

# Ask the Utility Webinar: Working with your Local Municipal Utility



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**SunShot**  
U.S. Department of Energy

# About the SunShot Solar Outreach Partnership



The SunShot Solar Outreach Partnership (SolarOPs) is a U.S. Department of Energy (DOE) program designed to increase the use and integration of solar energy in communities across the US.



# ICLEI Is Your Guide

- Take your local climate, energy, and sustainability initiatives to the next level:
- Tap the power of ICLEI and our network of 550 U.S. cities, towns, and counties, & 1,100 worldwide.



# Speakers

## Today's Speakers

Becky Campbell, Research Manager  
SEPA

Leslie Libby, Solar Program Manager  
Austin Energy

Karen Collins, Manager, Residential Solar  
& Sustainability Programs  
Salt River Project

Jason Dudley, Sustainability Program  
Strategist  
Salt River Project



# About SEPA

- Formed in 1992 as the Utility Photovoltaic Group
- Educational non-profit organization
- Provides unbiased solar information, services and events with a utility focus



The screenshot shows the SEPA website's Resources page. The header features the SEPA logo with a '20 YEARS' anniversary badge, the text 'solar electric power association', and navigation links for 'HOME', 'ABOUT', 'MEMBER CENTER', 'RESOURCES', 'NEWS & MEDIA', 'EVENTS', and 'SEARCH'. A secondary navigation bar includes links for 'Knowledge Center', 'Publications', 'Resource Library', 'Solar Projects', 'Business Models', and 'Solar Case Studies'. The main content area is titled 'Resources' and includes a '+ SHOW EXPLANATION' button. The 'Solar Energy Information' section highlights the 'Utility Solar Knowledge Center', describing it as a resource portal for filtering documents, multimedia, news, and events. It also lists links to the 'Resource Library', 'SEPA News Briefs', 'SEPA Events', and 'Solar Tools'.

**SEPA**  
solar electric power association

20 YEARS

SEPA CONNECT

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HOME ABOUT MEMBER CENTER RESOURCES NEWS & MEDIA EVENTS SEARCH

Knowledge Center Publications Resource Library Solar Projects Business Models Solar Case Studies  
Utility Solar Rankings Solar FAQs Solar Solutions Tool Online Tools

Home > Resources > Resources Home

## Resources

+ SHOW EXPLANATION

### Solar Energy Information

#### Utility Solar Knowledge Center

The Utility Solar Knowledge Center is a resource portal which allows you to intelligently filter through hundreds of documents, multimedia, news and events by technology, market sector, job function, and other options. In addition this should be your first stop every time you visit the website. Visit the [Utility Solar Knowledge Center](#).

You can also visit the individual parts of the Knowledge Center:

- [Resource Library](#)
- [SEPA News Briefs](#)
- [SEPA Events](#)
- [Solar Tools](#) (see below)



# Resources



## DOE SunShot Resource Center

- [http://www4.eere.energy.gov/solar/sunshot/resource\\_center/](http://www4.eere.energy.gov/solar/sunshot/resource_center/)

## Database of State Incentives for Renewables and Efficiency (DSIRE)

- [www.dsireusa.org](http://www.dsireusa.org)

## SEPA

- [www.solarelectricpower.org](http://www.solarelectricpower.org)

## North American Board of Certified Energy Practitioners (NABCEP)

- [www.nabcep.org](http://www.nabcep.org)

**Don't forget to check your local utility's website for info!**

# What Makes Municipal Utilities Different

## Municipal Utilities (Munis)

- Non-profit, community-owned utilities
- On average, munis service about 11,500 customers each
- Munis serve approximately 14% of all U.S. electricity customers
- More than 2,000 municipal utilities in the U.S. compared to more than approximately 200 Investor-Owned and nearly 900 Cooperatively-Owned
- Operated by the local government, often not regulated at the state or federal level
  - Municipal utilities are directly accountable to local elected or appointed officials

