



SolMarket Presents:

Investor Preferences: Key Solar Project Traits that Lead to Successful Financing

Yuri Horwitz, CEO of Sol Systems & Jigar Shah, Founder of SunEdison
May 3, 2012

Introductions



Yuri Horwitz

CEO, Sol Systems



Jigar Shah

**CEO, Jigar Shah Consulting &
Founder of SunEdison**

Agenda

1. SolMarket Overview
2. Current Solar Landscape
 - Financing Available
 - Strategic Trends
 - Aggregate Pricing Data
3. Key Traits that Lead to Successful Financing

Part 1: SolMarket Overview

Company Overview

Sol Systems SREC Aggregation & Finance

Largest SREC aggregator

Trusted partner to **thousands of homeowners and businesses**

250 developer and installer partners

PV and ST portfolio over **30MW**

Facilitated over **\$100 million** in project financing through SRECs

SolMarket Project Development & Finance

Innovator in solar energy finance and development

200+ solar projects seeking financing

\$2 billion in aggregate capital seeking projects

300+ SolMarket members

20+ MW of SolMarket projects financed or at term sheet

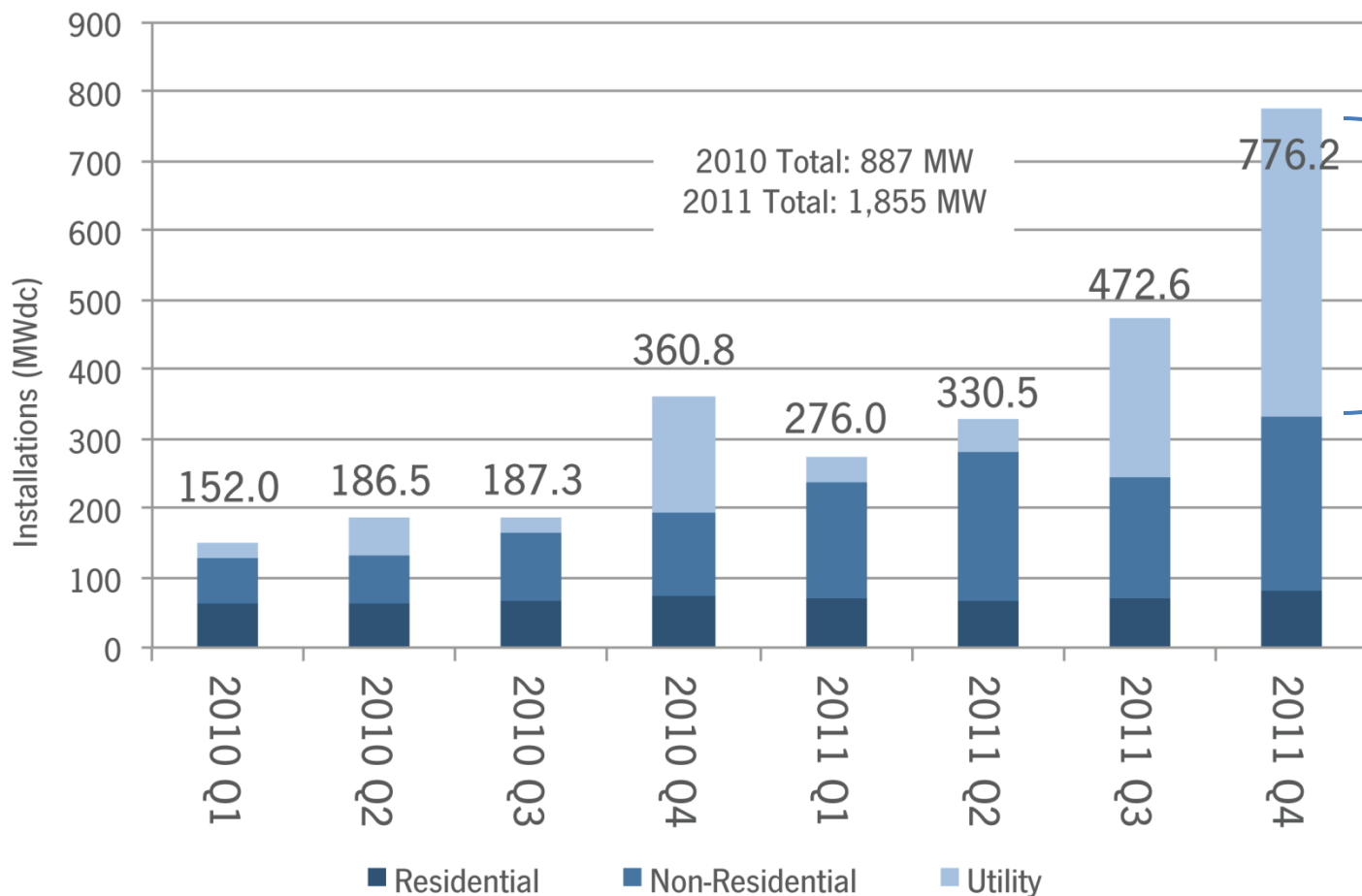
SolMarket Overview

For the Solar industry to scale we must...

- **Build an Ecosystem:** Provide an ecosystem in which multiple new developers and players can thrive and innovate. Competition is healthy.
- **Reduce overall transaction costs:** Bring down costs of developing, investing and architecting portfolios. Uniformity in the origination and vetting process, standardization in documentation.
- **Create a standardized asset class:** We must provide a level of standardization across the industry to create secondary markets, reducing initial investment risk and creating an opportunity for more advanced investment vehicles.

