Welcome to
Shining the Light on Solar

WiFi network: Guest-at-TCNJ3 | Username: guest1783 | Password: ujy6uvuh
Speakers

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SolSmart Overview

• SolSmart was funded by U.S. DOE SunShot with the goal of designating at least 300 municipalities as “open for solar business” by the end of October 2018.

• SolSmart will provide targeted technical assistance in critical **soft cost reduction areas** towards achieving SolSmart designation.
SolSmart Advisors

- Communities and regions can apply to host “SolSmart Advisors”
- Advisors will work one-on-one with communities to provide technical assistance towards achieving designation
- SolSmart Advisors will assist communities through engagements lasting up to six months.
DVRPC is the SolSmart Advisor for these eight communities in PA:

1. City of Philadelphia (Already Gold)
2. Chester City (Delaware County)
3. Edgmont Township (Delaware County)
4. Media Borough (Delaware County)
5. Cheltenham Township (Montgomery County)
6. Lower Merion Township (Montgomery County)
7. Pottstown Borough (Montgomery County)
8. Upper Merion Township (Montgomery County)
SolSmart Program Structure

SolSmart Program

TA Delivery

The SOLAR FOUNDATION™

NREL

MEISTER CONSULTANTS GROUP

RAP®

EPRI®

ELECTRIC POWER RESEARCH INSTITUTE

BROOKS ENGINEERING

NACo

NLC

SEIA

Solar Energy Industries Association

Solar Outreach Experience

ICMA

Leaders at the Core of Better Communities

Home Innovation RESEARCH LABS™
SolSmart Designation Criteria

Foundational Categories

Permitting

Planning, Zoning, and Development

Special Focus Categories

Utility Engagement

Community Engagement

Market Development/Finance

Construction Codes

Solar Rights

Inspection
Designation Program

3 tiers to recognize progress

Ongoing competitions and awards to recognize outstanding achievement in special categories
Bronze Designation

• Commitment Letter and public statement
• Review zoning barriers, commit to reducing.
• Review Permitting Process, Create Checklist, Post Online
• Earn 20 Pts in Permitting
• Earn 20 Pts in Planning, Zoning, Development
• Earn 20 pts total in Special Focus
Silver Designation

- **Allow solar by-right** and as accessory use in all major zones
- **Provide PV Cross Training** to permitting and inspection Staff
- **Achieve 100 total points**
Gold Designation

First earn Silver, then...

- Achieve three-day turnaround
- Achieve 200 points total
SolSmart Targets
Reducing Soft Costs

1. Soft costs = non-hardware costs (permitting, inspection, financing, etc.)

2. Soft costs can account for over a third of total system cost

3. Municipalities can help lower soft costs by improving regulatory processes, encouraging solar in their communities, and educating residents and businesses on solar opportunities.

4. High soft costs can discourage local solar market growth
   - More than 1 in 3 installers avoid selling solar in an average of 3.5 areas because of associated permitting difficulties.

Sources: LBNL, IREC
Prerequisite Actions

Solar Statement: A letter stating your community’s commitment to the SolSmart designation process

P-1: Create and make available an online checklist detailing the steps of your community's solar permitting process.

PZD-1: Local government has reviewed zoning requirements and removed restrictions intentionally or unintentionally prohibiting PV development. Compile findings in a memo, and commit to reducing barriers to PV during next zoning review.
SolSmart Designation Criteria

Foundational Categories

Permitting

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Inspection
Foundational Category: Permitting

Summary of Best Practices

- Make the permitting process as transparent, simple, and efficient as possible
  - Checklist
  - One application form
  - Standard solar PV permit
  - Post requirements and application online

- Reduce permitting costs
  - Align with national best practices ($400 or less for residential and based on cost-recovery for commercial)

- Make sure all permitting and first responders are trained on solar PV

- Opening up permit data to other departments
  - Especially important for fire and safety as it’s helpful for them to know if solar panels will be at an emergency site.
SolSmart Designation Criteria

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Construction Codes

Inspection
Foundational Category: Planning, Zoning, and Development

Summary of Best Practices

– Reduce unnecessary restrictions on solar PV in the zoning code and other ordinances
  • This includes making it clear and transparent
  • *By right*, sensible setbacks, exempt from height restrictions, exempt from impervious cover

– Find ways to incentivize solar PV adoption
  • Density bonuses

– Include solar PV goals in community plans
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SolSmart Designation Criteria

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Inspection
Summary of Best Practices

- Providing a quick turn around for inspection requests and appointments
  - Less than 10 days
  - Offering appointment times instead of windows
- Training inspection staff on best practices for solar PV
SolSmart Designation Criteria

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Solar Rights

Inspection
Community Engagement

Summary of Best practices
Engaging, educating, and empowering residents on solar.

- Involvement and awareness of regional conversations, state-level policy
- Support or encouraging existing community-driven or stakeholder-driven engagement in solar.
  - Supporting local Solarize efforts
SolSmart Designation Criteria

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Solar Rights

Inspection
Utility Engagement

Summary of Best Practices

- Understanding challenges and value proposition to solar for utilities
- Engaging utilities on improving processes and opportunities for solar
  - In our region, we engaged with PECO:
    - Interconnection Roundtable
    - Whitepaper on Interconnection
    - PECO Solar Collaborative
SolSmart Designation Criteria

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Solar Rights

Inspection
Summary and Best practices

- Various financing options available – but need to be understood, some need to be developed.
- Enact PACE in your municipality
- Facilitate conversations with local lenders to provide solar financing options
- Market Development: Promote solar
  - Make metrics transparent, show growth
  - Lead by example: Conduct feasibility/install solar on facilities
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Solar Rights

Inspection
Construction Codes

Resources and example

- Solar Ready New Construction Checklist

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Construction Codes

Solar Rights

Inspection
Summary of Best Practices

- Make information on state policies available to residents
- Develop local ordinances to protect solar access
- Offer procedure for recording solar easements for property owners
Thank you!

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Solarize

Solarize Portland

Solarize Washington

A program of Northwest Seed

Solarize Pendleton

Solarize Asheville

Solarize Brooklyn

Solarize Tompkins

Solarize Syracuse

www1.eere.energy.gov/solar/pdfs/54738.pdf
Solarize

Barriers

High upfront cost ➔

Complexity ➔

Customer inertia ➔
Barriers

High upfront cost
Complexity
Customer inertia

Solutions

Group purchase, volume discount
Installer selection, community outreach
Limited-time offer
Solarize

**Barriers**

- **High upfront cost**
  - Installers are unknown entities to most residents
  - Residents uncertain if pricing is competitive

- **Complexity**
  - Incentives are complicated

- **Customer inertia**
  - Policies are complicated
  - Calculating value of investment is complicated
Solarize Process

- Select Installer
- Marketing & Workshops
- Enrollment
- Site Assessment
- Decision & Installation
Solarize – Lasting Impact

Annual Portland Residential PV Installations

Source: NREL
Solarize Media

- Led by Transition Towns Media
- Targeting communities within a 5-mile radius of Media (13 communities total)
Solarize Greater Media

Results:

288 Customers signed up for sites assessments

50 new contracts signed

37 new systems installed totaling 274 kW

9 systems denied for interconnection.

$2.75/W solar price
Final Thoughts

Collective Impact:

n. the commitment of a group of actors from different sectors to a common agenda for solving a specific social problem, using a structured form of collaboration