



CONERGY

**Solar Energy Overview Transforming the Market
The Sustainability Series
May 18, 2009**



AGENDA

- | An overview of Conergy and its position in the industry.
- | **Projects.**
- | Market Overview: How solar works
- | A Solar Project is a Financial Deal

Since 1998, the Conergy group has grown into a worldwide market leader in the field of renewable energy



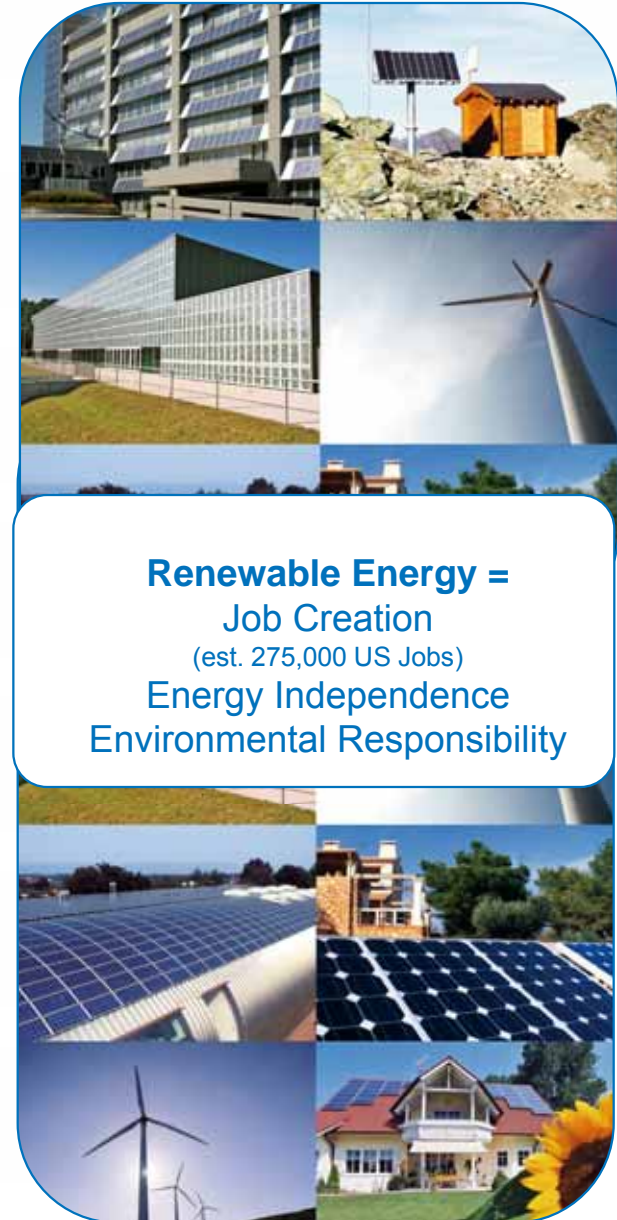
Our world is full of energy



Conergy is a global leader

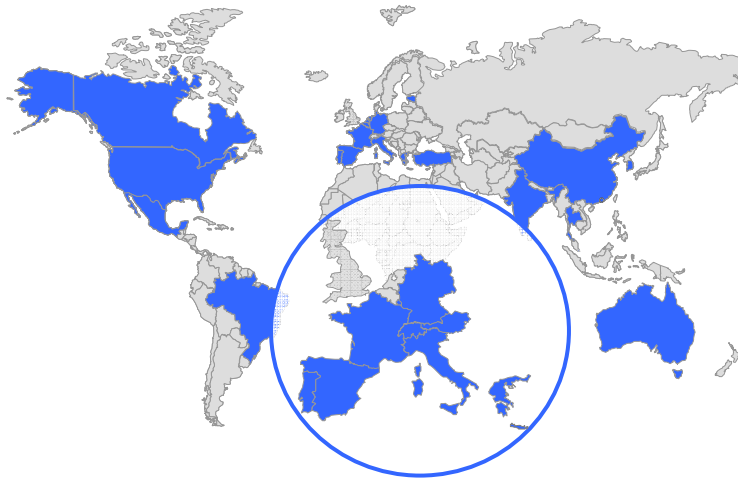


- 1 One of the world's largest companies 100% dedicated to solar energy with over 1 gigawatt of renewable energy installed in the past decade
- 2 A comprehensive portfolio of proven photovoltaic technology including crystalline and thin film modules, balance of system components and custom engineered solutions
- 3 Complete, project specific PV solutions including project development and financing, engineering, construction and O & M services.
- 4 Two distinct, highly focused sales channels:
Distribution Sales Group serves a national network of installers
Projects Group provides custom, turn-key solutions for large system customers
- 5 Solutions for grid-tie and off-grid PV for residential, commercial, municipal, government, agriculture and utility systems
- 6 Local expertise powered by global strength - regional management structure ensures strong customer and market focus

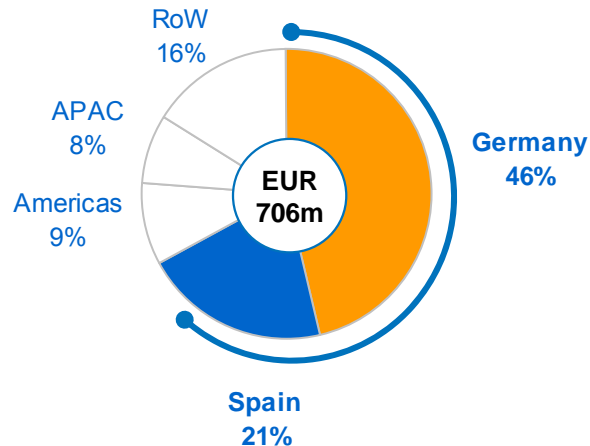


Conergy group has some substantial advantages in current positioning.

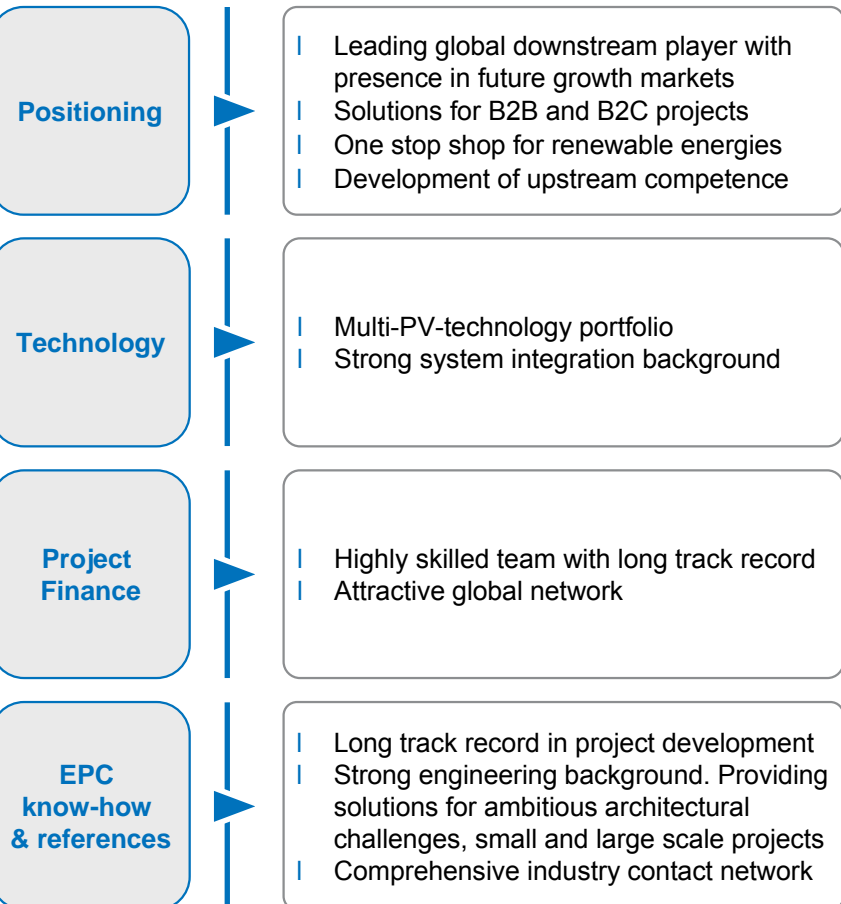
Global presence with Germany and Spain as key markets



Conergy's geographical sales split (2007)



Conergy advantages in positioning





Conergy PV: The experts for PV business and system solutions.

Conergy PV

Conergy engineers have over ten years experience building PV systems and have successfully installed thousands of these systems worldwide.



