

## ATTACHMENT "1"



### Funding Opportunity Announcement

# ROOFTOP SOLAR CHALLENGE II

Funding Opportunity Announcement Number: DE-FOA-0000788

Announcement Type: **Amendment Number 002**

CDFA 81.117

Key Dates and Deadlines	
December 20, 2012	Funding Opportunity Announcement (FOA) Issued
January 11, 2013	Deadline for Letter of Intent (LOI) to Apply Deadline for Questions Related to Concept Paper
January 15, 2013 @ 1:00 P.M. EST	Webinar on Concept Papers and Question & Answer (Q&A) Session
January 25, 2013	Deadline for Concept Paper Submission
March 5, 2013	Webinar on Full Application and Q&A Session
March 8, 2013	Deadline for Full Application Questions
March 22, 2013	Deadline for Full Application Submission
April 18, 2013	Reviewer Comments Released (Tentative)
April 23, 2013	Deadline for Reply to Reviewer Comments (Tentative)
May 2013	Pre-Selection Presentations and Conference Calls (Tentative)
May 2013	Selection Notifications (Tentative)

All deadlines occur at 5:00PM Eastern Time on the date indicated

## What is this document?

This Funding Opportunity Announcement (FOA) is an instructional document that provides potential Applicants with all of the information needed to construct a compliant, and potentially successful, application to the Rooftop Solar Challenge II ("RSC II") program. It is organized by first describing the SunShot Initiative and the RSC II; it then explains the application process. Finally, it provides potential Applicants with various DOE policies and legal details. Each step has a description to help potential Applicants understand the purpose and goal of the step. It is recommended that a potential Applicant begin by reading the Executive Summary of this document to determine if the potential Applicant is eligible and interested in applying. Although the U.S. Department of Energy (DOE) cannot guarantee the success for a particular Applicant, past experience has demonstrated that those Applicants who carefully read this entire document are more likely to create a successful application. This document tells potential Applicants exactly what DOE is looking for and how to construct the application. Deviating from these instructions will likely result in an unfavorable review, and unfavorable reviews typically do not lead to awards. In addition, reading the document in full should answer most of the questions potential Applicants have.

Note that all section references in this document are active links; hold down "Ctrl" and click on a reference ("See...", "on page...") and the document will move to the relevant section. Pressing "Alt" and then the "Left Arrow" buttons at the same time will return the document to the previous section (similar to the "Back" button on a web browser).



**U.S. Department of Energy**  
Golden Field Office  
1617 Cole Boulevard  
Golden, Colorado 80401-3393

DE-FOA-0000788  
Amendment No. 002

DATE: February 21, 2013  
FROM: Diana Bobo, Contracting Officer  
TO: All Prospective Respondents

SUBJECT: Amendment No. 002 to Funding Opportunity Announcement DE-FOA-0000788,  
“Rooftop Solar Challenge II”.

I. The purposes of this Amendment are to:

- a. Change the date for the Webinar on Full Applications and Q&A Session to March 5, 2013;
- b. Extend the Deadline for Full Application Questions to March 8, 2013;
- c. Extend the Deadline for Full Application Submission to March 22, 2013;
- d. Under Section IV – Application and Submission Information, delete the requirement to submit “14. Other Sources of Funding Disclosure;” and
- e. Update the requirements for “7. Resume File”, under Section IV – Application and Submission Information.

II. The areas which have changed are highlighted in yellow within the FOA.

III. All other parts of the FOA remain unchanged.

*Please see below for scheduling and registration information for the Rooftop Solar Challenge II Funding Opportunity Announcement (FOA) Concept Paper and Full Application webinars:*

#### **ROOFTOP SOLAR CHALLENGE II FOA: CONCEPT PAPER WEBINAR**

**Date:** Tuesday, January 15, 2013

**Time:** 1:00 PM - 2:00 PM EST

This webinar will focus on the Concept Paper stage of the Rooftop Solar Challenge II FOA application process. Applicants will be able to submit questions on any topic related to the Concept Paper up to three (3) business days prior to the webinar. Relevant questions submitted prior to the deadline will be answered during the webinar and in writing, and will be posted to the Exchange website. Questions may be submitted to [RooftopChallenge@go.doe.gov](mailto:RooftopChallenge@go.doe.gov) with the subject line "Concept Paper Webinar Question."

If you wish to attend, you must register for the webinar at:  
<https://www1.gotomeeting.com/register/894277008>

After registering you will receive a confirmation email containing information about joining the Webinar.

System Requirements

PC-based attendees

Required: Windows® 7, Vista, XP or 2003 Server

Mac®-based attendees

Required: Mac OS® X 10.5 or newer

Mobile attendees

Required: iPhone®, iPad®, Android™ phone or Android tablet

#### **ROOFTOP SOLAR CHALLENGE II FOA: FULL APPLICATION WEBINAR**

**Date:** Tuesday, March 5, 2013

**Time:** 3:00 PM - 4:00 PM EST

This webinar will focus on the Full Application stage of the Rooftop Solar Challenge II FOA application process. Applicants will be able to submit questions on any topic related to the FOA up to three (3) business days prior to the webinar. Relevant questions submitted prior to the deadline will be answered during the webinar and in writing, and will be posted to the Exchange website. Questions may be submitted to [RooftopChallenge@go.doe.gov](mailto:RooftopChallenge@go.doe.gov) with the subject line "Full Application Webinar Question."

If you wish to attend, you must register for the webinar at:  
<https://www1.gotomeeting.com/register/880300145>

After registering you will receive a confirmation email containing information about joining the Webinar.

System Requirements

PC-based attendees

Required: Windows® 7, Vista, XP or 2003 Server

Mac®-based attendees

Required: Mac OS® X 10.5 or newer

Mobile attendees: Required: iPhone®, iPad®, Android™ phone or Android tablet

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## Required Documents Checklist

Use this checklist to ensure that your application meets the mandatory compliance requirements. Submitted applications that have not addressed all items on the checklist may be deemed non-compliant and may not be reviewed. See the relevant FOA sections for further details and Compliant Criteria on page 24.

All deadlines occur at 5:00PM Eastern Time on the date indicated.

Submission	Components	Optional/ Mandatory	FOA Section	Deadline
Letter of Intent to Apply	<ul style="list-style-type: none"> <li>Brief email expressing intent to apply. Email should include Applicant name, project focus, and brief description of the approach.</li> </ul>	Optional	IV.1	January 11, 2013
Concept Paper	<ul style="list-style-type: none"> <li>Single document in PDF consisting of: <ul style="list-style-type: none"> <li>Abstract (1 page maximum)</li> <li>Project Description (3 pages maximum)</li> <li>Summary of Qualifications and Resources (1 page maximum) <ul style="list-style-type: none"> <li>Appendix of resumes for each team member (1 page maximum per resume)</li> <li>Appendix of any letters of support from external entities (1 page maximum per letter)</li> </ul> </li> </ul> </li> <li>Summary Slide (1 page, Microsoft PowerPoint format)</li> </ul>	Mandatory	IV.2	January 25, 2013
Full Application	<ul style="list-style-type: none"> <li>Project narrative (16 pages maximum in PDF format), consisting of: <ul style="list-style-type: none"> <li>Title Page (1 page maximum)</li> <li>Project Summary (1 page maximum)</li> <li>Project Overview (10 pages maximum)</li> <li>Project Timetable and Milestones (2 pages maximum)</li> <li>Qualifications and Resources (2 pages maximum)</li> <li>Letters of Support and Commitment (1 page maximum per letter, must be attached as appendix to Project Narrative, no limit to number of letters)</li> </ul> </li> <li>Statement of Project Objectives (Work Plan) (6 pages maximum)</li> <li>Resume File (1-page resumes for each key person, compiled into one PDF document, no page limit)</li> <li>Summary Slide (1 page, Microsoft PowerPoint format)</li> <li>SF-424 (no page limit, PDF format) <ul style="list-style-type: none"> <li>SF-LLL, if applicable</li> </ul> </li> <li>SF-424a (no page limit, Microsoft</li> </ul>	Mandatory	IV.3	March 22, 2013

	<p>Excel format)</p> <ul style="list-style-type: none"> <li>• Budget Justification PMC 123.1 (no page limit, Microsoft Excel format)</li> <li>• Sub-Recipient Budget Justification, if applicable</li> <li>• Environmental Impacts Questionnaire (no page limit, PDF format)</li> <li>• Ineligibility Disclosure (2 pages maximum, PDF format)</li> <li>• Solar Market Maturity Indicators (submitted via Solar Metrics online portal)</li> </ul>			
Reply to Reviewer Comments	<ul style="list-style-type: none"> <li>• Single document in PDF consisting of: <ul style="list-style-type: none"> <li>○ Up to 2 pages of text</li> <li>○ Up to 1 page of images</li> </ul> </li> </ul>	Optional	IV.14	April 23, 2013

## Executive Summary

### 1. AWARD SUMMARY

The Rooftop Solar Challenge II (“RSC II”) is a program intended to deploy – at regional and national scales – innovative, local-government-level solutions for eliminating market barriers and lowering the non-hardware balance of system costs (“soft costs”) of grid-tied photovoltaics (PV). Applicants are expected to have already demonstrated exceptional progress towards achieving soft cost reductions in specific geographic areas, and must present a credible plan to build on these successes by rapidly deploying techniques and tools to achieve larger-scale impact on PV markets. In addition to receiving a rigorous qualitative evaluation, Applicants will be quantitatively assessed and scored before, during, and at the end of the project period according to the DOE Solar Market Maturity Model (SM<sup>3</sup>). Applicants are expected to propose a means for achieving the widespread process standardization that is critical to achieving rapid scale-up of PV markets.

Approximately \$12 million of Federal funding is anticipated to be available for new awards under this FOA, subject to the availability of annual appropriations. DOE may issue one, multiple, or no awards under this FOA. The expected period of performance is two and a half years, with a go/no-go decision point after the initial 18 months.

The cost share must be at least 20% of the total allowable costs (i.e., the sum of the Government share, including Federally Funded Research and Development Center [FFRDC] contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 CFR Part 600 for the applicable cost sharing requirements.)

Applicants may apply for one of two Topic Areas of awards:

1. Topic Area A – Wide-Impact Awards: These awards are intended to fund unique and innovative approaches to local solar market transformation, with particular focus on approaches with wide geographic and large population impacts.
2. Topic Area B – State and Regional-Impact Awards: These awards are intended to fund efforts to streamline and standardize processes for solar market transformation at the state or regional level.

### 2. ELIGIBILITY

In accordance with 10 CFR 600.6(b), eligibility for award is restricted to Applicants:

- Located in the United States; and
- State or territorial governments; or
- Local governments; or
- Consortia, made up of regional or statewide teams of local, governments, large single jurisdictions, or Tribal governments; or
- Non-profit or for-profit entities authorized to act on behalf of a consortia of state and/or local governments, and
- The total population represented or impacted by an Applicant for this FOA must be 1,000,000 or greater as defined by the 2010 report of the U.S. Census Bureau.

Additional eligibility requirements are provided in “Section III – Eligibility Information”.

### 3. HOW TO APPLY

To apply to this FOA, please complete the following steps:

- Register for an account at <https://eere-exchange.energy.gov/Registration.aspx>. This account will then allow the user to register for any open EERE FOAs that are currently in the Office of Energy Efficiency and Renewable Energy's (EERE) online application portal, EERE eXCHANGE. It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the contact point for each submission.
- Log in and review the EERE eXCHANGE Applicant User Guide which is available at <https://eere-exchange.energy.gov/Manuals.aspx> (Recommended)
- Use required forms for Full Application that are available at EERE eXCHANGE <https://eere-exchange.energy.gov>
- Upon login to EERE eXCHANGE (<https://eere-exchange.energy.gov/login.aspx>), the Applicant may access its submissions to EERE FOAs by clicking the "My Submissions" link on the left side of the page. Every application that it has submitted to EERE and the corresponding control number is displayed on this page. Applicants are not able to submit more than one application to this FOA.
- Submit all required material through EERE eXCHANGE prior to the submission deadline. Submissions received through other means, including email, will not be considered for an award. Solar Market Maturity Indicators must be submitted to the Solar Metrics portal prior to the application deadline as well.
- Complete submission online at least 24 hours and preferably 48 hours in advance of each submission deadline. (Highly Recommended)
- All potential Applicants (Prime Recipients and Subrecipients) lacking a DUNS number, or have not yet registered with the System for Award Management or FedConnect should complete those registrations as soon as possible (see "Registration Process Requirements" for details).

### 4. CONTACTING DOE

To contact DOE regarding this FOA, please observe the following guidelines:

- Please read this document in full prior to contacting DOE.
- For questions regarding this FOA, Applicants may contact DOE by sending an email to [RooftopChallenge@go.doe.gov](mailto:RooftopChallenge@go.doe.gov) with the FOA name in the subject line of the email.
- Questions regarding an Applicant's specific situation or project will not receive responses. Broadly-relevant questions and responses will be posted on the FOA Q&A page on the EERE eXCHANGE website. DOE reserves the right to choose which questions to answer and which are broadly relevant. DOE will attempt to answer relevant questions within three (3) business days.
- DOE will not accept or respond to communications received by any other means including telephone calls, faxes, etc. Emails sent to addresses other than [RooftopChallenge@go.doe.gov](mailto:RooftopChallenge@go.doe.gov) will be disregarded.
- For questions or technical issues with EERE eXCHANGE, email [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov). Responses will be directly sent to Applicants.
- **Do not contact DOE employees directly.** Questions asked via this route will be disregarded.



## 5. REQUIRED DOCUMENTS SUBMISSION CHECKLIST

	Deadline	Submission	Optional/ Required	FOA Page #
<input type="checkbox"/>	January 11, 2013	Letter of Intent to Apply	Optional	26
<input type="checkbox"/>	January 25, 2013	Concept Paper	Mandatory	26
<input type="checkbox"/>	March 22, 2013	Full Application	Mandatory	28
<input type="checkbox"/>	April 23, 2013	Reply to Reviewer Comments	Optional	37

All documents submitted must adhere to the guidelines prescribed in the FOA. Documents that do not meet content and form requirements may be deemed non-responsive or non-compliant at the discretion of DOE.

## Section I – Funding Opportunity Description

### A. Background – SunShot and Soft Costs

The U.S. Department of Energy (DOE) SunShot Initiative<sup>1</sup> aims to make subsidy-free solar energy cost-competitive with conventional forms of energy by the end of the decade. SunShot drives American innovation in manufacturing, engineering, business, and local governance through a series of programs designed to spark and promote market solutions to solar energy development and clean energy growth.

Over the past four years, the decline in installed system prices (from over \$8 per watt in 2008 to about \$6 per watt in 2011) is largely attributed to falling photovoltaic module prices, which fell by \$2 per watt from 2008 through 2011.<sup>2</sup> Residential and small-commercial scale solar energy systems still require substantial price reductions to meet the SunShot goals of \$1.50 per watt and \$1.25 per watt, respectively. Designing and implementing practices that enable dramatic reductions in the associated non-hardware costs — deemed the "soft costs" — of solar is now the greatest challenge to achieving national targets for attaining cost-competitive solar by 2020.

Soft costs associated with processes such as customer acquisition, permitting, inspection, installation, and interconnection currently make up approximately 30-40% of the total installed cost of a rooftop PV system. In addition, specific market barriers such as restrictive interconnection standards, statewide caps on net metered capacity, regulatory uncertainty regarding third party ownership, and local land use policies that restrict PV siting for aesthetic reasons limit PV market potential even in the face of significantly reduced hardware costs. While not a sufficient condition for reducing soft costs, the elimination of local level process fragmentation, through widely adopted standards, is a necessary requirement. The central thesis of the Rooftop Solar Challenge II program is that execution of ambitious strategies to increase market maturity causes dramatic reductions in solar soft costs. Meeting the SunShot 2020 goal for residential non-hardware costs necessitates an enduring focus on spreading the best local-government approaches to lowering soft costs. Figure 1 depicts the conceptual relationship between solar market maturity as measured by DOE's Solar Market Maturity Model (SM<sup>3</sup>) and soft costs.

Addressing these soft costs and market barriers requires careful coordination with many parties, in particular, state and local governments. Since these process costs are influenced by a large and diverse set of stakeholders— over 18,000 "authorities-having jurisdiction" (AHJs), over 5,000 utilities, and thousands of solar sales and installation companies — bringing down costs is challenging.



**Figure 1 - Meeting the SunShot Cost Targets**

The Rooftop Solar Challenge II is a program intended to nationally deploy innovative, state and local government-level solutions to reduce market barriers and lower the soft costs of solar. Applicants to this

<sup>1</sup> For more information on the SunShot Initiative, see [www.energy.gov/sunshot](http://www.energy.gov/sunshot) and the [SunShot Vision Study](#).

<sup>2</sup> G. Barbose, N. Darghouth, and R. Wiser. 2012. *Tracking the Sun V: An Historical Summary of the Installed Price of Photovoltaics in the United States from 1998 to 2011*. Berkeley, CA: Lawrence Berkeley National Laboratory.

FOA will be expected to have *already demonstrated* exceptional progress and success towards achieving soft cost reductions in a specific geographic area, and must present a credible plan to expand these successes by rapidly deploying techniques and tools to achieve a larger-scale impact. Teams will be quantitatively assessed and scored before, during, and at the end of the project period according to Solar Market Maturity Model (SM<sup>3</sup>) Indicators (see Table 2).

