NASEO Finance Committee Call
Insights from SAPC workgroup
August, 6th, 2015

John Joshi
Director Financing Solutions
NYSERDA
1359 Broadway, 19th Floor | New York, NY 10018
P: 212-971-5342 x3636 | E: John.Joshi@nyserda.ny.gov
NREL Activities to Open Capital Market Investment and Bank Lending for Solar Deployment

Presentation to Senate & White House Staff
September 15 & 16, 2014

Michael Mendelsohn, NREL
John Joshi, Capital Fusion Partners
Capital market participation requires...

i. **Asset and contractual consistency**, which allows project cash flows to be pooled into tradable and highly liquid securities, and

ii. **Availability of data to conduct due diligence** necessary to build market confidence in the asset class.

Which creates virtuous cycle of...
NREL Securitization Activities: Project History

**NREL / DOE Goal**

- Expand availability of capital
- Lower cost of capital
- Reduce transaction cost, time to access capital

**3 Yr. DOE Award**

*Under SunShot Initiative (FY ’13 – ’15)*

- Organize the industry around:
  - Standard documents
  - Best practices
  - Robust datasets

- Comprehend opportunities and barriers

- Promote adoption by developers, financiers, law firms, etc.
SAPC Activities

• **Standard Contracts** – first set *available* and in use:
  - Residential Lease (aggregated, disaggregated)
  - Commercial Power Purchase Agreement (PPA)
  - Residential PPA

• **Develop Best Practices**
  - Installation, Operation & Maintenance (O&M)
  - *First public releases due Q4 2014*

• **Build Robust Datasets**
  - System performance: oSPARC (Open Solar Performance and Reliability Clearinghouse) *available here*
  - Credit performance

• **Develop Mock Filing to Rating Agencies**
  - Residential mock presented to 5 rating agencies
  - Commercial mock in development w/ innovative structure
Standard Contracts

Benefits of Adoption:

• Facilitate cash flows to be pooled into securities to access capital market investment
• Lower transaction costs
• Speed deployment
• Improve customer protection
• Enable market liquidity of projects

Adopters:

• Developers
  • SolarCity
  • Clean Power Finance
  • Sunrun
  • One Roof Energy
  • OnSwitch
  • Altus Power

• Law Firms
  • K&L Gates
  • Nixon Peabody

• Financing / Risk Platforms
  • Mercatus
  • truSolar
  • ModSolar
Standard Contracts

• **SAPC benefit:**
  - Standard contracts and best practices will facilitate asset consistency and improve liquidity of projects
  - Easier to buy and sell projects portfolios
Mock securitization benefits:

- *Legal term sheets* – lowering transaction costs for smaller entities to enter debt markets
- *Education* – of rating agencies & industry on risk perception, technology & credit performance
- *Structure* – tandem tax equity / debt structure could solve complex industry issue
Are SAPC Goals being met?

NREL / DOE Goal

- Expand availability of capital
- Lower cost of capital
- Reduce transaction cost, time to access capital

Solar industry continues to mature through operating, technical, and financial innovation

DOE / NREL efforts to standardize, facilitate asset quality, and provide analytic tools is speeding that maturity