



December 2, 2011

U.S. Environmental Protection Agency  
Attention: Abigail Daken  
1200 Pennsylvania Ave. NW  
Washington, DC 20460

**RE: Solar water heaters and the ENERGY STAR® label**

Dear Ms. Daken:

On behalf of our 1,100 members, the Solar Energy Industries Association (SEIA) would like to thank you for this opportunity to comment on the Draft 2 Version 2.0 Water Heater Specification posted on Nov. 8, 2011 on the ENERGY STAR® website. For the reasons enumerated below, we encourage you to maintain the ENERGY STAR® labeling program for solar water heating systems.

**I. Introduction**

Established in 1974, the Solar Energy Industries Association is the national trade association of the U.S. solar energy industry. Through advocacy and education, SEIA and its 1,100 member companies are building a strong solar industry to power America. As the voice of the industry, SEIA works to make solar a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy.

More than 100,000 Americans are employed by the solar industry at over 5,000 businesses (many of them small businesses) in all 50 states.<sup>1</sup> In fact, the solar industry is one of the fastest growing industries in the country.<sup>2</sup> Solar energy in the U.S. now exceeds 3,100 megawatts, enough to power more than 630,000 American homes.

---

<sup>1</sup> 2011 Jobs Census Topline at <http://www.thesolarfoundation.org/sites/thesolarfoundation.org/files/2011%20Jobs%20Census%20Topline%20Release%20FINAL.pdf>.

<sup>2</sup> U.S. Solar Market Insight Report: 2<sup>nd</sup> Quarter 2011, available at <http://www.seia.org/galleries/pdf/SMI-Q2-2011-ES.pdf>.

## II. Comments

SEIA feels very strongly that solar water heaters should continue to be eligible to receive the ENERGY STAR® label based on the ability of solar water heating products to meet the criteria of the ENERGY STAR® program and to achieve significant energy and financial savings for millions of consumers. Solar water heating systems are extremely efficient and have the lowest emissions of any class of water heating technology.

Installations of solar water heating systems are on the rise, and have been since 2009 when solar water heaters first became eligible for the ENERGY STAR® label. Solar water heating experienced a 16% compound annual growth rate from 2006-2010, and a growth rate of 5% from 2009 to 2010 alone, despite the U.S. still recovering from the recession.<sup>3</sup> SEIA expects to see continued growth in this sector for 2011 and going forward.

One of the most significant barriers to increased deployment of solar water heating systems, as identified by the solar heating and cooling industry, is consumer awareness. A recent poll by Gotham Research Group found that about half of the American population (47%) did not know enough about solar water heating systems to rate them one way or another, and that more consumer education is needed about the affordability and reliability of solar water heating systems.<sup>4</sup>

The ENERGY STAR® label helps to fill the gap in consumer awareness of solar water heaters. The ENERGY STAR® label is a widely recognized tool which allows consumers to make smart purchases. The label offers a reassurance to consumers that they are purchasing a reliable product that will achieve the desired energy and financial savings. As the premier mechanism for encouraging and promoting the use of highly energy efficient consumer products, ENERGY STAR® is the perfect (and least-cost) venue for expanding the solar water heating market. Furthermore, the ENERGY STAR® label also educates consumers on which products are the most valuable to the environment; omitting solar water heating systems would send the wrong signal to consumers about one of solar water heating's most important attributes.

About half of the respondents to the Gotham Research Group poll also identified the reliability and dependability of a solar water heating system as the most significant cause for hesitation to purchase a system.<sup>5</sup> The ENERGY STAR® label helps alleviate consumer concerns that solar water heating systems are unreliable, given the stringent product criteria a system must fulfill in order to receive the label. The

---

<sup>3</sup> U.S. Solar Market Insight Report, available at <http://www.seia.org/cs/research/SolarInsight>

<sup>4</sup> Gotham Research Group Poll on Public Perceptions of Solar Water Heating: [http://www.seia.org/galleries/pdf/2011\\_SHC\\_Survey\\_Results\\_10.17.11.pdf](http://www.seia.org/galleries/pdf/2011_SHC_Survey_Results_10.17.11.pdf)

<sup>5</sup> Gotham Research Group Poll on Public Perceptions of Solar Water Heating: [http://www.seia.org/galleries/pdf/2011\\_SHC\\_Survey\\_Results\\_10.17.11.pdf](http://www.seia.org/galleries/pdf/2011_SHC_Survey_Results_10.17.11.pdf)

ENERGY STAR® label offers the assurance that products have met certain quality criteria to help ensure that the desired energy and financial savings are achieved.