# **SRP's Distributed Solar Option for Schools, Governmental and Nonprofit Entities**

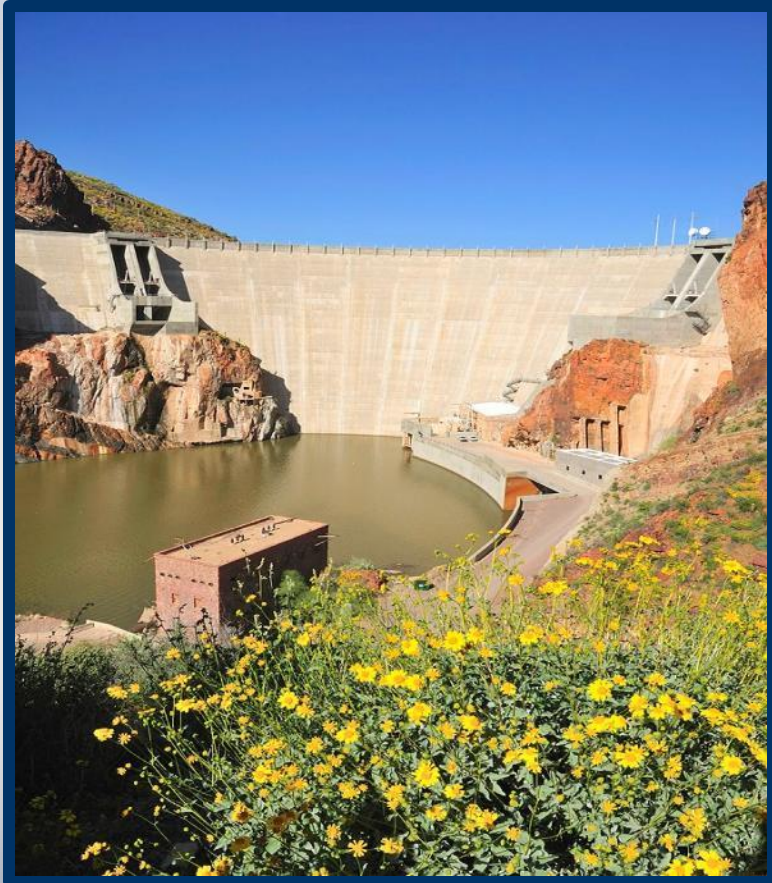
***SEPA Webinar  
Karen Collins and Jason Dudley  
November 16, 2012***





# Agenda

- **Who is SRP**
- **Distributed Solar Options**
- **Community Solar for Schools**



- **Established in 1903 after Theodore Roosevelt signed the National Reclamation Act of 1902**
- **Largest water supplier to the Valley of the Sun**
- **Third largest public power utility in the nation**
- **940,000 electric customers**
- **6,663 MW peak load (August 8)**

# Background

- **Solar City filing with Arizona Corporation Commission (ACC) to allow sale of electricity directly to customers through Solar Service Agreements (SSA)**
  - **ACC ruling (July 2010) allowed SSAs for schools, governmental and non-profit entities**
  - **Prior to ACC ruling, SRP agreed to purchase output of solar facilities and resell to customers through a third party agreement (sleeving)**

# Current Situation

- **December 2010, SRP's Board provided approval for SRP to offer a Distributed Solar Option to school districts, governmental and nonprofit entities on a pilot basis**
  - **Under the Distributed Solar Option, SRP purchases output from the solar providers and then resells it to customers at same price**
  - **Program limited to customers that receive incentive payments pursuant to the FY13 solar incentive budget**

