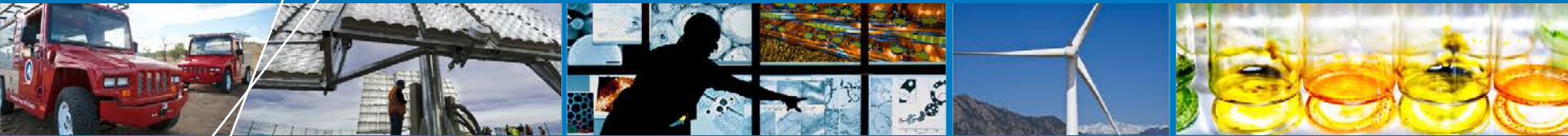


UNDERSTANDING SOLAR POWER CLAIMS:

*Best Practices for Hosting, Leasing,
and Owning Solar Generation*



Presenters:

Jenny Heeter, NREL

Robin Quarrier, CRS

Bryce Smith, OneEnergy Renewables

Feb 26, 2015

Housekeeping

- Participants are joined in listen-only mode.
- Use the Q&A panel to ask questions during the webinar. We will hold all questions until after all speakers have presented.
- This webinar is being recorded. The slides will be posted to:
<http://apps3.eere.energy.gov/greenpower/events/archive.shtml>.

Outline

Presenters

- Jenny Heeter
- Robin Quarrier
- Bryce Smith

Background

- Voluntary Renewable Energy Market
- Solar Energy Market
- Community Solar & SREC Markets

Issue

- REC Claims
- FTC Green Guides;
- “Made with Renewable Energy” Claims

Case

- FTC letter to Green Mountain Power

About Presenters



- **Jenny Heeter**

Energy analyst, NREL

Jenny's research interests and expertise include: Utility regulation and analysis, market and policy analysis, voluntary green power market, renewable energy certificate markets and pricing, and solar renewable energy certificate markets.



- **Robin Quarrier**

Chief Counsel, Center for Resource Solutions(CRS)

Robin is involved in the development of new standards and policies for the Green-e Energy program. She manages and provides counsel and support for legal issues ranging from contract negotiations, to marketing claims, and the Green-e intellectual property portfolio.

Fun Facts: She practices Aikido and is an accomplished Ironwoman.



- **Bryce Smith**

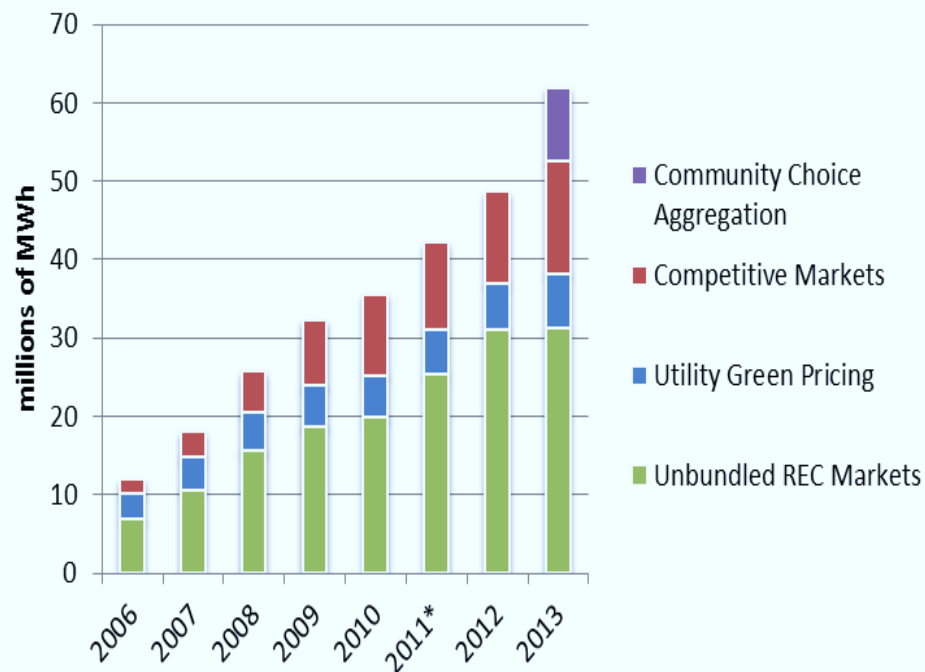
Co-founder and CEO, OneEnergy Renewables

Bryce is co-founder and CEO of OneEnergy Renewables, a company that develops distributed utility-scale solar projects and next-generation PPA products. Previously, as Director of Bonneville Environmental Foundation's Project Management Group, Bryce oversaw the Foundation's nationwide investment in small-scale clean power projects, and developed more than 160 solar projects in 16 states.