PV for Distributed Energy



Agricultural

PV for private and public customers



Public buildings

PV special solutions



Telecommunications

PV Off-grid systems



Free field plants

PV power plants



On-roof PV plants



Schools



Residential



Special architectural applications



On-roof installations



Large-scale free field

Solar Power Roof Projects



Warmerdam Distribution Facility

- | Location: San Joaquin Valley
- | Output: 1.2 MWp
- | N° of modules: 6,600 modues
- | Over 25 years, the system will offset CO2 equivalent to 124 million car miles



Michelin Manufacturing Plant

- | Location: Landau, Homburg, Bad Kreuznach, Bamberg
- | Output: 10 MWp
- | N° of modules: 60,000, on 200,000 m² roof surface
- | **World's largest solar power roof project.**

Solar Tracking System Projects – Spain



- | Location: Chincilla
- | Start of operation: 2007
- | Output: 3 MWp
- | N° of modules: 18,000
- | N° of tracking systems: 390
- | Surface covered: 146,400 m²

Conergy SolarOptimus Tracking System increases energy yield by 30%.

- | Location: Darro, Granada
- | Start of operation: 2007
- | Output: 5.8 MWp
- | N° of modules: 29,964
- | N° of tracking systems: 710
- | Surface covered: 34 hectares

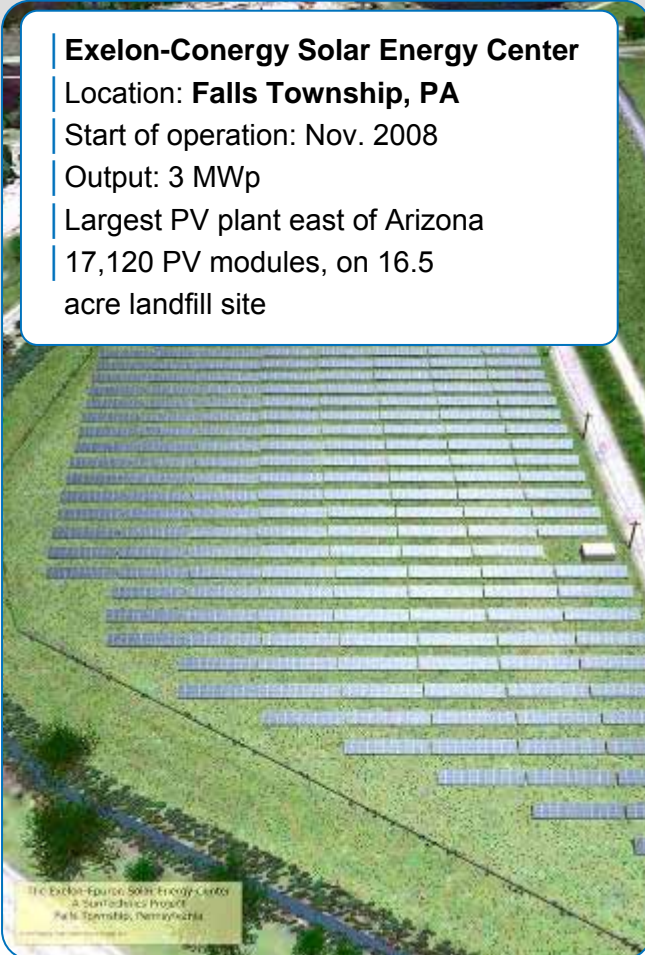
The installation saves the environment 9,860 tons of CO₂.



PV Power Plant Projects

Exelon-Conergy Solar Energy Center

- | Location: Falls Township, PA
- | Start of operation: Nov. 2008
- | Output: 3 MWp
- | Largest PV plant east of Arizona
- | 17,120 PV modules, on 16.5 acre landfill site



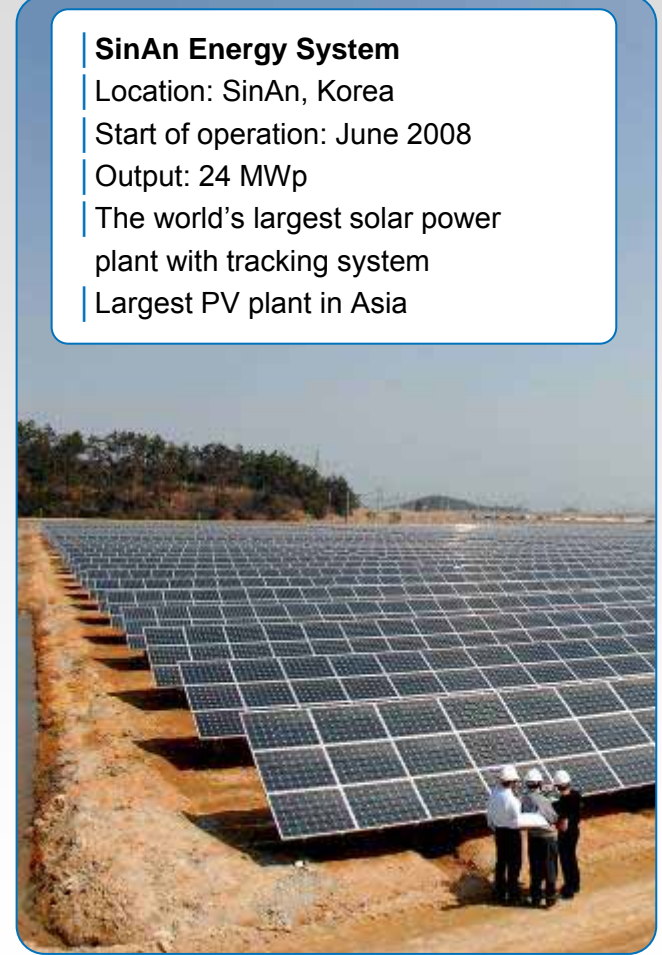
South San Joaquin Irrigation District

- | Location: Manteca, CA
- | Start of operation: May, 2008
- | Output: 2 MWp
- | Reduce annual energy costs \$500,000
- | Single Axis solar tracking system will improve energy output by 15%



SinAn Energy System

- | Location: SinAn, Korea
- | Start of operation: June 2008
- | Output: 24 MWp
- | The world's largest solar power plant with tracking system
- | Largest PV plant in Asia



Exelon - Conergy Solar Energy Center - 3 MWp

- | Location: Falls Township, PA
- | Landfill site – Waste Management
- | Exelon – Energy off take & SRECs
- | Over 100 green jobs created

The largest installation east of the Mississippi, the fifth largest solar power plant in the United States.