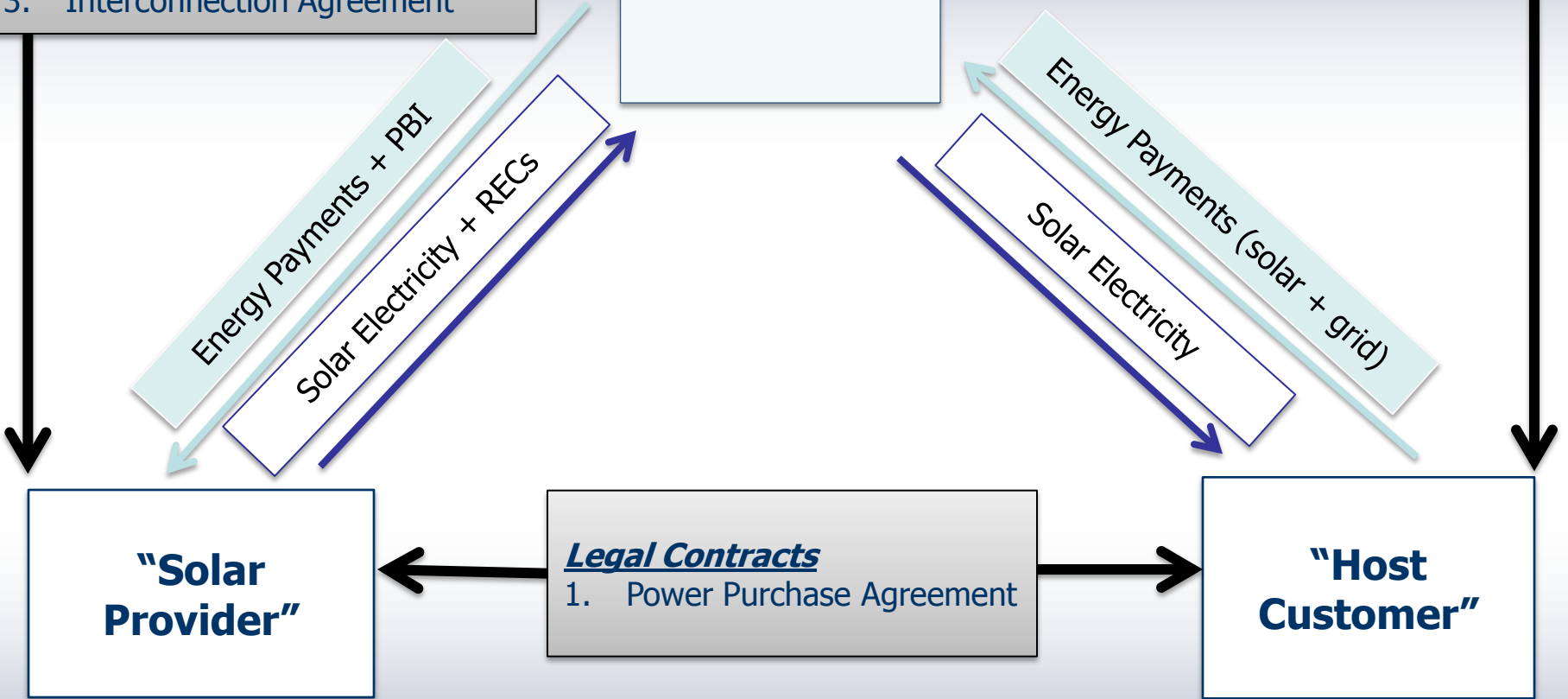
**Legal Contracts**

1. SRP Power Purchase and Sale Agreement
2. SRP Commercial Solar Electric Program Supplement to Terms and Conditions
3. Interconnection Agreement



