The solar upgrade can be added at the time the outdoor unit is installed, or at a later date, creating the SunSource® Home Energy System.

## The simplest way to bring money-saving solar power into the home

### How it works

This energy-saving system harnesses solar energy and uses it first, before using electricity from the utility company, to power the heat pump or air conditioner.



**Heat pump or air conditioner—**  
Dave Lennox Signature® Collection XC/XP21 or XC/XP17 units are modified to accept a Lennox® Solar Subpanel accessory that replaces the piping panel, making the unit solar-ready.

**Communication module—**  
Sends performance information for each solar module to a website, where a homeowner can view system status.

**Performance-monitoring website—**  
This site allows homeowners to keep track of system status, energy production and see environmental benefits in real time.

**Solar modules—**Unlike typical solar-panel systems, which have one large inverter for the complete array, each SunSource module has its own scaled-down microinverter that converts the solar energy into usable electrical power. This has three key advantages:

- A dedicated microinverter for each module allows a higher capture of solar energy, compared to traditional single-inverter systems\*
- Homeowners have the flexibility to start small and add more modules at a later date as their budget permits.
- Any issue that might affect one module, such as tree shading or cloud cover, doesn't impact the operation of other modules.

\*According to tests conducted by Enphase Energy

# SunSource System—Easy installation

**Because the SunSource® Home Energy System is so brilliantly innovative and highly sophisticated, you might be surprised to learn how easy it is to install!**

The SolarSync® package required for installation includes three main components:



## 1. Lennox® Solar Subpanel (one per outdoor unit)

Replaces the piping panel and provides the connection between the solar modules and the outdoor unit



## 2. Solar Modules (one to 15 per outdoor unit)

Turnkey, easy-to-install solution requiring 80% fewer parts than typical DC solar systems, featuring a fully integrated plug-and-play design; includes microinverter



## 3. Communication Module (one per household)

Allows 24/7 online monitoring of system status, energy production and environmental benefits

Also included in the SolarSync package are a choice of mounting kits, each designed for different roof types, and all required installation parts.

## Making the transition to home energy contractor

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The tools and resources you need to expand your business from HVAC contractor to home energy contractor are all available from Lennox.

Technical training is available online as an eLearning module on the DaveNet® e-Business Website. Field training is also available. Ask your Territory Manager for details.

Technical training includes:

- Installation – Includes all aspects of the SunSource Home Energy System install, including solar modules
- Operation – Gives you full knowledge of all the features and benefits the SunSource system provides
- Troubleshooting – Ensures the SunSource system delivers the highest level of performance

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### SunSource Sales Training

Comprehensive sales training is available to help you take full advantage of the growth opportunities the SunSource Home Energy System brings to your business. Ask your TM for details.

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# Selling SunSource

## Seize the opportunity to grow your business

With the development of the SunSource® Home Energy System, Lennox gives you yet another opportunity to differentiate yourself at the kitchen table and achieve a sustainable competitive advantage. With SunSource:

- You have something to sell that no one else has
- You can step into a virtually untapped market
- You can deliver what homeowners want most—energy savings and lower utility bills

As a Lennox Dealer, only you have the ability to give homeowners a simple, affordable way to bring solar power into their homes. And it doesn't matter where your business is located—the money-saving benefits of the SunSource Home Energy System are available to homeowners everywhere.

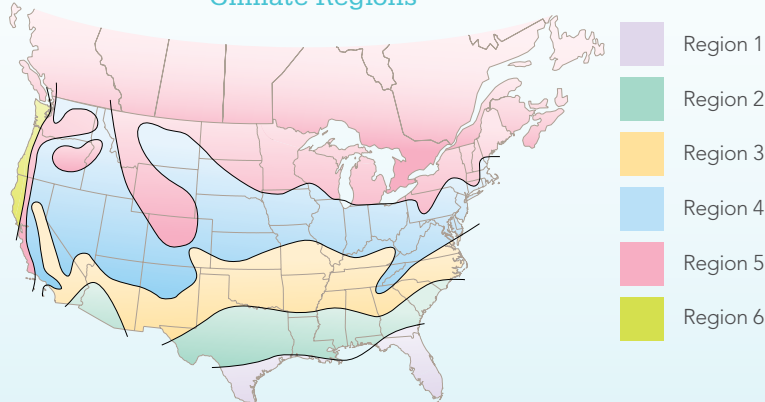
### Overall Impact of the SunSource Home Energy System on Heating and Cooling Costs

Estimated annual operating cost savings\* of a 3-ton XP21/XC21 heat pump (HP) and air conditioner (AC) with solar modules, compared to a 10 SEER AC or a 10 SEER/7.0 HSPF HP.

	with 2 Modules		with 6 Modules		with 15 Modules	
	HP	AC	HP	AC	HP	AC
Region 1	49%	59%	59%	73%	81%	104%
Region 2	47%	63%	59%	83%	85%	129%
Region 3	43%	67%	54%	96%	79%	163%
Region 4	36%	74%	45%	117%	66%	215%
Region 5 includes Canada**	25%	95%	34%	179%	53%	370%
Region 6	36%	120%	49%	254%	78%	556%

Air conditioners typically only run during the summer, so they have lower annual operating costs than heat pumps, which are used year-round for heating and cooling needs. Less annual energy consumption for ACs translates to greater savings percentages.

### Climate Regions



- Region 1
- Region 2
- Region 3
- Region 4
- Region 5
- Region 6

Whether homeowners decide to upgrade to solar immediately or at a later date, **SunSource® Solar-Ready air conditioners and heat pumps are a key differentiator at the kitchen table**, setting you apart from the competition and allowing you to create a new source of revenue. Helpful tools you can take to the kitchen table, and leave behind for your customers, are provided for you in a SunSource selling kit that includes:

- SunSource product brochure
- SunSource energy savings chart
- SunSource FAQs
- SunSource monitoring brochure

\*Equipment cost-savings estimates are based on the U.S. Department of Energy (DOE) annual performance factor (APF) method for heat pumps (10CFR part 430). Estimates of annual solar energy production are calculated for a centrally located city in each DOE heating region, using National Renewable Energy Laboratory's (NREL) PVWatts, Version 1.

\*\*Percent savings for Canada based on 2750 heating load hours (same as U.S. Region 5). Northern regions of Canada may have even higher heating load hours.

# The SunSource<sup>®</sup> Home Energy System is the simplest way to bring money-saving solar power into your customers' homes.



## Beyond Innovative<sup>™</sup>

- Harnesses clean, sustainable solar energy for residential use
- Lets homeowners upgrade to solar now or later, and expand the system by adding more modules
- Provides online monitoring of energy production and environmental benefits
- Qualifies for federal tax credits, which can offset the cost of the solar modules by 30%, including installation\*
- May also qualify for state and local tax credits, as well as rebates and other incentives from local utility companies

## Beyond Efficient<sup>™</sup>

- Significantly reduces residential energy consumption, which accounts for nearly 56%\*\* of home energy use
- Returns surplus power, when available, to the utility company for a possible credit to the homeowner
- High-SEER outdoor units provide outstanding efficiency, even without the solar upgrade

## Beyond Reliable<sup>™</sup>

- XC/XP21 and XC/XP17 outdoor units include a 10-year limited warranty on the compressor and covered components
- Solar modules and the Lennox<sup>®</sup> Solar Subpanel also include excellent warranty coverage. Ask your Territory Manager for details.
- Solar modules are weather- and impact-resistant



For a complete list of the registered and common law trademarks owned by Lennox Industries Inc., please visit [www.lennox.com](http://www.lennox.com).

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