## B. Scope of Award and Program Objectives

DOE has made substantial investments in programs to reduce market barriers and lower soft costs, including the SunShot Incubator<sup>3</sup> Rounds 6 and 7, the SunShot Prize<sup>4</sup>, and the Rooftop Solar Challenge<sup>5</sup>. The RSC II seeks to build on the success of DOE's past and ongoing efforts.

The RSC II has three goals, which are:

1. To build strong regional solar markets by rapidly deploying innovative, transformative, locally-generated solutions on a broad scale;
2. To enable solar companies to more efficiently manage their labor, material and cash flows, and customer interactions by introducing process predictability and standardization at the local government level; and
3. To increase affordability of residential and small-scale solar PV.

The RSC II will empower successful Applicants that have already pioneered reducing market barriers and reducing soft costs at the local government level. RSC II participants will streamline and standardize permitting and interconnection processes across wide geographic areas (i.e., statewide, regionally, nationally), as well as introduce financing opportunities and zoning and planning practices that enable solar market development.

Priority will be given to projects with both transformative methods and widespread process standardization, as this is critical to achieving rapid scale-up of the grid-connected rooftop PV markets at the residential and small commercial scales. In order to enable the lowest PV system prices possible, solar installers and consumers must face a predictable, transparent, and mature national solar marketplace. A mature national marketplace is characterized by two parameters: 1) a large portion of highly mature local markets and 2) a narrow distribution of these maturity levels. A narrow distribution signifies uniformity in processes, and a wide distribution signifies market fragmentation. A “business as usual” approach, where each local solar market matures on its own terms, leads to a stratified national marketplace. The Rooftop Solar Challenge II spurs communities to rapidly scale practices and policies, such as streamlined permitting and interconnection processes, in order to eliminate stratification and to bring about solar market growth and cost reduction. Figure 2 conceptually compares national solar marketplace trajectories in a “business as usual” versus a SunShot-inspired approach.

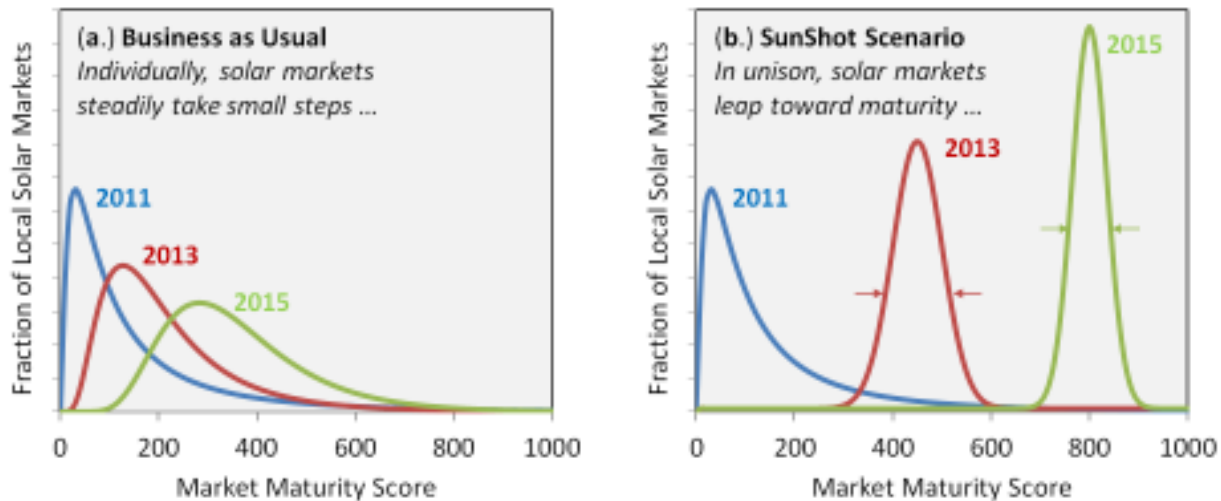
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<sup>3</sup> See <http://www1.eere.energy.gov/solar/sunshot/incubator.html> for more info.

<sup>4</sup> See <http://www1.eere.energy.gov/solar/sunshot/prize.html> for more info.

<sup>5</sup> See <http://www.eere.energy.gov/solarchallenge/> for more info.

## Solar's Local Market Trajectories



**Figure 2 – National distribution of U.S. local solar market conditions**

In order to achieve these goals, DOE seeks Applicants that represent non-profit, for-profit, regional or statewide groups of local or Tribal governments, and large single jurisdictions, impacting a total population of at least 1,000,000 people. Applicants must provide a Letter of Commitment from the chief elected official of each participating jurisdiction that confirms that the jurisdiction will contribute cost-share to the project in the form of staff time or other resources, and will make personnel in relevant city departments available as needed to support the objectives proposed.

Applicants may also wish to provide a letter of support from the respective State Energy Office(s) or equivalent, and from the primary load-serving electric utility for each participating jurisdiction. The letters of support should indicate that the entity is supportive of the applicant's proposal and will engage in activities as appropriate to help the Applicant achieve the proposed objectives.

Applicants should **propose compelling and innovative means** of achieving improvements and standardization in the following action areas:

**Table 1 – RSC II Action Areas**

<b>PERMITTING AND INTERCONNECTION PROCESSES:</b>  Develop and implement a transparent, consistent, and expedient permitting and interconnection process for residential (less than approximately 10 kW) and small commercial (less than approximately 300 kW) rooftop PV systems, throughout all participating jurisdictions.	<b>FINANCING OPTIONS:</b>  Increase distributed PV market activity in models other than self-financed ownership by enabling direct financing options, community solar programs, and/or utility-owned distributed generation and resolving legal issues around third party ownership models.
<b>PLANNING AND ZONING RULES:</b>  Address state and local PV siting restrictions, homeowner associations that restrict PV, and land use policies in every participating jurisdiction to maximize PV siting options.	<b>NET METERING AND INTERCONNECTION STANDARDS:</b>  Improve interconnection and net metering standards, as evaluated in the Freeing the Grid <sup>6</sup> grading scheme, for the primary load-serving utility in each participating jurisdiction.

These action areas were designed so that awardees that succeed in all action areas will have the necessary policy and process framework in place to support a robust solar market in their region. While success in one action area would represent important progress, it is only with results in all four action areas that awardees will truly reap the economic and environmental benefits associated with a healthy solar energy market. Applicants will need to engage the necessary stakeholders so that all four action areas can be addressed.

## **1. THE SOLAR MARKET MATURITY MODEL**

DOE has developed a Solar Market Maturity Model (SM<sup>3</sup>) organized around the four Action Areas described above in Table 1 – RSC II Action Areas. In order to provide a uniform assessment and to enhance tracking of progress and cost reductions, Applicants will be required to input past, current, and anticipated market SM<sup>3</sup> indicators into DOE’s Solar Metrics online portal as part of the application process following the Concept Paper stage (see “Solar Market Maturity Indicators” for additional details). Past and current indicators must be accurate and certain indicators must be independently verified prior to submission (see “Independent Verification” for more details). Table 2 lists the categories of indicators that are tracked by SM<sup>3</sup>. For each category, applicants will be required to answer a series of questions in the Solar Metrics online portal that will be scored by the model as indicated in Table 2 below. Table 2 represents the maximum points achievable for each action area and sub-category.

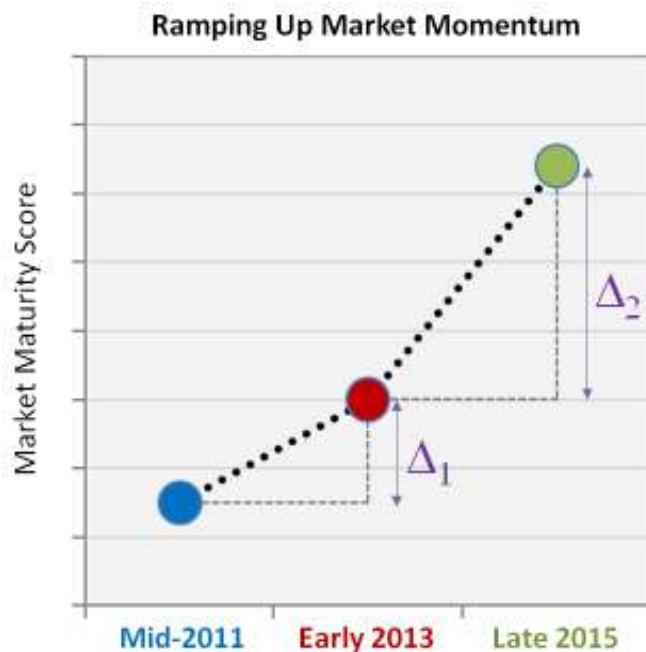
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<sup>6</sup> See <http://freeingthegrid.org/> for more info.

**Table 2 – SM<sup>3</sup> Indicators**

ACTION AREA	POINTS	ACTION AREA	POINTS
<b>Permitting Process</b>	<b>460</b>	<b>Financing Options</b>	<b>150</b>
Application	110	Third Party Ownership (or equivalent)	90
Information Access	60	Direct Finance Options	25
Process Time	110	Community Solar	15
Fee	30	Other	20
Model Process	30		
Inspection	80	<b>Planning and Zoning</b>	<b>80</b>
Communication w/ Utility	40	Solar Rights and Access	54
<b>Interconnection Process</b>	<b>110</b>	Zoning	20
Application	40	New Construction	6
Information Access	20		
Process Time	20	<b>Interconnection Standard</b>	<b>100</b>
Inspection	30	<b>Net Metering Standard</b>	<b>100</b>
<b>TOTAL POSSIBLE POINTS: 1000</b>			

These indicators will be used to create Market Snapshot Scores for each of the time periods and to calculate Impact Scores to aid reviewers in assessing Applicants' track records and vision (see Figure 3 below). While all indicators above are important to robust local solar markets, please note that the point allocation outlined in Table 2 does not imply that DOE considers those action areas weighted highest to be most important to solar market development overall. The point allocation is based on the action areas DOE sees as most appropriate for action by the entities engaged in the RSC II. DOE may adjust the point scoring approach and SM<sup>3</sup> parameters as appropriate at any time.



**Figure 3 – Market Snapshot & Impact Scores**

The Rooftop Solar Challenge supports the development of a market escalator: a series of individual steps that local communities can take to enhance market maturity. In addition to reviewing Market Snapshot Scores that represent local solar markets at various states of evolution, the evaluation of Applicants takes into account two Impact Scores: the Track Record Score ( $\Delta_1$  at left) is a recent maturity score growth that is indicative of a success in promoting solar markets, and the Vision Score ( $\Delta_2$  at left) is a projection of how proposed activities will affect the marketplace.

Note that while it may seem that Applicants have little influence regarding statewide Net Metering and Interconnection standards, DOE believes that Applicants indeed have a role to play in maintaining or improving these standards. However, Applicants should note that the use of federal funds for purpose of lobbying is expressly prohibited (see “Lobbying” on page 42).

## 2. INDEPENDENT VERIFICATION

For certain indicators, Applicants must submit verification from solar companies that the permitting and interconnection process information provided is in line with industry experience. The indicators that require validations will be clearly marked. The independent industry verification should be in the form of a letter signed by Authorized Representatives from at least two companies in the residential PV business and at least two companies in the commercial PV business representing a significant portion of PV sales in the participating jurisdictions (see “Appendix II – Suggested Letter Format for the Independent Industry”).

In addition to this industry verification, DOE may independently verify any results reported by the Applicant. DOE will work with Applicants to address any questions that arise regarding the accuracy of the information reported. All data is subject to a thorough audit by DOE or its affiliates prior to award determination, during the award period, and after.

## C. Demonstrating Progress and Establishing Targets

DOE intends to make awards to Applicants who have demonstrated the capability to make measurable improvements in local solar markets and who present a feasible and impactful vision for future improvements. Applicants will be required to provide both qualitative and quantitative assessments of progress to date in increasing solar market maturity, as well as their vision and proposed plan for maturing local solar markets. The following information details DOE’s expectations for demonstration of Applicants’ Track Records and Visions.

### **1. Track Record – Demonstrating Measurable Progress (see: Merit Review Criterion 1)**

**Purpose:** DOE will assess the Applicant’s experience and capability to meet RSC II objectives by reviewing the Applicant’s Track Record at improving local solar markets. The assessment will be based on both qualitative and quantitative factors:

- **Qualitative:** Applicants will be required to provide a detailed narrative of activities that have led to concrete reforms in local solar markets during the period from approximately July 2011 (“past”) to February 2013 (“present”) (~20 months). This may include, but is not limited to, major initiatives and reforms that demonstrate a simplified or streamlined process for installing solar; reductions in market barriers as experienced by local installers; and increases in the growth rate of installed PV capacity. Descriptions of reforms recently put into motion with forthcoming results, including a timeline of expected impacts, will also be considered.
- **Quantitative:** Applicants will input: 1) a verifiable assessment of solar market conditions from 20 months prior (i.e., approximately July 2011) and 2) current solar market indicators (approximately December 2012) into the SM<sup>3</sup> online portal. This will allow DOE to calculate past and present Market Snapshot Scores to provide a standard measure for assessing market maturity, as well as a Track Record Score for internal review purposes (see Figure 3 above).

### **2. Vision (see: Merit Review Criterion 2)**

**Purpose:** DOE will use the Vision Score to assess the Applicant’s potential and future impact in implementing RSC II Action Areas. The assessment will be based on qualitative and quantitative factors:

- **Qualitative:** Applicants must provide a narrative of their vision for the impact they expect their project to make, including credible and specific targets. This narrative must be reinforced by letters of commitment and support from project partners.
- **Quantitative:** Applicants will use an online interface to summarize the projected market maturity at the end of the project period. The difference between the current and future states will be used to calculate a Vision Score. The future Market Snapshot Score will reflect the qualitative descriptions of project goals, and should be aggressive, yet credible. Reviewers will assess credibility by examining targets in light of the qualitative description of plans and market potential (see Figure 3 above), as well as by examining letters of support and commitment.

## **D. Special Post-Award Requirements**

DOE may conduct independent verification of performance and key deliverables, as well as a mid-project Solar Market Maturity survey, at the end of each budget period of all projects funded under this FOA.

This independent verification will be used to support a go/no-go decision at the end of each budget period. Successful Applicants will include a description of key deliverables that will be provided at the end of each budget period and the specific performance elements for those deliverables (see “Period of Performance” on Page 23).

Proposed deliverables and targets should serve as appropriate measures for demonstrating that the project is on track for achieving its overall objectives and the objectives of the SunShot Initiative.



## Section II – Award Information

### A. Award Overview

Approximately \$12 million of Federal funding is anticipated to be available for new awards under this FOA, subject to the availability of annual appropriated funds. DOE anticipates making 3-9 awards under this FOA. DOE may issue one, multiple, or no awards under this announcement.

The cost share must be at least 20% of the total allowable costs (i.e., the sum of the Government share, including FFRDC contractor costs if applicable, and the recipient share of allowable costs equals the total allowable cost of the project) and must come from non-Federal sources unless otherwise allowed by law. (See 10 CFR Part 600 for the applicable cost sharing requirements.)

Applicants may choose one of two Topic Areas of awards to apply for:

1. **Topic Area A – Wide-Impact Awards:** These awards are intended to fund unique and innovative approaches to local solar market transformation, with particular focus on wide geographic and high population impacts. DOE intends to issue approximately 2 to 4 awards in this category. The ceiling funding level<sup>7</sup> is \$4,000,000 per award and there is no floor funding level.<sup>8</sup>
2. **Topic Area B – State and Regional-Impact Awards:** These awards are intended to fund efforts to streamline and standardize processes at the state and regional level. DOE may issue approximately 6 to 8 awards in this category. The ceiling funding level is \$2,000,000 per award and there is no floor funding level.

The expected period of performance is two and a half years, with a go/no-go decision point at end of the first 18 months (see Period of Performance on Page 23).

DOE will accept only new applications under this FOA (i.e., applications for renewals of existing DOE funded projects will not be considered).

The above numbers of awards per topic area are only an estimate. Therefore, depending on the quality of applications in each topic area, it is possible that DOE may only fund awards under one topic area. DOE reserves the right to select an application in whole or any part of an application at a funding level that will be negotiated with the Applicant. DOE also reserves the right to determine for which Topic Area an application qualifies, regardless of the Applicant's request.

### B. Application and Selection Process Overview

This section provides an overview of the application and selection process, but does not include specific details regarding application content. Please see Section IV – Application and Submission Information for specifics on the requirements for the content and form of the various application stages.

#### 1. LETTER OF INTENT TO APPLY

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<sup>7</sup> The “ceiling funding level” is defined as the maximum amount for an individual award made under this announcement.

<sup>8</sup> The “floor funding level” is defined as the minimum amount for an individual award made under this announcement.

To facilitate the timely review of applications, Applicants are requested to submit an optional Letter of Intent (LOI) to Apply to [RooftopChallenge@go.doe.gov](mailto:RooftopChallenge@go.doe.gov) as early as possible, but no later than the due date indicated on the first page of this document. Applicants should use “DE-FOA-0000788 LOI” as the subject line, include the name of the Applicant, the project focus (e.g., regional standardization), and a brief description of the approach and why it is proven, innovative, and appropriate for scaling-up (2-3 sentences). Submitting a Letter of Intent to Apply is strongly encouraged but not mandatory.