Agriculture Projects Projects

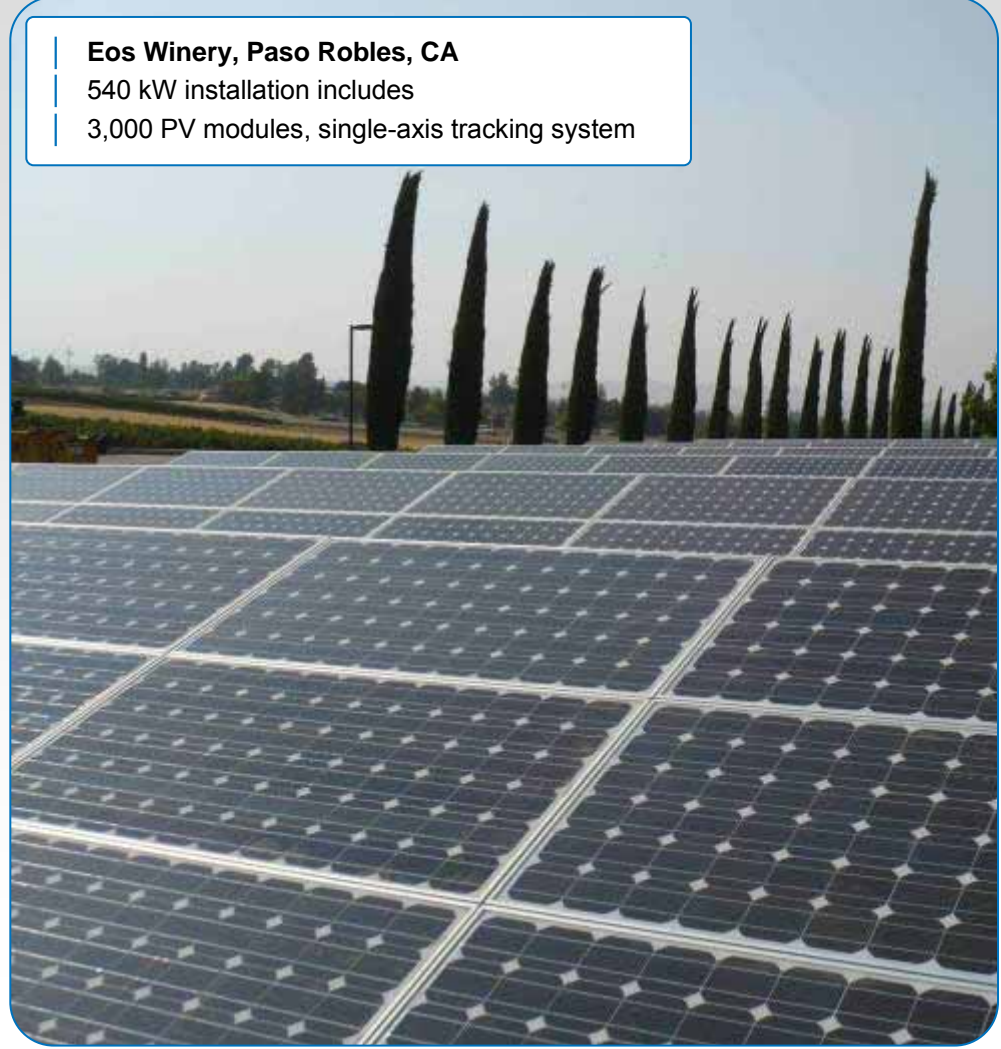
Colusa Rice, California

314 kW system includes 1848 modules

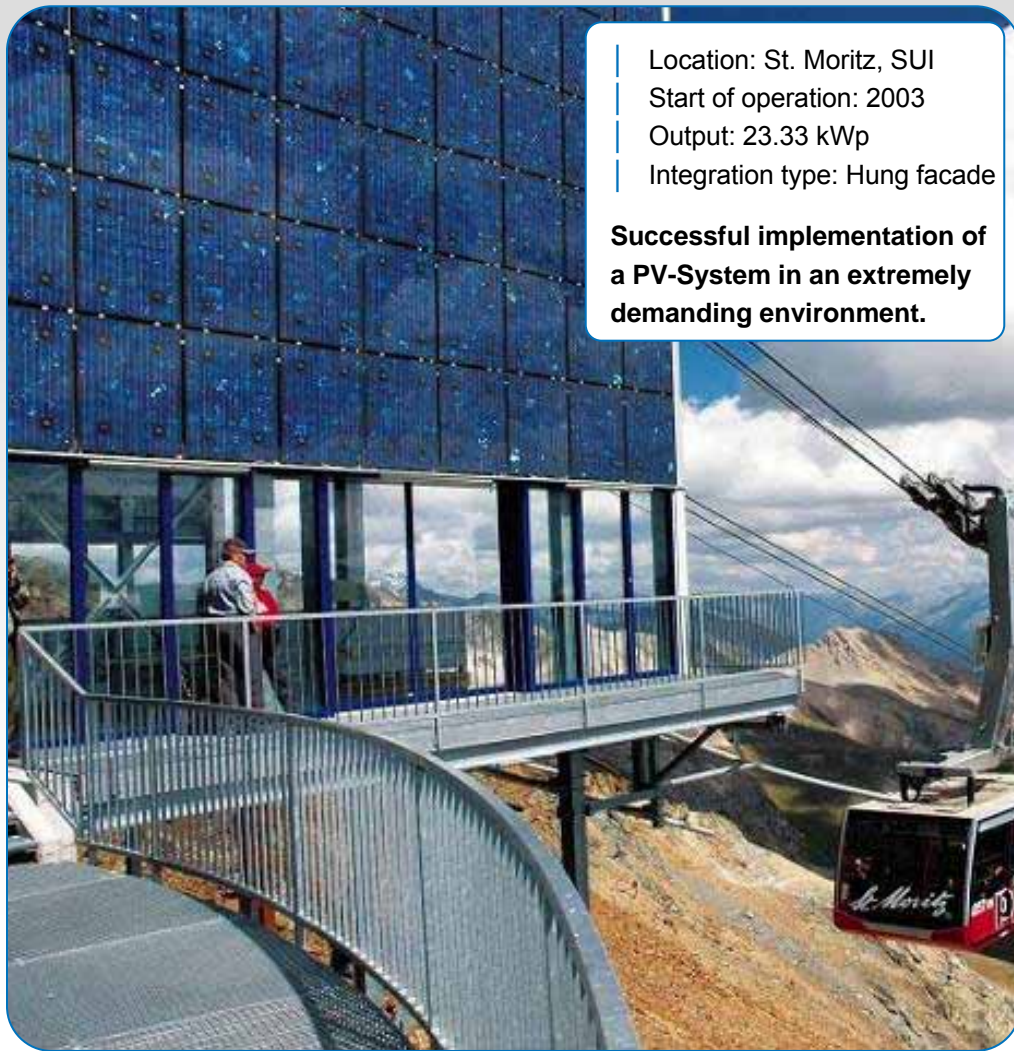


Eos Winery, Paso Robles, CA

540 kW installation includes
3,000 PV modules, single-axis tracking system

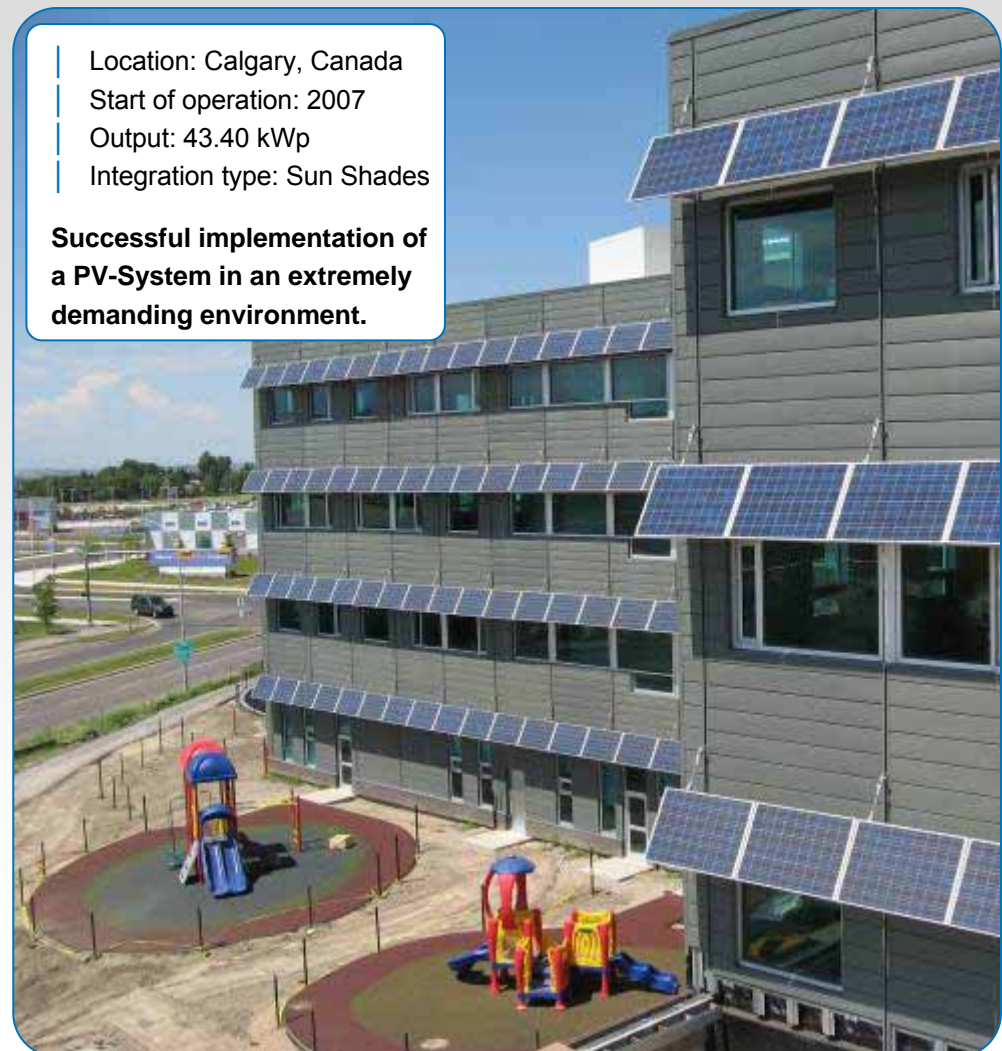


Building Integrated PV Projects



- | Location: St. Moritz, SUI
- | Start of operation: 2003
- | Output: 23.33 kWp
- | Integration type: Hung facade

Successful implementation of a PV-System in an extremely demanding environment.



- | Location: Calgary, Canada
- | Start of operation: 2007
- | Output: 43.40 kWp
- | Integration type: Sun Shades

Successful implementation of a PV-System in an extremely demanding environment.

Solar Park Project – Spain

- | Location: Darro, Granada
- | Start of operation: 2007
- | Output: 5.8 MWp
- | Number of modules: 29,964
- | Tracking systems: 710
- | Surface covered: 34 hectares

The installation saves the environment 9,860 tons of CO₂ every year



PV Power Plant Project – South Korea

- | Location: SinAn
- | Start of operation: June 2008
- | Output: 24 MWp
- | Number of modules: 109,000
- | Covers electricity needs of 6,000 homes

The world's largest solar power plant with tracking systems.



Michelin Solar Power Roof Project – Germany



- | Location: Landau, Homburg, Bad Kreuznach, Bamberg
- | Output: Approx. 10 MWp
- | Number of modules: 60,000, on 200,000 m² roof surface
- | System covers electricity needs of 2,400 households

World's largest solar power roof project.



