



GoSolar Financing Solar PV Committee Meeting

2nd Floor Hearing Room, Government Center West
One North University Drive, Plantation
Tuesday, October 30, 2012 1:00 p.m. – 4:30 p.m.

Meeting minutes

Participants

Steve Alexander
Olga Alvarez
Wolfgang Beaugrand
Casten Bethge
Joe Bona
Yann Brandt
Hugo Campodonica
Paul Farren
Jean-Luc Giraud
William Goetz
Steve Keskula
Rudy Magasrevy
John Paulson
JD Polk
John Preston
Mitch Taylor
Michael Wallander

County Staff

Matthew Anderson
Ken Dobies
Don Burgess
Maribel Feliciano
Nancy Gassman
Jeff Halsey
Jennifer Jurado
Scott Miller
Alfred Reid
Kay Sommers
Martin Weigand

1) Welcome and Introductions

Dr. Nancy Gassman, GoSolar Finance Committee Lead, welcomed the participants. The objective of the meeting was stated as “Investigate Solar PV financing options for residential and small commercial structures identify the benefits and challenges of each option...” This was followed by self-introductions.

2) Go SOLAR Program Overview

For more information about the GoSolar Broward program, go to www.broward.org/GoGreen/GoSolar.



Jeff Halsey, GoSolar Project Manager, provided an overview of the Broward GoSolar grant funded through the US Department of Energy's SunShot program. The main focus of the grant was to reduce soft costs of rooftop Solar Photovoltaic (PV) installation by streamlining permitting. Mr. Halsey outlined the efforts to date including the development of an online permitting system to be used by 14 municipalities. The permitting system allows contractors to choose critical design elements of a Solar PV system, receive the permit, approved engineering plans and pay a single permitting fee of \$539 all in a single online session. The permitting system is still under development.

3) Financing Survey Preliminary Results – Property Owners

Dr. Nancy Gassman reviewed the outcome of a Solar PV Financing Survey (<http://www.surveymonkey.com/s/W23CLY7>) offered on-line prior to today's meeting. The survey will remain open until November 2 and results will be posted to www.broward.org/gogreen/gosolar. Thirty-nine surveys were completed in the Property Owner and Interested Parties category. The expense of solar panels and the upfront costs were the highest ranked reasons for waiting to install Solar PV. Respondents were generally aware of rebates but not as aware of tax credits and other incentives. Most were aware of financing options such as home equity loans but less than half were aware of other options such as energy efficiency mortgages, revolving loan funds and property assessed clean energy (PACE) programs. Respondents noted understanding financing options as the highest ranked reason they would be more likely to pursue financing, with PACE funding availability second. When asked what the role of government should be, these property owners most often pointed to having more financing options available and establishing a revolving loan fund. Key general comments from the survey included concerns that property owners understand the full costs and impact of installing rooftop panels, desire to have information in a central repository, and abolition of short term rebate programs.

4) Financing Options for Property Owners: **Facilitated Discussion**

The Workshop Participants were asked to provide feedback on fundamental financing issues, barriers and recommendations related to Property Owners.



Fundamental Financing Issues:

- Expense
- Upfront Costs
- Understanding financing options
- Lack of market momentum/cultural adoption of PV
- Low cost of energy per kW
- Educating the financial community
- Educating the realtors and appraisers (see PV value – Sandia National Lab – PV value assessment tool)
- Creditability (property owner qualification for financing, low credit score)
- Need for a renewable portfolio standard
 - Challenge of increased rate payer cost related to FIT, RPS
 - Fuel diversity remains a concern in FL
 - Public Service Commission favors lowest cost option – need to consider society benefits, (air quality, fuel sources, carbon footprint, etc.) beyond cost
- Return on Investment
- Need to offer loans at the interest rate of 3.5%
- Policy level change needed
- Education on equipment use and maintenance (maintaining efficiency of panels)
- Better customer education by, and marketing from, the solar industry
- Panel price is coming down but near bottom of price point

Incentive Options and Barriers

- FPL Rebate – Too little funding, uncertainty of qualifying, not available continually
- Sale Tax
- Tax credits
- Property tax incentive (creates uncertainty)
 - Law to prevent solar installations from increasing the assessment on your home – pending approval
 - Commercial vs. residential
- Job creation (solar's tie to energy efficiency industry)
- Solar leasing: Solar repo is challenged by cost of labor versus cost of equipment – use of WiFi meters to turn off power
- Home owner incentives from government
- Private enterprise and market forces should drive market not incentives.