## **2. QUESTION AND ANSWER WEBINARS**

DOE anticipates hosting two Question and Answer (Q&A) Webinars. The first Q&A webinar will be held prior to the Concept Paper submission deadline. The second Q&A webinar will be held prior to the Full Application submission deadline. Information regarding the Q&A webinars will be posted on the EERE eXCHANGE website and will be sent by email to Applicants that submit a Letter of Intent to Apply. Applicants will be able to submit questions on any topic related to the FOA up to three (3) business days prior to the webinar. Relevant questions submitted before the webinar will be answered during the webinar and in writing, and will be posted to the Exchange website. Questions may be submitted to [RooftopChallenge@go.doe.gov](mailto:RooftopChallenge@go.doe.gov) with the subject line “Webinar Question.”

## **3. CONCEPT PAPERS**

The first step to apply for funding under this FOA is to submit a Concept Paper. The Concept Paper describes the success the Applicant has had in fostering soft cost reductions at the local level, as well as the a concise description of the proposed project/solution and its novelty. Only Applicants that submit a compliant and responsive Concept Paper are eligible to submit a Full Application. See Section III – Eligibility Information of the FOA for compliance, responsiveness, and eligibility criteria.

Concept Papers must be submitted to DOE through its online application portal, EERE eXCHANGE (<https://eere-exchange.energy.gov/login.aspx>), as described in “Submission and Registration Requirements” on page 38 of the FOA.

DOE will perform a preliminary review of Concept Papers to determine whether they are compliant and responsive, as described in “Compliant Criteria” on page 24 of the FOA. Noncompliant and/or nonresponsive Concept Papers will be eliminated from further review.

DOE will evaluate each compliant Concept Paper based on the “Criteria for Concept Papers” on page 45. Applicants will be notified of DOE’s determination, as described in “Award Notices” on page 49 of the FOA.

## **4. FULL APPLICATIONS**

The next step in applying for funding under the FOA is the submission of a Full Application, including providing SM<sup>3</sup> Indicators to the Solar Metrics online portal. The Full Application provides detailed information on the proposed project, including an in-depth discussion of the proposed project and a detailed budget.

Only Applicants that submit a compliant and responsive Concept Paper are eligible to submit a Full Application. See Section III – Eligibility Information of the FOA for compliance, responsiveness, and eligibility criteria.

Applicants may submit a Full Application even if they previously received a recommendation from DOE discouraging them from doing so as part of the Concept Paper process. By discouraging the submission

of a Full Application, DOE intends to convey its lack of programmatic interest in the proposed project and to save Applicants the considerable time and expense of preparing a Full Application for a proposed project that is unlikely to be selected for award negotiations.

Full Applications must be submitted to DOE through its online application portal, EERE eXCHANGE (<https://eere-exchange.energy.gov/login.aspx>), as described in “Submission and Registration Requirements” on page 43 of the FOA.

DOE will perform a preliminary review of Full Applications to determine whether they are compliant and responsive, as described in “Compliant Criteria” on page 24 of the FOA. Noncompliant and/or nonresponsive, and/or otherwise ineligible Full Applications will be eliminated from further review.

## **5. REPLIES TO REVIEWER COMMENTS**

Reviewer comments on compliant and responsive Full Applications will be made available to Applicants via EERE eXCHANGE. An Applicant, and only that Applicant, will be able to view the comments provided to their own application. Applicants will have a brief opportunity to review these comments and prepare a short Reply to Reviewer Comments. Applicants may elect to respond to one or more Reviewer comments.

Submitting a Reply to Reviewer Comments is optional. Each compliant and responsive Full Application will be considered on the merits regardless of whether a Reply to Reviewer Comments is submitted. If submitted, Replies to Reviewer Comments are considered clarification of the application and are not scored separately.

DOE will perform a preliminary review of Replies to Reviewer Comments to determine whether they are compliant, as described in “Compliant Criteria” on page 24 of the FOA. Noncompliant Replies to Reviewer Comments will not be considered. Compliant and responsive Full Applications are reviewed on the merits even if a Reply to Reviewer Comments is determined to be noncompliant.

Following receipt of the Replies to Reviewer Comments, DOE will convene a panel of reviewers to discuss the merits of compliant and responsive Full Applications and Replies to Reviewer Comments.

## **6. PRE-SELECTION CLARIFICATION PRESENTATIONS**

Based upon the results of the merit review of Full Applications and Replies to Reviewer Comments, DOE may determine that pre-selection clarification presentations are necessary for a certain set of applicants. These presentations will be for the purposes of further clarifying the application. Applicants may be invited to present their project through a webinar, at the Applicant's facility, or at a DOE facility. Applicant costs incurred to participate in pre-selection clarifications (such as travel or other presentation costs) are application costs and are only allowable to awardees as indirect expenses to Federally sponsored projects to the extent that those costs are allowable, allocable, and reasonable. DOE, in its sole discretion, may contact one, multiple, or no Applicants for a pre-selection presentation. DOE will contact the Applicant(s) to make appropriate arrangements for the pre-selection presentation. DOE reserves the right to select applications for funding and make awards without pre-selection presentations. Selection for participation in pre-selection clarifications does not signify that Applicants have been selected for negotiation of award.

## **7. PRE-SELECTION CLARIFICATION CONFERENCE CALLS**

Based upon the results of the merit review of Full Applications, Replies to Reviewer Comments, and Pre-Selection Clarification Presentations, DOE may determine that additional pre-selection clarification conference calls are necessary from certain Applicants. These pre-selection clarification conference calls will be for the purposes of clarifying the application.

DOE, based upon the results of the merit review of written applications and in its sole discretion, may decide not to hold any pre-selection clarification conference calls. The information provided by Applicants to DOE through pre-selection clarification conference calls is incorporated in their application and contributes to the merit review evaluation and DOE's selection decisions. Selection for participation in pre-selection clarifications does not signify that Applicants have been selected for negotiation of award.

## **8. SELECTION**

The Selection Official may consider the merit review recommendation (based on the review of Full Applications, Reply to Reviewer Comments, and Pre-Selection Clarifications), program policy factors, and the amount of funds available.

Government may enter into discussions with a selected applicant for any reason deemed necessary, including, but not limited to: (1) the budget is not appropriate or reasonable for the requirement; (2) only a portion of the application is selected for award; (3) the Government needs additional information to determine that the recipient is capable of complying with the requirements in 10 CFR part 600; and/or (4) special terms and conditions are required. Failure to resolve satisfactorily the issues identified by the Government will preclude award to the applicant.

### **Selected Applicants Notification**

DOE will notify Applicants selected for award. This notice of selection is not an authorization to begin performance. (See "Funding Restrictions" with respect to the allowability of pre-award costs.)

### **Non-selected Notification**

Organizations whose applications have not been selected will be advised as promptly as possible. This notice will explain why the application was not selected.

Applicants will be promptly notified of DOE's determination. Please refer to "Award Notices" on page 49 of the FOA.

## **9. AWARD NEGOTIATIONS**

Upon selection, Applicants will be provided with a schedule for award negotiations. Failure to meet the specific deadlines stated in the schedule may result in the termination of award negotiations.

DOE is required to make certain determinations before executing the award, such as assessing the Applicant's financial management and project management capabilities and reviewing the proposed cost share for the project.

DOE is required to perform a financial management assessment to assess the Applicant's ability to manage the financial aspects of an award and the plans to accomplish project activities with reasonable

economy and efficiency. The standards for acceptable financial management systems are found at 10 CFR 600.121 for Institutions of Higher Education, Hospitals, and other nonprofit organizations; 10 CFR 600.220 for State and Local Governments; and 10 CFR 600.311 for for-profit organizations.

DOE is required to make an affirmative determination of responsibility. The responsibility determination includes, but is not limited to, the financial management assessment and business review, review of audits, and review of activities under previous awards, including but not limited to, compliance with reporting requirements. The responsibility determination considers if the contractor has the administrative and programmatic capabilities to perform the project under the award.

The term “administrative capability” means the capability of a Prime Recipient<sup>9</sup> or Sub-recipient to develop and implement administrative systems, including systems related to financial management, property management, procurement standards, financial reporting, record-keeping, and submission of administrative reports/certifications for award closeout.

The term “programmatic capability” means the technical capability of a Prime Recipient or Subrecipient to successfully carry out a project taking into account such factors as:

- The Prime Recipient’s performance in successfully completing projects similar in size, scope, and relevance to the proposed project;
- The Prime Recipient’s history of meeting reporting requirements on prior or current assistance agreements with Federal and/or non-Federal organizations and submitting acceptable final technical reports;

## **C. DOE Financial Assistance Agreements**

Through Financial Assistance Agreements, DOE provides financial and other support to projects that have the potential to realize DOE’s statutory mission. DOE does not use such agreements to acquire property or services for the direct benefit or use of the U.S. Government.

### **1. COOPERATIVE AGREEMENTS**

DOE anticipates awarding Cooperative Agreements under this announcement to provide financial and other support to Prime Recipients. Cooperative Agreements differ from Grants in terms of agency involvement, supervision, and intervention in the project. DOE has substantial involvement in the management and direction of every cooperative agreement, as described in the “Statement of Substantial Involvement” below.

### **2. STATEMENT OF SUBSTANTIAL INVOLVEMENT**

DOE has the right to intervene in the conduct or performance of project activities for programmatic reasons. Intervention includes the interruption or modification of the conduct or performance of project activities. Refer to 10 CFR 600.5 (d) for additional language and citations.

DOE generally has substantial involvement in the management and direction of its projects from inception to completion. DOE does not limit its involvement to the administrative requirements of the

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<sup>9</sup> The Prime Recipient is the signatory to the funding agreement with DOE.

cooperative agreement. Instead, DOE has substantial involvement in the project as a whole and will provide direction or redirection on the project.

Each cooperative agreement will include a statement of substantial involvement describing the ways in which DOE will be substantially involved in the award. Such involvement may include, as appropriate:

- Facilitation of networking meetings and information sharing platforms for awardees to connect with each other to accelerate sharing of successes and promote common approaches.
- Coordination of regional collaboration to assist the awardees' development of common processes and standards.
- Facilitation of active collaboration and coordination among SunShot awardees. In this regard, DOE will provide additional monitoring and oversight to permit specified kinds of direction or redirection of each entity's work due to interrelationships between projects and/or critical programmatic goals.
- Technical assistance, where needed, to assist the recipients in achieving project goals by DOE and/or its affiliates.

### **3. FUNDING AGREEMENTS WITH FEDERAL FUNDED RESEARCH AND DEVELOPMENT CENTERS (FFRDCs)**

#### **Federally Funded Research and Development Center (FFRDC) Contractors**

FFRDC contractors may be proposed as a team member on another entity's application subject to the following guidelines:

Authorization for non-DOE FFRDCs. The Federal agency sponsoring the FFRDC contractor must authorize in writing the use of the FFRDC contractor on the proposed project and this authorization must be submitted with the application.

Authorization for DOE FFRDCs. The cognizant Contracting Officer for the FFRDC must authorize in writing the use of a DOE FFRDC contractor on the proposed project and this authorization must be submitted with the application. The following wording is acceptable for this authorization.

“Authorization is granted for the \_\_\_\_\_ Laboratory to participate in the proposed project. The work proposed for the laboratory is consistent with or complementary to the missions of the laboratory, will not adversely impact execution of the DOE assigned programs at the laboratory.

Value/Funding. The value of, and funding for, the FFRDC contractor portion of the work will not normally be included in the award to a successful Applicant. Usually, DOE will fund a DOE FFRDC contractor through the DOE field work proposal system and other FFRDC contractors through an interagency agreement with the sponsoring agency.

Cost Share. The Applicant's cost share requirement will be based on the total cost of the project, including the Applicant's and the FFRDC contractor's portions of the effort.

#### **FFRDC Contractor Effort:**

- The scope of work to be performed by the FFRDC contractor may not be more significant than the scope of work to be performed by the Applicant.

Responsibility. The Applicant, if successful, will be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues, including but not limited to, disputes and claims arising out of any agreement between the Applicant and the FFRDC contractor.

## D. Period of Performance

DOE anticipates making awards that will run up to two and half years subject to the availability of annual appropriations. Each project will be divided into two budget periods. The first budget period will cover approximately a period of one and a half years (18 months). Continuation to the next, one-year budget period will be contingent upon satisfactory performance of the first budget period, go/no-go decision review, and subject to the availability of annual appropriations.

**Table 3 – Example of Down-Selection after Budget Period 1 Evaluation**

Category	Number of Funded Awards		
	Budget Period 1	Down - select	Budget Period 2
Tier 1: Wide Impact Awards	3		2
Tier 2: State and Regional Focus Awards	5		4

At the go/no-go decision points, DOE will evaluate project performance, project schedule adherence, meeting milestone objectives, compliance with reporting requirements, and overall contribution to the SunShot goals and objectives. As result of this evaluation, DOE will make a determination to continue the project, re-direct the project, or discontinue funding the project. Only those projects demonstrating a high probability of successfully meeting the SunShot Initiative targets will be continued. In addition, DOE may conduct a down-selection of awards (see Table 3), which may result in not all awarded projects continuing into future budget periods.

## Section III – Eligibility Information

### A. Eligible Applicants

**Applicants must submit a Concept Paper by the Concept Paper due date to be eligible to submit a Full Application.**

Eligibility for this FOA is restricted to entities that satisfy the following requirements:

- Located in the United States; and
- State or territorial governments; or
- Local governments; or
- Consortia, made up of regional or statewide teams of local governments, large single jurisdictions, or Indian Tribes; or
- Non-profit or for-profit entities authorized to act on behalf of a consortia of state and/or local governments; and



- The total population represented by eligible entities for this FOA must be 1,000,000 or greater as defined by the 2010 report of the U.S. Census Bureau<sup>10</sup>.

### **Questions Regarding Eligibility**

DOE will not make eligibility determinations for potential Applicants prior to the date on which applications to this FOA must be submitted. The decision whether to submit an application in response to this FOA lies solely with the Applicant.

## **B. Cost Share Requirements**

Please refer to Appendix IV – Cost Share Information.

## **C. Other**

### **1. COMPLIANT CRITERIA**

Prior to a comprehensive merit evaluation, DOE will perform an initial review to determine that (1) the Applicant is eligible for an award; (2) the information required by the announcement has been submitted; (3) all mandatory requirements are satisfied; and (4) the proposed project is responsive to the objectives of the funding opportunity announcement. If an application fails to meet these requirements, it may be deemed non-responsive and eliminated from full Merit Review.

DOE will perform a preliminary review of Concept Papers to determine whether:

- The Applicant meets the eligibility and compliance requirements in Sections III.A of the FOA;
- The Concept Paper conforms to the content and form requirements in Section IV.2 of the FOA; and
- The Concept Paper was submitted via EERE eXCHANGE by the applicable deadline. See Section IV.15 of the FOA for guidance on the timely submission of Concept Papers.

DOE will perform a preliminary review of Full Applications to determine whether:

- The Applicant meets the eligibility and compliance requirements in Sections III.A, of the FOA;
- The Full Application conforms to the content and form requirements in Section IV.3 of the FOA;
- The Full Application was submitted via EERE eXCHANGE by the applicable deadline (see Section IV.15 of the FOA for guidance on the timely submission of Full Applications); and

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<sup>10</sup> The total population represented by eligible entities for this FOA must be 1,000,000 or greater as defined by the 2010 report of the U.S. Census Bureau. Populations should represent full-time residents. In the case of counties, the population of cities within the jurisdiction that choose not to participate in the challenge should be subtracted from total population size. See: <http://2010.census.gov/2010census/data/>



- The Applicant submitted a compliant and responsive Concept Paper. Only Applicants that submitted a compliant and responsive Concept Paper are eligible to submit a Full Application.

DOE will perform a preliminary review of Replies to Reviewer Comments to determine whether:

- The Reply to Reviewer Comments conforms to the content and form requirements in Section IV.14; and
- The Reply to Reviewer Comments was submitted via EERE eXCHANGE by the applicable deadline. See Section IV.15 of the FOA for guidance on the timely submission of Replies to Reviewer Comments.

Please refer to Section VI.A of the FOA for information on notifications of noncompliant submissions.

## 2. DISCLOSURES FOR ELIGIBILITY DETERMINATION

Applicants are required to disclose in their Full Applications if any of the following conditions exist:

- The Applicant (or a member of the Project Team) is under investigation for or has been convicted of fraud or similar acts, violations of U.S. export controls laws and regulations, or violations of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701, et seq.);
- The Applicant (or a member of the Project Team) is debarred, suspended, proposed for debarment, or otherwise declared ineligible from receiving Federal contracts, awards, and financial assistance and benefits; and
- The Applicant (or a proposed subrecipient) is insolvent.

### **Corporate Felony Conviction and Federal Tax Liability Representations (March 2012)**

By submitting an application in response to this FOA the Applicant represents that:

- (1) It is **not** a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months,
- (2) **No** officer or agent of the corporation have been convicted of a felony criminal violation for an offence arising out of actions for or on behalf of the corporation under Federal law in the past 24 months,
- (3) It is **not** a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

For purposes of these representations the following definitions apply:

- (4) A Corporation includes any entity that has filed articles of incorporation in any of the 50 states, the District of Columbia, or the various territories of the United States [but not foreign corporations]. It includes both for-profit and non-profit organizations.