France's largest PV plant – 1.4 MW

- | Location: Saint-Aunès Mall
- | Start of operation: June 2008
- | Output: 1.4 MWp
- | Number of modules: 5.492

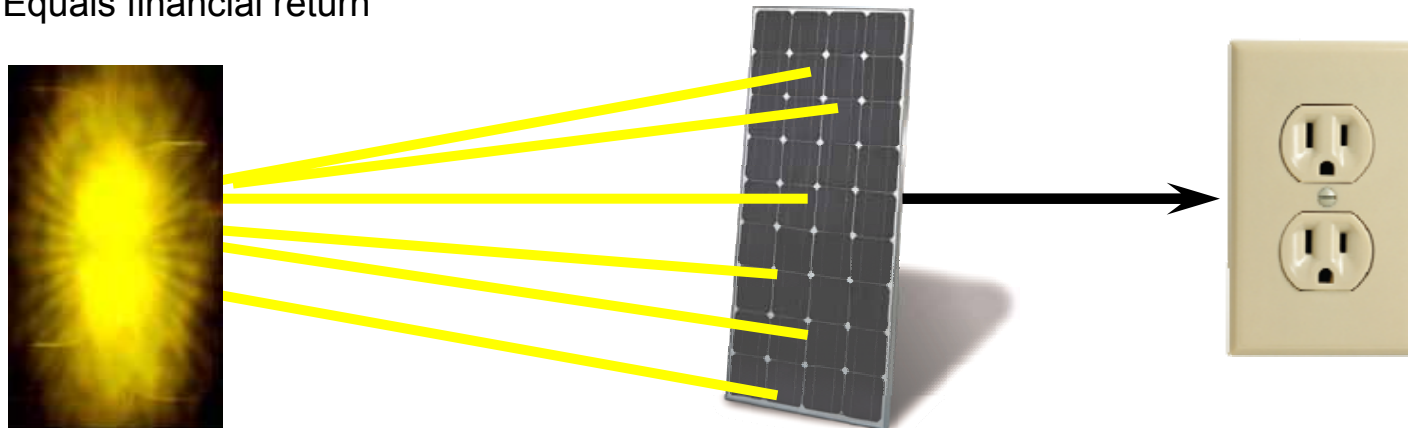
The mall's customers are very pleased to park their car under shade.



Market Overview

How Does Solar Electricity Work

- | Solar PV is the direct conversion of sunlight to electricity. Edmond Becquerel discovered the concept known as photovoltaic effect in 1839
- | Solar Electricity (a.k.a. Photovoltaics, or PV) is a clean, quiet, inexhaustible power source for your home, business or institution
- | Most reliable source of electricity (Space Program)
- | Nearly 40 years of Solar Insolation Data Available (fuel source)
- | Predictable and reliable output
- | Produces energy when needed most
- | Equals financial return





What Makes Solar Work?

| Policy

- Electric Utility Deregulation
- Net metering rules
- Interconnection rules
- AEPS (portfolio standards)

| Technology

- Inverters
- Increased module efficiency
- Mounting Solutions
- Tracker Technology

State solar programs are in variety of development stages presenting challenges in market navigation

Effective solar policy has four principles

- Utility rates and revenue policies
- Interconnection
- Net metering
- Incentives

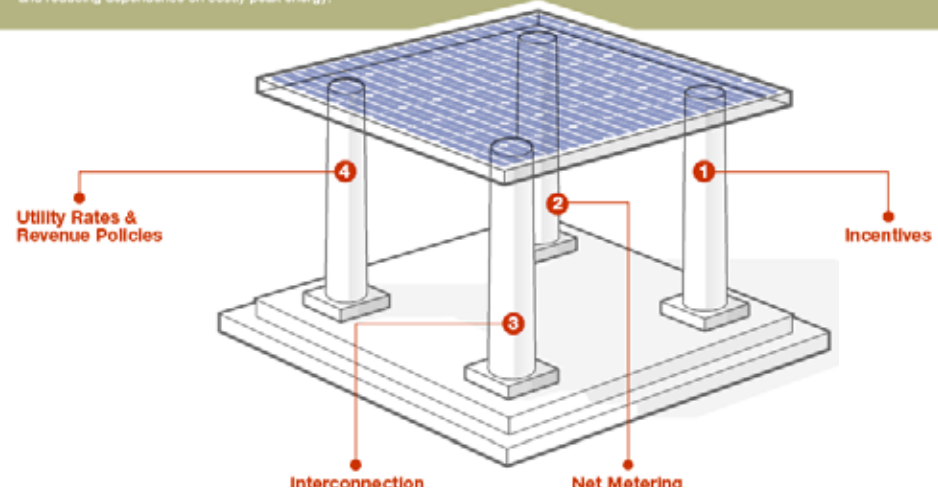
Challenges exist in key states establishing all four pillars

- New Jersey
- Pennsylvania
- Arizona
- Florida

These four principles (pillars) are necessary for optimal market development

THE FOUR PILLARS OF COST-EFFECTIVE SOLAR POLICY

Any state can develop a world-class solar market, strengthening the local economy and environment, increasing grid stability, and reducing dependence on costly peak energy.



Courtesy: Solar Alliance



Interconnecting Solar

| Net-metered, Grid tied

- Offset onsite loads through net metering, customer pays or finances the system, benefits from the energy produced by reducing onsite electric consumption at retail rates. Conergy Projects group market focus on net-metered projects. Key segments include: Agriculture, water utilities and districts, industrial and commercial customers.

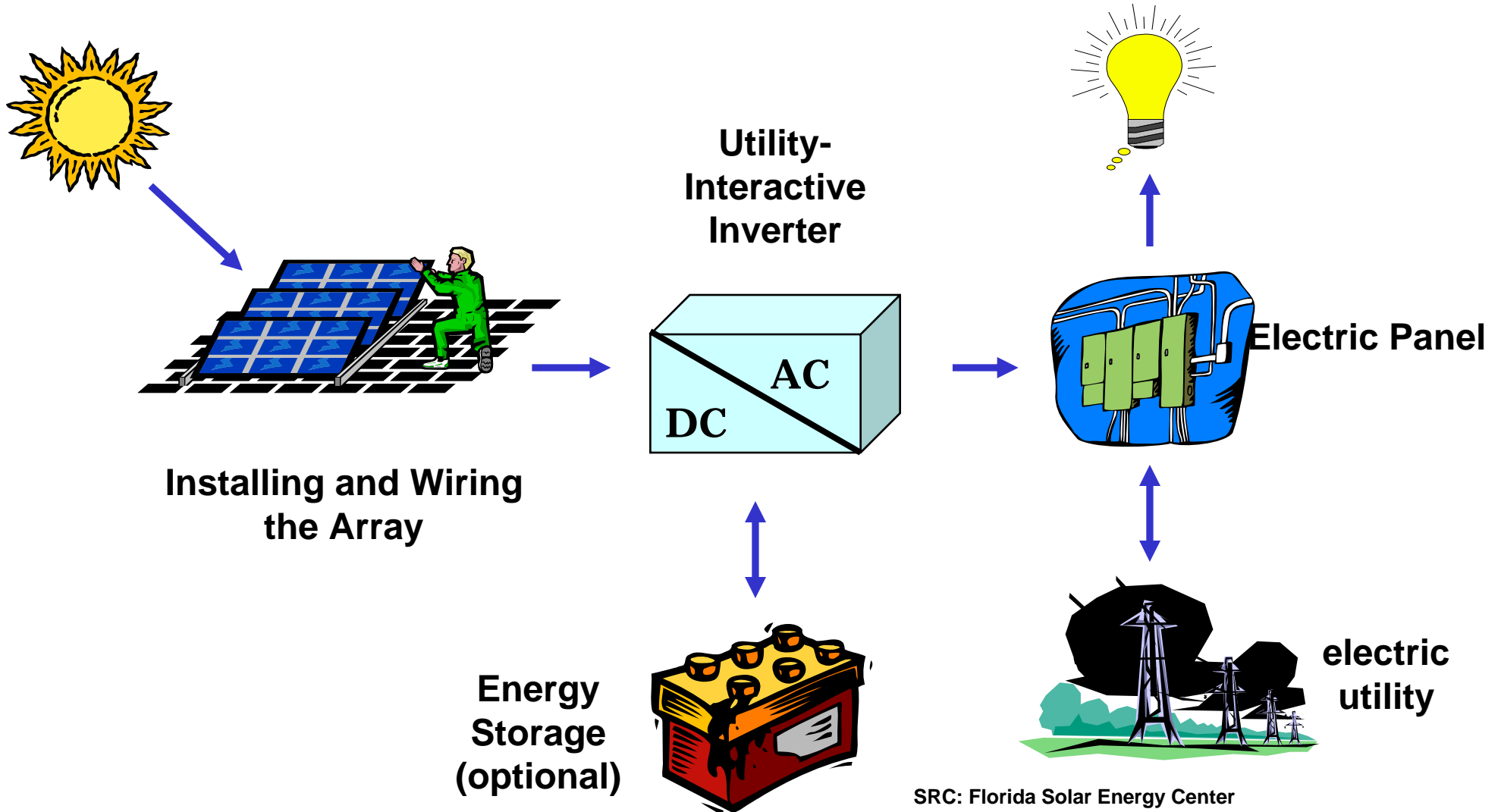
| Utility scale

- Interconnect at the grid, sell power directly to the utility at wholesale rates. Conergy Projects group market focus for utility scale power: unregulated utilities in RPS states, and selective RFPs.