**Legal Contracts**

1. SRP Commercial Solar Electric Program Supplement to Terms and Conditions



**PBI = Production Based Incentive**

# Distributed Solar Option Customers (FY11-12)

## Scottsdale Unified School District

- Saguaro High School
- Arcadia High School

## Riverside School District #2

- Kings Ridge Preparatory Academy
- Riverside Traditional School

## Gilbert Christian Schools

- Gilbert Christian Middle School
- Gilbert Christian High School

## Higley Unified School District

- Williams Field High School
- Chaparral Elementary

## Laveen Elementary School District

- Cheatham Elementary
- Desert Meadows School

# Current Distributed Solar Option Customers (FY13)

## Arizona Board of Regents

- ASU Macro Technology Works

## Tempe Elementary School District

- Brogan Center
- Holdeman
- Thew

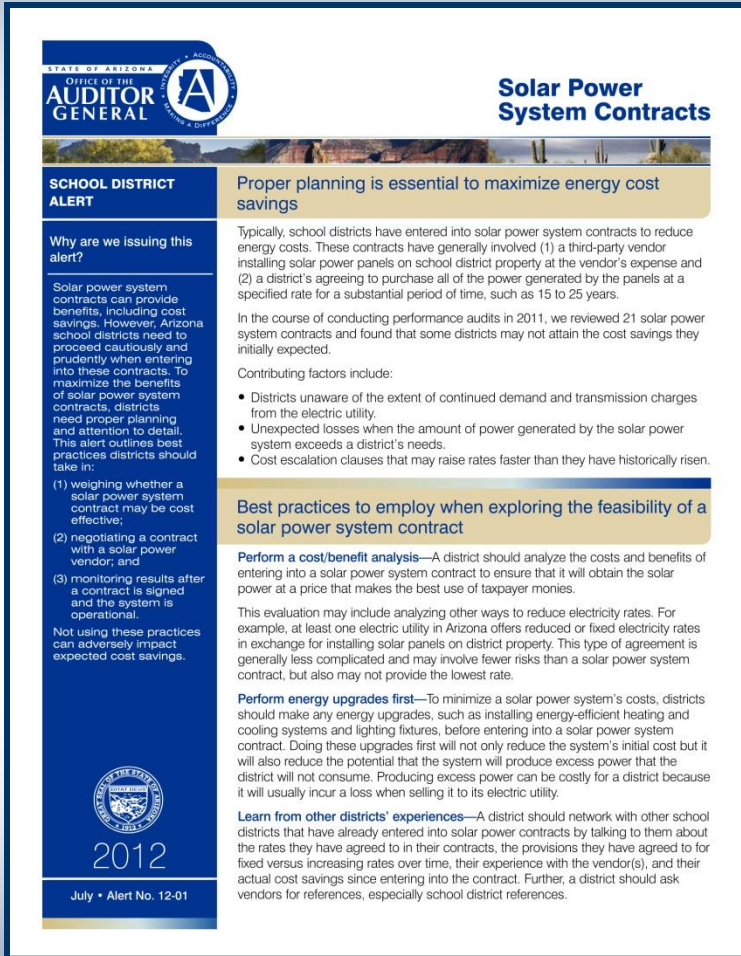
## City of Chandler

- Tumbleweed Recreation Center

## Laveen Elementary School District

- Vista Del Sur
- MC Cash
- Trailside

# Solar Power System Contracts



**STATE OF ARIZONA**  
**OFFICE OF THE AUDITOR GENERAL**  
**Solar Power System Contracts**

**SCHOOL DISTRICT ALERT**

**Proper planning is essential to maximize energy cost savings**

**Why are we issuing this alert?**

Solar power system contracts can provide benefits, including cost savings. However, Arizona school districts need to proceed cautiously and prudently when entering into these contracts. To maximize the benefits of solar power system contracts, districts need proper planning and attention to detail. This alert outlines best practices districts should take in:

- (1) weighing whether a solar power system contract may be cost effective;
- (2) negotiating a contract with a solar power vendor; and
- (3) monitoring results after a contract is signed and the system is operational.

Not using these practices can adversely impact expected cost savings.

**Best practices to employ when exploring the feasibility of a solar power system contract**

**Perform a cost/benefit analysis**—A district should analyze the costs and benefits of entering into a solar power system contract to ensure that it will obtain the solar power at a price that makes the best use of taxpayer monies.

This evaluation may include analyzing other ways to reduce electricity rates. For example, at least one electric utility in Arizona offers reduced or fixed electricity rates in exchange for installing solar panels on district property. This type of agreement is generally less complicated and may involve fewer risks than a solar power system contract, but also may not provide the lowest rate.

**Perform energy upgrades first**—To minimize a solar power system's costs, districts should make any energy upgrades, such as installing energy-efficient heating and cooling systems and lighting fixtures, before entering into a solar power system contract. Doing these upgrades first will not only reduce the system's initial cost but it will also reduce the potential that the system will produce excess power that the district will not consume. Producing excess power can be costly for a district because it will usually incur a loss when selling it to its electric utility.

**Learn from other districts' experiences**—A district should network with other school districts that have already entered into solar power contracts by talking to them about the rates they have agreed to in their contracts, the provisions they have agreed to for fixed versus increasing rates over time, their experience with the vendor(s), and their actual cost savings since entering into the contract. Further, a district should ask vendors for references, especially school district references.

**2012**  
July • Alert No. 12-01

- **Perform a cost/benefit analysis**
- **Perform energy upgrades first**
- **Learn from other districts' experiences**
- **Avoid purchasing an oversized solar power system**
- **Clarify key provision of your electric utility's policies**
- **Ensure rates paid for solar power and competitive with rates paid by other districts**
- **Avoid contracts with cost escalators if possible**
- **Ensure the solar power system is connected to the most appropriate meters**



# Community Solar for Schools

## SRP ANNOUNCES COMMUNITY SOLAR FOR SCHOOLS

Salt River Project is launching a new innovative solar option for schools. Community Solar for Schools offers an alternative to the traditional method of installing solar systems on rooftops. School districts can purchase a portion of the energy output of a 20 MW photovoltaic plant to be built in the Southeast Valley.

