

Tool #6:

Solar Mapping

What is it?

Solar mapping can be used as an effective tool to raise awareness and interest in solar energy in your region. Solar maps provide a portal for connecting residents and businesses with local solar installers as well as financing information. Depending upon the mapping software, maps can estimate the generating capacity and cost of a solar installation by neighborhood, by block or even on the rooftop of a particular building.

How do you do it?

- Identify what type of mapping software would be required based upon the needs of your region and the preferred level of detail.
- Determine whether the map can be created in-house. If the map must be outsourced, find a vendor with solar mapping expertise.
- Create an inventory of any existing solar installations in your region.
- Create links on the map to solar financing information. If desired, provide site-specific financing information.
- Develop a database of recommended local installers and provide links to them on the map.
- Link web tracking software with the map to count the amount of people using the site.
- Link the map with the National Renewable Energy Laboratory's (NREL) Open PV Project, which tracks solar installations throughout the country.
- Consider using the map to publicly track progress towards a stated installation target.

Who else is doing it?

- The Denver Regional Council of Governments developed a solar map that displays the solar capacity for an individual site and connects residents and businesses with local solar installers. For more information see the DRCOG case study on page 28 of this *Guide* or visit <http://solarmap.drcog.org/>.
- The City of Houston, TX developed an interactive solar map, which includes photos and case-study information on individual solar installations around the city. <http://www.solarhouston.tx.org/LEEP/Experience/InteractiveMap/tabid/1164/Default.aspx>
- San Francisco, CA designed a web-based solar tool to assess a rooftop's solar potential and any related economic or environmental benefits that would result from installing solar on that site. For more information, visit <http://sf.energymap.org>.
- New York City's solar map shows the solar energy potential for every building within New York's five boroughs in addition to displaying the city's real-time solar production. For more information, visit <http://www.nycsolarmap.com>.
- Boston, MA developed an Interactive GIS Map indicating the active renewable energy installations within the city and also providing the ability to calculate the solar potential of building rooftops. For more information, visit <http://gis.cityofboston.gov/solarboston/#>.

Where can I get more information?

- The National Renewable Energy Laboratory's (NREL) Open PV Project tracks solar installations throughout the country. <http://openpv.nrel.gov>
- NREL's In My Backyard tool estimates the PV array production based upon a site's system size, location and other variables. <http://maps.nrel.gov/imby>
- NREL created an analysis of web-based solar PV mapping tools. The report identifies and analyzes several web-based solar mapping tools based upon various criteria. http://www.nrel.gov/analysis/analysis_tools_tech_sol.html
- The U.S. Department of Energy's Solar Powering Your Community: A Guide for Local Governments is a comprehensive resource created to assist local governments and stakeholders in designing and implementing a strategic local solar plan. The guidebook includes a section on including solar mapping on page 120-122. http://www4.eere.energy.gov/solar/sunshot/resource_center/sites/default/files/solar-powering-your-community-guide-for-local-governments.pdf