

7 HVAC Systems for Zero Energy Green Homes – The heating, cooling and ventilation systems are large energy users, so achieving a zero energy home means learning how to select super high-efficiency equipment and ductwork. Learn the impact of correct sizing, duct layout and duct tightness. This course covers air circulation systems in conjunction with heat pumps, geothermal heat pumps, and gas furnaces. Radiant heating and evaporation cooling systems will also be discussed.

8 Selecting Appliances and Plug Loads for a Zero Energy Green Home – Learn how to reduce energy by selecting ENERGY STAR® appliances and electronics, efficient pumps (such as for pools and wells), ceiling fans, and minimizing lighting requirements. This course includes demonstrations on how to monitor the home for possible hidden plug-load problems.

9 Sizing and Selecting Solar Electric Systems for a Zero Energy Green Home – Learn how to size a solar photovoltaic system and why it is important to follow the efficiency steps provided in earlier webinars. Learn the pros and cons of selecting different system types such as efficiency, durability and price.

10 Using Your Home Solar Electric System for Emergency Power – This webinar will explore how you can install your grid-connected solar system within code regulations to supply emergency power when the grid is down. The course includes a video visit to a home with such an installation. Recommendations for managing and storing the power for the emergency system will also be provided.

11 Installation Considerations for Solar Electric Systems – This course will examine locations for the solar system based on shading considerations, roof mounting, electrical runs, inverters, meters and monitoring. Learn how to install a system right the first time!

12 Monitoring and Operating the Zero Energy Green Home – This course is designed as a guideline for an occupant in a zero energy green home. It will cover more than 30 considerations to maximize savings, comfort and occupant satisfaction.

For course schedule go to:
www.floridaenergycenter.org/go/zero



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Achieving Zero Energy Green Homes

12 Course Webinar Series

Learn the key strategies to design, build and operate
a zero energy home
– a home that produces as much energy as it uses.


SEEC
Southern Energy Efficiency Center
Building Energy Solutions for the South



Achieving Zero Energy Green Homes

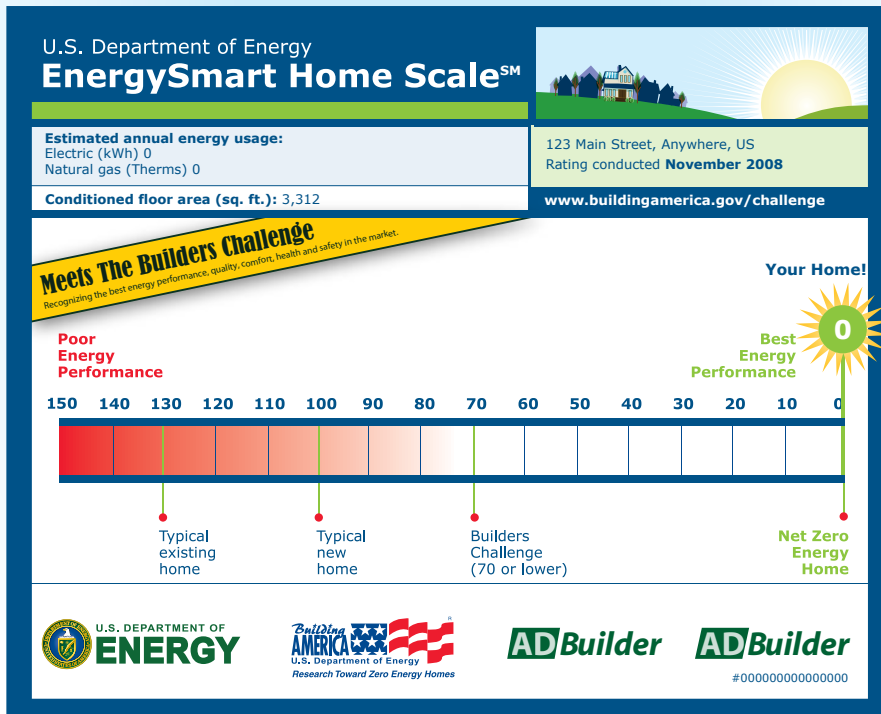
Practical Education from the Expert - Presentations are by the staff of the Florida Solar Energy Center who have been conducting research leading to zero energy homes for over thirty years.

Video Case Study - From design to occupancy, follow successful implementation of strategies to achieve zero energy use.

Earn our Certificate - Attend ten of our webinars and pass a brief quiz to receive our Certificate for Zero Energy Home Building.

Designed for You - This series is appropriate for builders, contractors, designers, educators, energy auditors, energy raters, engineers, perspective homebuyers and utility representatives.

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DOE's EnergySmart Home Scale will be used to measure the progress towards achieving a zero energy home.

Introducing the 12 Course Webinar Series

- 1 Defining a Zero Energy Green Home** – Why attempt a zero energy home? What are some of the costs and concerns? Review case studies of near-zero and zero energy homes and some of the key findings from each one. See how ENERGY STAR® Builders Challenge, and green home program energy performance compares with zero energy homes.
- 2 Designing a Zero Energy Green Home** – This course considers many design stage parameters, from solar orientation and shading to location of HVAC and renewable equipment, and material selection. Follow our case study through the design stage.
- 3 ENERGY STAR® Water Heating Choices** – Achieve great savings from solar water heating systems, electric dedicated heat pump water heating and gas tankless systems. Learn how each of these systems works, including savings potential of combining solar with a heat pump or gas tankless. Instructors will show how to rate different systems and describe any maintenance considerations.
- 4 Selecting Solar Water Heating for Zero Energy Green Homes** – Achieve renewable energy savings by providing solar water heating. Explore various types of solar water heating systems, typical savings and costs, and key features to specify based on climate and operation considerations.
- 5 Selecting Windows and Walls for a Zero Energy Green Home** – Learn what matters when selecting windows and walls for your climate and your application. Our experts will tell you the energy savings you may expect and the important characteristics to look for when choosing windows and walls.
- 6 Constructing Roofs and Attics for a Zero Energy Green Home** – Roof materials, attic insulation, duct location and radiant barrier systems are all covered in this webinar. Make the right roofing system choice to reduce energy use in your home.