The DOE Contracting Officer may reject a Full Application if any of the above conditions exist. If the DOE Contracting Officer rejects the Full Application, it will not be considered for award.

## **Section IV – Application and Submission Information**

### **A. Application Forms**

Required forms for Full Applications are available <https://eere-exchange.energy.gov>

#### **1. CONTENT AND FORM OF LETTERS OF INTENT TO APPLY**

To facilitate the timely review of applications, Applicants are requested to submit an optional Letter of Intent to Apply to [RooftopChallenge@go.doe.gov](mailto:RooftopChallenge@go.doe.gov) as early as possible, but no later than the due date indicated on the first page of this document. Applicants should use “DE-FOA-0000788 LOI” as the subject line, include the name of the Applicant, the project focus (e.g., regional standardization), and a brief description of the approach and why it is proven, innovative, and appropriate for scaling-up (2-3 sentences). Submission of Letters of Intent to Apply ultimately result in a faster and optimally organized review, and are therefore, strongly encouraged but not mandatory.

#### **2. CONTENT AND FORM OF CONCEPT PAPERS**

See “Criteria for Concept Papers” on page 45 of the FOA for a description of the merit criteria related to the Concept Papers.

The purpose of the Concept Paper phase is to save Applicants the considerable time and expense of preparing Full Applications for proposed projects that are unlikely to be selected for award negotiations.

The Concept Paper must conform to the following requirements:

- The Concept Paper must be submitted as a single document in PDF format.
- The Concept Paper must be written in English.
- All pages must be formatted to fit on 8-1/2 by 11 inch paper with margins not less than one inch on every side. Use Times New Roman typeface, a black font color, and a font size of 11 points or larger (except in figures and tables). (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.)
- The control number<sup>11</sup> must be prominently displayed on the upper right corner of the header of every page. Page numbers must be included in the footer of every page.

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<sup>11</sup> Upon login to EERE eXCHANGE (<https://eere-exchange.energy.gov/login.aspx>), the Applicant may access its submissions to EERE FOAs by clicking the “My Submissions” link in the navigation on the left side of the page. Every application that it has submitted to EERE and the corresponding control number is displayed on this page. If

Concept Papers must conform to the following content and form requirements, including maximum page lengths, described below in Table 4. If Applicants exceed the maximum page lengths indicated below, DOE will review only the authorized number of pages and disregard any additional pages.

**Table 4 – Content Requirements for Concept Papers**

SECTION	PAGE LIMIT	DESCRIPTION
<b>Abstract</b>	1 page maximum	<ul style="list-style-type: none"> <li>• State the Topic Area for which the Applicant is applying (Topic Area A or B)</li> <li>• State the total estimated budget and cost share.</li> <li>• Describe succinctly: <ul style="list-style-type: none"> <li>○ Prior successes and innovations in addressing market barriers and soft costs at the local level;</li> <li>○ How the proposed project will expand on these efforts; and</li> <li>○ The potential impact that the proposed project would have on the targeted geographic area and SunShot cost reduction goals.</li> </ul> </li> </ul>
<b>Project Description</b>	3 pages maximum	<ul style="list-style-type: none"> <li>• Describe: <ul style="list-style-type: none"> <li>○ The Applicant, its organizational structure, team members (if any), what it does, and its current capabilities;</li> <li>○ Applicant’s prior successes and innovations in addressing market barriers and soft costs at the local government level;</li> <li>○ The proposed project including its basic principles and how it is unique and innovative;</li> <li>○ Justification for selected award topic area;</li> <li>○ The current state of practices and policies in the relevant area, including key shortcomings, limitations, and challenges and how the proposed project will overcome them;</li> <li>○ The proposed project’s goal for the end of the award (Applicants should provide support to show how the proposed target could be met). The proposed level of performance must be stated in the form of a credible outcome (e.g., statewide standardized permitting).</li> <li>○ The key risks/issues associated with the proposed plan and how they will be addressed;</li> <li>○ The impact that DOE funding would have on the proposed project. Applicants should specifically explain how DOE funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the project objectives; and</li> <li>○ How the target outcomes support the SunShot price goals.</li> </ul> </li> </ul>
<b>Qualifications and Resources</b>	1 page maximum	<ul style="list-style-type: none"> <li>• Specify the Applicant’s team members and describe the skills and expertise that make the team uniquely suited to successfully execute the proposed project.</li> <li>• Attach one-page resumes for each participating team member as an appendix. Resumes do not count towards the page limit. Multi-page resumes are not allowed and will not be considered. Please attach Resumes as a single file.</li> <li>• Attach letters of support from external entities (1 page maximum per letter). Letters of support do not count towards the page limit.</li> </ul>
<b>Summary Slide</b>	1 page	Applicants are required to provide a single slide summarizing the proposed project. The slide must be submitted in Microsoft PowerPoint format and

the Applicant submits more than one application to this FOA, a unique control number is assigned to each application.

		<p>conform to the format shown in Appendix III – Sample Summary Slide. This slide is used during the evaluation process and may be made public; please do not include any proprietary or sensitive information. The slide should include the following information:</p> <ul style="list-style-type: none"> <li>• Description of the proposed project;</li> <li>• Potential impact of the proposed project i.e., uniqueness of the innovative concept;</li> <li>• Project overview consisting of the period of performance, requested DOE funding, proposed cost share, total budget for the entire project period, and a breakdown of the project’s key deliverables; and</li> <li>• A listing of key personnel.</li> </ul>
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### 3. CONTENT AND FORM OF FULL APPLICATIONS

Only Applicants that submit a compliant and responsive Concept Paper are eligible to submit a Full Application.

For segments of the Full Applications without specified forms (i.e., SF-424, Budget Justification excel templates, etc.) Applicants must conform to the following requirements:

- All Full Applications must be written in English.
- All pages must be formatted to fit on 8-1/2 by 11 inch paper with margins not less than one inch on every side. Use Times New Roman typeface, a black font color, and a font size of 11 points or larger (except in figures and tables). (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.)
- The control number, which is the same number used for the Concept Paper, must be prominently displayed on the upper right corner of the header of every page. Page numbers must be included in the footer of every page.

Full Applications should consist of the following 11 components within the specified page limitation for each section. Strict adherence is required:

#### Project Description:

- Project Narrative, including appendices
- Statement of Project Objectives (Work Plan)
- Resume File
- Summary Slide
- Solar Market Maturity Indicators (submitted to Solar Metrics portal, confirmation code included on Project Narrative Title Page)

#### Financial Information:

- SF-424 Application for Financial Assistance
- SF-424A – Budget Information – Non-Construction Programs
- Budget Justification Form PMC123.1

#### Compliance Documents:

- Environmental Impacts Questionnaire

- Disclosures for Eligibility Determination

DOE provides detailed guidance on the content and form of each component below.

Note: The maximum file size that can be uploaded to the EERE Exchange website is 10MB. Files in excess of 10MB cannot be uploaded, and hence cannot be submitted for review. If a file exceeds 10MB but is still within the maximum page limit specified in the FOA it must be broken into parts and denoted to that effect. (e.g. ControlNumber\_LeadOrganization\_Project\_Part\_1, Part\_2, etc.)

#### 4. PROJECT NARRATIVE

The project narrative should include the sections described in the following table and should not exceed 16 pages in PDF format.

**EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE.**

**Table 5 – Content Requirements for Project Narrative**

SECTION	PAGE LIMIT	DESCRIPTION
<b>Title Page</b>	1 page maximum	<p>The title page must include: the application control number received during the Concept Paper phase, the name and type of organization, the announcement number, the project title, and both the technical and business points of contact for the Applicant, denoting the names, titles, addresses, telephone numbers, and electronic mail addresses. The cover page should also identify the names for all other participants (subrecipients).</p> <p>In addition, in order to confirm completion of the SM<sup>3</sup> assessment, the title page must include the confirmation number that Applicants will receive upon completing the Solar Market Maturity Model assessments for each participating jurisdiction and for each time period requested (past, present, and future). This assessment must include at least 5 participating jurisdictions which cover at least 25% of the population represented by the participating jurisdictions (see “Solar Market Maturity Indicators” below). More details on obtaining a confirmation number will be provided following the Concept Paper stage in the form of a webinar.</p>
<b>Project Summary</b>	1 page maximum	<p>Include a summary of the proposed project and how it meets the SunShot Initiative objectives. This section should discuss the history, successes, and current status of the Applicant’s efforts to reduce market barriers and soft costs at the local level and an overview of the intended impacts of the project.</p>
<b>Project Overview</b>	10 pages maximum	<ul style="list-style-type: none"> <li>• The Project Overview must conform to the following structure. <b>Please address all relevant Merit Review criteria in the course of the discussion, rather than listing each criterion individually.</b> Responses must contain the following information: <ul style="list-style-type: none"> <li>○ <i>Background and Track Record:</i> <ul style="list-style-type: none"> <li>▪ Provide a summary of the proposed project and how it meets the SunShot Initiative objectives. This section should discuss the history, successes, and current status of the Applicant’s efforts to reduce soft costs at the local level and must convey a thorough understanding of the of current market environment with respect to the focus of the Rooftop Solar Challenge II.</li> <li>▪ Provide a detailed description of concrete actions and reforms</li> </ul> </li> </ul> </li> </ul>

		<p>during the period of approximately July 2011 to February 2013 (~20 months) that led to reductions in market barriers as experienced by local installers and increases in installed PV capacity. Applicant must describe how these reforms occurred in and/or impacted a major region or population center (i.e., 500,000 or more residents).</p> <ul style="list-style-type: none"> <li>○ <i>Project Objectives and Expected Impact</i> <ul style="list-style-type: none"> <li>▪ This section should contain a detailed narrative discussion introducing the project objectives that will be pursued under this effort over its 30-month duration. The baseline assessment will be the starting point for the detailed objectives of the proposed project. This section should explicitly identify targeted improvements to the baseline performance and critical success factors for the effort.</li> <li>▪ Describe extent of the innovation and disruptive potential of proposed idea to drive market reforms and reduce costs at the local level.</li> <li>▪ Applicant must describe how these reforms will occur in and/or impact a major region or population center (i.e., 1,000,000 or more residents).</li> </ul> </li> <li>○ <i>Project Partners</i> <ul style="list-style-type: none"> <li>▪ Discuss the extent of involvement and roles for any partners and how they will be effectively leveraged to achieve project success.</li> </ul> </li> <li>○ <i>Conclusion:</i> <ul style="list-style-type: none"> <li>▪ Any closing remarks the Applicant feels should be discussed.</li> </ul> </li> </ul>
<b>Project Timetable and Milestones</b>	2 pages maximum	<ul style="list-style-type: none"> <li>• This section should outline as a function of time all the important activities or phases of the project, including any activities planned beyond the project period. Decision points, critical review criteria, or go/no-go criteria should be quantifiable to the greatest extent possible, along with associated deliverables schedules. This section should also include, usually in a table, the spend plan by task.</li> <li>• This section should also thoughtfully address potential risks and strategies for overcoming these risks.</li> </ul>
<b>Qualifications and Resources</b>	2 pages maximum	<ul style="list-style-type: none"> <li>• Clearly and succinctly describe the Applicant's and Subrecipients' (if applicable) resources and credentials. This section should also include previous work efforts, demonstrated innovations, and how these enable the Applicant to achieve the project objectives. Include sufficient labor details to support the project.</li> </ul>
<b>Letters of Commitment (Appendix)</b>	1-page limit per letter, no limit on number of letters.	<ul style="list-style-type: none"> <li>• Applicants should have a letter from each third party contributing cost share (i.e., a party other than the organization submitting the application) stating that the third party is committed to providing a specific minimum dollar amount of cost share. <b>All Letters of Commitment must be attached as an Appendix to the Project Narrative File.</b> Identify the following information for each third party contributing cost share: (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed type of cost share – cash, services, or property. Letters of Commitment from parties participating in the project, exclusive of vendors, who will not be contributing cost share, but will</li> </ul>

		be integral to the success of the project, should be included as part of this Appendix to the Narrative. Letters of Commitment will not count towards the Project Narrative page limit, but should be kept to 1 page per letter.
<b>Letters of Support (Appendix)</b>	1-page limit per letter, no limit on number of letters.	<ul style="list-style-type: none"> <li>Applicants should have a letter from each third party (i.e., a party other than the organization submitting the application) indicating that the entity is supportive of the Applicant's proposal and will engage in activities as appropriate to help the Applicant achieve the proposed objectives. <b>All Letters of Support must be attached as an Appendix to the Project Narrative File.</b> Letters of Support will not count towards the Project Narrative page limit, but should be kept to 1 page per letter.</li> </ul>

Save the information in a single file titled "ControlNumber\_LeadOrganization\_Project".

## 5. STATEMENT OF PROJECT OBJECTIVES

The Statement of Project Objectives (SOPO) must address how the project objectives will be met and will serve as the project work plan. It must contain a clear, concise description of all activities to be completed during the project and must conform to the structure shown in Figure 4 below and on the example template provided on the eXCHANGE website. The SOPO must also contain the following information:

- A concise detailed description of the specific activities to be conducted over the period of performance. "Detailed" is defined as a full explanation and disclosure of the project being proposed (i.e., statements such as "we will then complete a process" are unacceptable). It is the Applicant's responsibility to prepare an adequately detailed task plan to convince reviewers that the proposed project can meet SunShot Initiative goals.
- Projects should be divided into two budget periods, totaling up to 30 months. The first budget period will cover the first 18 months of the project, and the second budget period will cover the final year of the project.
- It is critical that the overall project objective is broken into separate Task sections that are clearly linked to, and combine to result in, the project objective. While Task sections may include multiple deliverables, Task sections should represent larger activities that contribute to meeting project objectives, rather than specific, individual deliverables.
- Each task must be broken out into component Subtask sections to specify the activities that will be conducted to accomplish the task.
- Specific milestones that are intermediary steps toward the project deliverables must be identified in each subtask. The milestones must demonstrate that a detailed plan has been constructed to achieve aggressive deliverables (see below for note on deliverable metrics).
- The SOPO must be limited to 6 pages and attached as a separate document. The SOPO does not count towards the Project Narrative page limit.

**Figure 4 – Content Requirements for Statement of Project Objectives**

<p><b>Scope of Work:</b> Explain the final objective or deliverable that is to be produced and how it can be accomplished through separate tasks.</p> <p><b>Task 1:</b> Distinctive Title, Date range of activity, Associated Deliverables (D1, D2, etc.), Associated Milestones (M1, M2...) contained in all subtasks.</p> <p>Instructions: Task descriptions shall explicitly identify the project objectives/outcomes being addressed and a concise statement of the objectives of that task. Within this section, the barriers</p>
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and risks should be identified, as well as the approaches for overcoming those barriers and risks. Where appropriate, multiple pathways early in the effort can be outlined for risk reduction.

**Subtask 1.1:** Date range, Associated Milestones (M1, M2...)

Instructions: Describe the specific and detailed work efforts that go into achieving the higher-level tasks. Specify the evaluation techniques that will be used and the result that will be generated. Identify milestones that can track the progress towards achieving deliverables.

**Subtask 1.2:**

(Continue until all Task 1 subtasks are listed)

**Task 2:** (continue in the format above until all tasks and subtasks are listed)

**Subtask 2.1:** Description and Discussion

**Subtask 2.2:** Description and Discussion

The SOPO may be released to the public by DOE, in whole or in part, at any time. Therefore, the SOPO must not contain proprietary or confidential business information.

### *Deliverable Metrics*

The deliverables which are proposed by the applicant will be reviewed, discussed, and negotiated in detail following selection for award negotiation.

It is the Applicant's responsibility to convince reviewers that the deliverables proposed are both appropriate for the proposed approach, and that they are verifiable. The following deliverable metrics are unacceptable:

- Reports
- Unverifiable data
- Cost reduction based on quotes
- Time spent on project

Cost reduction is the overall goal of SunShot and should be a core part of any application. However cost reduction cannot be a deliverable, as verification of cost reduction is not straightforward. Reviewers must be able to easily see if and how proposed technologies will be able to aid in achieving SunShot goals. Therefore, metrics that can be more directly measured and rapidly verified should define the deliverables.

Save the information in a single file titled "ControlNumber\_LeadOrganization\_SOPO".

## **6. SOLAR MARKET MATURITY INDICATORS**

Applicants will be required to use the Solar Metrics online portal to enter Solar Market Maturity (SM<sup>3</sup>) Indicators for their participating jurisdictions as part of their Full Application for the Rooftop Solar Challenge II. This will assist the Merit Review committee in assessing the Applicant track record and vision as set forth in the Merit Review Criteria. Applicants are *not* required to enter SM<sup>3</sup> indicators as part of the Concept Paper stage and will not have access to the Solar Metrics online portal relevant to RSC II prior to the completion of the Concept Paper stage. Questions regarding use of the Solar Metrics online portal will be answered following the Concept Paper stage.

### *How to enter SM<sup>3</sup> Indicators in the Solar Metrics Online Portal*



Following the Concept Paper stage, DOE will hold a webinar. The date of the webinar is to be determined and will be announced on the EERE eXCHANGE website. This webinar will detail the expectations and process for entry of SM<sup>3</sup> indicators into the Solar Metrics online portal. In the meantime, Applicants can examine diagrams in “Appendix I – Solar Metrics Online Portal Overview” for a tentative overview of the expected data entry process.