| Type of deal drives deal structure, “customers”, and complexity:

- Net-metered: Purchase, Lease or PPA
- Utility: Purchase or PPA

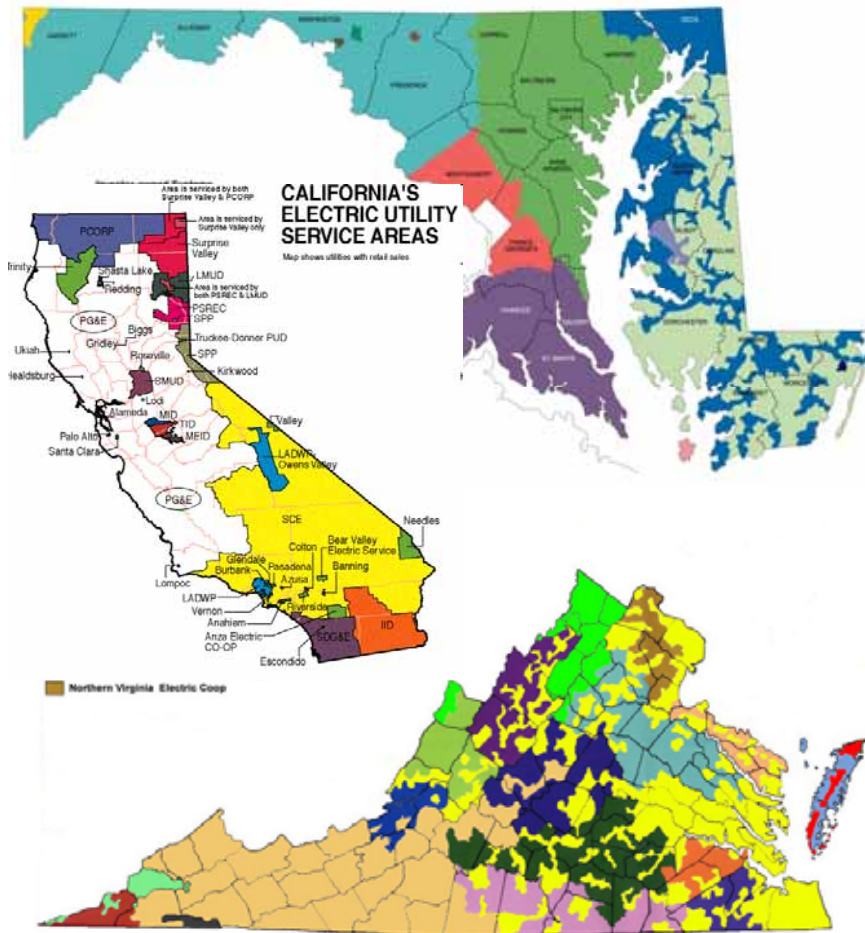
How Solar PV Works – Grid Tied



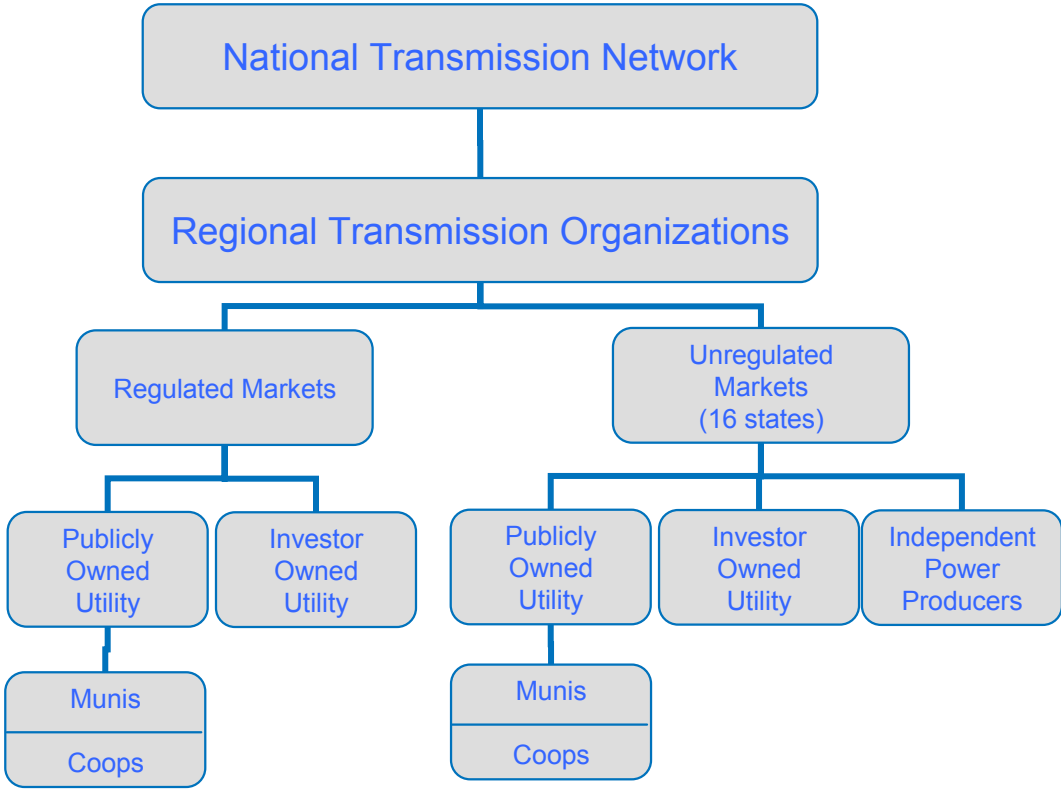
SRC: Florida Solar Energy Center

The US electric utility market is large and complex

There are over 3000 electric utilities in the US

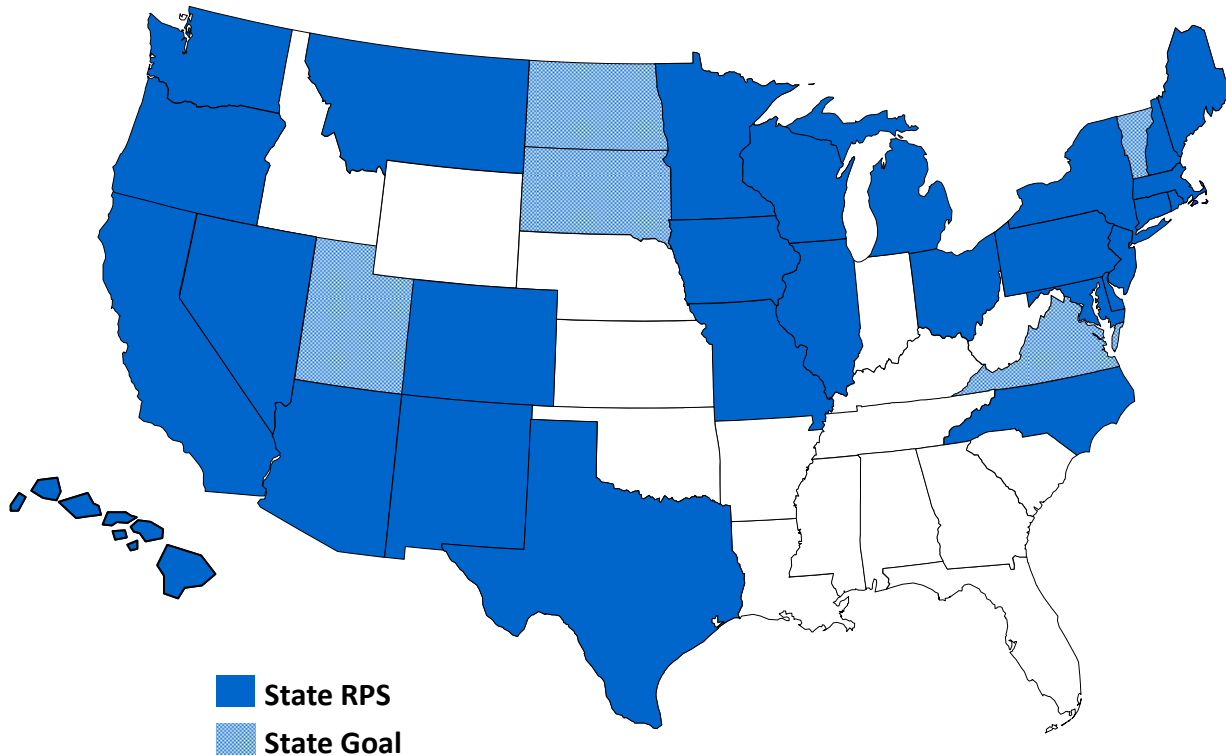


The Flow of Electricity



Renewable Portfolio Standards and goals create 33 different state markets

- | RPS is the main vehicle for deploying renewable energy
- | 28 states have an RPS
- | 5 states have renewable energy goal