SolMarket Overview

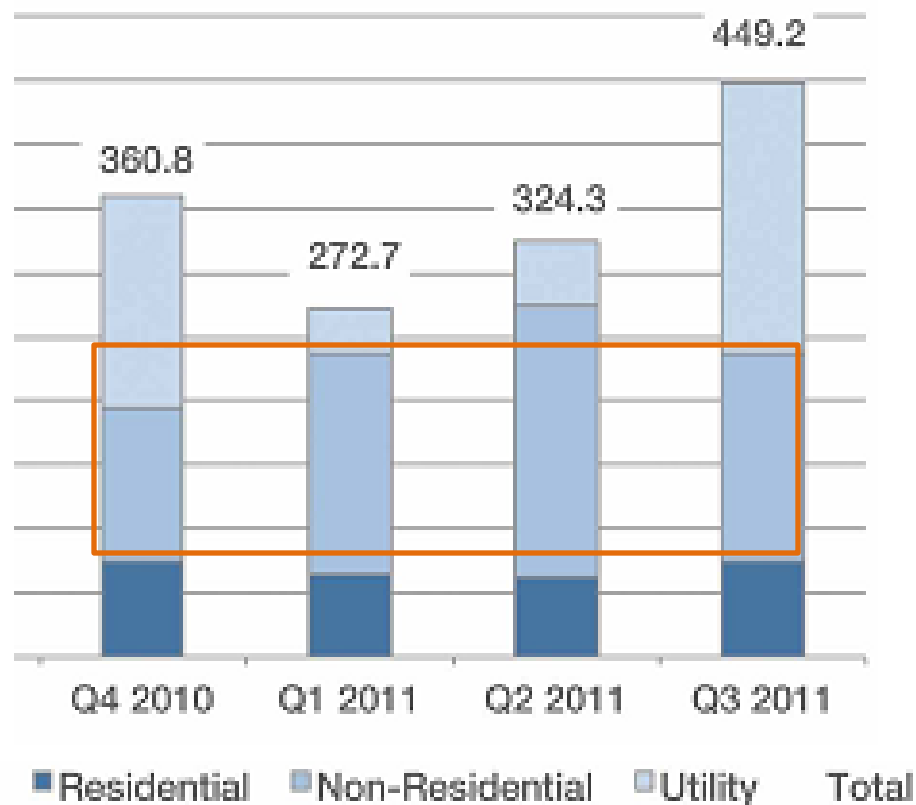
2010-2011 Solar Trends



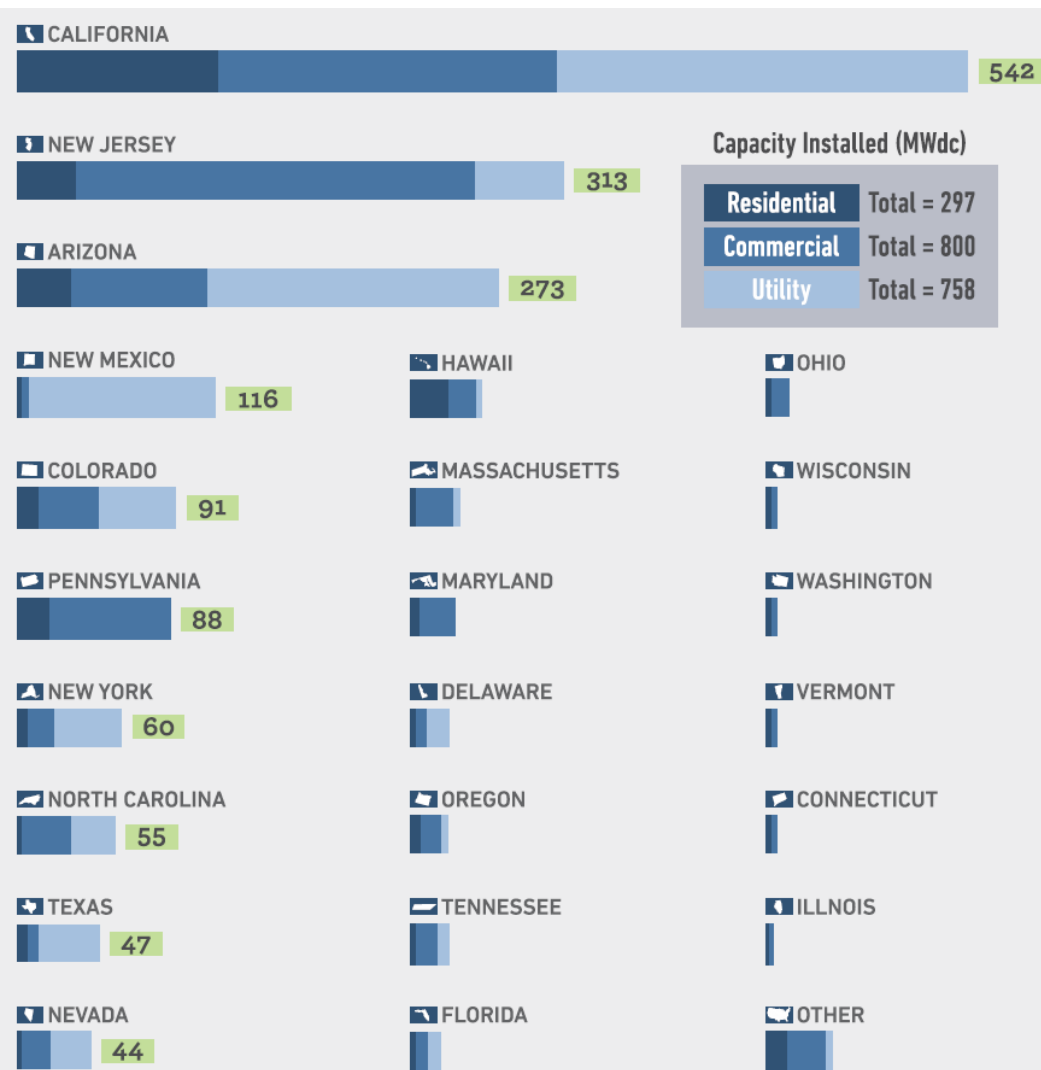
Larger projects are often DOE loan guarantee projects with limited replication possible.

SolMarket Overview

The vast majority of solar (in volume) is built in not utility and non-residential space. These developers must succeed if the solar industry is to continue to scale. Providing them with the appropriate resources and information will be critical to this success.



SolMarket Overview



Solar's Back Bench

Outside of California and the southwest, commercial systems tend to dominate the market, and are key to the future of solar.

Where in the United States does it make sense to build massive solar arrays hundreds of miles from population centers?

Is this the technology's costs competitive advantage? It's future?

Sweet Spot: 250kw - 2MW

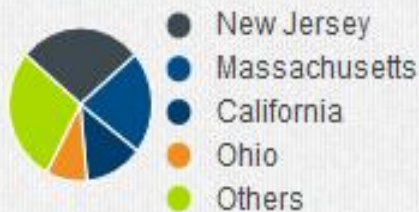
SolMarket Overview



SolMarket Overview

- Over 300 users
- 400+ MW of project pipeline
- \$2 Billion in available investment dollars for qualified solar projects
- Current investor preferences posted on dashboard

Projects By State



Financial Needs



High Demand States



Part 2: Current Solar Landscape

Current Landscape

- The majority of commercial solar projects currently in development in the US will not get financed successfully this year
- However, there are significant opportunities for financing available and waiting on the sideline for projects



Current Landscape



What is the disconnect?