### Advantages for Schools

- Investment in solar without the upfront capital costs
- No maintenance or repair expenses
- 10-year fixed price for energy produced by the solar plant
- Solar energy educational materials / web portal for students

Interested school districts should contact [Charlie.Gruher@srpnet.com](mailto:Charlie.Gruher@srpnet.com) by Friday, August 20 to learn more about the program.

SRP is developing a similar program for residential customers to be launched later this year. Community Solar is just one way SRP's customers can invest in clean energy for the future.

Delivering more than power.™



# Benefits

- **Environmentally friendly; reduces greenhouse gas emissions**
- **Alternative to rooftop solar installation – purchased and leased**
- **No upfront costs, solar panel repair or maintenance**
- **Solar educational materials**
  - **Special web portal for plant operation and generation data**

# Terms of Participation

- **Easy, affordable way to support solar in the community**
  - **No up-front investment**
  - **Fixed price certainty for 10 years**
  - **Up to 35% of customer's peak demand per account; minimum 1 kW**
  - **Renewable Energy Credit (REC) stays with SRP**

# Community Solar Pricing

- **Schools: \$0.099/kWh**
  - **10-year term, 2-year commitment**
  - **7.8 MW subscribed to date**
  - **11 school districts**
  - **103 accounts**
- **Same for Businesses**



# Community Solar Pricing



- **Residential: \$0.1125/kWh**
  - **5-year term, cancel anytime**
  - **1,200 enrolled; nearly 3 MW subscribed to date**

# Summary

- **SRP wants to help schools, governmental agencies adopt solar**
- **Distributed Solar Option offers a way to facilitate the deal**
- **Community Solar for Schools offers an alternative to traditional rooftop solar options**
- **Solar curriculum and web portal add extra benefits**

# Questions?

**Karen Collins**

**Manager, Residential Solar & Sustainability Programs**

**(602) 236-2983**

[Karen.Collins@srpnet.com](mailto:Karen.Collins@srpnet.com)

**Jason Dudley**

**Sustainability Program Strategist**

**(602) 236-6882**

[Jason.Dudley@srpnet.com](mailto:Jason.Dudley@srpnet.com)

**For more information on SRP Solar Programs:**

[www.srpnet.com/solar](http://www.srpnet.com/solar)

[www.srpnet.com/solarbiz](http://www.srpnet.com/solarbiz)

[www.srpcommunitysolar.com](http://www.srpcommunitysolar.com)

[www.srpcommunitysolarbiz.com](http://www.srpcommunitysolarbiz.com)



# Austin Energy

Ask the Utility Webinar:

Working with your Local Municipal Utility



*Leslie Libby, Manager of Solar Incentive Programs*

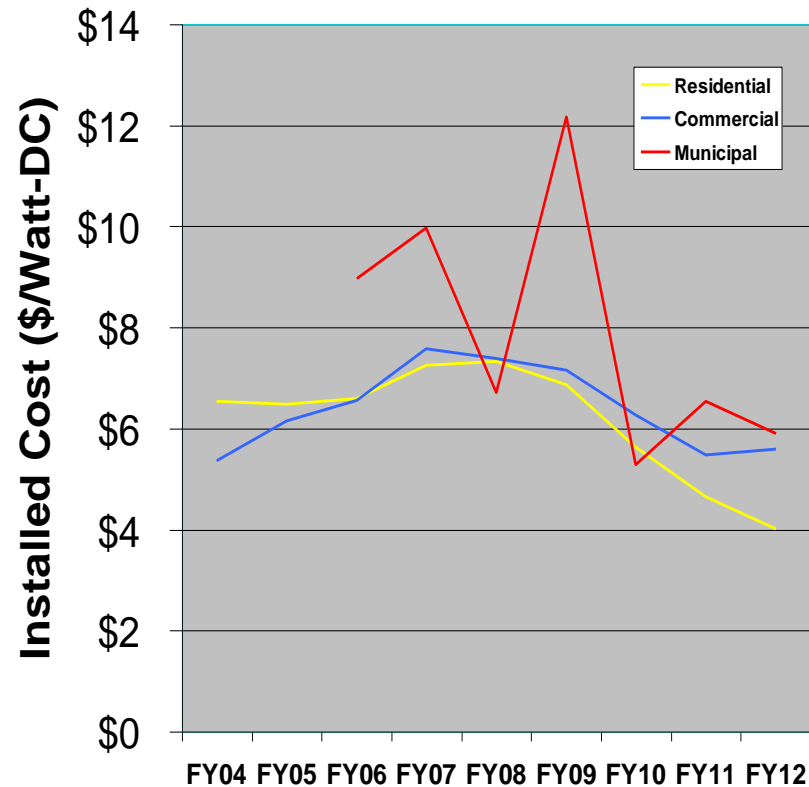
*November 16, 2012*



# Total Austin Energy Solar Capacity



- Total AE Solar
  - 38.5 MW
- Utility Solar
  - 30.0 MW
- Distributed Solar
  - 8.5 MW



