# Strategic Communications Planning and Knowledge Transfer for the Solar Energy Technologies Program

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#### **ABSTRACT**

The goal of the Solar Program Communications Team is to enable the Solar Energy Technologies Program to increase America's awareness and understanding of solar energy to accelerate market penetration of solar technologies. Our objectives are to communicate clearly and consistently to consumers, stakeholders, and research partners the core purpose and vision of the Solar Program and to create a cross-communication approach that unifies all solar technologies. Our efforts will lead to greater understanding, collaboration, and partnerships to advance the Solar Program's goal of producing cost-effective solar energy systems.

In FY 2006, our team of experts supported the development and implementation of the Solar America Initiative (SAI) and collaborated with internal and external stakeholders to articulate the value proposition of solar energy technologies and energy efficiency to target audiences. We produced a variety of products, including strategic communications planning documents for the Solar Program, technical reports, conference papers and proceedings, journal articles, brochures, fact sheets, presentations, posters, exhibits, displays, Web sites, and CDs, as well as important program documents such as the 2006 Solar Program Overview, the 2006 Annual Report, and the Solar Program's Multi-Year Program Plan.

#### 1. Objectives

The Solar Communications Team's objectives are to create high-quality communications products, integrate our communications strategy with the Solar Program's Multi-Year Program Plan, and communicate effectively the benefits of the Solar Program's vision to target audiences. Our communications team works with DOE, NREL, and Sandia laboratory staff, as well as numerous external stakeholders, to unify outreach and knowledge transfer about relevant solar technologies. Our goal is to promote understanding of the technologies and collaborations and partnerships among stakeholders to advance research and commercialization of solar energy technologies.

#### 2. Technical Approach

In FY 2006, we updated our communications objectives to reflect the change in programmatic

direction from the Systems-Driven Approach to one that is synchronized with the accelerated R&D and commercialization goals of the Solar America Initiative. Our work will continue to emphasize strategic connections with the aggressive R&D and market transformation activities proposed in the SAI. These efforts to accelerate commercialization of solar technologies and feed the solar R&D pipeline will continue in FY 2007 and beyond.

Our approach included eight key audiences and their perceptions of solar technologies; audience-specific messages and communication objectives and strategies; and communications tactics (projects) to reinforce the objectives. Our team viewed communications activities within four primary areas:

- <u>Planning</u>—strategic planning, budgeting, and program alignment
- <u>Developing and Producing</u>—creating and producing a variety of communications products
- <u>Transferring Knowledge</u>—transferring research and program information to critical audiences
- <u>Measuring</u>—Measuring and assessing the relationships to critical audiences and the effectiveness of messages to them.

# 3. Results and Accomplishments

We summarize our key results and accomplishments for FY 2006 under the four core activities above.

## 3.1 Planning

- We served on the proposal review committee to choose the teams for Solar Decathlon 2007.
- Our team—DOE, NREL, and Sandia—met to discuss our role in the SAI and how communications is vital to SAI's goals.
- We prepared the Solar Communications FY 2007 Draft R&D Project Proposal for the Solar Energy Technologies Program.
- We participated in SAI's Technology Pathway Partnership and Technology Acceptance meetings to obtain feedback on the development of the initiative from prospective SAI participants.
- Though ongoing dialogue with our program management and participation in program-level planning efforts, we realigned our business efforts to correspond to the direction of the SAI.

 As representatives for the United States, we participated in the International Energy Agency's (IEA's) Photovoltaic Power Systems (PVPS) Programme Task 1: Exchange and Dissemination of Information Committee to develop distribution strategies for IEA PVPS information, including industry analysis and documents.