Financing Options and Barriers

- Cash
- Home Equity Loan

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- Broward PACE Program
- Vendor-based financing (barriers = interest rates and credit score)
- Revolving loan funds
 - low interest loans for equipment purchase – attach financing to equipment not property
- Barriers: Expense of Solar PV, Upfront costs

Recommendations

- Improve Property Owner Education on Finance Options

Role of Government- Recommendations

- Have County reach out to financial industry and create a list of banks offering solar loan for property owners
- Education of realtors and appraisers
- Better understand how third party ownership financing can be used within the existing legal framework of FL
- Look at existing installed solar PV system to understand how they were financed
- Support Non-profits who are raising solar PV awareness
- Property Appraisers role in advocating for property tax exemption for solar installation
- Create a solar fund within government with revolving loan fund

- 5) Financing Survey Preliminary Results – Solar Industry Representatives:
Dr. Gassman reviewed the twenty-four surveys completed in the Solar Industry Representatives category. Customers most often pay for Solar PV using financial reserves or loans. Comments were made on the importance of understanding and expanding third party financing. Customers more often pay in full upfront (71%) and 21% pay in installments in a period of less than one year. Solar industry representatives were more aware of incentives than property owners and 70% noted that incentives always increased their business. Additional comments on incentives noted the disruptive nature of short term rebate programs, concerns about Investor-Owned utility “monopoly” on electricity, and the need to diminish government’s role in the solar industry. Most were aware of financing options such as home equity loans, PACE, and solar leasing.



Solar industry representatives (81%) stated their sales staff was trained to talk to customers about finance options and that customers were generally aware of fiscal options. About half of their customers asked about long term financing.

The top barriers to vendor-based financing included getting financial support from financial institutions and market scale/volume. Better rebates and incentives were ranked the highest as tools to grow the solar market. Other tools noted include Feed in Tariff, allowing others to sell energy, power purchase agreements or raising the cost of energy.

The most often chosen roles for government included setting a community PV goal, developing PACE program and offering more financing options. Among the comments were options to enact a renewable portfolio standard and allow power purchase agreements.

Other general comments included a unified inspection evaluation criteria, job creation through the solar market, need for Feed in Tariffs, need to educate property appraisers and realtors, and the ineffectiveness of using of cost avoidance to market solar.

6) Financing Issues in the Solar Industry: ***Facilitated Discussion***

The Workshop Participants were asked to provide feedback on fundamental financing issues, barriers and recommendations related to the Solar Industry.

a) Options, Barriers and Recommendations

Fundamental Financing Issues:

- Consistent demand for product
- Available Financing Options (need low interest rate 3.5%)
- Public Service Commission related to
 - Renewable Portfolio Standard
 - Who can “sell” electricity
 - Prohibitions or complicated regulations related to solar leasing, Community solar and PPAs
- Need initial investment in industry that is maintained
- Third Party financing structure in FL to improve understanding of solar leasing and PPA structure



- Previous survey related to a public benefit trust fund (FPL bill) supported funding to go toward distributed generation solar installation.
- No appetite in FL for utility rate fee increase due to social equity issues (solution: exempt low income bills) – \$\$ could support State “rebate” program
- Incentives cannot sustain the industry long term.
- Clean up industry to not “work” the system.
- Feed in Tariff (target \$0.05/kW above current rate)

Financing and Incentives for the Solar Industry

- Profit levels and financial resources limit ability to pursue contractor-based financing.
- Incentives are great but won’t maintain the industry.
- Cost point for solar compared to other energy/fuel sources is likely to be reached in the next 12-18 months.

Recommendations from the Solar Industry

- Allow/Encourage/Establish Feed in Tariff program
- Adopt a Renewable Portfolio Standard
- Fund FPL rebates from early cost recovery dollars
- Work to get Power Purchase Agreements approved
- Eliminate utility monopoly on selling energy
- Change legislation to allow Community Solar
- Raise the cost of electricity
- Share policy/legislative recommendations at local, regional and state scales to increase awareness of issues and get them incorporated into planning documents and legislative platforms

Role of Government

- Talked about using the 1% tax on luxury purchases for Energy Efficiency and Conservation programs
- Revolving loan programs with low interest (<3.5%)
- Need to understand our local issues/market and tailor successful programs from other locations to our own region
- Local or state level carbon footprint standard
- Local ordinances to help prepare new building stock for solar (Lauderhill ordinance)

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7) Financing Survey Preliminary Results – Financial Institution Representatives: Only one survey was completed by a financial institution representative at the time of the meeting. Workshop participants suggested that financial institution need education/outreach on what solar is about as a commodity. They expressed concerns related to applicant credit score and associated fiscal risk. There was also an emphasis on the need for low interest loans (3.5%).

8) Next Steps

Five steps were suggested:

- Attend January 25-26, 2013 Solar Fest
- Attend Seven50 Energy Resilience Summit Dec 11, 2012 to voice your concerns and advocate for policies that support solar (www.seven50.org)
- Post presentation to the web site
- Post final survey results to the website (survey closes Nov 2)
- Visit www.broward.org/gogreen/gosolar for updates and more information

The Workshop attendees were thanked for their input. The meeting adjourned at approximately 4:00 p.m.