# AE 2020 Solar Goal – 200MW



- Utility Scale Solar
  - 30 MW-AC at Webberville
- Residential Rebate
  - Current Rebate \$2.00/Watt
  - 6.4 MW-AC
- Commercial Performance Based Incentive (PBI)
  - Current PBI \$0.14/kWh
  - 1.36 MW-AC
- Municipal Solar
  - Solar Installations on City Buildings
  - 0.627 MW-AC
- Solar for Schools
  - Demonstration Projects
  - 0.118 MW-AC

- Equipment Leases that Qualify for Performance Based Incentives
- Community Solar

# **Equipment Leases that Qualify for Performance Based Incentives**

- Only charitable organizations organized under section 501(c)(3) of the Internal Revenue Code and governmental entities, including school districts, may lease PV systems and be eligible for PBIs, subject to all requirements, as described in the Commercial PBI Guidelines
- Leased PV systems by other commercial customers are not eligible for participation in the PBI program

# New Guidelines Inserted into the Existing PBI Guidelines



- Austin Energy is the exclusive provider of electricity within its service territory. State law prohibits other owners of electric equipment from furnishing electricity for compensation. Therefore, leases must be flat equipment leases and may not be based on volumetric charges or multipliers for kWh output of the PV equipment or consumption of the customer/lessee.
- Leased PV systems must be installed on facilities owned by the qualifying non-profit or governmental customer/lessee.
- Lessor and lessee must have an agreement in place which ensures the proper function of the leased PV equipment and appropriately allocates ongoing maintenance responsibility of the equipment.
- Both lessor and lessee must transfer to Austin Energy, in writing, all RECs and other environmental attributes, as described above.
- Information detailing the total equipment and installation costs of the PV system paid by lessor and installer must be provided to Austin Energy.
- Lease contract and all attachments must be provided to Austin Energy.
- The PBI payment cap per customer does not apply to leases.

# SolarChoice Program Objectives



- To provide approximately 10 MW toward Austin Energy's 2020 solar goal
- Provide a solar option to targeted customers:
  - Homeowners with too much shading on their roof and are ineligible to participate in the rebate program
  - Renters of single and multi-family properties

# Community Solar



- SolarChoice participation drives installation of Solar projects.
- AE owns, operates, and maintains projects
- AE allocates energy produced to customers

