Solar Briefing - Solar Community Engagement Strategies for Planners

Subodh Kumar¹, Hari Mohan Meena² and Kavita Verma³

¹Assistant Professor, Chemistry Department, Chandra Kamal Mahavidhiyalaya, Vichawa, Mainpuri Utter Pradesh, India.

²Assistant Professor of Hansraj College in Delhi University, New Delhi, India.

³Assistant Professor, Dayal Singh College in Delhi University, New Delhi, India.

Abstract

Much of the work that planners do can be summed up under the broad umbrella of “sustainability.” Planners are dedicated to creating communities that offer better choices for where and how people work and live for present and future generations. They promote policies and practices that improve equity, economy, and the environment, and help communities to envision their futures, finding the right balance of new development and essential services, environmental protection, and innovative change.

Keyword:-Solar resource, solar collector.

INTRODUCTION

A major tool that a growing number of communities are using to both educate residents about the solar resource as well as track local solar implementation is the solar map. The second paper discusses how local governments are using online mapping tools to showcase existing installations and to allow residents and business owners to estimate the solar resource available to their properties and the potential cost savings that installing a solar energy system could offer. Solar maps can also be used to provide information to residents about local installers and financing options,
and can help utility companies track their own systems’ production and efficiency. Once solar energy has made it on to the local agenda, it is important that local governments make their solar priorities clear and set the stage for growth in local solar markets. Planners have a big role to play in this step by helping their communities adopt and implement policies and regulations that will help them turn these visions into reality. Local plans, most importantly the comprehensive plan, can help clarify a community’s goals when it comes to solar energy, identify the local solar resource, outline relevant policies, and establish the foundation for incorporating solar energy standards into local development regulations.

**Solar Community Engagement Strategies for Planners:**
Planners work to improve the sustainability and livability of their communities. They are uniquely positioned and qualified to promote policies and practices that improve downtowns and neighborhoods, lessen human impacts on the environment, strengthen local economies, and engage community members in analyzing issues, generating visions, developing plans, and monitoring outcomes (Godschalk and Anderson 2012).

Energy use is an important piece of the sustainability puzzle. APA's policy guides on energy and sustainability exhort planners to support energy efficiency, energy conservation, and renewable energy development, including appropriate on-site applications of renewable energy systems along with regulatory and financial support for these technologies (APA 2000, 2004, 2010, 2015).

**Initiating a Community Conversation about Solar Energy:**

Community visioning is the process of identifying collective values and priorities. Communities conduct visioning exercises both in the context of formal planning processes and as stand-alone initiatives. Through visioning and goal-setting exercises, planners have opportunities to initiate community conversations about solar energy, and these exercises give planners chances to highlight both the benefits of and barriers to increasing local solar energy production. While visioning is an ideal venue for initiating a community conversation about solar energy, planners should also be prepared to facilitate conversations about solar that might arise either in response to a specific development proposal or through some other phase of the planning process. Discussions of policy or project alternatives may segue naturally into a community conversation about solar.

**Common Concerns and Misconceptions about Solar Energy:**

Though just about everyone can recognize a solar panel when they see it, unfamiliarity with basic information about solar photovoltaic technology, systems, and economics can be a barrier to solar implementation. Lack of understanding of the technology was one of the top five challenges to solar implementation identified by local governments in a 2011 survey (ICMA 2011).

**Strategies for Community Engagement:**

One of planners’ main roles is to make sure that local residents have access to reliable information about planning issues and other topics of interest. Besides simply being repositories of information on solar energy, planners are in a position to educate and inform their communities about the general benefits of solar, as well as promote solar-related goals and policies their local governments have adopted or solar programs they may be offering. There is a need for public education and outreach around solar energy; “lack of interest in or awareness of solar energy development” was the third most commonly reported challenge in the 2011 solar survey (ICMA 2011).
One Community’s Experience: Salt lake City, Salt lake County, and Utah Clean Energy opening the Door to Solar Energy:-

In 2007 Salt Lake City and Salt Lake County, Utah, established a goal to achieve 10 MW of solar PV installed by 2015. At the time they had virtually none of the foundational pro-solar policies, rules, and incentives in place in surrounding states. What’s more, community stakeholders had limited exposure to solar energy, which translated to limited awareness and understanding of solar technologies and applications. Undaunted by the formidable task at hand, the city and county joined forces with a trusted local nonprofit, Utah Clean Energy, and other partners to tackle the barriers to solar one by one. Their strategic public-private initiative, known as the Solar Salt Lake Partnership (SSLP), laid the foundation for significant solar market growth. Five years after Salt Lake City was named one of the U.S. Department of Energy’s first thirteen Solar America Cities in 2007, the installed rooftop solar PV capacity in the city and county has increased nearly 4,000 percent, growing from a nominal 158 kW to nearly 6,500 kW in 2011. In recognition of their successes and their ability to build bridges from brick walls, the SSLP has received “Barrier Buster” and “Mountain Mover” awards from the U.S. Department of Energy.

Instrumental to the success of the SSLP was a concerted focus on community engagement and outreach to diverse stakeholders, including utilities, regulators, policymakers, planning and zoning officials, building officials, businesses, citizen.

*Billboard from the Solar Salt Lake Partnership’s solar campaign. (Image courtesy of Utah Clean Energy)*
Solar workshops with well over 100 stakeholders to inform the development of Powering Our Future: Solar Salt Lake Implementation Plan, a toolbox for elected officials, government agencies, and affiliated partners to grow the local solar market

• A solar mapping website with calculator, developed by the city’s GIS specialists and IT consultant Critigen, to help local citizens better understand their solar resource potential

• A brief billboard and media campaign to direct people to the solar mapping website and implementation plan

• Solar Code Trainings with solar code experts to educate building and permitting officials about solar technologies, facilitating easier permitting of solar projects

• Peer-to-peer and community forums and workshops, through the city’s Sustainable Code Revision Project with Clarion Associates, to review and develop new solar-friendly zoning ordinances, which the city ultimately adopted

• Strategic collaborations with businesses and citizens to garner support among key decision makers for a state law enabling third-party power purchase agreements (PPA) for Utah’s governments, schools, and churches

• Engagement with over 100 stakeholders in the utility regulatory arena to increase the allowable interconnected solar project size from 25 kW to 2 MW and give fair value to excess solar generation While major strides have been made on the solar front and the solar market continues to expand, Salt Lake City, Salt Lake County, and Utah Clean Energy remain steadfast in their efforts to unlock the local solar market.

CONCLUSION

Energy use is an important issue for communities to address both for environmental and economic reasons. Renewable energy is an important piece of the energy puzzle, and solar energy is a promising resource that municipalities and their residents can tap into to reduce energy costs, greenhouse gas production, and dependence on fossil fuels and foreign sources of oil. Planners can help their communities meet their solar energy visions and accomplish implementation items by ensuring that residents know the facts about solar energy and are aware of local programs and goals. By becoming knowledgeable about common solar energy concerns and by using a variety of strategies and tools for increasing public awareness, planners can help their communities move toward greater sustainability.

REFERENCES AND RESOURCES