Current Landscape

Direct Equity

- The most common type of financing sought/available is direct equity
- Development right, turn-key purchase, and equity stake
- Required returns range from 8% to 18%
- Lower returns correlate to larger projects with contracted revenues

Current Landscape

Construction Debt

- Typically utilized by larger projects, but often applied to smaller deals as well
- Critical to tax equity structures
- Interest usually pegged at 8-12%, widely available at 10% with a 2% origination fee for smaller deals

Current Landscape

Permanent Debt

- Typically utilized by larger projects, but beginning to be applied to smaller deals and completed projects
- Critical to inverted lease and flip tax equity structures
- Critical to developer looking to turn over financing for reinvestment
- Interest usually pegged at 5-8%, with 1-2% origination fee for smaller deals

Current Landscape

Tax Equity

- Structures include flip, inverted lease, and sale-leaseback
- Required for almost all projects, but generally not available for smaller projects
- Smaller developers can usually sell out of a quality project to an investor/developer with tax equity appetite
- Return usually pegged at 8 to 12% plus a 2% preferred return and potential put

Current Landscape

General Financial Trends

- Increasing amount of non-recourse construction and term debt available to commercial solar projects, as small as 100 kW
- The tax equity pool is increasing, with a number of entities (including Sol) working on syndication, but still limited
- Smaller developers are opting to sell projects to more established developers with access to tax equity

Part 3: Key Traits that Lead to Successful Financing

Key Traits

Bankable Legal Documents

Ensure that your legal documents work. Initially, the 3 most important documents that we require (if they have been obtained) are:

- » Offtake Agreement
- » Interconnection Agreement
- » Site Control

** GET THEM RIGHT. Please see the SolMarket webinars on ensuring bankable solar legal documents.*

Key Traits

Strong State Incentives

Locate markets that work. Most often, located in state or utility territories with strong solar programs:

- **SREC Markets** (MA, NJ, MD, DE, DC, CT)
- **Feed-in-Tariff Style Programs** (RI, VT, IN, Gainesville Regional Utilities, San Antonio Solartricity, CREST and PG&E's similar FIT program in CA)
- **Direct Utility PBI** (AZ, CO)
- **State Tax Credits** (NC, OR)
- **NMTC**