**For Applicants without prior access to the Solar Metrics online portal:**

Following the Concept Paper stage, Applicants will be required to request an account at [SolarMetrics@nrel.gov](mailto:SolarMetrics@nrel.gov). Only one log-in per Applicant will be provided.

**For Applicants with prior access to the Solar Metrics online portal:** Applicants will be able to access their existing accounts, and will be able to add indicators for the “future” Market Snapshot Score following the Concept Paper stage. Applicants in this category will have already entered data for the “Present” and “Past” time periods, effective February 14, 2012.

See Table 6 below for Solar Market Maturity Index submission timelines and requirements

**Table 6 – Indicator Due Dates and Requirements**

Application Stage:	Concept Papers	Full Application	Award Negotiation and Finalization
Due Date:	January 2013	March 2013	May 2013
SM <sup>3</sup> Indicator Data Required from Jurisdictions?	No.	Yes.	Yes.
SM <sup>3</sup> Indicator Data Required	None.	Data from at least 5 participating jurisdictions representing at least 25% of the expected population that the project will represent.	Data must be entered from all participating jurisdictions <b>prior to award finalization</b> . Delays in data collection may result in termination of Award negotiations.
Letters of Commitment/Support from Jurisdictions?	Recommended, <b>not required</b> .	<b>Required</b> from all participating jurisdictions.	<b>Required</b> from all participating jurisdictions.

## 7. RESUME FILE

Provide a resume for each key person proposed, including subawardees and consultants if they meet the definition of a key person. A key person is any individual who contributes in a substantive, measurable way to the execution of the project. The biographical information for each resume must not exceed 1 page when printed on 8.5” by 11” paper with 1 inch margins (top, bottom, left, and right), single spaced, with font not smaller than 11 point and should include the information below, if applicable.

**Of the key personnel identified in the resume file, indicate the Principal Investigator(s) (PI).**

For Multiple Principal Investigators: The Applicant, whether a single organization or team/partnership/consortium, must indicate if the project will include multiple PIs. The decision to use multiple PIs for a project is the sole responsibility of the Applicant. If multiple PIs will be designated, the application must identify the Contact PI/Project Coordinator and provide a “Coordination and Management Plan” that describes the organization structure of the project as it pertains to the designation of multiple PIs. This plan should, at a minimum, include:

- Process for making decisions on scientific/technical direction;
- Publications;

- Intellectual property issues;
- Communication plans;
- Procedures for resolving conflicts; and
- PIs' roles and administrative, technical and scientific responsibilities for the project

The compiled resume file does not have a page limitation; however, the biographical information for **each individual resume must not exceed one page** when printed on 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right), single spaced, with font not smaller than 11 point and should include the following information, if applicable:

*Education and Training:* Provide institution(s), major(s)/area(s) of study, degree(s) and year(s) for undergraduate, graduate and/or postdoctoral training;

*Professional Experience:* Beginning with the current position list, in chronological order, professional/academic positions with a brief description.

*Publications:* If relevant, provide a list of up to 10 publications most closely related to the proposed project. For each publication, identify the names of all authors (in the same sequence in which they appear in the publication), the article title, book or journal title, volume number, page numbers, year of publication, and website address, if available electronically.

Patents, copyrights and software systems developed may be provided in addition to, or substituted for, publications.

*Synergistic Activities:* List no more than 5 professional and scholarly activities related to the effort proposed.

Save all resumes in a single file named "Control#\_LeadOrganization\_Resumes.PDF."

## 8. SUMMARY SLIDE

(1 page maximum in Microsoft PowerPoint format)

Applicants are required to provide a single slide summarizing the proposed project. The slide must be submitted in Microsoft PowerPoint format and conform to the format shown in "Appendix III – Sample Summary Slide." This slide is used during the evaluation process. The slide should include the following information:

- Description of the proposed project;
- Potential impact of the proposed project relative to the current state;
- Project overview consisting of the period of performance, requested DOE funding, proposed cost share, total budget for the entire project period, and a year-by-year breakdown of the project's key deliverables; and
- A listing of key personnel.

Save the Summary Slide as "ControlNumber\_LeadOrganization\_Summary.pptx."

## 9. SF-424 APPLICATION FOR FINANCIAL ASSISTANCE

(No page limit, PDF format)

Please refer to the following website for the SF-424 form: <https://eere-exchange.energy.gov/Default.aspx>. The SF-424 includes instructions for completing the form. Applicants are required to complete all required fields in accordance with the instructions. The SF-424 must be submitted in PDF format.

If applicable, complete the SF- LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying."

DOE provides the following supplemental guidance on completing the SF-424:

- The Prime Applicant should submit only one SF-424 (i.e., a Subrecipient should not submit a separate SF-424).
- Assume a project start date near May 27, 2013.
- The list of certifications and assurances in Block 21 can be found at <http://energy.gov/management/downloads/certifications-and-assurances-use-sf-424>.
- The dates and dollar amounts on the SF-424 are for the entire project period (from the project start date to the project end date), not a portion thereof.

Save the information in a single file titled "ControlNumber\_LeadOrganization\_App424".

## **10. SF-424A – BUDGET INFORMATION – NON-CONSTRUCTION PROGRAMS**

(No page limit, Microsoft Excel format)

Applicants are required to complete the SF-424A Excel workbook entitled "Budget Information Non-Construction Programs," The SF-424A must be submitted in Microsoft Excel format.

You must provide a separate budget for each year of support requested and a cumulative budget for the total project period. Use the SF 424A Excel, "Budget Information – Non Construction Programs" form on the DOE Financial Assistance Forms Page at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>. The SF424A provides columns for each individual budget-year as well as the cumulative project-budget. You may request funds under any of the Object Class Categories as long as the item and amount are necessary to perform the proposed work, meet all the criteria for allowability under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement (see "Funding Restrictions"). Save the information in a single file titled "Control#\_Lead Organization\_SF424A.xls". The total project cost, including cost share (if applicable) and federal funding, must be represented in this document.

Applicants must create multiple, separate SF-424A forms for the following groups:

- 1) The project as a whole (i.e., all work to be performed by the Project Team under the DOE cooperative agreement);
- 2) Each FFRDC participant; and
- 3) Each sub-recipient that is performing at least \$100,000 of the work under the DOE cooperative agreement.

Note that the following travel requirements should be planned and budgeted:

- One (1) DOE Annual Review Meeting (Domestic location TBD – 1 traveler – 2 days)
- One (1) Final Presentation at DOE (Washington, DC - 1 traveler – 2 days).

Save the information in a single file titled “ControlNumber\_LeadOrganization\_SF424A”.

## **11. BUDGET JUSTIFICATION FORM PMC123.1**

(10 tabs, Microsoft Excel format)

Applicants must create a PMC 123.1 Budget Justification. The PMC 123.1 form is provided in the required documents section of the eXCHANGE posting for this FOA. (<https://eere-exchange.energy.gov>) The total project cost, including cost share (if applicable) and federal funding, must be represented in this document.

Applicants must justify the costs proposed in each Object Class Category/Cost Classification category. This includes identifying:

- Key persons and personnel categories and the estimated costs for each person or category, amounts of time (e.g., hours or % of time) to be expended, the composite base pay rate, total direct personnel compensation and identify the rate basis (e.g., actual salary, labor distribution report, technical estimate, state civil service rates, etc.);
- Provide a list of equipment and cost of each item providing a basis of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying its need as it applies to the Statement of Project Objectives;
- Identify proposed subrecipient/consultant work and cost of each subrecipient/consultant;
- Describe purpose of proposed travel, number of travelers, and number of travel days;
- List general categories of supplies and amount for each category providing a basis of cost such as vendor quotes, catalog prices, prior invoices, etc., and briefly justifying the need for the supplies as they apply to the Statement of Project Objectives; and provide any other information you wish to support your budget;
- Provide the name of your cognizant/oversight agency, if you have one, and the name and phone number of the individual responsible for negotiating your indirect rates; and
- Identify all sources of cost share including third parties and specify (1) the name of the organization; (2) the proposed dollar amount to be provided; (3) the amount as a percentage of the total project cost; and (4) the proposed type of cost share – cash, services, or property.

If your application is selected for negotiation, the DOE Contracting Officer may request a more detailed budget for a particular subaward. Provide an explanation of the source, nature, amount, and availability of any proposed cost sharing.

Save the budget justification information in a single file named "Control#\_Organization\_BudgetJustification.xls."

## **12. SUBAWARD BUDGET FILE(S) (OPTIONAL)**

You must provide a separate budget (i.e., budget for each budget year and a cumulative budget) for each subawardee that is expected to perform work estimated to be more than \$100,000 or 50 percent of the

total work effort (whichever is less). The SF424A provides columns for each individual budget-year as well as the cumulative project-budget. The total project cost, including cost share (if applicable) and Federal funding, must be represented in this document. Use the SF 424 A Excel for Non Construction Programs or the SF 424 C Excel for Construction Programs. This form is found on the DOE Financial Assistance Forms Page at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>. Save each Subaward budget in a single file titled “ControlNumber\_LeadOrganization\_Subawardee\_SF424A”.

A PMC 123.1 Budget Justification file for the subaward budget is also required. The budget justification must include the same justification information described in Paragraph 8 above.

Save each Subaward budget justification in a single file titled “ControlNumber\_LeadOrganization\_Subawardee\_Budget”.

### 13. ENVIRONMENTAL IMPACTS QUESTIONNAIRE

(No page limit, PDF format)

Please refer to the following website for the Environmental Impacts Questionnaire: <https://eere-exchange.energy.gov>. To facilitate and expedite DOE’s environmental review, Applicants are required to complete an Environmental Impact Questionnaire. The Environmental Impact Questionnaire must be submitted in PDF format.

By law, DOE is required to evaluate the potential environmental impact of projects that it is considering for funding.<sup>12</sup> Before a project begins, DOE must determine whether the project qualifies for a categorical exclusion under 10 C.F.R. § 1021.410 or whether it requires further environmental review (i.e., an environmental assessment or an environmental impact statement).

Applicants are required to complete the Environmental Impact Questionnaire for the project as a whole, including all work to be performed by the Prime Recipient and its Subrecipients and Contractors and including all work performed using cost share funds. Applicants may not limit their responses to work performed by the Prime Recipient, nor exclude work performed using private or non-Federal funds.

In completing the Environmental Impact Questionnaire, Applicants must provide specific information regarding the nature of their proposed action, including information on their size, operations, and the types and quantities of air emissions, wastewater discharges, solid wastes, land disturbances, etc. Applicants should identify the location(s) of the proposed action and specifically describe the activities that would occur at each location.

Upon selection for award negotiations, the Prime Recipient or Subrecipients may be requested to provide additional information to the DOE NEPA Compliance Officer.

### 14. CONTENT AND FORM OF REPLIES TO REVIEWER COMMENTS

Written feedback on Full Applications will be made available to Applicants via EERE eXCHANGE

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<sup>12</sup> National Environmental Policy Act (NEPA), Pub L. No. 91-190, 42 U.S.C. § 4321 et seq.; Department of Energy NEPA Implementing Regulations, 10 C.F.R. part 1021.

before the submission deadline for Replies to Reviewer Comments indicated on the cover page of this document. Applicants have a brief opportunity (3-4 days) to prepare a short Reply to Reviewer Comments responding to one or more comments or supplementing their Full Application.

Applicants are strongly encouraged to submit a Reply to Reviewer Comments, but it is not mandatory. Submitting a Reply to Reviewer Comments is optional. Each compliant and responsive Full Application will be considered on the merits regardless of whether a Reply to Reviewer Comments is submitted.

Replies to Reviewer Comments must conform to the following requirements:

- The Reply to Reviewer Comments must be submitted in PDF format as a single attachment in EERE eXCHANGE.
- In addition to uploading the Reply as a PDF, the text of the Reply must be inserted into the relevant textbox in EERE eXCHANGE system where the reviewer comments appear. The text must be identical. Any graphics or images do not need to be inserted into the textbox.
- The Reply to Reviewer Comments must be written in English.
- All pages must be formatted to fit on 8-1/2 by 11 inch paper with margins not less than one inch on every side. Use a Times New Roman a black font color, and a font size of 11 points or larger (except in figures and tables). (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.)
- The control number, which is the same number used for the Concept Paper and Full Application, must be prominently displayed on the upper right corner of the header of every page. Page numbers must be included in the footer of every page.

Replies to Reviewer Comments must conform to the following content and form requirements, including maximum page lengths, described below. If a Reply to Reviewer Comments is more than three pages in length, DOE will review only the first two pages of text and one page of images. Any additional pages will be disregarded.

**Table 7 – Content Requirements for Replies to Reviewer Comments**

SECTION	PAGE LIMIT	DESCRIPTION
<b>Text</b>	2 pages maximum	<ul style="list-style-type: none"> <li>• Applicants may respond to one or more Reviewer comments or supplement their Full Application.</li> <li>• All replies to all comments must fit within the 2-page limit.</li> </ul>
<b>Images</b>	1 page maximum	<ul style="list-style-type: none"> <li>• Applicants may provide graphs, charts, or other data to respond to Reviewer Comments or supplement their Full Application.</li> </ul>

## 15. REQUIREMENTS FOR TIMELY SUBMISSION

Applicants must complete the following actions before the submission deadline in order for their Concept Papers and Full Applications to be considered timely submitted:

- Applicants must provide the requested information (see

- Required Documents Checklist in EERE eXCHANGE;
- Applicants must upload their Concept Papers or Full Applications to EERE eXCHANGE; and
- Applicants must click the “Submit” button under the “Upload and Submit” tab in EERE eXCHANGE for this FOA.

Applicants must successfully upload their Reply to Reviewer Comments to EERE eXCHANGE before the submission deadline in order for it to be considered timely submitted.

Concept Papers, Full Applications, and Replies to Reviewer Comments that are not timely submitted are deemed non-compliant and are not considered for award. A late application may be reviewed if the applicant provides sufficient evidence of technical issues that the EERE Exchange Help Desk failed to resolve prior to the receipt date and time.

Please refer to “Submission and Registration Requirements” on page 43 of the FOA and the “EERE eXCHANGE Applicant User Guide” (<https://eere-exchange.energy.gov/Manuals.aspx>) for guidance on submitting Concept Papers, Full Applications, and Replies to Reviewer Comments to EERE eXCHANGE.

Applicants are responsible for meeting the submission deadline. DOE strongly encourages Applicants to submit their Concept Papers, Full Applications, and Replies to Reviewer Comments at least 48 hours in advance of the submission deadline. Applicants should not wait until the last minute—Internet and data server traffic can be heavy in the last hours before the submission deadline, which may affect Applicants’ ability to successfully submit their Concept Papers, Full Applications, or Replies to Reviewer Comments.

DOE uses EERE eXCHANGE to determine whether Concept Papers, Full Applications, and Replies to Reviewer Comments are timely submitted. Following the expiration of the applicable deadline, Applicants are no longer able to click the “Submit” button under the “Upload and Submit” tab in EERE eXCHANGE for this FOA.

## 16. INTERGOVERNMENTAL REVIEW

This program is not subject to Executive Order 12372 (Intergovernmental Review of Federal Programs).

## 17. SUMMARY OF REQUIRED FORMS/FILES

Your application must include the following documents:

Name of Document	Format	File Name
Project Narrative File, including required appendices	PDF	ControlNumber_LeadOrganization_Project
Statement of Project Objectives (Work Plan)	PDF	ControlNumber_LeadOrganization_SOPO
Resume File	PDF	ControlNumber_LeadOrganization_Resume



Summary Slide	PowerPoint	ControlNumber_LeadOr ganization_Summary
SF 424 - Application for Federal Assistance	Part of Adobe Application Package	ControlNumber_LeadOr ganization_App424
SF 424A Excel – Budget Information for Non-Construction Programs File	Excel	ControlNumber_LeadOr ganization_SF424A
PMC 123.1 Budget Justification File	Excel	ControlNumber_LeadOr ganization_Budget
SF-424A Subaward Budget File(s), if applicable	Excel	ControlNumber_LeadOr ganization_Subawardee_ SF424A
PMC 123.1 Budget Justification(s), if applicable	Excel	ControlNumber_LeadOr ganization_Subawardee_ Budget
Budget for Federally Funded Research and Development Center (FFRDC) Contractor File, <i>if applicable</i>	PDF	ControlNumber_LeadOr ganization_FFRDC_FW P
Authorization from cognizant Contracting Officer for FFRDC, <i>if applicable</i>	PDF	ControlNumber_LeadOr ganization_FFRDC_Aut h
Environmental Questionnaire, <i>if applicable</i>	PDF	ControlNumber_LeadOr ganization_Env
SF-LLL Disclosure of Lobbying Activities, <i>if applicable</i>	PDF	ControlNumber_LeadOr ganization_SF LLL

## B. Funding Restrictions

### 1. ALLOWABLE COSTS

All expenditures must be allowable, allocable, and reasonable in accordance with the applicable Federal cost principles.

For for-profit entities, the allowability of costs is determined through reference to the for-profit cost principles in the Federal Acquisition Regulations (48 C.F.R. Part 31).