Voluntary Renewable Energy Market

- Voluntary retail sales of RE has grown rapidly over the last decade.
- 2012-2013 saw the most significant growth in RE sales (to 62 million MWh, by 27%).
- 5.4 million green power customers
- Green pricing sales grew 15%.
- Competitive markets grew 25%.
- Solar provided 1% of total green power sales (0.6% in 2012).

Estimated Annual Voluntary Sales By Sector, 2006-2013

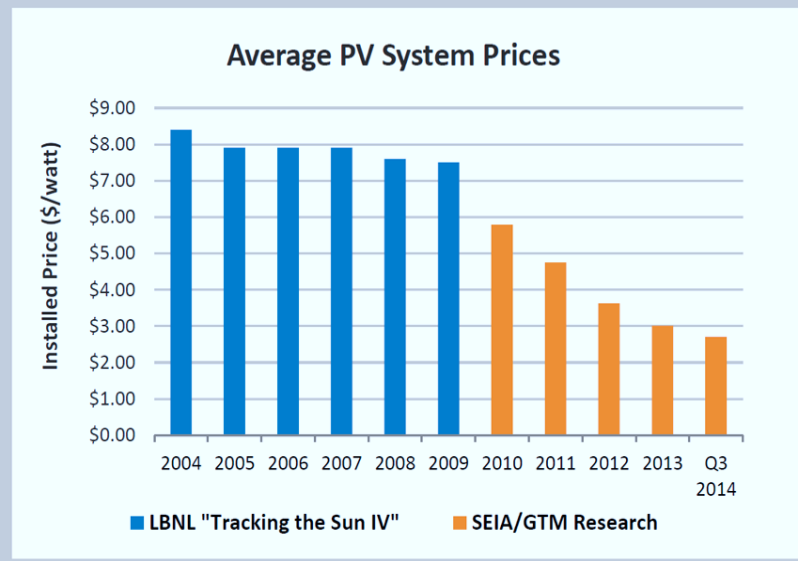
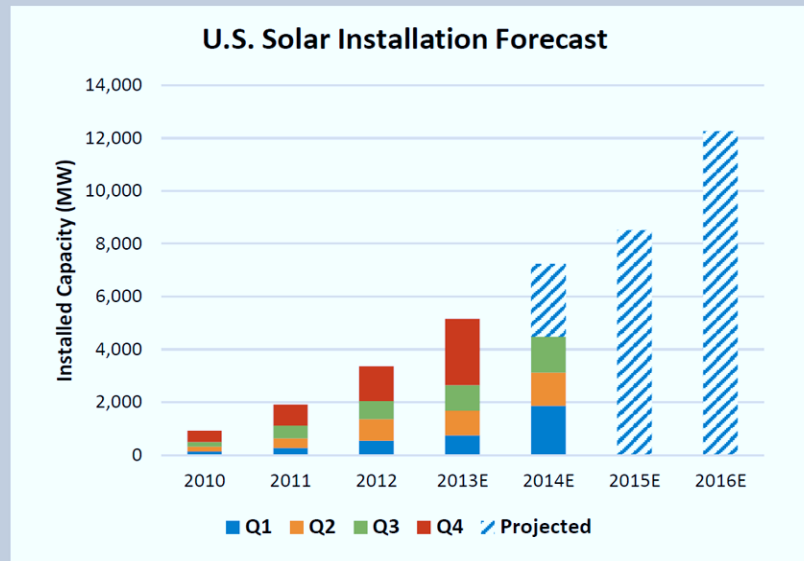


* Voluntary sales for 2011 are estimated as the mid-point of 2010 and 2012 sales.

