



Using the “Group Purchase” Concept to Reduce Costs and Promote Local Solar PV Adoption

June 2016

Plano Solar Advocates

PlanoSolar.org



Plano Solar Advocates (PSA)

We are

- A grass-roots volunteer group of Plano residents
- Many are also "Live Green in Plano" volunteers
- To learn more, see www.planosolar.org

Our mission

- To increase awareness and expand the use of Solar Energy for electricity generation in Plano and beyond

We work closely with

- City of Plano Sustainability & Environmental Education (LiveGreeninPlano.com)
- North Texas Renewable Energy Group (www.ntreg.org)
- Texas Solar Energy Society (www.txses.org)
- North Central Texas Council of Governments (www.nctcog.org/solar)



Financing and Incentives

- **Financing/Commitment approaches**
 - Purchase
 - Finance purchase with a loan (generally 5 yr, 10 yr)
 - Long Term Lease Agreement
 - Long Term Power Purchase Agreement

- **The Two Primary Financial Incentives for Installed Residential Solar PV Systems in Texas**
 - Utility incentives when available
 - Federal Investment Tax Credit
 - *Available to the homeowner if purchased or financed*
 - *Available to the Lease/PPA company if leased or sign PPA*



Cooperative, Collective, Group Purchasing

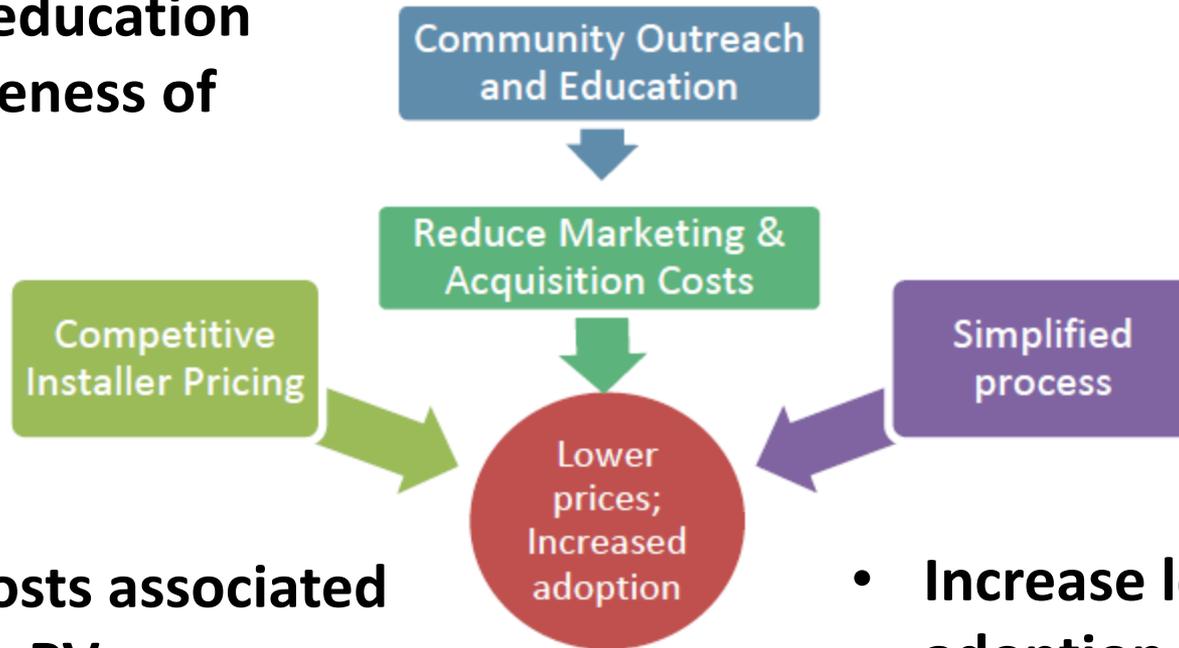
- **Collective buying power** is a coming together of a group of consumers and the use of the old "rule of thumb", there's power in numbers, to leverage the group size in exchange for discounts.
- **Collective purchasing** is co-operative organization made up from like minded people, who gang together to get economy of scale discounts for buying in bulk for specific goods, which they plan to purchase. A great example is the many groups of people in rural areas who purchase home heating oil in this way to cut down the price.
- In the case of solar PV, **Solarize** is a collective group purchase about
 - ***Getting together,***
 - ***Learning together,***
 - ***Lowering costs together, which***
 - ***Result in Local Clean Energy Together***



Group Solar Purchase Concept

All across the United States, groups are using this "**solarize**" approach to enable the installation of clean and cost effective solar energy for distributed electricity generation.

