Community Solar Success
What’s New and What’s Next for Utility-Led Community Solar Programs

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• The Community Solar Value Project was launched by Extensible Energy in 2015, supported by the US DOE SunShot, Solar Market Pathways Program and led by Extensible and Cliburn and Associates, and support from utilities and allies throughout the West.

• Today, CSVP is an independent collaboration that works with utilities, industry and community partners to increase the value and speed of community solar deployment, especially along four pathways:
  • process management
  • target marketing
  • strategic design, including solar plus
  • procurement and pricing partners

• Recently, ... focused on developing integration value solutions

www.communitysolarvalueproject.com

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How This Goes

• High-Value Community Solar Solutions!
• In-Sourcing and Out-Sourcing and Getting the Job Done
• The Vision Thing
• Solar Double-Plus
• The Next Wave: Helping C/I Customers
• Discussion
Community Solar Value Project
Extensible Energy, LLC, with Cliburn & Associates • Olivine, Inc. • Navigant Consulting

Solutions

Here we introduce an solutions-oriented process for utilities to follow in developing community solar program plans. First, a report in the planning module; one of community solar process and planning diagrams. This supports utility leadership makes community solar better. We introduce an archive of CSVP’s resources on collaboration (aka, silo-busting) is included. Practical tips and case studies for community solar program design are captured in two webinars, which are archived with downloadable slides, for easy review.

The Process

Intro
Process
Design
Procurement
Marketing
Solar Plus
Assessment

Community Solar: A Brief Guide to Utility Program

Contact page. Second, we introduce an archive of CSVP’s resources on collaboration (aka, silo-busting) is included. Practical tips and case studies for community solar program design are captured in two webinars, which are archived with downloadable slides, for easy review.

Community Solar Value Project

 UTILITY LEADERSHIP MAKES COMMUNITY SOLAR BETTER
Solutions Beyond the Box communitysolarvalueproject.com

<< Solutions >>
Address Your Questions in the (Dis)Order In Which They Occur

- Presentation-based reports
- Conventional guides
- Great webinars with downloads
- Blogs that have details & links
- RFP library, case studies & more
The Timeline is One Clue to Your Outsourcing Needs

Benchmarks:
1. 12 to 18 months for most solar projects, from draft RFP to construction
2. Financing delays are common with customized projects; plan ahead
3. 4 to 6 months from marketing launch to reach 70 to 85% commitment
4. 12+ months from marketing launch for most utilities to reach full subscription
5. Billing/software may be a drag on the planning process if issues arise
6. Continued program support will not be costly, but it is important
Key Considerations: Expertise + Bandwidth

Program Designer/Manager
- Coordinates cross-departmental team
- Coordinates external stakeholders
- Collects initial research; outlines plan
- Works across departments and leads GAP analytics to finalize the program plan
- Member of procurement team/s
- Leads budget coordination and reporting

Marketing Manager
- Leads market research & segmentation
- Participates in iterative cross-departmental plan
- Leads development of program offer/s
- Leads development of marketing materials
- Develops plans for customer acquisition and care
- Leads consumer service and sales training

Resource Manager
- Coordinates with program planners
- Provides support
- Leads schedules and coordination
- Oversees business
- Oversees business

IT Manager
- Customer acquisition tools
- SRA analysis and other economics software to support marketing and billing system modifications
- Budgetary support

CPA Firm
- Advises on IRS, SEC, and FERC
- Resolves account and related issues
- Coordinates with CPA and offer development
- Each utility will have responsibilities and responsibilities

Photo: Silos in Vancouver, BC, Brent Toderian
Market Research:
Engage Even If You Don’t Lead It

✓ Assess market research needs
✓ Draw on outside resources
  ✓ … question the questions
  ✓ … listen and learn
✓ Draw on internal customer data
✓ Draft your customer offer … iteratively
✓ Test it
✓ … and engage thought leaders to develop your delivery approach
✓ Implement, monitor, improve
How Market Research and Economics Drive the Program Offer

Market Information (Target Segmentation)

Draft Offer

Competitive Test

Delivery Approach

Customer Engagement

Draft Pricing

Revise Pricing, Using Test Information

Check results via utility strategic value GAP Analysis: What can you do to reduce net cost?*

*See details on the “Getting At Price” (GAP) Analysis at www.communitysolarvalueproject.com
Vision Study: Lots of Good Stuff

Residential Subscribers Are Looking for Simplicity and Predictability of Costs

Average Score to “Rate the Importance of the Following Attributes to Potential Residential Customers”

- Predictability of Costs
- Simplicity
- Autonomy
- Local
- Tangible Economic Savings
- Alignment with Values
- Financing Options
- Program Administration
- Choice
- Economic Impact or Co-benefits

Residential subscribers are primarily looking for predictable energy costs where the benefits and terms are simple to understand. Interviews indicate that:
- Rate escalators and double bills (one from utility and another from community solar operator) result in more difficult communication around savings
- Short-term contracts may be needed to attract renters, who may not be willing to sign up for 15- to 25-year contracts that include exit fees

Residential subscribers are looking for more independence in their supply and consumption of energy — something that a mature community solar subscription offering can increasingly provide

While not the primary motivator, residential subscribers still want savings on their energy bills. Community solar operators and lead generators indicate that 5%-15% savings is typically considered desirable

Source: GTM Research Wood Mackenzie
“Community solar … can evolve into a portal for more holistic energy services such as energy efficiency, energy analytics and active load control for flexible demand. … (It) also provides a physical location and equipment with which to pair other distribution infrastructure, including smart inverters and energy storage. These assets can be shared between the community solar operator and the grid operator to maximize community solar’s contribution.”

Source: Vote Solar, WM/GTM, July 2018
But Here’s What We See

Lithium-Ion Battery Prices, 2014-2018E ($/kWh)

- Battery price (old)
- Battery price (new)

Source: GTM Research
And Here’s What We See…

Solar PPA Prices, 2006 to 2018e

The China effect: Decreasing PV utilization rates, serious oversupply and future strategies

Independent energy analyst, Corinne Lin discusses the fallout of China’s recent solar policy decision, including decreasing utilization rates and serious oversupply; and on equipment upgrades, particularly for PERC, SE, half cut and bifacial technologies. Industry will bounce back in 2019, she concludes.

JULY 4, 2018  CORRINE LIN
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CSVP Process for Solar Plus Storage Companion Measures

1. Characterize Utility Integration Needs
2. Review Storage Technology Options
3. Score Technology Options to Relevant Integration Value Streams
4. Score Solar Plus Storage Configurations That Address Value Streams
5. Design a Program to Deliver Solar Plus Storage or a Triple Play
Where Might This Lead?
Different Products for Different Customers

Visualization of Solar Double Plus Impact on Typical Load
Source: Extensible Energy, Powers
John’s Favorite Graph
Solar Load Balancing Software

Use IoT platform to control multiple loads as distributed solar generation varies. Question for 2019: Can this technology be integrated with utility-side solar-plus-storage, too?
Contact: john@extensibleenergy.com
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Photo: Silos in Vancouver, BC. Brent Toderian