Data Source: NREL

Solar Energy Market

- 17,500 MW of cumulative solar electric capacity operating in the U.S.
- 36% of All New Electric Capacity in 2014 From Solar
- Nearly 600,000 U.S. homes and businesses have now gone solar
- The average price of a completed commercial PV project in Q2 2014 has dropped by 14% year over year and by more than 45% since 2012.



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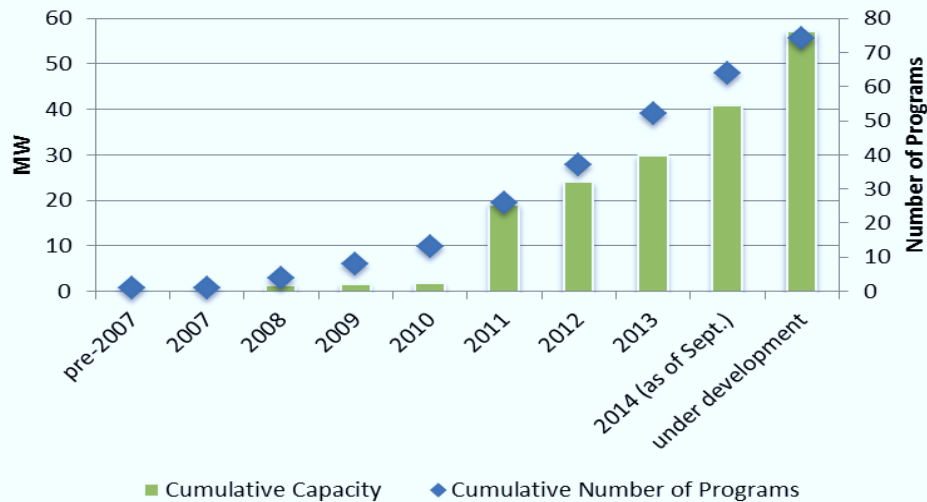
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Data Source: Solar Energy Industries Association(SEIA)

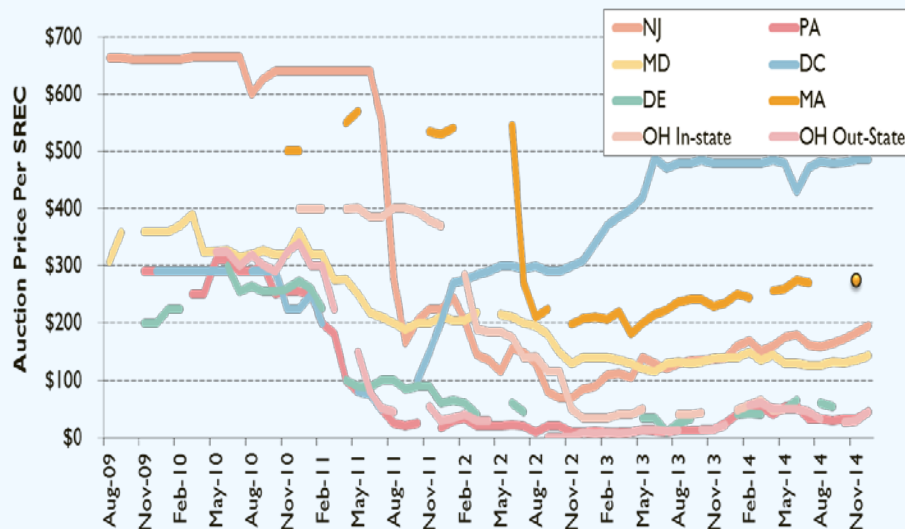
Community Solar & SREC Markets

Number and Capacity of Community Solar Programs



- As of September 2014, 64 community solar programs were operational around the country, totaling more than 40 MW of capacity, with an additional 17 MW of projects under development.
- The average community solar program has 213 participants and programs are around 70% subscribed.

Compliance Market SREC Spot Prices, August 2009–July 2014



- With exception of Ohio and PA, SREC prices remain relatively flat in 2014. Prices are not returning to previous highs but are well above historic lows.
- All states have seen increases in SREC prices since October, even Ohio, which recently “froze” RPS requirements.

REC Claims



- Companies are increasingly wanting to make claims and be recognized for their green power purchases.