For nonprofit organizations not listed in Appendix C to OMB Circular A-122 (codified at 2 C.F.R. Part 230), the allowability of costs through reference to the cost principles for nonprofit organizations in OMB Circular A-122 (10 C.F.R. § 600.127).

For institutions of higher education, the allowability of costs through reference to OMB Circular A-21, “Cost Principles of Educational Institutions” (codified at 2 C.F.R. Part 220).



## **2. PRE-AWARD COSTS**

DOE will not reimburse any pre-award costs incurred by Applicants if not selected for award negotiations. Please refer to “Award Notices” on page 49.

Pre-award Costs. Recipients may charge to an award resulting from this announcement pre-award costs that were incurred within the ninety (90) calendar day period immediately preceding the effective date of the award and no earlier than the selection date, if the costs are allowable in accordance with the applicable Federal cost principles referenced in 10 CFR part 600. Recipients must obtain the prior approval of the Contracting Officer for any pre-award costs that are for periods greater than this 90 day calendar period.

Pre-award costs are incurred at the Applicant’s risk. DOE is under no obligation to reimburse such costs if for any reason the Applicant does not receive an award or if the award is made for a lesser amount than the Applicant expected.

If recipients are State or Local Governments, they may not incur pre-award costs prior to award, without prior approval of the DOE Contracting Officer.

Given the uncertainty of award negotiations, it is strongly recommended that Prime Recipients and Subrecipients consult with the DOE Contracting Officer before incurring any pre-award costs.

## **3. CONSTRUCTION**

The Rooftop Solar Challenge II will not fund projects that involve major construction.

## **4. FOREIGN TRAVEL**

This FOA is not intended to fund foreign travel. Therefore, no Federal funds or cost share may be used for foreign travel.

## **5. PERFORMANCE OF WORK IN THE UNITED STATES**

DOE requires all work under DOE cooperative agreements to be performed in the United States – i.e., 100% of the Total Project Cost must be expended in the United States. However, Applicants may request a waiver of this requirement where their project would materially benefit from, or otherwise requires, certain work to be performed overseas.

## **6. PURCHASE OF EQUIPMENT**

In the event an Applicant is selected for award negotiations, it will be required to provide a detailed list of any equipment items planned to be purchased along with a price for the acquisition of each. The individual price proposed for each item shall be verifiable via vendor quote, price sheet, or other means deemed acceptable by DOE.

All new equipment purchased under the cooperative agreements must be made or manufactured in the United States, to the maximum extent practicable. This requirement does not apply to used or leased equipment.

## 7. LOBBYING

By accepting funds under this agreement, Recipients agree that they will comply with the National Policy Assurances and the applicable lobbying prohibition provisions of the following national policies located at: [http://energy.gov/sites/prod/files/National\\_Policy\\_Assurances-September\\_%202011.pdf](http://energy.gov/sites/prod/files/National_Policy_Assurances-September_%202011.pdf), as well as applicable cost principals contained in 2 CFR 230.5-50, 48 CFR 31.205-22 and 2 CFR 225.5-55. Additionally, the lobbying prohibitions contained in 10 CFR 601 also apply.

Pursuant to the above authorities, no award funds, whether Federal or recipient cost share, may be expended by the recipient for any of the following activities:

Any attempt to influence a jurisdiction, or an official of any government, to favor, adopt, or oppose, by vote or otherwise, any legislation, law, ratification, policy, or appropriation, whether before or after the introduction of any bill, measure, or resolution proposing such legislation, law, ratification, policy, or appropriation through direct contact or communication, or by using publicity or propaganda urging members of the general public, or any segment thereof, to contribute to, or participate in any, campaign, rally, or similar effort.

Any attempt to influence an officer or employee of any agency, a member or employee of Congress, in connection with the awarding of any Federal contract grant, cooperative agreement or loan; or the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

The above prohibitions do not prohibit the recipient from expending any federal funds on the following:

Technical and factual presentations on topics directly related to the performance of a grant, contract, or other agreement in response to a documented request made by the recipient member, legislative body or subdivision, or a cognizant staff member thereof, provided such information is readily obtainable and can be readily put in deliverable form, and further provided that costs under this section for travel, lodging or meals are unallowable unless incurred to offer testimony at a regularly scheduled Congressional hearing pursuant to a written request for such presentation made by the Chairman or Ranking Minority Member of the Committee or Subcommittee conducting such hearings;

Outreach activities directed at stakeholders including, local developers, permitting bodies, local utilities, trade groups and other stakeholders to gather information and establish best practices.

If applicable, complete the SF- LLL. Applicability: If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the grant/cooperative agreement, you must complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying."

## 8. FINANCING RESTRICTIONS

Financing activities associated with awards should be for the purposes of increasing distributed photovoltaic market activity in models other than self-financed ownership by enabling direct financing options, community solar programs, and/or utility-owned distributed generation and resolving legal issues around third party ownership models. Recipient is restricted from using award funds or recipient cost share to provide funding, loans, or direct support to finance solar technology installations.

## C. Submission and Registration Requirements

### 1. WHERE TO SUBMIT

**APPLICATION MATERIAL MUST BE SUBMITTED UNDER THIS ANNOUNCEMENT THROUGH EERE EXCHANGE at <https://eere-exchange.energy.gov/> TO BE CONSIDERED FOR AWARD.** You cannot submit an application through EERE eXCHANGE unless you are registered. Please read the registration requirements below carefully and start the process immediately. Applications submitted by any other means will not be accepted.

If you have problems completing the registration process or submitting your application, send an email to the EERE eXCHANGE helpdesk at [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov). It is the responsibility of the Applicant to verify successful transmission, prior to the Application due date and time.

### 2. REGISTRATION PROCESS REQUIREMENTS

There are several one-time actions that must be completed before submitting an Application in response to this Funding Opportunity Announcement (FOA), as follows:

- Register and create an account on EERE eXCHANGE at: <https://eere-exchange.energy.gov/>. This account will then allow the user to register for any open EERE FOAs that are currently in Exchange. It is recommended that each organization or business unit, whether acting as a team or a single entity, use only one account as the appropriate contact point for each submission.

The Applicant will receive an automated response when the Concept Paper, Application, and the Reply to Reviewer Comments have been received. This will serve as a confirmation of receipt. Please do not reply to the automated response. The Applicant will have the opportunity to re-submit revised application materials for any reason as long as the relevant submission is submitted by the specified deadline. The Users' Guide for Applying to the Department of Energy EERE Funding Opportunity Announcements is found at <https://eere-exchange.energy.gov/Manuals.aspx> **once logged in to the system**.

The EERE eXCHANGE registration does not have a delay; however, the remaining **registration requirements below could take several weeks to process and are necessary in order for a potential Applicant and to receive an award under this announcement**. Therefore, although not required in order to submit an Application through the EERE eXCHANGE site, **all potential Applicants (Prime Recipients and Subrecipients) lacking a DUNS number, or not yet registered with the System for Award Management or FedConnect should complete those registrations as soon as possible**. Questions related to the registration process and use of the EERE eXCHANGE website should be submitted to: [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov)

- **Prime Recipients and Subrecipients** must obtain a Dun and Bradstreet Data Universal Numbering System (DUNS) number (including plus 4 extension, if applicable) at <http://fedgov.dnb.com/webforms>
- **Prime Recipients and Subrecipients** must register with the System for Award Management (SAM) at: <https://www.sam.gov/portal/public/SAM/>. Please update your SAM registration annually.

- **Prime Recipients** must register in FedConnect at <https://www.fedconnect.net/>. To create an organization account, your organization's CCR MPIN is required. For more information about the CCR MPIN or other registration requirements, review the FedConnect Ready, Set, Go! Guide at [https://www.fedconnect.net/FedConnect/PublicPages/FedConnect\\_Ready\\_Set\\_Go.pdf](https://www.fedconnect.net/FedConnect/PublicPages/FedConnect_Ready_Set_Go.pdf)
- By law, **Prime Recipients** are also required to register with the Federal Funding Accountability and Transparency Act Subaward Reporting System (FSRS) at <https://www.fsrs.gov/>.<sup>13</sup> Prime Recipients are required to report to FSRS the names and total compensation of each of the Prime Recipient's five most highly compensated executives and the names and total compensation of each Subrecipient's five most highly compensated executives. Please refer to <https://www.fsrs.gov/> for guidance on reporting requirements.

DOE may not execute a cooperative agreement with the Prime Recipient until it has obtained a DUNS number and completed its SAM and FSRS registrations. In addition, the Prime Recipient may not execute subawards with Subrecipients until they obtain a DUNS number and complete their SAM registration. Prime Recipients and Subrecipients are required to keep their SAM and FSRS data current throughout the duration of the project.

### 3. ELECTRONIC AUTHORIZATION OF APPLICATIONS AND AWARD DOCUMENTS

Submission of an application and supplemental information under this announcement through electronic systems used by the Department of Energy, including EERE eXCHANGE, constitutes the authorized representative's approval and electronic signature.

Submission of award documents, including modifications, through electronic systems used by the Department of Energy, including FedConnect, constitutes the authorized representative's approval and acceptance of the terms and conditions of the award. Award acknowledgement via FedConnect constitutes the authorized representative's electronic signature.

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<sup>13</sup> The Federal Funding Accountability and Transparency Act, P.L. No. 109-282, 31 U.S.C. 6101 note.

## Section V – Application Review Information

### A. Criteria

DOE considers a mix of quantitative and qualitative criteria in determining whether to encourage or discourage the submission of a Full Application and to select or not select a Full Application for award negotiations. DOE carefully considers all of the information obtained through the application process, and evaluates each compliant and responsive Concept Paper and Full Application based on the criteria and program policy factors in this section.

#### 1. CRITERIA FOR CONCEPT PAPERS

Concept Papers are evaluated based on the following criteria:

**(1) Overall Project Plan (50%)** – Each reviewer will assign a score of -1, 0, or 1 for this criterion. This criterion involves consideration of the following factors:

- Whether the Applicant proposes work that is unique, innovative, scalable, and feasible;
  - Credible targets for further soft cost reductions and market barrier removal at the local level;
- Whether the Applicant demonstrates a sound approach to accomplish the proposed objectives;
  - Specific and well-considered method/approach to achieve market improvements and cost reductions;
- Whether the Applicant envisions a project outcome and deliverables that are clearly defined;
- Quality and qualifications of the team/group;
  - Applicants will be judged on ability and willingness to collaborate with various stakeholders in various geographic areas; this will be judged, in part, by quality of letter(s) of support and composition of Applicant team;
- Capacity for reducing soft costs and market barriers at the local level, demonstrated by at least one example of a substantial achievement in soft costs reduction and/or process reform over the past 20 months,
  - This claim may be supported and strengthened by letters of support from solar installers doing business in the Applicant’s geographic area, local officials, collaborators, etc.

**(2) Impact of the Proposed Project on the Goals of the SunShot Initiative (50%)** – Each reviewer will assign a score of -1, 0, or 1 for this criterion. This criterion involves consideration of the following factors:

- The Applicant shows a clear understanding of:
  - The goals of the SunShot initiative;
  - How the target outcomes support the SunShot cost reduction goals;
- How method/approach could be scaled beyond immediate local area to state/region/nationally;
- Whether the Applicant demonstrates an awareness of best practices and other methodologies and identifies how its proposed solution provides improvement over these other potential solutions or a particularly effective and/or creative form of implementation;
- Applicants understand and explicitly state the baseline current cost in their geographic area relevant to and addressed by the proposed work.

The scores indicate the following:

**Table 8 – Scoring – Concept Papers**

<b>1</b>	Applicant has strong potential to meet FOA requirements
<b>0</b>	Applicant has potential to meet FOA requirements
<b>-1</b>	Applicant does not have potential to meet FOA requirements

The scores are weighted as follows:

**Table 9 – Criteria Weighting – Concept Papers**

<b>50%</b>	Overall Project Plan
<b>50%</b>	Project Impact on SunShot Initiative Goals

DOE conducts an evaluation of each Concept Paper based on the criteria above. Each Concept Paper will be reviewed by at least two reviewers. A Concept Paper that receives an average final score (Criteria 1 and 2) of less than 0 will be discouraged from submitting a Full Application. A Concept Paper that receives an average final score (Criteria 1 and 2) above 0 will be encouraged to submit a Full Application. A Concept Paper that receives an average final score (Criteria 1 and 2) of zero will be evaluated by one or more additional reviewers to determine whether it should be encouraged to submit a Full Application.

## **2. CRITERIA FOR FULL APPLICATIONS**

Full Applications are evaluated based on the following criteria:

**Table 10 – Criteria Weighting – Full Applications**

<b>20%</b>	Criterion 1: Track Record (Demonstrating Measurable Progress)
<b>25%</b>	Criterion 2: Vision and Quantifiable Impact
<b>25%</b>	Criterion 3: Quality and Relevance of Project Plan
<b>20%</b>	Criterion 4: Qualifications, Resources, and Capabilities
<b>10%</b>	Criterion 5: Management Plan, Timetables, Deliverables

### **Criterion 1: Track Record (Demonstrating Measurable Progress)**

- Extent to which Applicant demonstrates a thorough understanding of current market environment with respect to the four Rooftop Solar Challenge II action areas and SunShot soft cost reduction goals.
- Ability to demonstrate concrete actions and reforms during the period of approximately July 2011 to February 2012 (~20 months) that led to reductions in market barriers as experienced by local installers, and increases in installed PV capacity. Descriptions of reforms recently put into motion with forthcoming results, including a timeline of expected impacts, will also be considered. This Criterion will also be assessed using the SM<sup>3</sup> Track Record scores. Considerations include completeness of responses and soundness of industry verification provided.
- The extent to which the Applicant demonstrates that these reforms occurred in and/or impacted a major region or population center (i.e., 500,000 or more residents).

### **Criterion 2: Vision and Quantifiable Impact**

- The extent to which Applicant identifies specific, aggressive, yet realistic goals and expected positive impact on solar market development if those goals are achieved.
- The extent to which the application quantifies the impact of the proposed changes in practices and policies against extant practices and policies. This includes the SM<sup>3</sup> Vision score for a sample of

participating jurisdictions. The sample should represent at least 25% of the total population and at least five jurisdictions.

- The extent of the innovation and disruptive potential of proposed idea to dramatically drive market reforms and reduce costs at the local level to meet the SunShot Initiative goals.
- The extent to which the Applicant demonstrates potential for impact in a wide geographic area that encompasses at least 1,000,000 residents.
- The extent to which Applicant identifies viable follow-on activities that extend beyond the project period/grant funding that will continue to positively impact the solar market.

### **Criterion 3: Quality and Relevance of Project Plan**

- Thoroughness and viability of plan to achieve goals, including identification of all necessary stakeholders and strategies for engaging those stakeholders.
- Extent to which Applicant identifies potential challenges and risks to success, and proposes smart strategies for overcoming obstacles that arise.
- Degree to which the proposed approach can be replicated and scaled.

### **Criterion 4: Qualifications, Resources, and Capabilities**

- Extent to which the capabilities, experience, and qualifications of the organization involved are consistent with, and support, the proposed scope of work and the proposed objectives.
- Extent to which the necessary business and technical management for supporting a high likelihood of success of the project have been identified.
- Extent to which the composition of the proposed team supports the implementation and planning for market transformations and reductions of soft costs.
- Appropriateness and quality of proposed partners to accomplish project goals.
- Adequacy of support as evidenced by letters of commitment and letters of support.

### **Criterion 5: Management Plan, Timetables, and Deliverables**

- Appropriateness of the proposed organizational structure of team and plan for collaboration to accomplish goals within the project period.
- Identification of a strong project manager capable of leading a diverse team and interfacing effectively with DOE and other awardees to maximize transparency and information sharing.
- Quality of Applicant's proposed schedule, with defined tasks, deliverables, timing, quantifiable progress and resource allocation.
- Clarity with which project risks are identified and correlated with program decision points and go/no-go's.

Submissions will not be evaluated against each other since they are not submitted in accordance with a common work statement.

Full Applications will be reviewed by no fewer than three independent reviewers using the criteria and relative weighting described above. The results of these reviews will be detailed strengths and weaknesses comments and associated scores on a scale of 0-10.

The comments (but not the scores) will then be available for review by the Applicant for a short time in which a reply to reviewer comments can be submitted to address key weaknesses (see "Content and Form of Replies to Reviewer Comments" on page 37). A merit review will then be held with independent reviewers and the designated federal reviewers to discuss the merits of the various applications.

### 3. CRITERIA FOR REPLIES TO REVIEWER COMMENTS

Replies to Reviewer Comments are evaluated as part of the Full Application.

### 4. CRITERIA FOR PRE-SELECTION PRESENTATIONS

During each pre-selection presentation, DOE representatives will meet with the Project Team and pose questions regarding the proposed project that are structured to clarify information in areas relevant to the Full Application scoring criteria (see “Criteria for Full Applications” on page 46). These questions allow DOE to clarify the proposed project plan and provide the Applicant with the opportunity to respond to programmatic issues and concerns. Following the pre-selection presentation, DOE will assign a score of -1, 0, or 1 to the entirety of the presentation, including the Applicant’s responses. DOE will then re-evaluate the Merit Review scores for each Applicant.