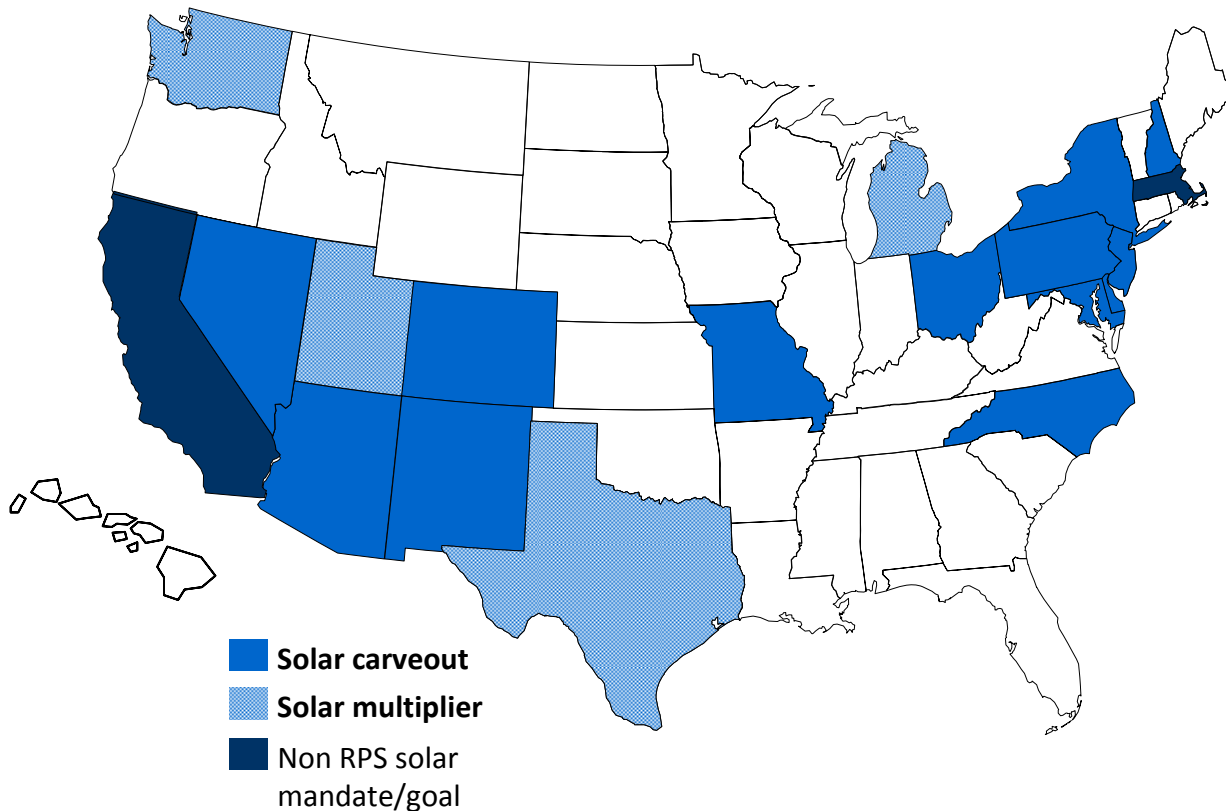


State RPS Goals

AZ	15% by 2025
CA	20% by 2010
CO	20% by 2020
CT	23% by 2020
DC	20% by 2020
DE	20% by 2019
HI	20% by 2020
IA	105MW
IL	25% by 2025
MA	15% by 2020
MD	20% by 2022
ME	30% by 2020
MI	10% by 2015
MN	25% by 2025
MO	15% by 2021
MT	25% by 2025
NC	12.5% by 2021
ND	10% by 2015
NH	24% by 2025
NJ	22.5% by 2021
NM	20% by 2020
NV	20% by 2015
NY	24% by 2013
OH	25% by 2025
OR	25% by 2025
PA	18% by 2020
RI	16% by 2020
SD	10% by 2015
TX	5880MW by 2015
UT	20% by 2020
VA	12% by 2022
VT	20% by 2017
WA	15% by 2020
WI	10% by 2015

RPS solar carveouts and state solar goals provide foundation for solar

- | Solar carveouts are key vehicle for deploying solar
- | 13 solar carveouts; 4 states have a multiplier
- | 2 states have established solar goals and supporting programs



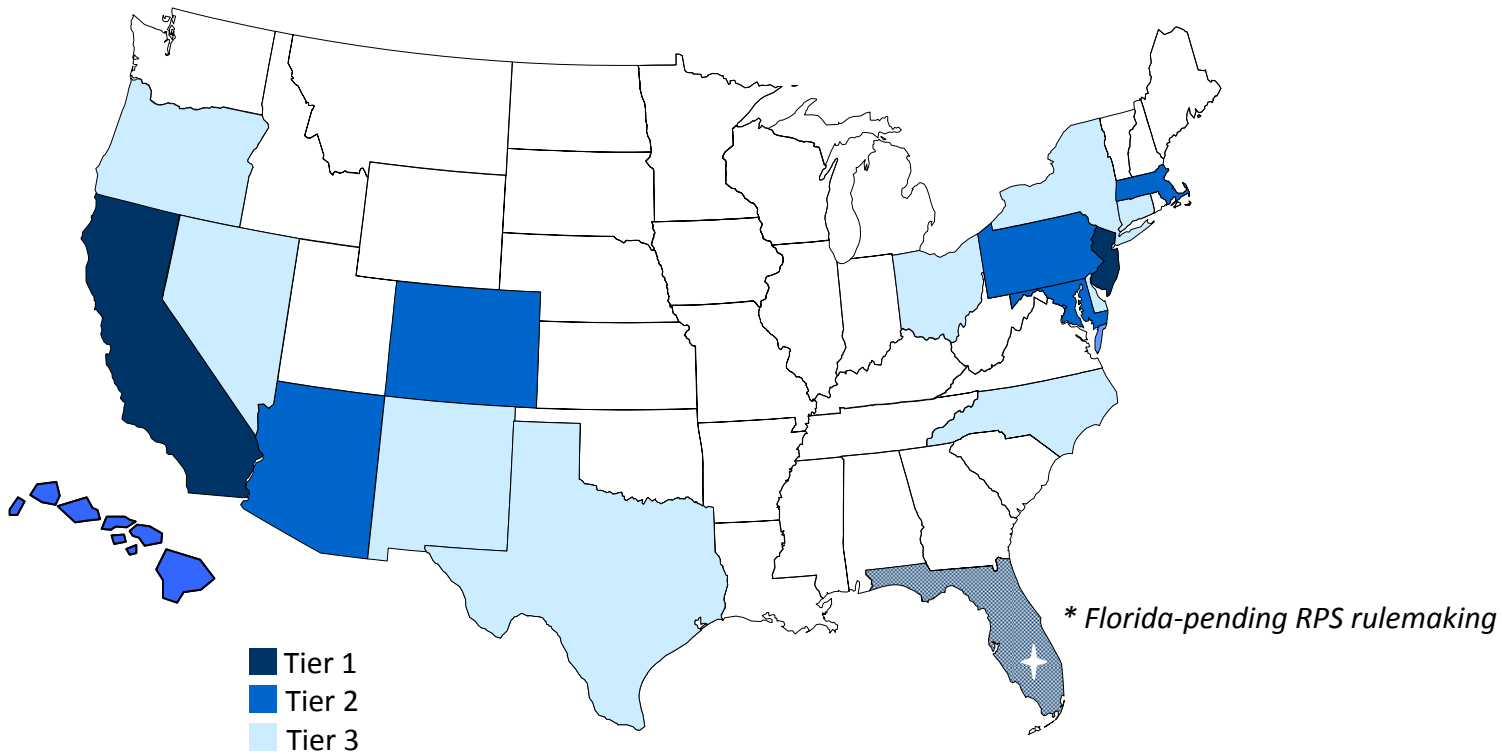
Carveout goals

AZ	4.5% by 2025
CA	3GW by 2016
CO	0.8% by 2020
DE	2% by 2019
MA	250MW by 2017
MD	2% by 2022
MI	3X credit
MO	0.3% by 2021
NC	0.2% by 2018
NH	0.3% by 2015
NJ	2% by 2021
NM	4% by 2020
NV	1% by 2015
NY	0.15% by 2013
OH	0.5% by 2025
PA	0.5% by 2020
TX	2X for non-wind
UT	2.4X for PV
WA	2X for DG

