

Understanding Renewable Energy Projects & Their Zoning and Permitting Challenges

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A Brief History

Act 213 Of 2004

This legislation put the ball in motion by requiring Electric Distribution Companies, and Competitive Suppliers to provide a percentage of their supply from Alternative Energy Resources beginning with the end of capped rates.

To accomplish this

The Public Utility Commission was directed to oversee the establishment of an Alternative Energy Credit market.

Today, 5 years since the start of Credit trading

The installed capacity for Solar generation is grown from less than 5 megawatts to nearly 200 megawatts registered to participate in the PA market. This includes in state and out of state resources.

Credit Prices, Then & Now

The credit market opened in 2008 with prices exceeding \$300 each for solar credit

The market bottomed out earlier this year at \$10 each for solar credits

Why the big drop?

What does the future hold?

Between now and end of 2020 market capacity needs to grow from just under 200 megawatts to over 800 megawatts of capacity.

So expect a significant expansion.

Factors that impact expansion:

- System costs.....Trend of late is downward
- Completion delays....EDC's have deadlines
- Soft costs..... The cost of navigating inconsistent and often unnecessary Zoning, Permitting, and Inspection requirements

Most municipalities have no Solar Permitting

- With about 2500 Municipalities in PA it is easy to understand why many have not yet addressed the specific zoning and permitting needs

What are the specific concerns

- Aesthetics, glare, visual impacts, height limitations, noise, setbacks,
- Safety, structural limits, fire protection, electrical hazards

How can the Zoning & Permitting process be improved?

- Through development of model ordinances and permitting processes

The good news is.....

The heavy lifting is done



<http://pennfuture.org/sunshot/>

Sunshine TEAM
FACILITATING SOLAR ENERGY STANDARDS IN YOUR COMMUNITY

This resource hub contains information and tools for municipalities that wish to institute best practices for the zoning and permitting of small scale solar PV projects in their communities.

Resources for Pennsylvania Municipalities

Department of Energy Rooftop Challenge I

PennFuture and partners (CONNECT, Southwestern Pennsylvania Commission, Allegheny County, City of Pittsburgh, Solar Unified Network of Western Pennsylvania — the region's solar industry network) were chosen to receive one of 22 SunShot Rooftop Challenge grants from the Department of Energy, which began in February 2012 and ended in February 2013. The objective of that grant was to create model zoning, permitting, and inspection procedures with 23 municipalities in Allegheny and Beaver Counties, and develop creative financing tools for solar energy in the Southwestern Pennsylvania region.

This collaborative process engaged zoning officers, planners, electrical inspectors, municipal officials, and managers from the 24 participating municipalities, as well as, technical advisors from county governments and other communities, professional planners, attorneys who specialize in the Pennsylvania Municipal Planning Code and the Uniform Construction Code and national experts on solar permitting and inspection practices.

As a result, a model zoning ordinance and permitting practices (and an accompanying guidebook) were developed. Many of these municipalities, which ranged in size from city (Pittsburgh) to suburban to small urban and rural communities, are in process of adopting models. The municipalities participating in this grant are: Aspinwall, Baldwin Borough, Brentwood, Carnegie, Collier, Dormont, Etna, Forest Hills, Green Tree, McKees Rocks, Monroeville, Mount Oliver, O'Hara, Pittsburgh, Scott, Sharpsburg, Shaler, Stowe, Richland, Upper St. Clair, West Mifflin, and Wilkinsburg in Allegheny County and Midland and Monaca in Beaver Counties.

Resources

These resources and tools can be used by any Pennsylvania municipality that wishes to institute best practices for the permitting and zoning of small scale solar energy systems. All of these tools were developed as part of the SunShot Solar Rooftop Challenge.

Download a Municipal Guidebook for Solar Zoning and Permitting and model Solar Zoning Ordinance and Solar Photovoltaic (PV) Permit Application documents.

