Set ambitious goals for solar energy adoption



WHY COMMITMENTS MATTER

A solar energy goal provides an opportunity to institutionalize a shared vision for a solar-powered future. The objective should be a specific, measurable amount of solar energy that is either produced or used within or by the city. While there are many different types of solar commitments, they all play an important role in guiding a community's transition towards clean energy. For instance:

- Agreeing on a goal brings decision makers, stakeholders and community members together behind a shared mission.
- Articulating and sharing your vision publicly provides an opportunity to inspire constituents as well as other communities to participate in the transition.
- A goal will drive the adoption of policy solutions within its overall framework and ensure that solar development is considered in future government decisions, even as elected officials and personnel come and go.
- A goal will drive solar development. Goals that apply to the entire community's energy use will have the greatest impact, encouraging solar on homes, businesses, utilities and public buildings to supply all of the community's energy needs.
- Creating an action plan that includes a solar-specific goal and timeline can also keep your community on track to meet any existing clean energy commitments.

CHOOSING THE RIGHT GOAL

You can craft a solar goal from the wide variety of possibilities that fits your community's specific energy landscape and needs. Engage with stakeholders as you consider several questions:

How comprehensive will your goal be?

Goals can apply to city operations only, or they can apply to an entire community's energy consumption. Similarly, they might apply specifically to electricity, or include all forms of energy use, including transportation and other sectors. While more expansive goals feel more challenging to measure and achieve, they bring more stakeholders into the transition you want to achieve and lead to broader solar energy adoption.

Communities that are new to renewable energy commitments or have seen limited prior progress may see setting goals that apply only to municipal electricity as a more approachable first step. However, we recommend that cities work towards a community-wide electricity or energy commitment in order to have the greatest impact.

What will you measure?

You can measure solar energy many different ways, and the unit you choose should reflect your goals. If you want to boost the amount of solar energy produced within your community, you could aim for a number of solar rooftops, a percentage of homes powered by solar or a simple measure of total energy produced locally (e.g. megawatts). Alternatively, if you want to drive use of solar more than production, consider setting a goal for the percentage of electricity consumption fulfilled by solar. In growing communities, a target that scales with population, like a percentage or per capita figure, will have the greatest impact.

How ambitious should you be?

We need renewable energy goals that match the scale of the climate challenges our communities face. That said, effective goals must also recognize local realities. A goal that fails to aim high will not encourage real progress, but a seemingly impossible goal will also fail to motivate change. Factors like your community's current baseline, projected future energy

needs and estimated solar potential can help you find the right balance. An ideal goal requires faster adoption than expected with no action, but acknowledges that achieving the full solar potential of every rooftop may not be feasible.

What is your timeline?

A good goal always includes a deadline, and figuring out the right timeline for your community is also a balancing act. You should allow enough time to achieve your target, but still set a date that will necessitate change in the short term. Interim goals as stepping stones can accomplish both.

CASE STUDIES

As you work through these and other questions, check out commitments from other communities. Here are a few examples of strong solar goals:

- **Interim Goals:** In 2014, Philadelphia set a community wide goal of reaching 20,000 solar roofs by 2025. In 2018, the city added a longer term goal of installing solar on 80 percent of rooftop space suitable for solar at the time by 2050. According to the city's <u>Powering Our Future</u> report, meeting these goals will "represent a significant increase from the current pace of solar installation in Philadelphia" and "make a significant contribution to [their] clean grid vision" of reducing citywide emissions.
- **Pairing city-only and community wide goals:** New York City established a community wide goal of generating 1,000 megawatts (MW) of local solar energy, enough to power more than a quarter of a million homes, by 2030. The city has also committed to installing 100 MW of solar electricity generation capacity on municipal rooftops by 2025, which will both set a strong example and move the city towards its broader vision.
- **Solar as part of vision for 100 percent renewable:** The <u>City of San Diego</u> has a goal of achieving 100 percent renewable electricity community wide by 2035 and is one of the top cities in America in terms of installed solar capacity. The city recently partnered with the National Renewable Energy Lab <u>Solar Energy Innovation Network</u> to complete a survey of total solar potential and established a new goal that 25 percent of the total electricity consumed throughout the city be generated by local renewable energy sources, namely solar, by 2035. This goal clarifies the city's path to 100 percent renewable energy.

RESOURCES

- Learn more about the energy plans in Philadelphia, San Diego and New York City.
- Environment America Research and Policy Center's <u>Shining Cities report</u> ranks major U.S. cities based on installed solar energy capacity so that you can see how your community stacks up.
- Google's <u>Project Sunroof</u> is a free tool that can provide an estimate of rooftop solar potential at the state, county, city, zip code or rooftop level.
- The U.S. Department of Energy also offers <u>Local Energy Data</u>, including renewable potential.
- The EPA provides a <u>framework</u> for establishing municipal renewable and solar energy goals.
- Environment America can provide additional examples of solar commitments and individualized guidance as your community considers a new energy goal.