Key markets are driven by solar carveouts and effective policy

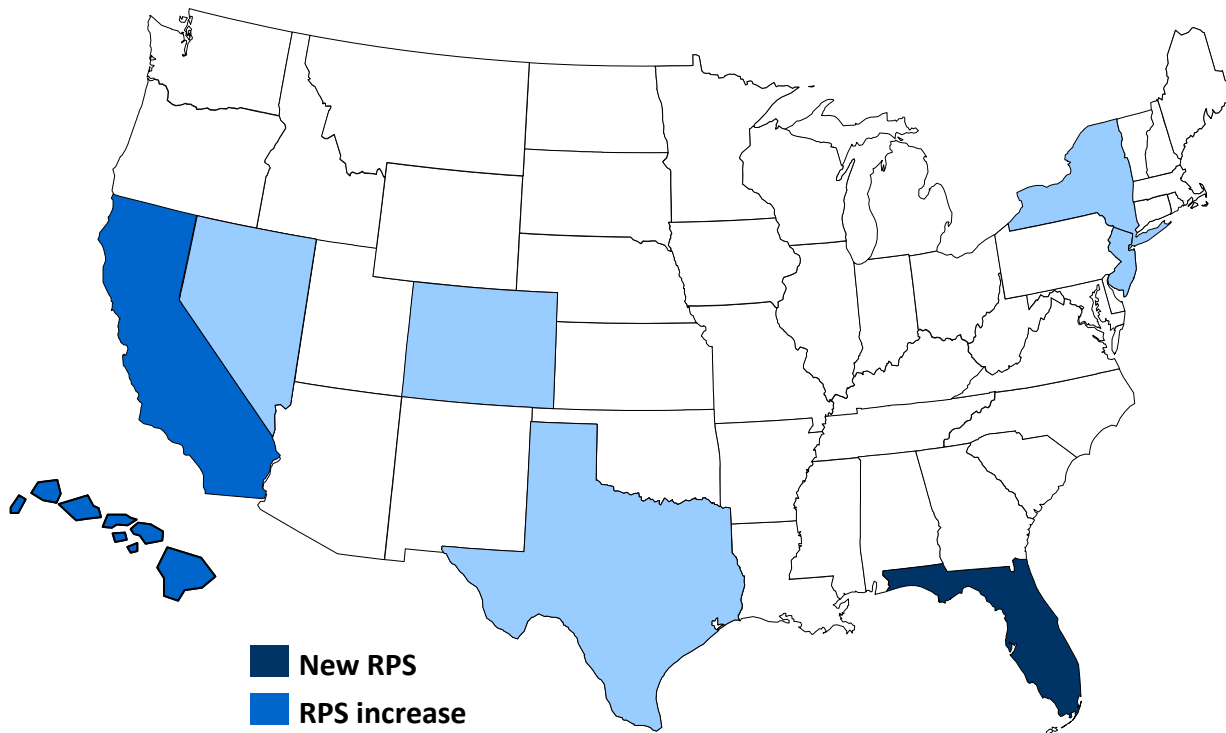
Ranking criteria:

- Incentives
- Political landscape
- Solar carveout
- Electric rates
- Near term potential
- Competition
- Net metering
- Total market potential
- Funding



Potential changes in certain states will increase and improve opportunities for solar

- | 1 new RPS
- | 2 RPS increases
- | 5 solar increases



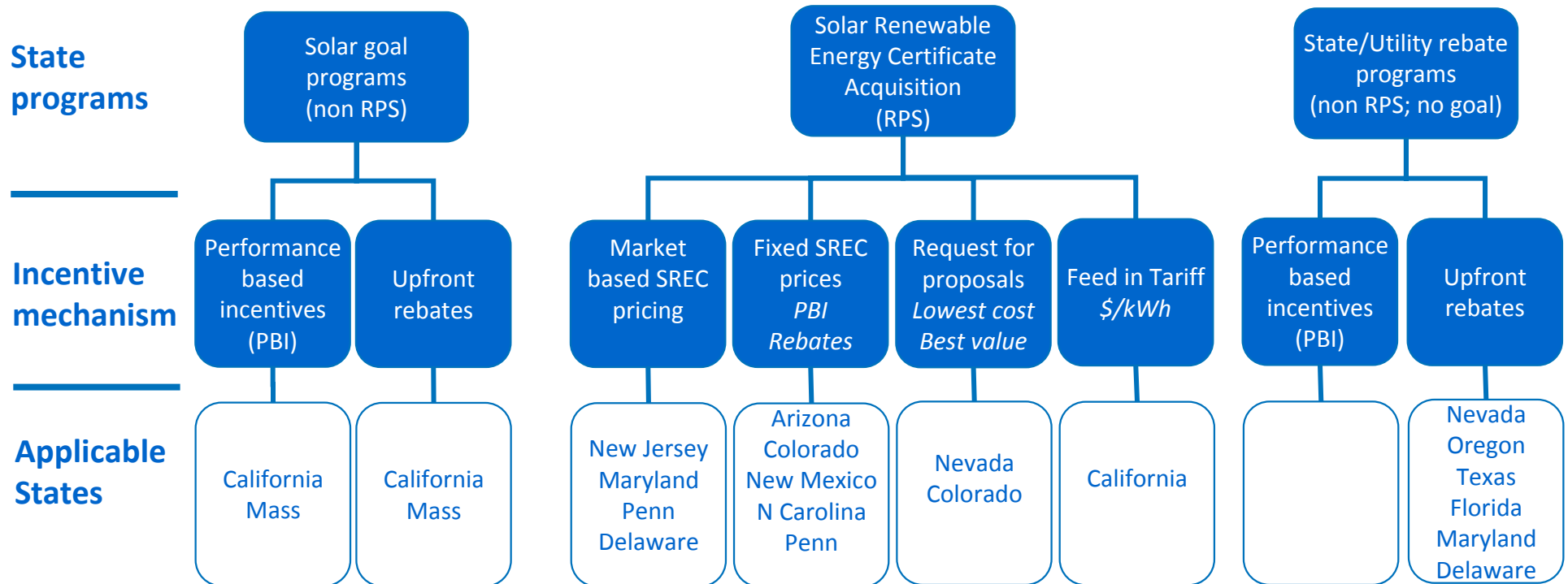
New RPS
 RPS increase
 Solar increase

Policy changes

CA	33% by 2020
CO	1GW DG by 2020
FL	20% by 2020
NJ	6000GWH by 2026
NV	TBD
NY	100 MW by 2012
TX	100MW solar

Different market structures used for RPS compliance and solar deployment in key states

- | These are the main structures although there are others currently in operation
- | RPS states must acquire renewable energy certificates but use different incentive mechanisms



