

1.6

Include Solar in Broader City, County, or Regional Planning Efforts

Solar power is a reliable energy option that can help urban planners manage increasing energy demand. Solar technologies generate clean power, extend the life of a community's conventional energy supplies, create jobs, and support economic development. **Solar energy** can also help a community reach its economic, environmental, and sustainability goals. By incorporating solar into a community master plan, as well as into these complementary planning endeavors, planners can coordinate the community's efforts and reach common goals more easily. Because large infrastructure projects and land use changes can take years to develop and implement, it's important to begin considering now how such efforts might take advantage of solar energy as it becomes increasingly cost competitive over the next several years. Integrating the solar plan into broader local and regional planning efforts firmly establishes solar as a viable energy option and supports a growing market in the community.

BENEFITS : Integrating a solar plan into broader local or regional planning efforts affirms a community's commitment to solar energy, promotes strategic long-term thinking, and can help secure resources and political will to accomplish solar goals.

Implementation Tips and Options

- Identify ways solar energy can assist the community in reaching its broader climate change, environmental, and sustainability goals.
- Identify how solar energy can contribute to economic development and community revitalization. See [5.0, Creating Jobs and Supporting Economic Development](#).
- Work with the local planning department and utility to integrate solar energy into the community's infrastructure and resource planning activities.
- Update government procurement processes to include solar as appropriate.
- Define roles for each organization involved after determining where the solar plan can be integrated into broader planning efforts.

Examples

Berkeley, California: Including Solar Provisions in a Climate Action Plan

Berkeley's climate action plan, updated in June 2009, incorporates solar energy as a means of meeting many broader goals, including carbon reduction, energy independence and security, workforce development, and improved building energy standards. In November 2006, voters passed Measure G, an initiative to reduce Berkeley's **greenhouse gas (GHG) emissions** by 80% from 2000 levels by 2050. To meet its requirements, the city aims to eliminate 11,600 **metric tons of carbon dioxide equivalent (MtCO₂e)** per year by 2020 through decentralized solar electric installations on residential and nonresidential buildings. Decentralizing these installations will decrease the vulnerability of the local electricity grid and reduce the city's dependence on fossil fuels.

The city's Office of Energy and Sustainable Development and its partner, the Community Energy Services Corporation, offer numerous services to encourage decentralized solar installations, including innovative financing programs, personalized energy consultations, and an online solar map that estimates the solar energy potential for Berkeley homes and businesses. To meet growing demand for solar energy, the city's action plan includes programs to increase the skilled workforce in Berkeley. The city is implementing youth development job training and placement programs that will match local residents with high-quality green jobs. The plan also incorporates solar energy technologies into new building energy use standards by calling for all new construction to meet zero net-energy performance standards by 2020. Visit www.ci.berkeley.ca.us/ContentDisplay.aspx?id=19668 to download a copy of the plan.

Boston, Massachusetts: Incorporating Solar into Transportation and Emergency Planning

Solar Boston is incorporating **photovoltaic (PV)** battery backup systems at traffic intersections along one of the city's major evacuation routes. These systems will ensure that if the grid fails, the transportation infrastructure at those intersections will continue to function long enough to allow for evacuation. These systems will have the added benefit of feeding solar power into the grid during nonemergency situations. The city's Office of Environmental and Energy Services worked with a cross-departmental team that included the Mayor's Office of Emergency Management, the Boston Transportation Department, the Public Works Department, and the Boston Police Department to develop the solar evacuation route concept. The city is also in the process of developing a long-term energy assurance plan that will incorporate solar power resources.

Tucson, Arizona: Collaborating Regionally on the Greater Tucson Solar Development Plan

Tucson collaborated on a regional level with the Pima Association of Governments (PAG), the Arizona Research Institute for Solar Energy (AzRISE) at the University of Arizona, and the Clean Energy Corporation (CEC) to draft the Greater Tucson Solar Development Plan. The PAG vetted the plan through the Southern Arizona Regional Solar Partnership. The plan forecasts expected solar installations in the greater Tucson region, outlines the status of various solar-related rules and regulations, and suggests strategies for reaching 15 megawatts of installed solar capacity in the region by 2015. Because Tucson is surrounded by Pima County and several small communities, installers and developers must deal with numerous jurisdictions. Thinking

regionally and moving to coordinate solar planning and execution facilitates solar deployment and opens the door to more uniform permitting rules and code adoptions through cooperation between the jurisdictions. More information about the regional solar development plan is available at www.pagnet.org/Programs/EnvironmentalPlanning/SolarPartnership/StrategicPlan/tabid/723/Default.aspx.

Visit www.solaramericacommunities.energy.gov for more inspiring examples from communities across the United States. 

Additional References and Resources

WEB SITES

American Planning Association, Planners Energy and Climate Database

www.planning.org/research/energy/database/

This database contains examples of communities that have integrated energy and climate change issues into planning, and states that have addressed climate change issues in plans or policies.