Key Traits

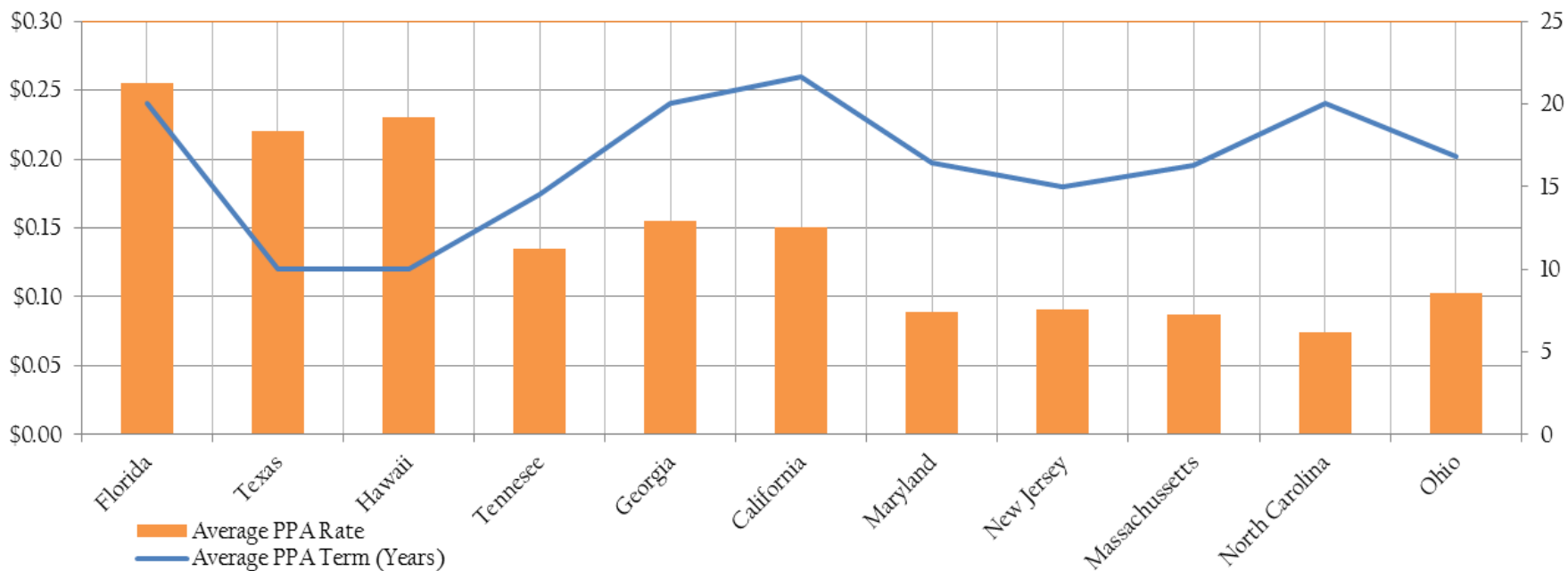
High Electricity Rates

Projects located in markets with high electricity rates have better economics:

- Hawaii,
- Puerto Rico/Other Caribbean Islands
- California distributed generation (Some utility-level Production Based Incentives for the first few years as well)

SolMarket Data

Average PPA Rate and Term Across Projects on SolMarket



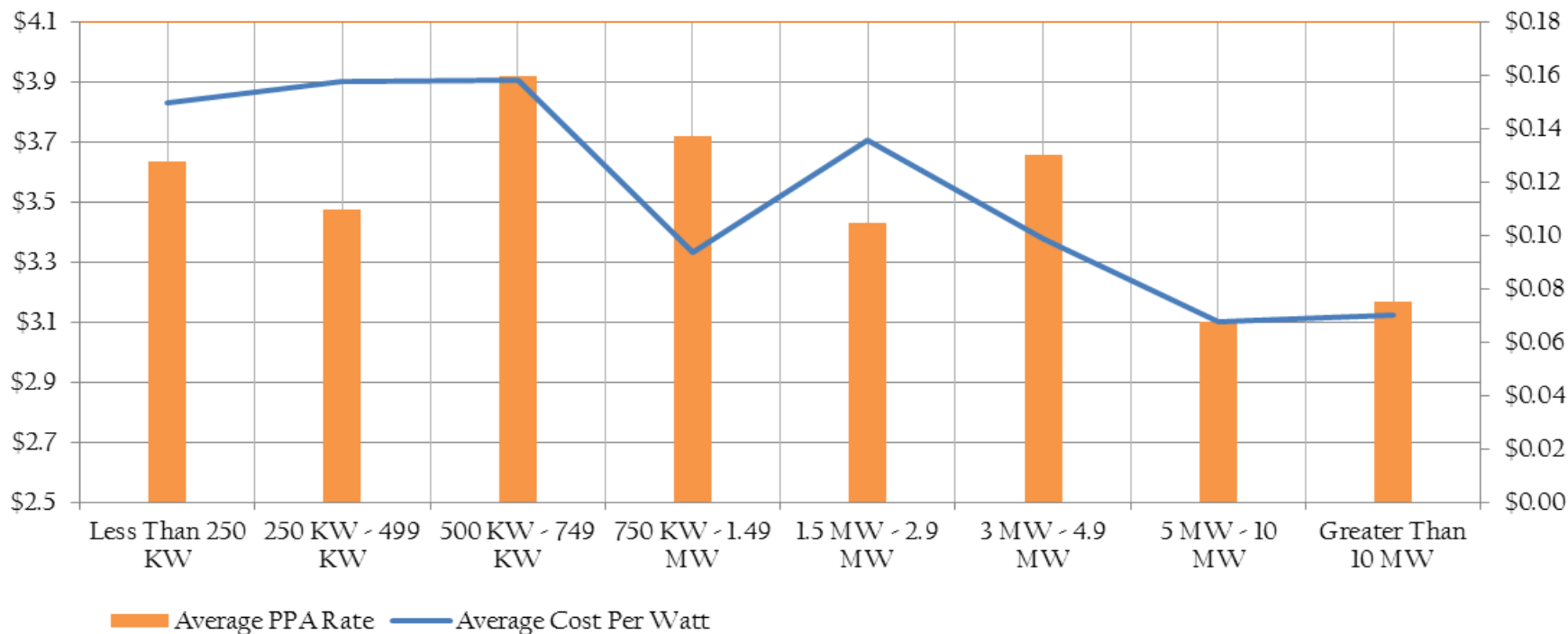
Key Traits

Stay Competitive

- **Developer Fees:** Seeing fees as low as \$0.12 to up to \$0.73/Watt, but this can vary dramatically depending on stage and quality of project
- **EPC Fees:** Seeing around \$2.40 to \$3.00/Watt, but will vary with mounting type, size, etc.
- **PPA Pricing:** Most solid PPAs getting at least \$0.08/kWh
- **PPA Escalator:** Most solid PPAs getting 2% to 3% escalator, and ideally a fixed escalator