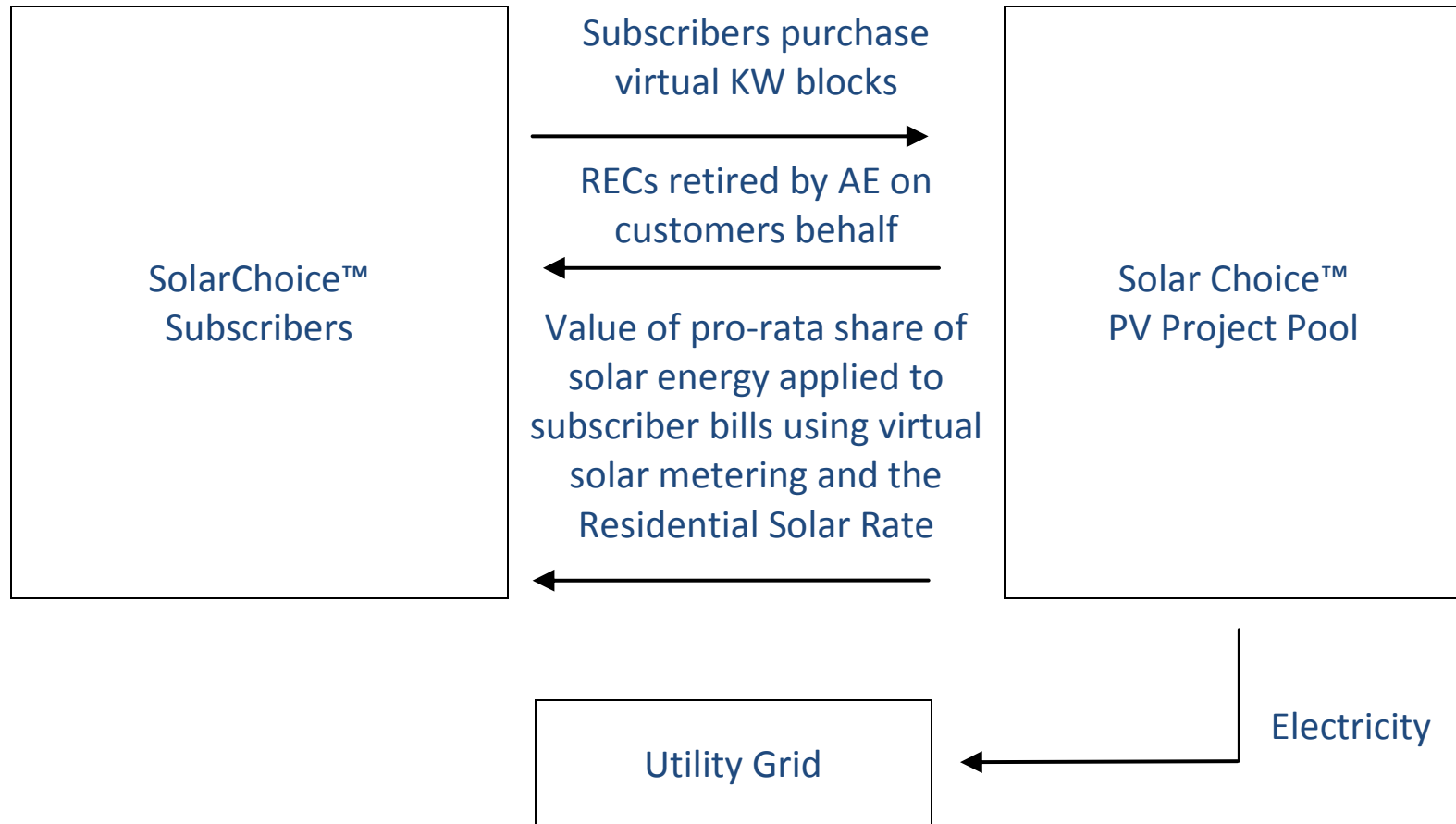
# Possible Project types



- Retrofitted on municipal buildings
- Integrated into municipal new construction
- Covered parking at city properties
  - Airport, Libraries, Parks
- Ground mounted at locations like the city landfill

- Program Launch 1Q 2013
- Program development partially funded by DOE's Rooftop Solar Initiative
- Goals
  - Anticipated Participation                      2000 Subscribers
  - Capacity Installed                                      10 MW-AC

# SolarChoice™ Option 1-Solar Investment Club



# Option 1 – Solar Investment Club



- Subscribe to Capacity Blocks
- One Block = 1 KW AC
- Monthly Fee per Block paid for ten years
- Lower monthly payment after ten years to cover maintenance
- Prorated production assign to participant through Virtual Net Metering (VNM)
- Prorated production receives Solar Value Credit

# Option 1 - Advantages



- Potential for economic payback of customer investment
- Premium payment for first ten years and savings for following ten years

# Option 1 - Disadvantages



- Cost benefit structure is difficult to understand
- Consumption analysis must be considered
- Federal tax credits not available
- System performance (benefit) varies with weather conditions