### 3.2 Developing and Producing

- We provided dynamic content for the Solar Decathlon Web site.
- We completed the Program and Abstracts book for the 2005 Solar Energy Technologies Program Review Meeting.
- We completed a repurposing of the solar-heating content on the EERE Solar Program Web site.
- We completed the final draft of the Solar Program Multi-Year Program Plan 2007–2011.
- We created the Solar America Initiative Web site and a Web-based enterprise solution to aid in the formulation of strategic alliances for the Technology Pathway Partnerships.
- We developed two targeted fact sheets about the SAI for utility and buildings stakeholders and distributed them at relevant conferences.
- We completed the U.S. annual contribution to the IEA PVPS: Task 1 2005 Annual Report: PV Technology Status in the USA and the 2005 PV Trends Report.
- We created an exhibit for a new 65-MW solar parabolic trough plant in Nevada.
- We completed the 3-D modeling and animation of the transfer pod/cluster tool concept, which is at the heart of the work conducted within NREL's new Science and Technology Facility.
- We completed the DOE Solar Energy Technologies Program Annual Report, FY 2005.
- We wrote and published DOE Solar Energy Technologies Program: Overview and Highlights.
- We created a kiosk for the 4<sup>th</sup> World Conference on Solar Energy Conversion.
- We continued to work with our respective program management at NREL, Sandia, and NREL to develop the annual operating plan and related reporting procedures.
- We wrote, designed, and produced capabilities material for the NCPV's Measurements & Characterization Division.
- We created new graphics for 19 display cases about PV technologies for NREL.

#### 3.3 Transferring Knowledge

 We managed key aspects of the Solar Decathlon 2005, which attracted about 120,000 visitors to the National Mall. Our village design and installation activity resulted in infrastructure for special events such as the Opening Ceremony, at which Secretary Bodman spoke; consumer workshops

- about energy efficiency and renewable energy, (about 1,400 attendees); and two exhibits: *Energy Today,* which provided information about EERE's purpose and mission, and *Anatomy of a House,* which provided visitors with a primer on the basics of energy efficiency and solar energy for homes.
- We managed the Solar Decathlon Communications Contest, which required the student teams to develop Web sites and conduct tours of their houses on the mall.
- We supported the American Solar Energy Society Tour of Solar Homes.
- We participated in two IEA PVPS workshops to (1) inform attendees about the Solar America Initiative and (2) educate the international financial and investment sector about the state of the PV industry in the United States.
- We participated in the ASES Solar 2006 (1,820 attendees), Solar Power 2006 (5,000 attendees), and 2006 International Builders' Show (104,000 attendees/~500 booth visitors) to distribute targeted information to participants, answer questions, and refer attendees to DOE and laboratory contacts.
- We hosted the "Your Home in the Sun" exhibit at the Colorado Springs Utility Innovation Center, which was in place for 3 months, where more than 18,000 visitors were exposed to the messaging and collateral materials.

#### 3.4 Measuring

- We prepared an online product survey for distribution to a control group for review. The 40+ survey participants provided feedback on one of two communications products. These data will be used to improve existing products prior to reprinting.
- We conducted a Web site survey and lessons learned on all communications and media outreach activities for Solar Decathlon 2005.
- We produced Solar Decathlon 2005: the Event in Review, a technical report that overviews the competition, including final results, team strategies, and detailed descriptions of each of the 18 competition homes. This report was written with an eye toward guiding and educating the 2007 Decathlon competitors.

#### 4. Conclusions

In FY 2007, the Solar Communications Team will plan and conduct activities related to core Solar Program support. We will also conduct all communications-related planning and implementation activities for Solar Decathlon 2007.

SAI's draft posture plan<sup>1</sup> states that its "Market Transformation element will work in parallel to the SAI's Technology Pathway Partnerships to reach a broad spectrum of industry and stakeholders. Market

Transformation and Technology Pathway Partnerships will help ensure success for the SAI by covering a wide range of technical and nontechnical barriers." Our team was, and continues to be, vital to reaching a broad spectrum of industry, consumers, and stakeholders within SAI and the entire Solar Program.

The Solar America Initiative, a market-directed program at its core, brings a bold new approach to performing R&D activities. That approach carries over to communications and outreach activities, which are widely recognized as integral to moving and growing markets. In alignment with this and other SAI goals, members of the Solar Communications Team are participating in merit reviews, supporting management at DOE, GO, and NREL, and developing a communications plan for the Solar America Showcases/ City Strategic Partnerships, State Technical Outreach, and Utility Technical Outreach tasks. We will also conduct outreach to specific stakeholder groups. DOE and NREL are conducting an informal review of solar communication activities to determine the most effective processes to accomplish the work. Input from staff at DOE Headquarters, GO, national laboratories, and contractors will be considered in forming an improved communications effort.

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