SolMarket Data

PPA Rate versus Installed Cost per Watt



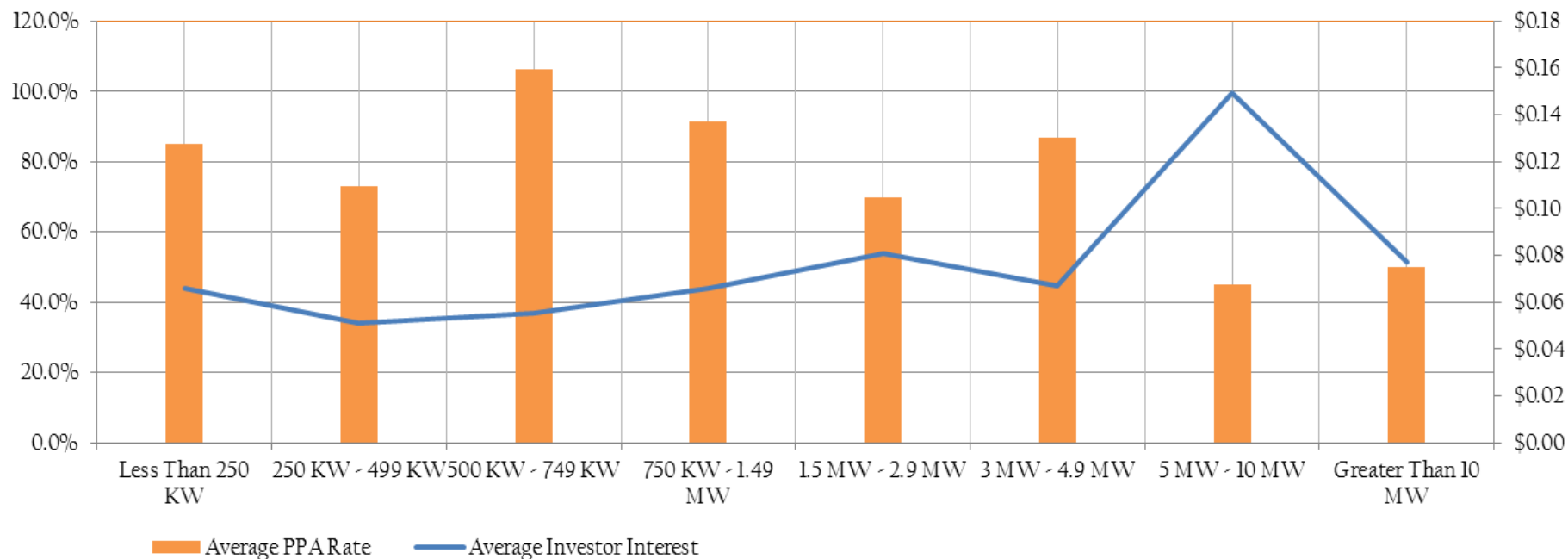
Key Traits

What's Working Now

- Projects in MA and NJ with interconnection approval (or close to it) and executed offtake of \$0.10/kWh or greater get immediate interest
- In areas with FIT-style programs, projects with at least \$0.20/kWh for 20 years will get immediate interest
- Projects that are willing to push total sale cost under or close to \$3/watt, will get more interest

SolMarket Data

PPA Rate versus Investor Interest (Normal Distribution)



Pitfalls

Even with an attractive offtake & good incentives, there are other important factors that can doom a project's revenue stream:

- Taxes (Property, Personal or Sales Tax)
- High site control costs
- EPC, insurance, or O&M costs that are well above the industry norm
- High interconnection costs
- Short term on offtake agreement or solar incentive

Recommendations

- Reduce your transaction costs by starting with documents that have been vetted
- Don't give everything to your client...your project will not get financed
- Do your own research or let us help you. If you're still pushing traditional projects in states like PA, you're in trouble
- Innovate with other financing mechanisms

Questions and Answers



Contact Info

Sol Systems

888-235-1538

info@solsystemscompany.com

www.solsystemscompany.com

SolMarket

888-SOL-1115

info@solmarket.com

www.solmarket.com