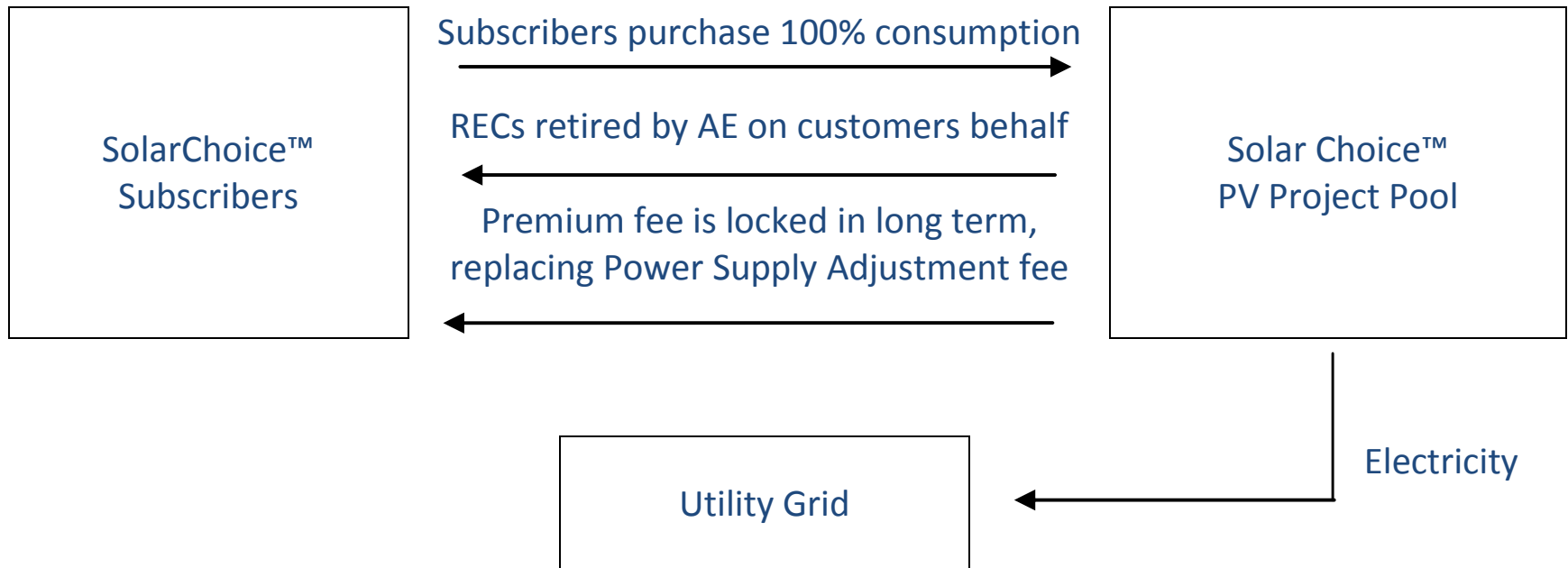
# Option -1 Example (3 KW)



- Enrolled 3 Blocks
  - Monthly Fee per block \$20
  - Total Monthly Capacity Fee \$60
- Electric Bill Solar Credit
  - ~ 375 kWh/mo allocated to VSM
  - Electrical Bill Solar Credit \$48
- Net Cost to customer
  - \$12 /mo or \$144 /yr
- After 10 years
  - Monthly Fee Reduced to cover O&M
  - Approximate O&M Fee \$5/mo/block
  - Net Solar Credit \$33 /mo
- Customer Payback
  - Customer 10 year net outlay \$1,440
  - Simple payback ~13.6 years



# SolarChoice™ Option 2



# Option 2 - Structure



- Premium SolarChoice fee replaces Power Supply Adjustment
- SolarChoice fee remains fixed for 20yr term
- Fee applied to 100% of consumption
- Fee based on the levelized cost of energy for the solar projects

- No Capital Required
  - Can participate with no capital
  - Does not need to credit qualify or complete credit application
- Locked in rate may become less than PSA over time
- Customer signs up for 100% of consumption only paying for energy used, alleviating need to run through sizing exercises
- Proven Cost structure (GreenChoice is the most successful green energy program in the nation)

## Option 2 - Disadvantages



- System cannot be resold on secondary market
- Does not have the same feel of true ownership
- Customer must sign up for 100% of energy consumption

# Community Solar Projects

- Palmer Events Center
  - 241 kW \$2.07/W, lowest price ever by \$2+ /W



## City of Austin - Austin Energy Customer Care Center

721 Barton Spring Rd.  
Austin, Texas 78704-1194  
p. 512.494-9400  
e. [custinfo@austinenergy.com](mailto:custinfo@austinenergy.com)

### Twitter

 [@austinenergy](https://twitter.com/austinenergy)

### Facebook

 [facebook.com/austinenergy](https://facebook.com/austinenergy)

# Thank You!

## Leslie Libby – Manager Solar Incentive Programs

721 Barton Spring Rd.  
Austin, Texas 78704-1194  
p. 512.482.5307  
e. [leslie.libby@austinenergy.com](mailto:leslie.libby@austinenergy.com)



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**Questions?**