



PROJECT IDEA & GOALS

Delaware Valley Regional Planning Commission (DVRPC) is partnering with the National Association of Regional Councils, the Mid-America Regional Council, Meister Consultants Group, the Council of State Governments, and eight regional councils on the U.S. Department of Energy SunShot Initiative Rooftop Solar Challenge Solar Ready II Project. Through this award, DVRPC is striving to implement solar best management practices, training materials, and additional proven implementation strategies in the DVRPC region. Together, with support from our local governments, DVRPC will achieve more streamlined and standardized solar practices, resulting in measurable improvement in DVRPC's solar market conditions. The project will ultimately achieve measurable improvements in solar market conditions, will engage 40,000 residents nationwide through online consumer market research panels, and will provide new solar market access for ten million people across the U.S.

TALKING POINTS

BENEFITS OF SOLAR DEVELOPMENT

The solar market is growing at a rapid pace, with the value of solar installations in the U.S. rising from \$6 billion in 2010 to \$11.5 billion in 2012. This market expansion has resulted in over 142,000 jobs in the solar industry in 2013 (Solar Foundation). Much of this value and job creation is concentrated in regions where solar is installed and financed, providing local governments with a substantial opportunity for economic development. It is therefore in the best interest of municipal governments to lower barriers of adoption when possible, in order to drive the growth of their local solar market.

Quick Facts:

- In New Jersey a new job is created for every 5 residential solar installations.
- In Pennsylvania a new job is created for every 4 residential solar installations.
- In 2013 Pennsylvania ranked 11th and New Jersey ranked 3rd in the nation in solar jobs.
- Each new residential solar installation creates \$30.76 in economic value in New Jersey.
- Each new residential solar installation creates \$33.35 in economic value in Pennsylvania.

BARRIERS TO ADOPTION

Through 2012, 7.7 GW of solar capacity has been installed in the US, enough to power 1,262,800 homes. However, the U.S. is significantly behind other nations in solar installations, with just 23 watts installed per capita, a fraction of other developed countries such as Germany with 400 watts installed per capita. There are two different types of costs: hard costs (the cost of equipment) and soft costs (the cost to acquire customers, design, finance, permit, interconnect and install the system). Hard costs are driven by global PV markets, while soft costs are primarily dependent on our region's public policies. These soft costs, which currently make up over 60% of the total installation cost, aren't experiencing the same falling cost trend that hardware costs have seen over the past decade.

Region Specific:

- Current residential installed cost per watt in New Jersey: \$3.96.
- Current non-residential installed cost per watt in New Jersey: \$2.68.
- Current installation cost per watt in Pennsylvania: \$2.23.

ZONING & PERMITTING

Despite the fact that a majority of small solar projects share a common design, jurisdictions have implemented vastly different permitting processes, resulting in a steep learning curve for installers in your region. Furthermore, many jurisdictions' inexperience with PV has resulted in permitting processes that are unnecessarily complicated, adding costs for developers and for the jurisdictions themselves. By streamlining our region's permitting processes, we will eliminate unnecessary barriers to solar development without compromising the health, safety, or welfare of your community.

Quick facts:

- There are 18,000+ local jurisdictions with unique permitting requirements.
- Communities that have implemented smart permitting policies have seen installation costs drop by as much as 12%.



ADDITIONAL BACKGROUND INFORMATION

INTERCONNECTION

Interconnection standards are the legal rules and procedures for connecting or “plugging-in” a renewable energy system to the utility’s power lines. Interconnection includes both the technical procedures and contractual terms that the system owner and utility must follow. Interconnection allows the owner to send power back into the grid and net meter. Significant costs and delays to the development of a PV system occur when interconnection standards are unclear, redundant, or when unnecessary tests or steps are applied by the utility beyond existing national standards.

- 5,000+ utilities with unique interconnection procedures.
- 43 States & D.C. have adopted interconnection standards.
- 26 states received a grade of C or lower on their interconnection policy.

Region Specific:

- New Jersey received a grade B for interconnection policies.
- Pennsylvania received a grade B for interconnection policies.

NET-METERING

Net metering allows customers to export power to the grid during times of excess generation, and receive credit that can be applied to later electricity usage.

Quick facts:

- More than 93% of distributed PV installations in the US are net-metered.
- Net metering allows for a customer-sited solar system to cover 100% of the customer’s load by crediting excess generation during the day to usage at night.
- 43 states, Washington D.C., and 4 territories have adopted a net metering policy.
- 20% - 40% of power generated from solar energy systems goes back to the grid. (SEIA)

Benefits:

- Customers can use excess generation credits when their electricity needs exceed the solar system’s output (e.g. at night).
- Allows customers to “zero out” their monthly electricity bills, making solar more cost effective.

Region Specific:

- New Jersey received a grade A for net metering.
- Pennsylvania received a grade A for net metering.