Federal Trade Commission - Green Guides

In October 2010, the FTC proposed revisions to its Green Guides, which provide guidance to marketers to help them avoid making misleading environmental claims. Last revised in 1998, the proposed revisions for the first time address issues related to renewable energy use claims.

- *Marketers should NOT make broad, unqualified general environmental benefit claims like 'green' or 'eco-friendly.' Broad claims are difficult to substantiate, if not impossible.*
- *Marketers should qualify general claims with specific environmental benefits. Qualifications for any claims should be clear, prominent, and specific.*

THE GREEN GUIDES

Sources: NREL, *Status and Trends in U.S. Compliance and Voluntary Renewable Energy Certificate Markets, 2011*
<http://www.nrel.gov/docs/fy12osti/52925.pdf>

FTC, *Environmental Claims: Summary of the Green Guides, 2012*
<http://www.ftc.gov/tips-advice/business-center/guidance/environmental-claims-summary-green-guides>

Green Guides – Made with RE Claims

- *Marketers shouldn't make unqualified renewable energy claims based on energy derived from fossil fuels unless they purchase renewable energy certificates (RECs) to match the energy use.*
- *Unqualified renewable energy claims may imply that a product is made with recycled content or renewable materials. One way to minimize the risk of misunderstanding is to specify the source of renewable energy clearly and prominently (say, 'wind' or 'solar energy').*
- *Marketers should NOT make an unqualified "made with renewable energy" claim unless all, or virtually all, the significant manufacturing processes involved in making the product or package are powered with renewable energy or non-renewable energy, matched by RECs.*
- *Marketers who generate renewable energy – say, by using solar panels – but sell RECs for all the renewable energy they generate shouldn't claim they "use" renewable energy. Using the term "hosting" would be deceptive in this circumstance.*

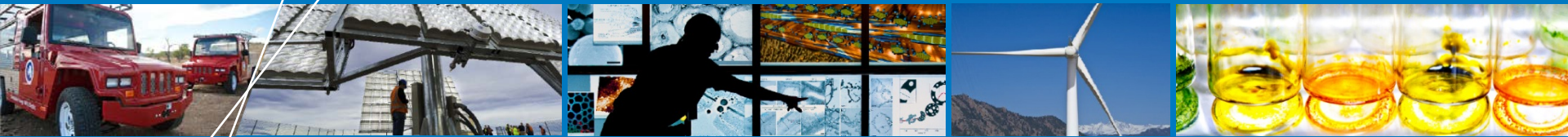
Source: FTC, *Environmental Claims: Summary of the Green Guides, 2012*
<http://www.ftc.gov/tips-advice/business-center/guidance/environmental-claims-summary-green-guides>

Federal Trade Commission Cautions Green Mountain Power, February 5, 2015

- The FTC staff letter cautioned Green Mountain Power regarding its renewable energy claims.
- The FTC reiterated the importance of RECs as a tool for transferring rights to characterize electricity as renewable.
- The letter states that “...some of these unqualified claims raise concerns...”.
- The FTC believes that utilities should follow the Green Guides, and that even in a monopoly the utilities would be subject to FTC oversight.
- Although the FTC is not taking action at this time, if they identify concerns in the future, they reserve the right to take further action.



Thank you!



Jenny Heeter

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Energy

Understanding Solar Power Claims: Best Practices for Hosting, Leasing, and Owning Solar Generation

Thursday February 26, 2015

Robin Quarrier

Chief Counsel

Center for Resource Solutions

Who Cares About Double Claims?

- Green-e Energy Sellers
- Purchasers Large and Small
- Generators
- Everyone?



When Does Green-e Evaluate Claims?

- Verification process
- Tracking system attestations approval
- Sua sponte
- Upon your request



Process of Evaluation

Explanation of Green-e Energy
Double Claim Policy

http://www.green-e.org/learn_re_claims.shtml



What Do I Do When I Find a Problem?

- Collect images of the marketing materials
 - Images, not just links
 - Date stamped
 - Statements both potentially problematic and innocuous
- Green-e participants: Notify your internal procurement, sales or legal team
 - Stop transacting questionable RECs

What Do I Do When I Find a Problem? (cont)

- Contact the claimant and/or the Generator
 - Speedy removal of the problematic language can help
 - Later generation
 - In some cases where a claim has not been made and problematic language is only unclear a speedy fix can result in eligible RECs already generated
- Contact CRS
 - To ensure that your fixes have been effective

What Are the Risk Factors?