SEIA was instrumental in the proceedings leading up to the inclusion of solar water heating systems in the ENERGY STAR® labeling program in 2009, and worked with several Congressional champions to do so.<sup>6</sup> We find it alarming that the EPA would consider removing solar water heaters from the program after only three successful years as part of the program, while maintaining labeling for conventional fossil fuel and electric products.

### III. **Conclusion**

We commend the excellent work the EPA does implementing the ENERGY STAR® program and appreciate the credibility the label adds to consumer products. For the reasons outlined above, SEIA strongly urges the EPA to help increase the use of solar water heaters by preserving their hard-won place in the ENERGY STAR® labeling program.

Thank you for your consideration of these comments.

Respectfully submitted,



Katherine Gensler  
Director, Regulatory Affairs

Katherine Stainken  
Policy Specialist

Solar Energy Industries Association  
575 7<sup>th</sup> Street NW  
Suite 400  
Washington, DC 20004  
(202) 682-0556

---

<sup>6</sup> See attached letter.

**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515**

May 16, 2005

The Honorable Samuel Bodman  
US Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585

The Honorable Stephen L. Johnson  
Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

Dear Secretary Bodman and Administrator Johnson:

We are writing to ask you to make a simple and inexpensive administrative change that could save the nation millions of cubic feet of natural gas over the coming years: expand the Energy Star program to include solar water heaters.

In a January 6, 2004 notice, Mr. Richard Karney, DOE's Energy Star Program Manager, announced that DOE had elected not to establish Energy Star criteria for solar water heaters. We strongly feel that this decision should be reversed, based on the ability of solar water heating products to meet the criteria of the Energy Star program and to achieve significant energy and financial savings for millions of consumers.

According to DOE statistics, heating water today accounts for up to 14 percent of the average household's energy use. Residential solar water heating systems can reduce energy consumption by 50 to 80 percent or more when compared to conventional water heaters. This is among the highest differentiation of any Energy Star product, and one of the most significant energy-saving measures available to homeowners. If just 40,000 American households purchased solar water heating systems in the next five years, it would displace 5 million cubic feet of natural gas demand.

By providing reliable and significant energy savings, solar water heaters represent a compelling, cost-effective investment deserving of Energy Star designation. Beyond financial considerations, an underlying purpose of the Energy Star program is to help protect the environment by decreasing the need for harmful emissions from power plants. Depending on the type of conventional fuel used, replacing an electric water heater with a solar heater can offset the equivalent of 40% to 100% of the carbon dioxide emissions of a modern passenger car. Using solar energy in place of nonrenewable fuels also reduces nitrous oxides and sulfur dioxides, which are components of smog.

The Energy Star program was created to overcome many of the market barriers to adoption of cost-effective energy efficiency products, and to help unleash the attendant savings for consumers. Solar water heaters are energy-efficient products that achieve considerable economic savings and avoid the need for emissions-intensive power generation. By coupling the premier nationwide efficiency marketing mechanism with an industry capable of rapid growth, DOE and EPA could create significant near term energy savings at a minimum of expense. We strongly urge you to consider expanding the Energy Star designation to include solar water heaters.

Sincerely,

John Hagmann

Robert

Shelley Buckley

Danell

Ed Cox

Virgil Goode

Raul M. Grijalva

Lamin G. Jimenez

Tony Balderrama

J. Saxton

Ken Calvert

Marcy Kaptur

Ed Pastor

John T. Doolittle