**Table 11 – Scoring for Pre-selection presentations**

<b>1</b>	Applicant adequately addressed the majority of the major program questions
<b>0</b>	Applicant adequately addressed some major program questions but other concerns remain
<b>-1</b>	Applicant did not adequately address the majority of the major program questions

### 5. CRITERIA FOR PRE-SELECTION CONFERENCE CALLS

During each pre-selection conference call, DOE representatives pose questions to the Applicant that are structured to clarify areas relevant to the Full Application scoring criteria (see “Criteria for Full Applications” on page 46). These questions allow DOE to further assess the proposed project and provide the Applicant with the opportunity to respond to programmatic issues and concerns.

### 6. PROGRAM POLICY FACTORS

In addition to the above criteria, DOE may consider the following program policy factors in determining which Full Applications to select for award negotiations.

- Diversity of technologies, approaches, methods, and institutions (including the degree to which proposed technologies, approaches, and methods would be complementary to and support a diversity of geographic locations and of technical approaches and methods that, in conjunction with the existing portfolio of projects funded by DOE, best achieve the overall goals and objectives of the Solar Program);
- Diversity of experience among Principal Investigators and Project Partners;
- The degree of apparent efficiency of leveraging DOE resources;
- Portfolio diversity within the project topic area;
- Diversity of degree of risk and associated potential benefits;
- Impact of DOE funds on the project measured by project's increased likelihood of achieving programmatic objectives and;
- Past performance on federal awards.

### 7. ANTICIPATED ANNOUNCEMENT AND AWARD DATES

DOE expects to announce selections under this FOA and to execute cooperative agreements in or about May 2012.



## Section VI – Award Administration

### A. Award Notices

#### 1. REJECTED SUBMISSIONS

Noncompliant and nonresponsive Concept Papers and Full Applications will be rejected by DOE and are not considered for award. The DOE Contracting Officer sends a notification letter by email to the technical and administrative points of contact designated by the Applicant in EERE eXCHANGE. The notification letter states the basis upon which the Concept Paper or Full Application was rejected.

#### 2. CONCEPT PAPER NOTIFICATIONS

Applicants will be promptly notified of DOE's determination to encourage or discourage the submission of a Full Application. DOE sends a notification letter by email to the technical and administrative points of contact designated by the Applicant in EERE eXCHANGE. DOE provides Applicants with feedback in the notification letter in order to guide the further development of the proposed project.

Applicants may submit a Full Application even if they receive a notification discouraging them from doing so. By discouraging the submission of a Full Application, DOE intends to convey its lack of programmatic interest in the proposed project. Such assessments do not necessarily reflect judgments on the merits of the proposed project. The purpose of the Concept Paper phase is to save Applicants the considerable time and expense of preparing a Full Application that is unlikely to be selected for award negotiations.

A notification letter encouraging the submission of a Full Application does not authorize the Applicant to commence performance of the project.

#### 3. FULL APPLICATION NOTIFICATIONS

Applicants will be promptly notified of DOE's determination. DOE sends a notification letter by email to the technical and administrative points of contact designated by the Applicant in EERE eXCHANGE. The notification letter may inform the Applicant that its Full Application was selected for award negotiations or not selected.

Written feedback on Full Applications is made available to Applicants before the submission deadline for Replies to Reviewer Comments. By providing feedback, DOE intends to guide the further development of the proposed project/solution and to provide a brief opportunity to respond to Reviewer comments

#### *Successful Applicants*

A notification letter selecting a Full Application for award negotiations does not authorize the Applicant to commence performance of the project. DOE selects Full Applications for award negotiations, not for award. Applicants do not receive an award until award negotiations are complete and the DOE Contracting Officer executes the cooperative agreement.

Please refer to "Pre-Award Costs" on page 41 of the FOA for guidance on pre-award costs.

#### *Unsuccessful Applicants*

By not selecting a Full Application, DOE intends to convey its lack of programmatic interest in the proposed project. Such assessments do not necessarily reflect judgments on the merits of the proposed project. DOE encourages unsuccessful Applicants to submit innovative ideas and concepts for future FOAs.

#### **4. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS**

The following administrative and national policy requirements apply to Prime Recipients. The Prime Recipient is the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues. Prime Recipients are required to flow down these requirements to their Subrecipients through subawards or related agreements.

#### **5. NATIONAL POLICY ASSURANCES**

The DOE Special Terms and Conditions for Use in Most Grants and Cooperative Agreements are located at:

<http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>.

The National Policy Assurances To Be Incorporated as Award Terms are located at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>

#### **6. PROOF OF COST SHARE COMMITMENT AND ALLOWABILITY**

Upon selection for award negotiations, the Prime Recipient must confirm in writing that the proposed cost share is allowable in accordance with applicable Federal cost principles.

The Prime Recipient is also required to provide cost share commitment letters from Subrecipients or third parties that are providing cost share, whether cash or in-kind. Each Subrecipient or third party that is contributing cost share must provide a letter on appropriate letterhead that is signed by an authorized corporate representative. The letter must state, in unconditional and unequivocal terms, its commitment to provide cost share. The letter may not include any conditions for receipt of the cost share contributions. The letter must state the amount and form of cost share, the source and precise nature of the contribution, and the duration and timing of the commitment (e.g., two years beginning in Spring 2013).

## 7. COST SHARE PAYMENTS<sup>14</sup>

All proposed cost share contributions must be reviewed and approved in advance by the DOE Contracting Officer (or his/her designee) and incorporated into the project budget before the expenditures are incurred.

Cost share may be paid in equal installments over the life of the award. Alternatively, the Prime Recipient may pay the entire cost share amount in the initial months of the award. DOE will not accept any proposal to pay the entire cost share amount in the final months of the award.

DOE may deny reimbursement requests, in whole or in part, or modify or terminate cooperative agreements where Prime Recipients (or Project Teams) fail to comply with DOE's cost share payment requirements.

## 8. REPORTING

Recipients are required to submit periodic technical, financial, and other reports, including:

- Performance Progress Reports: technical progress reports submitted on a quarterly basis;
- Bimonthly status calls.
- SF-425: financial status reports submitted on a quarterly basis;
- Scientific/technical conference papers and proceedings must be submitted to DOE's E-Link System;
- SF-LLL: reporting on lobbying activities relating to the project;
- Annual indirect cost proposals;
- Annual audits of for-profit recipients or A-133;
- Annual property inventories;
- Closeout reporting, such as final scientific/technical report, final invention and patent report, and final property report; and
- Subject invention utilization reporting.

Performance Progress Reports are submitted every three months starting from the award date. These written reports shall be in a short letter format, approximately 5 to 15 pages in length each, with emphasis placed on the status and data results as well as a brief overview of the progress made. These reports are required and are independent of the deliverables discussed in this FOA.

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<sup>14</sup> Please refer to “

### **Questions Regarding Eligibility**

DOE will not make eligibility determinations for potential Applicants prior to the date on which applications to this FOA must be submitted. The decision whether to submit an application in response to this FOA lies solely with the Applicant.

## A. Cost Share Requirements

Please refer to Appendix IV – Cost Share Information.

## B. Communications with DOE

Applicants may contact DOE through the following email addresses:

- [RooftopChallenge@go.doe.gov](mailto:RooftopChallenge@go.doe.gov) for questions regarding this FOA. Insert FOA name in the subject line of emails. Responses to questions are posted to “Frequently Asked Questions” on DOE’s website every Friday or, at the latest, one business day before the submission deadline (<https://eere-exchange.energy.gov/FAQ.aspx>, select the SunShot Rooftop Solar Challenge II FOA in the dropdown menu).
- [EERE-ExchangeSupport@hq.doe.gov](mailto:EERE-ExchangeSupport@hq.doe.gov) for questions regarding EERE eXCHANGE. Insert FOA name in the subject line of emails. Responses will be sent directly to the Applicant. DOE will refer any questions regarding the SunShot FOA to [RooftopChallenge@go.doe.gov](mailto:RooftopChallenge@go.doe.gov).

DOE will not accept or respond to communications received by other means (e.g., telephone calls, faxes). Emails sent to other email addresses will be disregarded.

## Section VIII – Other Information

### A. FOAs and FOA Modifications

FOAs and FOA modifications are posted on DOE’s website (<https://eere-exchange.energy.gov/Default.aspx>).

#### 1. OBLIGATION OF PUBLIC FUNDS

The DOE Contracting Officer is the only individual who can make awards on behalf of DOE or obligate DOE to the expenditure of public funds. Any perceived commitment or obligation by any individual other than the DOE Contracting Officer, either explicit or implied, is invalid.

#### 2. REQUIREMENT FOR FULL AND COMPLETE DISCLOSURE

Applicants are required to make a full and complete disclosure of the information identified in “Disclosures for Eligibility Determination” on page 25. Disclosure of the requested information is mandatory. Any failure to make a full and complete disclosure of the requested information may result in:

- The rejection of a Concept Paper, Full Application, and/or Reply to Reviewer Comments;
- The termination of award negotiations;
- The modification, suspension, and/or termination of a funding agreement;
- The initiation of debarment proceedings, debarment, and/or a declaration of ineligibility for receipt of Federal contracts, awards, and financial assistance and benefits; or
- Civil and/or criminal penalties.

### **3. RETENTION OF SUBMISSIONS**

DOE will retain copies of all Concept Papers, Full Applications, Replies to Reviewer Comments, and other submissions. No submissions will be returned. By applying to DOE for funding, Applicants consent to DOE's retention of their submissions.

## **B. Intellectual Property Provisions**

The standard DOE financial assistance intellectual property provisions applicable to the various types of recipients are located at <http://energy.gov/gc/standard-intellectual-property-ip-provisions-financial-assistance-awards>.

### **1. MARKING OF PROPRIETARY APPLICATION INFORMATION**

DOE will use data and other information contained in Concept Papers, Full Applications, and Replies to Reviewer Comments strictly for evaluation purposes. Applicants should not include confidential, proprietary, or privileged information in their applications unless such information is necessary to convey an understanding of the proposed project.

Concept Papers, Full Applications, Replies to Reviewer Comments, and other submissions containing confidential, proprietary, or privileged information must be marked as described below. 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.

The cover sheet of the Concept Paper, Full Application, Reply to Reviewer Comments, or other submission 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 double brackets or highlighting.

### **2. TITLE TO SUBJECT INVENTIONS**

Ownership of subject inventions is governed pursuant to the authorities listed below.

- Domestic Small Businesses, Educational Institutions, and Nonprofits: Under the Bayh-Dole Act (35 U.S.C. § 200 et seq.), domestic small businesses, educational institutions, and nonprofits may elect to retain title to their subject inventions.
- All other parties: The Federal Non Nuclear Energy Act of 1974, 42 U.S.C. 5908, provides that the Government obtains title to new inventions unless a patent waiver is granted (*see below*).
- Class Waiver: Under 42 U.S.C. § 5908, title to subject inventions vests in the U.S. Government and large businesses and foreign entities do not have the automatic right to elect to retain title to subject inventions. However, EERE may issue “class patent waivers” under which large businesses and foreign entities that meet certain stated requirements may elect to retain title to their subject inventions.
- Advance and Identified Waivers: Applicants may request a patent waiver that will cover subject inventions that may be invented under the award, in advance of or within 30 days after the effective date of the award. Even if an advance waiver is not requested or the request is denied, the recipient will have a continuing right under the award to request a waiver for identified inventions, *i.e.*, individual subject inventions that are disclosed to DOE within the timeframes set forth in the award’s intellectual property terms and conditions. Any patent waiver that may be granted is subject to certain terms and conditions in 10 CFR 784.

### 3. GOVERNMENT RIGHTS IN SUBJECT INVENTIONS

Where Prime Recipients and Subrecipients retain title to subject inventions, the U.S. Government retains certain rights.

- Government Use License: The U.S. Government retains a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States any subject invention throughout the world. This license extends to contractors doing work on behalf of the Government.
- March-in Rights: The U.S. Government, by law (see 35 U.S.C. § 203), retains march-in rights with respect to all subject inventions. March-in rights are intended to ensure that Government-funded inventions are commercialized so that the public can benefit from the government funding of the technology. March-in rights may also be used to alleviate public health or safety needs, in situations when use of the invention is required by Federal law, or to enforce the U.S. Preference Provision of the Bayh-Dole Act (see 35 U.S.C. § 204).

Under “march-in rights,” the Government may require a Prime Recipient or Subrecipient who has elected to retain title to a subject invention (or their assignees or exclusive licensees) to grant a license for use of the invention to a third party. In addition, the Government may grant licenses for use of the subject invention when Prime Recipients, Subrecipients, or their assignees and exclusive licensees refuse to do so.

Since the creation of march-in rights in 1980, the Department of Energy has never exercised its march-in rights to any subject inventions. However, the Department’s history of not exercising march-in rights has no impact on the Department’s ability and willingness to

exercise march-in rights if the Department determines that conditions exist that make march-in rights necessary. Specifically, the Department may exercise its march-in rights if it determines that such action is necessary under any of the four following conditions:

- The owner or licensee has not taken or is not expected to take effective steps to achieve practical application of the invention within a reasonable time;
- The owner or licensee has not taken action to alleviate health or safety needs in a reasonably satisfied manner;
- The owner has not met public use requirements specified by Federal statutes in a reasonably satisfied manner; or
- The U.S. Manufacturing requirement has not been met.

Any determination that march-in rights are warranted must follow a fact-finding process in which the contractor has certain rights to present evidence and witnesses, confront witnesses and appear with counsel (see 37 CFR § 401.6) and appeal any adverse decision (see 35 USC § 203(b)).

#### **4. SUBJECT INVENTION UTILIZATION REPORTING**

To ensure that Recipients (both Prime Recipients and Subrecipients) holding title to subject inventions are taking the appropriate steps to commercialize subject inventions, DOE may require Prime Recipients to submit annual reports for the life of the subject invention on the utilization of subject inventions and efforts made by Prime Recipients or their licensees or assignees to stimulate such utilization.

#### **5. RIGHTS IN TECHNICAL DATA**

Data rights differ based on whether data is first produced under an award or instead was developed at private expense outside the award.

- Background or “Limited Rights Data”: The U.S. Government will not normally require delivery of technical data developed solely at private expense prior to issuance of an award, except as necessary to monitor technical progress and evaluate the potential of proposed technologies to reach specific technical and cost metrics.
- Data Generated Under an Award: Normally, the government has unlimited rights in technical data created under a DOE award. Delivery or third party licensing of proprietary software or data developed solely at private expense will not normally be required except as specifically negotiated in a particular agreement to satisfy DOE’s own needs or to insure the commercialization of technology developed under a DOE agreement.

#### **6. COPYRIGHT**

For data other than scientific and technical articles, the DOE Contracting Officer must approve the assertion of copyright protection on data first produced under an award, including software or to use software developed outside of the award. Approval will be granted upon demonstration

that the assertion of copyright protection or use of software developed outside of the award will not interfere with DOE's ability to share and redistribute works for others to build upon.

### **C. Protected Personally Identifiable Information**

Applicants may not include any Protected Personally Identifiable Information (Protected PII) in their submissions to DOE. Protected PII is defined as data that, if compromised, could cause harm to an individual such as identity theft. Listed below are examples of Protected PII that Applicants must not include in their submissions.

- Social Security Numbers in any form;
- Place of Birth associated with an individual;
- Date of Birth associated with an individual;
- Mother's maiden name associated with an individual;
- Biometric record associated with an individual;
- Fingerprint;
- Iris scan;
- DNA;
- Medical history information associated with an individual;
- Medical conditions, including history of disease;
- Metric information, e.g. weight, height, blood pressure;
- Criminal history associated with an individual;
- Ratings;
- Disciplinary actions;
- Performance elements and standards (or work expectations) are PII when they are so intertwined with performance appraisals that their disclosure would reveal an individual's performance appraisal;
- Financial information associated with an individual;
- Credit card numbers;
- Bank account numbers; and
- Security clearance history or related information (not including actual clearances held).

### **D. ANNUAL COMPLIANCE AUDITS FOR FOR-PROFIT ENTITIES**

If a for-profit entity is a Prime Recipient or Subrecipient, it is required to have an annual compliance audit performed by an independent auditor. For additional information, please refer to 10 C.F.R. § 600.316 and for-profit audit guidance documents posted under the "Coverage of Independent Audits" heading at <http://energy.gov/management/office-management/operational-management/financial-assistance/financial-assistance-forms>



## Section IX – Glossary

**Applicant:** The entity that submits the application to DOE. In the case of a Project Team, the Applicant is the lead organization listed on the application.

**Application:** The entire submission received by DOE, including the Letter of Intent to Apply, Concept Paper, Full Application, and Reply to Reviewer Comments.

**Cost Share:** The Prime Recipient share of the Total Project Cost.

**DOE:** U.S. Department of Energy.

**DOE/NNSA:** U.S. Department of Energy/National Nuclear Security Administration.

**EERE:** Office of Energy Efficiency and Renewable Energy (EERE), U.S. Department of Energy.

**FFRDCs:** Federally Funded Research and Development Centers.

**FOA:** Funding Opportunity Announcement.

**GOGOs:** U.S. Government-Owned Government-Operated laboratories.

**Key Participant:** Any individual who would contribute in a substantive, measurable way to the execution of the proposed project.

**Prime Recipient:** The signatory to the funding agreement with DOE.

**Project Team:** The term “Project Team” is used to mean any entity with multiple players working collaboratively and could encompass anything from an existing organization to an ad hoc teaming arrangement. A Project Team consists of the Prime Recipient, Subrecipients, and others performing or otherwise supporting work under a DOE funding agreement.