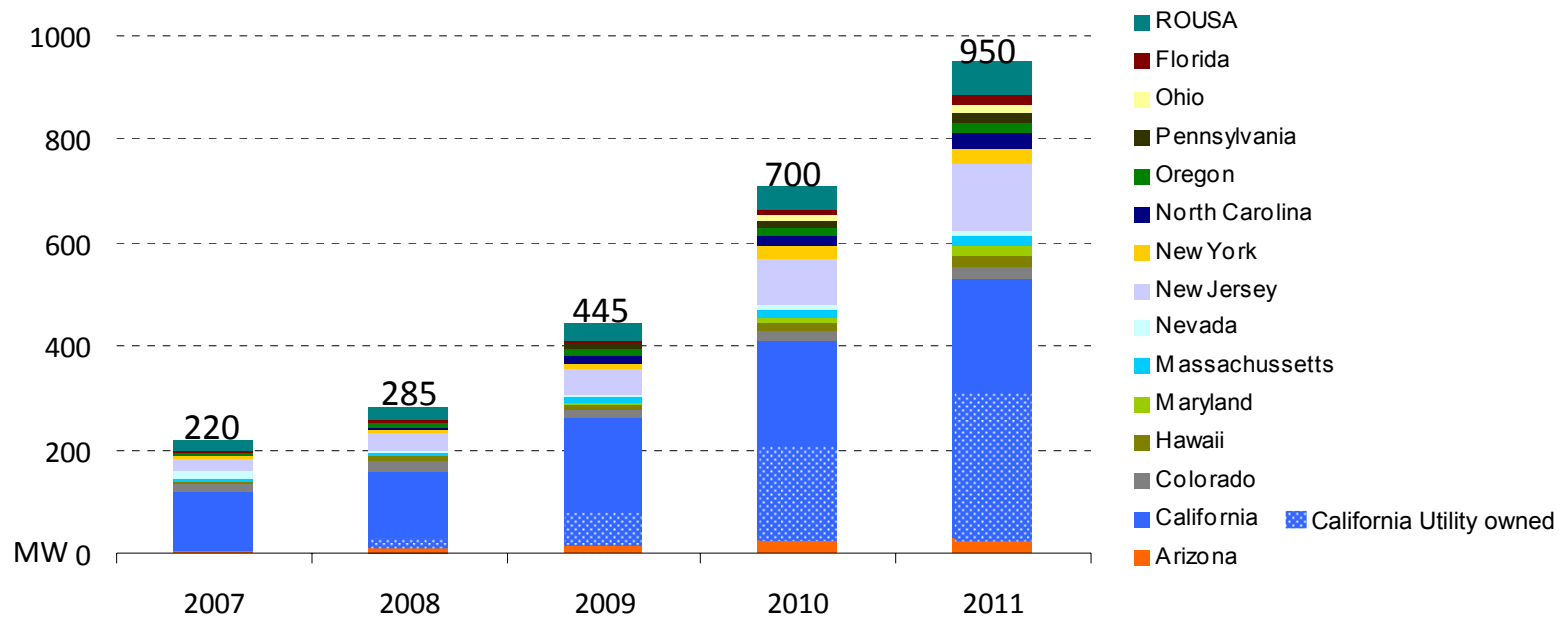


2009 Economic Stimulus

Provision	Funding	Comments	MW
Cash grant	No cap	Same 30% as ITC but grant opens the market to more investors & developers	Will help move some MWs but won't make it explode
Loan guarantee	\$6B for credit costs	The \$6B will enable \$60B in guarantees	Will help move some MWs but terms still tough
Subsidized financing	No cap	Major impact for project receiving gov't funds	Probably won't make any MWs move that wouldn't have already
Bonus depreciation	No cap	50% additional year 1	Minor impact on market growth
CREB	\$1.6B	Additional bonding authority for public entities	Still need a tax equity investor to use CREB so impact minimal
Solar on federal property	\$6.5B	This is for spending on improvements including EERE and not just solar	10% of this money for solar could be ~125MW
Solar on schools	\$1B	As part of larger state pool \$1B is set aside for renovations and meeting green building standards	If 20% of this goes towards solar it would be ~25MW
Solar on water treatment plants	\$6B	\$6B for water systems, of which 20% is for green infrastructure	20% of the 20% would be approx 40MW
State energy programs	\$3.1B	Many states will use this money for existing rebate programs	If 25% went to rebate programs at \$2/W it could drive nearly 400MW

California and New Jersey will continue to lead the way in megawatts installed

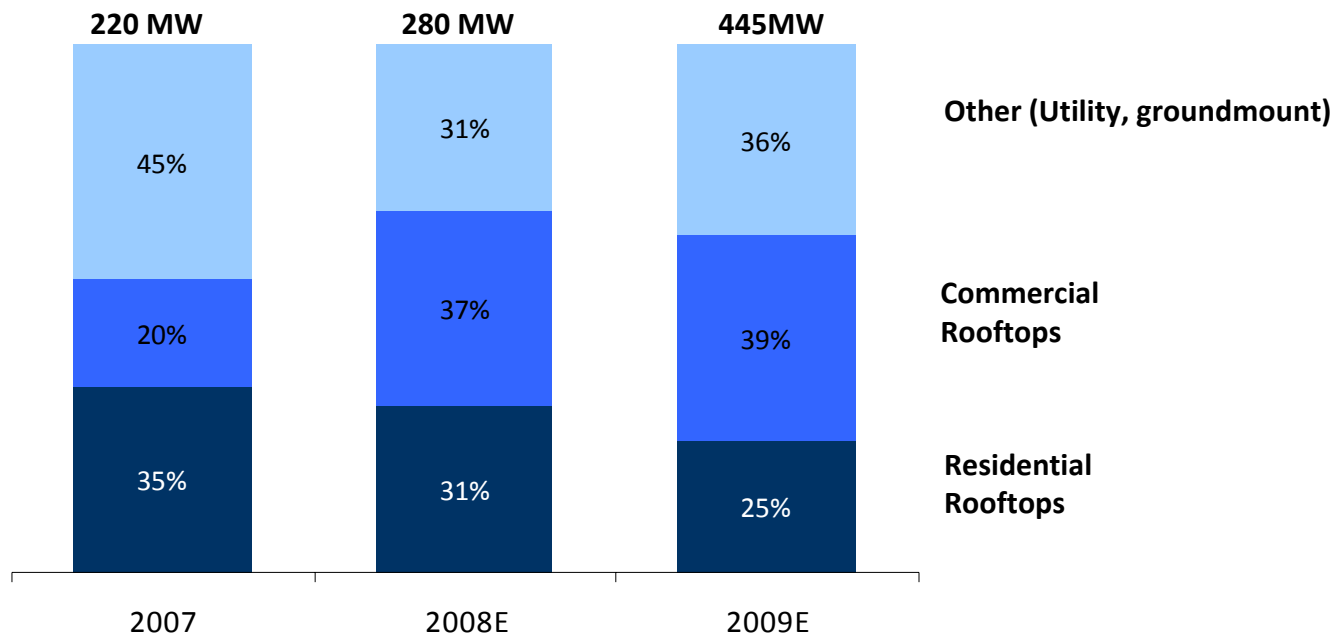
- | Utility project announcements in California will continue the state's dominance in the PV market
- | NJ's SREC program will soon grow market and cover RPS compliance shortfall
- | Tremendous upside exists in NJ with legislation for carveout increase
- | A solar carveout in Florida could produce gigawatts of PV in the sunshine state





Market segmentation will shift as large scale utility projects are installed

- | Residential was dominant in 2007
- | Utility freefield projects, part of the other category, will grow dramatically





Tier 2 states show good opportunity but still have room for improvement

| Arizona

- 30% distributed generation carveout mainly targeted at solar
- Recent net metering change removed barrier to commercial business

| Colorado

- Current projections show significant market decrease in 2010
- Gubernatorial proposal and companion legislation supporting 1GW of solar by 2020

| Maryland

- Solar requirements ramp up in 2011
- Long term contracting requirement in place which is critical for solar industry projects

| Massachusetts

- Good policies put into place in 2008 on net metering, distributed generation and long term contracts
- Funding in place to support 70MW over four years

| Pennsylvania

- Programs currently being formed to deploy \$180M in subsidy funds
- RPS ramps up in 2011 but policy hurdles still exist

Solar Projects are Financial Deals



Deal Components

Federal Tax Credit = 30% recently extended for 8 years

“State” Incentive

Solar Renewable Energy Credits (\$250-\$600 Per MWH) secured by long term contract

Rebate of Performance based incentive (e.g., CA = \$0.22/kwh)

Avoided Cost of Electricity

Energy savings- \$.08-\$.18 per kwh

Time of use/Time of day rates as high as \$.32/kwh

= Deal Economics

Host customer economic driver usually avoided electricity costs + payback period or IRR

Utility economic driver RPS mandates and elevate green profile

Tax equity economic driver is risk/return equation with minimum before tax yields of 7%-10%



Financing solutions to meet the needs of your business

| Buy

- System purchase financing-
- Customer takes SREC

| Lease

- 5-10 yr payments below current electricity costs – Customer takes SREC, or long term off taker is identified.

| PPA (Power Purchase Agreement)

- | Buy energy, not assets
- | No capital investment required
- | Host it on your roof, ground or parking facility
- | Buy the solar electricity produced at a fixed rate
 - | 10 – 20 year terms with buyout option
- | No maintenance costs
- | Your organization benefits from clean solar power, while demonstrating environmental leadership



Commercial Finance Solutions

- **Finance Lease (Capital Lease)**

- | 5 to 10 year term, customer uses tax credit and depreciation
- | similar to a bank loan, but no down payment is required
- | provides large cash reserve in early years to help make payments
- | Customer retains SREC ownership, additional income stream
- | 5 year buy out price

- **Benefit**

- | Customer gets low interest rate, keeps company's cash at work in the business; write off all interest paid on lease

- **Best for:**

- | Commercial For-Profit companies



Typical Lease Finance Partner

- | Privately owned finance company
- | Leasing and equipment finance experts
- | Expertise in large and middle market credits
- | Full service leasing company

Conergy

- | Knowledge of solar industry, products, and structures
- | Energy finance experience
- | Capacity to fund > \$150 million in 2008
- | Specializing in creative finance solutions



Conergy Commercial Finance Program

| What it is:

- Financing **options** for your commercial deals 250 kW + (**qualified credit rating**)
- Dedicated, experienced resources
- Deal enabling tool

| Market driven program solution:

- Rapid growth in commercial grid-tie
- Tax credits (30%) + other incentives increase commercial project attractiveness
- Performance based incentive programs creating greater need for financing

What Can Be Financed?

- | Photovoltaic systems
- | Hybrid systems
- | Balance of system components
- | Engineering & Installation



Eligible Borrowers

Commercial & Industrial

- | Hospitality
- | Agriculture
- | Retail
- | Hospitals
- | Industrials
- | Manufacturers
- | Schools
- | Any credit-worthy entity



Government

- Federal
- State
- Local
- Public Schools
- Public Hospitals
- Special Authorities



CONERGY

Thank You For Your Attention