- **Increase education and awareness of solar PV**



- **Reduce costs associated with solar PV**

- **Increase local adoption of solar**



Basics of a Solarize Program

Lot of people want to learn more about solar and install solar, but they don't know where to get started

With Solarize/Group Purchase

- **simplify the process**
- **educate consumers**
- **discounted pricing**
- **limited time offer**

Program Setup

- **Develop partnerships** with trusted organizations, e.g. local utility, city departments, financing organizations, local solar installers, other
- **Recruit volunteers** for Outreach committees and RFP (Request for Proposal)
- **Establish a web/blog site** to capture information and report information

Outreach and Education

- Outreach via various **marketing channels** including, website, blog, emails, print materials, flyers, local festivals, farmers market, press release, etc.
- Hold **workshops** with participants to provide project overview & timelines, residential solar 101
- **RFP Review Team** reviews RFPs and selects solar company selection;

Installations

- Provide status updates, monitor installations, periodic team meetings, problem resolution and correction when needed
- Install solar PV systems!
- **Solar-brations!**



Project Communications

- **Information Session meetings**

- Hold in-person meetings
- Present project overview, timeline, and Residential Solar 101 included
- Provide online information for persons not able to attend in-person meetings

- **Regular Project Communications**

- Periodic emails and also available at the Solarize project website

- **RFP Review Team**

- RFP documentation develop from existing solarize project templates
- RFP Team consists of interested project participants
- RFP specifies desired financing options, generally purchase and finance, could also include lease and PPA options
- RFP information available at the Solarize project website
- RFP scoring and final company selection made by RFP Review Team



Participant Process & Key Decisions

1. Decide to Enroll

- This is NOT a commitment to buy. This is an agreement to look at the options and learn more about solar.
- Learn about how to determine the size of a system you will need, its approximate cost, and other considerations and tradeoffs
- ***MUST do a little homework!***
 - *Determine your annual electricity usage in kWh*
 - *Think about how energy efficient is your home*

2. Decide to move forward with a Site Assessment

- Enrollee information shared with selected company
- Selected company performs site assessment and prepares proposal

3. Decide to Install

- Individuals sign a contract directly with the selected company. This is when the participant is making a financial commitment.
- The more persons that commit to install systems, the better the overall discount.



Plano Solar Advocates **Solarize Plano** Projects

- **2013 Solarize Plano Project (May 2013 – Jan 2014)**
 - 200+ enrolled, 52 site assessments, **20 installations**
- **2014 Solarize Plano Project (Jan 2014 – Oct 2014)**
 - 193 enrolled, 56 site assessments, **22 installations**
- **What are the impacts of these most installations?**
 - Long term investments in homes
 - Long term hedge of future electricity costs
 - Reduce the grid's peak electricity demand with ***no air, water, or noise pollution!***
 - Reduce water consumption in North Texas
 - Boost local economy - increased business sales revenue and associated jobs.



Solarize – Many Shapes and Sizes

- Solarize “train” size – large group of people
 - *Early examples - Solarize Portland, Salt Lake City, Massachusetts, North Carolina, New York, others*
- Solarize “bus” size – medium size group of people
 - *Plano, Garland, others*
- Solarize “carpool” size – small neighborhood group of interested people – as few as 3 people
 - *Know of one example in Garland, probably others out there*
- Group discount based on “tiered” pricing
- Group discount based on flat pricing



Solarize – Many Opportunities

- Who can organize “solarize” projects
 - Neighbors
 - Neighborhood associations
 - Grassroots volunteer groups
 - Local non-profit organizations
 - City/Municipalities
 - Businesses for local employee group/bulk processes
 - Church/Faith based groups
 - Others



Start Your Local Solarize Project!