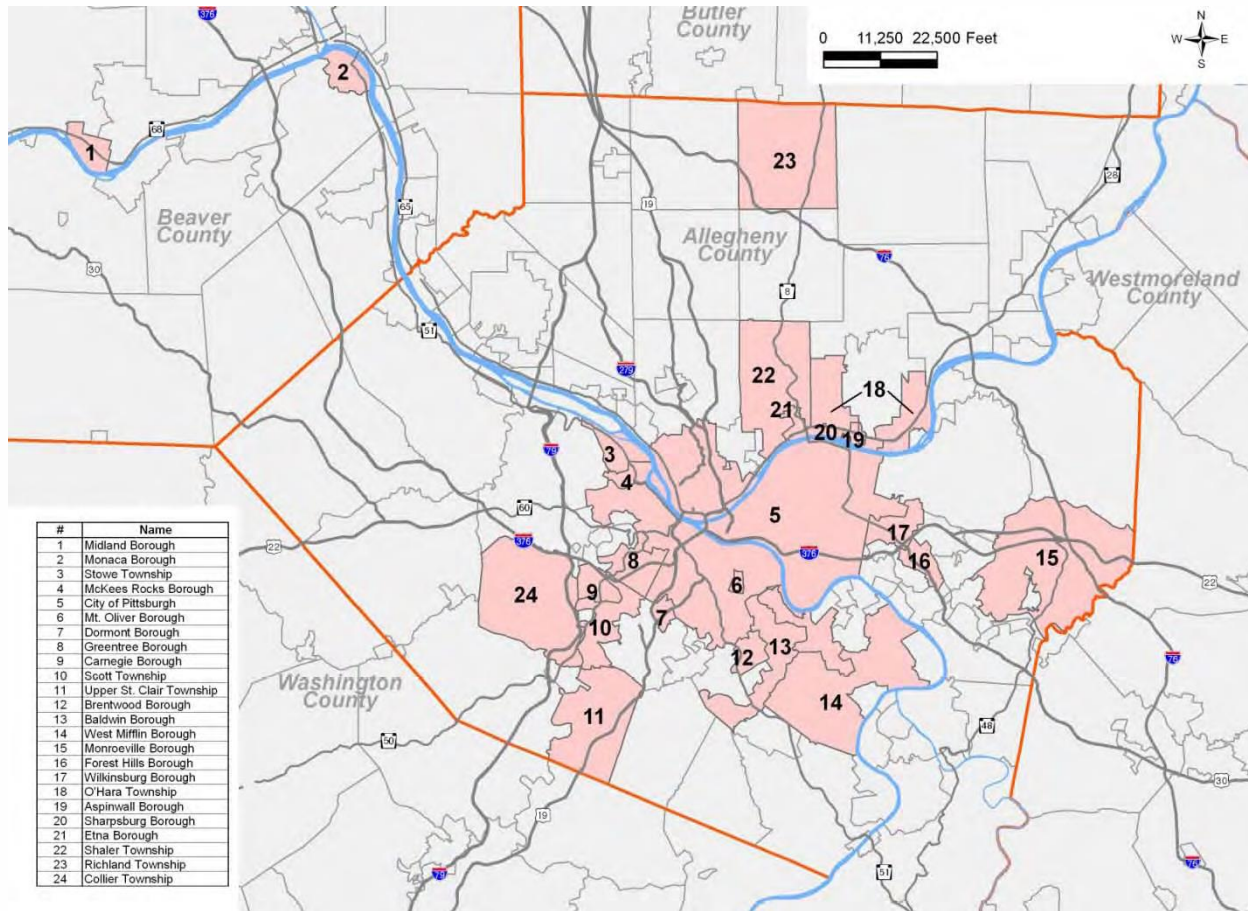
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With DOE funding support

- Penn Future in Pittsburgh teamed with...
- 23 munis from Allegheny & Beaver counties
- And a group of regional NGOs

A model ordinance for Solar projects is available

SunShot Footprint



SunShot Goals

1. Encourage solar energy;
2. Minimize barriers to installing solar so as not to improperly interfere with property owners' rights to access solar energy; and
3. Comply with existing standards and regulations like the Pennsylvania Municipalities Planning Code, Uniform Construction Code, and National Electric Code to protect the health, safety and welfare of residents, businesses and communities.

Known as the.....

- SunShot Solar Rooftop Challenge
- The grant ran from 2/2012 until 2/2013
- The team consisted of planners, county governments, attorneys, and other municipalities
- The work products are available online and include.....

SunShot Rooftop Challenge

- Municipal Guidebook for Solar Zoning & Permitting
- Model Zoning Ordinance & Solar Permit Application
- Glossary of Terms
- 2 Prerecorded Webinars that explain the program
- Technical Consideration Report

The Take Away

- The time to plan and implement and energy strategy is now
- Renewables offer a alternatives to conventional approaches with economic advantages
- Learn from and work with the “experts” in the field

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