**RD&D:** Research, Development, and Demonstration.

**SETP:** Solar Energy Technologies Program, within the Office of Energy Efficiency and Renewable Energy (EERE), U.S. Department of Energy.

**Start-up Business:** An entity with less than 500 employees not including the employees of any parent companies, subsidiaries or other affiliated companies.

**Standalone Applicant:** An Applicant that applies for funding on its own, not as part of a Project Team.

**Subject Invention:** Any invention conceived or first actually reduced to practice under a DOE funding agreement.

**Total Project Cost:** The sum of the Prime Recipient share and the Federal Government share of total allowable costs. The Federal Government share generally includes costs incurred by FFRDCs and GOGOs.

## Appendix I – Solar Metrics Online Portal Overview

As stated, DOE will host a webinar for Applicants to detail the process for inputting Solar Market Maturity Indicators following the concept paper phase of the application (Date TBD – will be posted on EERE eXCHANGE website).

Applicants will receive one log-in account per application. If an Applicant wishes to allow others on the Applicant's team to access the online portal, they will need to allow their log-in account information to be shared. Applicants may wish to consult Attachment 1 (Market Maturity Indicator Scorecard "Scorecard") in order to collect responses prior to inputting them into the Solar Metrics online portal. While this Scorecard represents many of the indicators that will be utilized in the final SM<sup>3</sup> model, the final set of indicators and associated questions are subject to change prior to the finalization of the Concept Paper stage. Also, please note that the point values of each individual indicator (i.e., details of how responses to questions are converted to scores) will not be provided to applicants. Consult Table 2 – SM3 Indicators for Action Area and Subcategory point totals.

**All Applicants are required to enter their own data into the Solar Metrics online portal in accordance with application deadlines and requirements – DOE will not accept data through alternative means (e.g., Attachment 1).**

### **How to access the Solar Metrics online portal:**

Following the Concept Paper stage, DOE will hold a webinar to detail the expectations and process for entry of Solar Market Maturity Indicators into the Solar Metrics online portal. In the meantime, Applicants can examine diagrams in this section for an overview of the expected data entry process.

### **For Applicants without prior access to the Solar Metrics online portal:**

Following the Concept Paper stage, Applicants will be required to request an account at SolarMetrics@nrel.gov. Only one log-in per Applicant will be allowed.

**For Applicants with prior access to the Solar Metrics online portal:** Applicants will be able to access their existing accounts. Applicants in this category will have already entered data for the "Present" score, effective February 15, 2012. Applicants will be able to enter data relevant to the Full Application for the Rooftop Solar Challenge II following the Concept Paper stage of the application.

The following is an overview of the Solar Metrics online portal. The interface and data entry process below is subject to change.

Figure 5 – Log-in Page

**Instructions:** Applicants will enter the email and password once they have been provided access to the online portal by DOE.

Figure 6 – Jurisdiction Page

Jurisdictions	% Complete	Edit Responses	View Report
DOER Boston	12.43 %	Edit Responses	View Report
DOER Cambridge	0.0 %	Edit Responses	View Report
DOER Harvard	0.0 %	Edit Responses	View Report
DOER Hatfield	0.0 %	Edit Responses	View Report
DOER Winchester	0.0 %	Edit Responses	View Report

Team Documents      Full Team Report

Finished?      Review Application ☐

**Instructions:** Applicants will be able to view and add participating jurisdictions from this screen and view the percentage complete for each jurisdiction.

Figure 7 – Section Page

Solar Metrics



ROOFTOP SOLAR CHALLENGE

  
Home

  
Application

  
Reports

  
Analysis

[Home](#) > [Application](#) > DOER Boston

generic.user@nrel.gov  
[Help](#) • [My Account](#) • [Logout](#)

**DOER Boston Jurisdiction**  
Fill out each application section for the jurisdiction listed below.

2012 Application Sections	% Complete	
Section 1: Permitting Process	18%	
Section 2: Interconnection Process	31%	
Section 3: Enabling Financing Options	0%	
Section 4: Siting, Planning and Zoning	0%	
Section 5: NNEC: Net Metering	0%	
Section 6: NNEC: Interconnection	0%	
Section 7: Installed PV Capacity and PV Costs	0%	




Continue 

**Instructions:** For each jurisdiction, Applicants will be able to view the completion levels for each of the sections. By selecting start, Applicants will be taken to the next screen to input responses.

Figure 8 – Response Page

Solar Metrics



ROOFTOP SOLAR CHALLENGE

Home

Application

Reports

Analysis

Home » Application » DOER Boston » Section 1: Permitting Process

generic.user@nrel.gov  
Help • My Account • Logout

SunShot Massachusetts Team - DOER Boston

Section 1: Permitting Process

Answer the questions below for this section.

Scored Questions

Industry Verification Required

Application

Residential

Commercial

1. To how many departments does an installer have to submit separate applications? (a municipal utility does not count as a city department here)

Enter any additional comments regarding this question

 Peek at last year's response


2. What types of departmental approvals are required? (check all that apply)

Enter any additional comments regarding this question

 Peek at last year's response

3. What approvals from Professional Engineers are required as part of the permit package? (Check all that apply)

Enter any additional comments regarding this question

 Peek at last year's response

Building

Electrical

Fire

Mechanical

Planning

Plumbing

Structural

Zoning

Other (\*Specify)

None of the above

Civil

Electrical

Environmental

Fire Protection

Mechanical

Structural

None of the above

Building

Electrical

Fire

Mechanical

Planning

Plumbing

Structural

Zoning

Other (\*Specify)

None of the above

Civil

Electrical

Environmental

Fire Protection

Mechanical

Structural

None of the above

Instructions: Applicants will enter responses for each of the questions for the residential and commercial PV sectors. Applicants will also be able to view responses from other periods (i.e., “past,” “present”) to avoid switching between periods.

## Appendix II – Suggested Letter Format for the Independent Industry

[Insert DOE POC and address]

Department of Energy Reviewers:

This letter serves as verification that we have reviewed the Market Evaluation prepared by *[insert Lead Applicant name]* and agree with the information reported for the following jurisdictions *[insert names of jurisdictions for which the company is providing verification]*. Our company represents a significant portion of *[insert applicable sector – residential, commercial, or residential and commercial]* PV sales in the above jurisdictions. Based on our experience doing business in these jurisdictions, the information reported is an accurate reflection of the status of the permitting and interconnection processes in these jurisdictions.

Sincerely,

[Company POC Name]  
[Company POC Title]  
[Address]  
[Phone Number]



## Appendix III – Sample Summary Slide

<h1>Title</h1> <h2>PI NAME / ORGANIZATION</h2>		Insert Control Number
<b>Project Summary</b> Insert a one-paragraph summary of the aim of the project, proposed tool(s) and/or desired insight, approach, and/or strategy for implementing and/or disseminating results.	<b>Key Personnel/Organizations</b> List all project partners	
<b>Budget and Timeline</b>		
Federal funds: \$	Cost-share: \$	Total: \$
<b>Key Milestones &amp; Deliverables</b>		
Year 1:	Insert key milestones and deliverables for each year as appropriate.	
Year 2:		
<b>Project Impact</b> Insert a description (text and/or graphic) of current market conditions and describe how this project will result in a significant advancement in solar market maturity in your area of focus.		
<b>Population Impact:</b>		
Insert one sentence summarizing the main idea(s) of the proposed project.		

## Appendix IV – Cost Share Information

### Cost Sharing or Cost Matching

The terms “cost sharing” and “cost matching” are often used synonymously. Even the DOE Financial Assistance Regulations, 10 CFR Part 600, use both of the terms in the titles specific to regulations applicable to cost sharing. DOE almost always uses the term “cost sharing,” as it conveys the concept that **non-federal share is calculated as a percentage of the Total Project Cost**. An exception is the State Energy Program Regulation, 10 CFR Part 420.12, State Matching Contribution. Here “cost matching” for the non-federal share is calculated as a percentage of the Federal funds only, rather than the Total Project Cost.

### How Cost Sharing Is Calculated

As stated above, cost sharing is calculated as a percentage of the Total Project Cost. Following is an example of how to calculate cost sharing amounts for a project with \$1,000,000 in federal funds with a minimum 20% non-federal cost sharing requirement:

Formula: Federal share (\$) divided by Federal share (%) = Total Project Cost

Example: \$1,000,000 divided by 80% = \$1,250,000

Formula: Total Project Cost (\$) minus Federal share (\$) = Non-federal share (\$)

Example: \$1,250,000 minus \$1,000,000 = \$250,000

Formula: Non-federal share (\$) divided by Total Project Cost (\$) = Non-federal share (%)

Example: \$250,000 divided by \$1,250,000 = 20%

See the sample cost share calculation for a blended cost share percentage below. **Keep in mind that FFRDC funding is DOE funding.**

### What Qualifies For Cost Sharing

While it is not possible to explain what specifically qualifies for cost sharing in one or even a couple of sentences, in general, if a cost is allowable under the cost principles applicable to the organization incurring the cost and is eligible for reimbursement under a DOE grant or cooperative agreement, then it is allowable as cost share. Conversely, if the cost is not allowable under the cost principles and not eligible for reimbursement, then it is not allowable as cost share. In addition, costs may not be counted as cost share if they are paid by the Federal Government under another award unless authorized by Federal statute to be used for cost sharing.

The rules associated with what is allowable as cost share are specific to the type of organization that is receiving funds under the grant or cooperative agreement, though are generally the same for all types of entities. The specific rules applicable to:

- Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations are found at 10 CFR 600.123;
- State and Local Governments are found at 10 CFR 600.224;
- For-profit Organizations are found at 10 CFR 600.313.



In addition to the regulations referenced above, other factors may also come into play such as timing of donations and length of the project period. For example, the value of ten years of donated maintenance on a project that has a project period of five years would not be fully allowable as cost share. Only the value for the five years of donated maintenance that corresponds to the project period is allowable and may be counted as cost share.

Additionally, DOE generally does not allow pre-award costs for either cost share or reimbursement when these costs precede the signing of the appropriation bill that funds the award. In the case of a competitive award, DOE generally does not allow pre-award costs prior to the signing of the Selection Statement by the DOE Selection Official.

Following is a link to the DOE Financial Assistance Regulations. You can click on the specific section for each Code of Federal Regulations reference mentioned above.

[DOE Financial Assistance Rules \(10 CFR 600\)](#)

As stated above, the rules associated with what is allowable cost share are generally the same for all types of organizations. Following are the rules found to be common, but again, the specifics are contained in the regulations and cost principles specific to the type of entity:

(A) *Acceptable contributions*. All contributions, including cash contributions and third party in-kind contributions, must be accepted as part of the recipient's cost sharing if such contributions meet all of the following criteria:

- (1) They are verifiable from the recipient's records.
- (2) They are not included as contributions for any other federally-assisted project or program.
- (3) They are necessary and reasonable for proper and efficient accomplishment of project or program objectives.
- (4) They are allowable under the cost principles applicable to the type of entity incurring the cost as follows:

(a) *For-profit organizations*. Allowability of costs incurred by for-profit organizations and those nonprofit organizations listed in Attachment C to OMB Circular A-122 is determined in accordance with the for-profit costs principles in 48 CFR Part 31 in the Federal Acquisition Regulation, except that patent prosecution costs are not allowable unless specifically authorized in the award document. (v) Commercial Organizations. [FAR Subpart 31.2—Contracts with Commercial Organizations](#)

(b) *Other types of organizations*. Allowability of costs incurred by other types of organizations that may be subrecipients under a prime award is determined as follows:

(i) *Institutions of higher education*. Allowability is determined in accordance with: [2 CFR 220 Cost Principles for Educational Institutions](#)

(ii) *Other nonprofit organizations*. Allowability is determined in accordance with: [2 CFR 230 Cost Principles for Nonprofit Organizations](#)

(iii) *Hospitals.* Allowability is determined in accordance with the provisions of: [Title 45 Appendix E to Part 74—Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts With Hospitals](#)

(iv) *Governmental organizations.* Allowability for State, local, or federally recognized Indian tribal government is determined in accordance with: [PART 225—Cost Principles for State, Local, and Indian Tribal Governments \(OMB Circular A-87\)](#)

(5) They are not paid by the Federal Government under another award unless authorized by Federal statute to be used for cost sharing or matching.

(6) They are provided for in the approved budget.

(B) *Valuing and documenting contributions*

(1) *Valuing recipient's property or services of recipient's employees.* Values are established in accordance with the applicable cost principles, which mean that amounts chargeable to the project are determined on the basis of costs incurred. For real property or equipment used on the project, the cost principles authorize depreciation or use charges. The full value of the item may be applied when the item will be consumed in the performance of the award or fully depreciated by the end of the award. In cases where the full value of a donated capital asset is to be applied as cost sharing or matching, that full value must be the lesser or the following:

- (a) The certified value of the remaining life of the property recorded in the recipient's accounting records at the time of donation; or
- (b) The current fair market value. If there is sufficient justification, the Contracting Officer may approve the use of the current fair market value of the donated property, even if it exceeds the certified value at the time of donation to the project. The Contracting Officer may accept the use of any reasonable basis for determining the fair market value of the property.

(2) *Valuing services of others' employees.* If an employer other than the recipient furnishes the services of an employee, those services are valued at the employee's regular rate of pay, provided these services are for the same skill level for which the employee is normally paid.

(3) *Valuing volunteer services.* Volunteer services furnished by professional and technical personnel, consultants, and other skilled and unskilled labor may be counted as cost sharing or matching if the service is an integral and necessary part of an approved project or program. Rates for volunteer services must be consistent with those paid for similar work in the recipient's organization. In those markets in which the required skills are not found in the recipient organization, rates must be consistent with those paid for similar work in the labor market in which the recipient competes for the kind of services involved. In either case, paid fringe benefits that are reasonable, allowable, and allocable may be included in the valuation.

(4) *Valuing property donated by third parties.*

- (a) Donated supplies may include such items as office supplies or laboratory supplies. Value assessed to donated supplies included in the cost sharing or matching share

must be reasonable and must not exceed the fair market value of the property at the time of the donation.

- (b) Normally only depreciation or use charges for equipment and buildings may be applied. However, the fair rental charges for land and the full value of equipment or other capital assets may be allowed, when they will be consumed in the performance of the award or fully depreciated by the end of the award, provided that the Contracting Officer has approved the charges. When use charges are applied, values must be determined in accordance with the usual accounting policies of the recipient, with the following qualifications:

- (i) The value of donated space must not exceed the fair rental value of comparable space as established by an independent appraisal of comparable space and facilities in a privately-owned building in the same locality.

- (ii) The value of loaned equipment must not exceed its fair rental value.

(5) *Documentation.* The following requirements pertain to the recipient's supporting records for in-kind contributions from third parties:

- (a) Volunteer services must be documented and, to the extent feasible, supported by the same methods used by the recipient for its own employees.
- (b) The basis for determining the valuation for personal services and property must be documented.

**SAMPLE COST SHARE CALCULATION  
FOR BLENDED COST SHARE PERCENTAGE**

*The following example shows the math for calculating required cost share for a project with \$2,000,000 in Federal funds with four tasks requiring different Non-federal cost share percentages:*

<u>Task</u>	<u>Proposed Federal Share</u>	<u>Required Federal Share %</u>	<u>Non-federal Cost Share %</u>
Task 1 (R&D)	\$1,000,000	80%	20%
Task 2 (R&D)	500,000	80%	20%
Task 3 (Demonstration)	400,000	50%	50%
Task 4 (Outreach)	<u>100,000</u>	100%	0%
	\$2,000,000		

Federal share (\$) divided by Federal share (%) = Task Cost

*Each task must be calculated individually as follows:*

Task 1

\$1,000,000 divided by 80% = \$1,250,000 (Task 1 Cost)

Task 1 Cost minus federal share = Non-federal share

\$1,250,000 - \$1,000,000 = **\$250,000 (Non-federal share)**

Task 2

\$500,000 divided 80% = \$625,000 (Task 2 Cost)

Task 2 Cost minus federal share = Non-federal share

\$625,000 - \$500,000 = **\$125,000 (Non-federal share)**

Task 3

\$400,000 / 50% = \$800,000 (Task 3 Cost)

Task 3 Cost minus federal share = Non-federal share

\$800,000 - \$400,000 = **\$400,000 (Non-federal share)**

Task 4

Federal share = \$100,000

Non-federal cost share is not mandated for outreach = **\$0 (Non-federal share)**

*The calculation may then be completed as follows:*

<u>Task</u>	<u>Proposed Federal Share</u>	<u>Federal Share %</u>	<u>Required Non-federal Cost Share \$</u>	<u>Required Non-federal Cost Share %</u>	<u>Total Project Cost</u>
Task 1	\$1,000,000	80%	\$250,000	20%	\$1,250,000
Task 2	500,000	80%	125,000	20%	625,000
Task 3	400,000	50%	400,000	50%	800,000
Task 4	<u>100,000</u>	100%	<u>0</u>	0%	<u>100,000</u>
	\$2,000,000		\$775,000		\$2,775,000

Blended Cost Share %

Non-federal share (\$775,000) divided by Total Project Cost (\$2,775,000) = 27.9% (Non-federal)

Federal share (\$2,000,000) divided by Total Project Cost (\$2,775,000) = 72.1% (Federal)