- Encourage neighbors, groups, and organizations to join together
- What can you do?
 - small group - find 3 or more interested persons in your neighborhood and obtain quotes from 3 companies, choose and then install
 - for larger group - form or find group or organization to sponsor and run a solarize project
- Where to start?
 - Review existing information from across the country
 - Review the Solarize Plano Project information on the web
 - PSA available to share our experiences



Solarize & Other References

- [US Department of Energy](#)
 - [Solarize Guidebook](#) - a community guide to collective purchasing of residential PV systems. **Watch this great accompanying Youtube video** - [Community Shared Solar with Solarize](#)
- [Community Power Network](#) a network of grass roots, local, state, and national organizations working to build, and promote locally based renewable energy projects and policies.
 - [Solar Group/Bulk Purchase](#) – Solarize examples and references
- Solarize Texas (solarizetexas.org)
 - Resources and links to projects across Texas
- Solarize Plano (solarizeplano.org)
 - Information about PSA Solarize Plano Projects
- Example City sponsored loan program
 - Plano's [Smart Energy Loan Program](#)
- Example City sponsored rebate program
 - Plano's [Great Update Rebate program](#) – neighborhood revitalization program for homes 35 years and older. (Other conditions apply. See program website for details and requirements. Includes renewable energy system investments.)

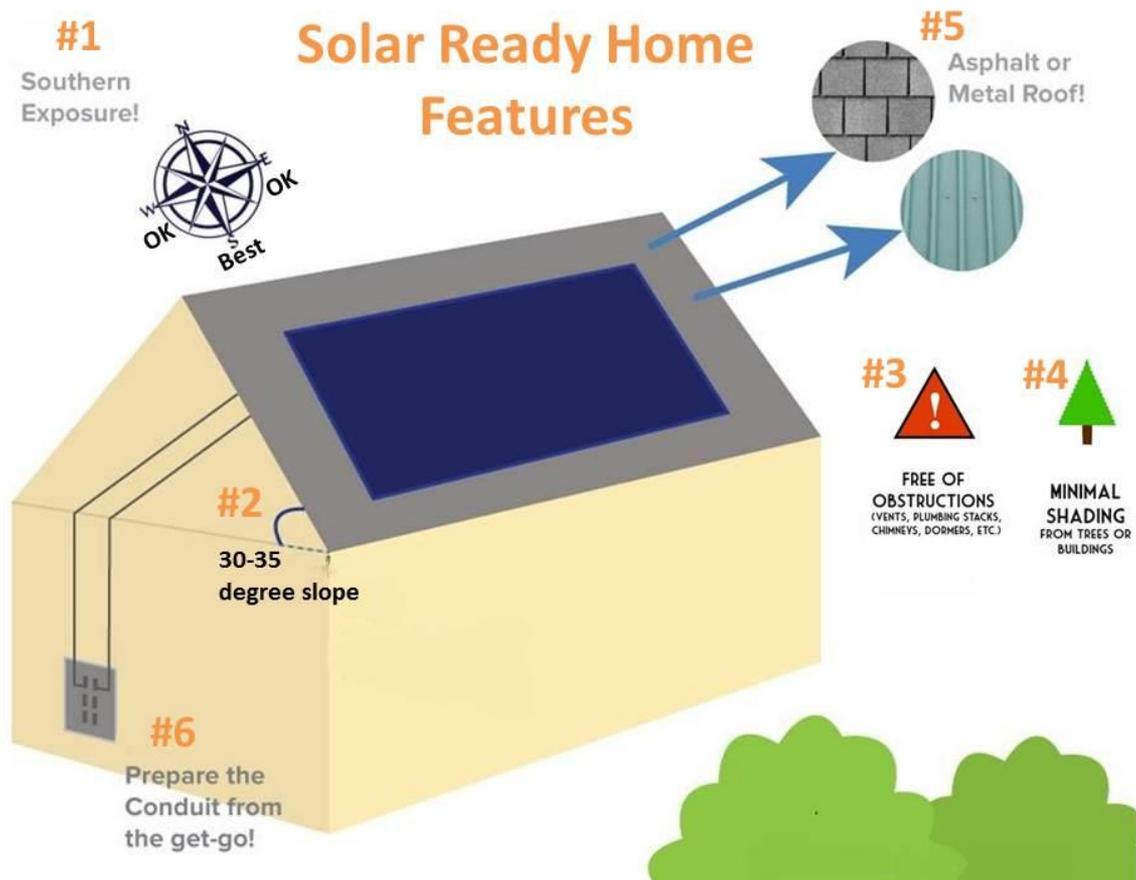


Building a New Home ?

or know someone who is?

- **Go “Solar Ready”**

[2015 International Residential Code Appendix U](#)





Solar PV Deployment

Install Rooftop Solar where you live! Thanks!

