



## Request for Information (RFI)

### Reaching \$2/Watt Installed Price for Residential Scale Solar

**Open Date:** March 14, 2012

**NEW Close Date:** 5PM ET, April 11, 2012

**Subject:** Request for Information on the actions required to drive down the installed price of solar energy to \$2 per watt (W) at the residential scale (<8 kilowatt systems), including the timeline and inducements that would facilitate reaching the goal.

**Description:** The U.S. Department of Energy's (DOE) SunShot Initiative seeks feedback from installers; utilities; manufacturers; state, municipal, and local governments; financial institutions; and other stakeholders to better understand the potential to dramatically drive down the price of residential solar energy systems. Answers to the following open-ended questions will provide DOE with sufficient background information to potentially design a funding opportunity, competition, challenge, or race to accelerate widespread solar deployment. The purpose of this RFI is solely to solicit input for SunShot's consideration to inform the possible future formulation of SunShot activities.

#### Questions

1. What cost structure would you estimate for a total installed price of \$2/W at the residential scale (<8kW) using the following cost categories? Please list the cost (in \$/W) associated with each – assuming *no* incentives such as tax credits or rebates

##### ***Hardware Costs***

- Module
- Inverter
- Installation Materials (includes racking, wiring, etc)

##### ***Non- Hardware Costs (Soft Balance of Systems)***

- Electrical labor
- Non-electrical labor
- Permitting, Inspection, Interconnection Labor (excluding fees)
- Permitting and Interconnection Fees
- Financing Costs
- Customer Acquisition (includes marketing/advertising, system design, and other costs)
- Operations & Maintenance
- Supply Chain Costs (inventory, contingency, etc.)
- Profit

2. How much variability ( $\pm$ \$/W) would you expect to exist between different installation sites in the location your institution services if the average price was \$2/W? Please explain the anticipated causes of this variation.
3. If you were to include incentives to reach a \$2/W installed price at the residential level, what would you estimate the following incentives to provide (measured in \$/W)?
  - Federal Investment Tax Credit
  - Modified Accelerated Cost Recovery System (i.e. accelerated depreciation)
  - State and Local Incentives (quantify and name)
  - Other (quantify and name)
4. Given a business as usual context (assuming all current incentives), when do you think \$2/W total installed price at the residential scale will be achieved?
5. What steps need to happen to reach the price structure you described in your answer to Question 1? What are the business models you would explore to realize the price structure discussed in Question 1? Please list in bullet points.
6. What key players would be needed to form a team to achieve \$2/W? i.e. What types of organizations would need to collaborate to ensure the target is reached?
7. What incentives – that are not tax credits, rebates, or other financial incentives – could motivate solar installers, municipalities, and utilities to drive down costs further? e.g. Would highly publicized, national recognition as America's top solar installer or most solar friendly community be a strong motivator to accelerate price reductions? Why or why not?
8. If you are an installer, approximately how long would it take to install 1,000 solar energy systems (5 megawatts cumulative) on residential rooftops if the price of solar were \$2/W (include time to acquire customers, makes sales, etc)? What business or policy changes could accelerate that timeline? How long would it take to install the next 1,000 systems at that same price point?
9. Given today's price structures, approximately how long does it take to install 1,000 residential solar energy systems (include time to acquire customers, makes sales, etc)? In bullet points, please include time to acquire customers, permit, inspect, interconnect the system, etc
10. If you are a municipality or local government, approximately how long would it take to inspect and permit 1,000 solar energy systems (5 megawatts) on residential rooftops? What steps could you take to hasten this process? What steps could DOE take to hasten this process?
11. If you are a utility, approximately how long would it take to inspect and interconnect 1,000 solar energy systems (5 megawatts) on residential rooftops? What steps could you take to hasten this process? What steps could DOE take to hasten this process?
12. Please include any additional comments you may have on what is needed to reach our goal and how to get there faster.

### **RFI Guidelines**

THIS IS A REQUEST FOR INFORMATION ONLY. THIS NOTICE DOES NOT CONSTITUTE A FUNDING OPPORTUNITY ANNOUNCEMENT (FOA). NO APPLICATIONS OR PROPOSALS ARE CURRENTLY BEING SOUGHT OR CONSIDERED FOR THIS ACTIVITY.

Parties interested in submitting a response to this RFI should review the RFI Guidelines in their entirety before developing and submitting a response. DOE will review and consider all responses in its formulation of program strategies or in potential FOAs. DOE will not reimburse costs associated with preparing any documents for this RFI. Information submitted may be used by SunShot on a non-attribution basis. No material submitted for review will be returned and there will be no formal or informal debriefing concerning the review of the material submitted. All feedback will be considered but SunShot will not respond to individual submissions or publish a compendium of responses. There is no guarantee that a project will be supported as a result of this RFI.

All responses to this RFI must be provided as an attachment (in Microsoft Word format, .doc or .docx) to an e-mail to [TwoDollarsPerWatt@ee.doe.gov](mailto:TwoDollarsPerWatt@ee.doe.gov).

Respondents should not include any information in the response that might be considered proprietary or confidential but should you choose to do so all responses containing confidential, proprietary, or privileged information must be marked as described below and will not be released publicly. Responses to the RFI must be marked as follows and identify the specific pages containing confidential, proprietary, or privileged information:

Notice of Restriction on Disclosure and Use of Data: Pages [ ] of this document may contain confidential, proprietary, or privileged information that is exempt from public disclosure. Such information shall be used or disclosed only for evaluation purposes or in accordance with a financial assistance or loan agreement between the submitter and the Government. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

The header and footer of every page that contains confidential, proprietary, or privileged information must be marked as follows: "Contains Confidential, Proprietary, or Privileged Information Exempt from Public Disclosure." In addition, every line and paragraph containing proprietary, privileged, or trade secret information must be clearly marked, for example with highlighting.

Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act or otherwise. The U.S. Government is not liable for the disclosure or use of unmarked information, and may use or disclose such information for any purpose.

Questions may be sent to [TwoDollarsPerWatt@ee.doe.gov](mailto:TwoDollarsPerWatt@ee.doe.gov) with the subject line "Question" before 5PM ET, March 28, 2012

**Respondents should provide the following information in their response to this RFI:**

- Company/Institutional Name
- Company/Institutional Contact
- Address, phone number, and e-mail address
- Brief description of the operations and mission of business or institution (a few bullet points will suffice).

**Responses should be limited to five (5) pages. Please connect your answers to the specific corresponding question.** Any additional comments that are not responsive to a particular question should be set out separately at the end of your response to this RFI as “Additional Comments.”

SunShot thanks you for your assistance and comments in helping build the solar energy industry in the United States.