- Residential solar
 - Leasing/PPA company talks about the benefits of using solar
- Commercial facilities that reference onsite generation in marketing
 - Solar and Biomass
 - Solar schools
- State policy claims the RECs for the utility
 - Some Georgia Solar
 - Risks of Some Arizona DG



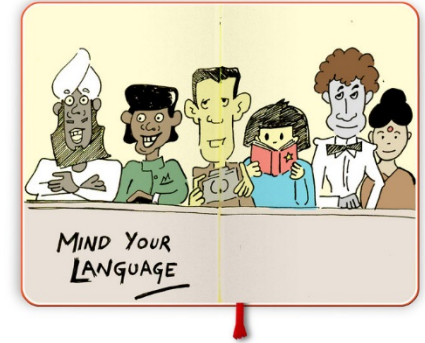
What to Do to Protect RECs and Our Customers?

- Educate Generators
 - Including marketing
- Clear contracts
- Regularly review your generators claims and null power purchasers claims



Language

- On a sustainability section of the website: “In total, the solar systems are expected to meet 80% of the total electricity needs of the schools.”
- “The solar systems promote energy independence and substantially decrease electricity costs by providing clean, green energy for the next 20 years and reduce greenhouse gas emissions by an estimated X tons.”



Factors

- Who made the statement? CEO, Principal, or reporter? In the chain of custody of the REC or null power?



Green-e Energy Explanation of Double Claims

Double claims, implying ownership and use of the REC, render it ineligible

If the generator uses most of the generation onsite, then clarify that they are selling the renewable energy to others and using traditional grid power onsite.

If the generator is a utility, then statements about the amount of RE generated should be accompanied with information about the amount actually delivered to customers

Factors

How misleading is the statement to the average consumer?

Not just is it true, but is it likely to cause confusion about REC ownership or renewable energy use?

The full context of statements:

- how and where the statement appears
- Is there clarifying/qualifying information?

Green-e Attestation Requirements

- Can the REC owner sign the Green-e Energy Participant Attestation in good faith?
 - Part of annual verification obligation
- Tracking system attestation
- Generator attestation

Special Cases of State Policy

- Georgia
 - Claims by Georgia Power
 - Contract (solar power here, RECs there)
 - The PSC had approved language that confuses the REC ownership
- Arizona
 - ACC
 - APS and TEP

CONTACT


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REC CLAIMS IN AN EVOLVING SOLAR LANDSCAPE



February 26, 2015

AGENDA

- ▶ Who We Are
 - ▶ The Evolving Green Power Purchasing Landscape
 - ▶ Offsite Solar: How It works
 - ▶ Case Study: National Aquarium
 - ▶ Revisiting Best REC Claim Practices
- 

WHO WE ARE

- ▶ Mission driven organization, certified B-Corp
- ▶ Founders participated in creation of REC market at BEF
- ▶ Diversified renewable energy company:
 - Utility-scale solar project developer
 - Renewable energy certificate (REC) sales & trading platform
- ▶ Innovative model for offsite solar development

Certified



Corporation™

bcorporation.net

WHAT WE DO



Utility-Scale Projects

- 2 to 50 MW



RECs and Offsets

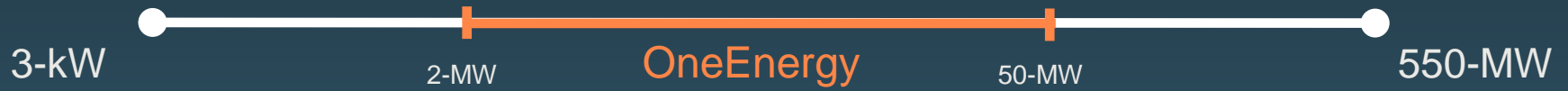
- Utility, corporate and university customers



Purpose-Built Solar™ Projects

- Develop off-site projects on behalf of companies and institutions
- Fixed price = hedge against rising energy prices
- Continuum of green power claim opportunities

THE SOLAR PROJECT SPECTRUM

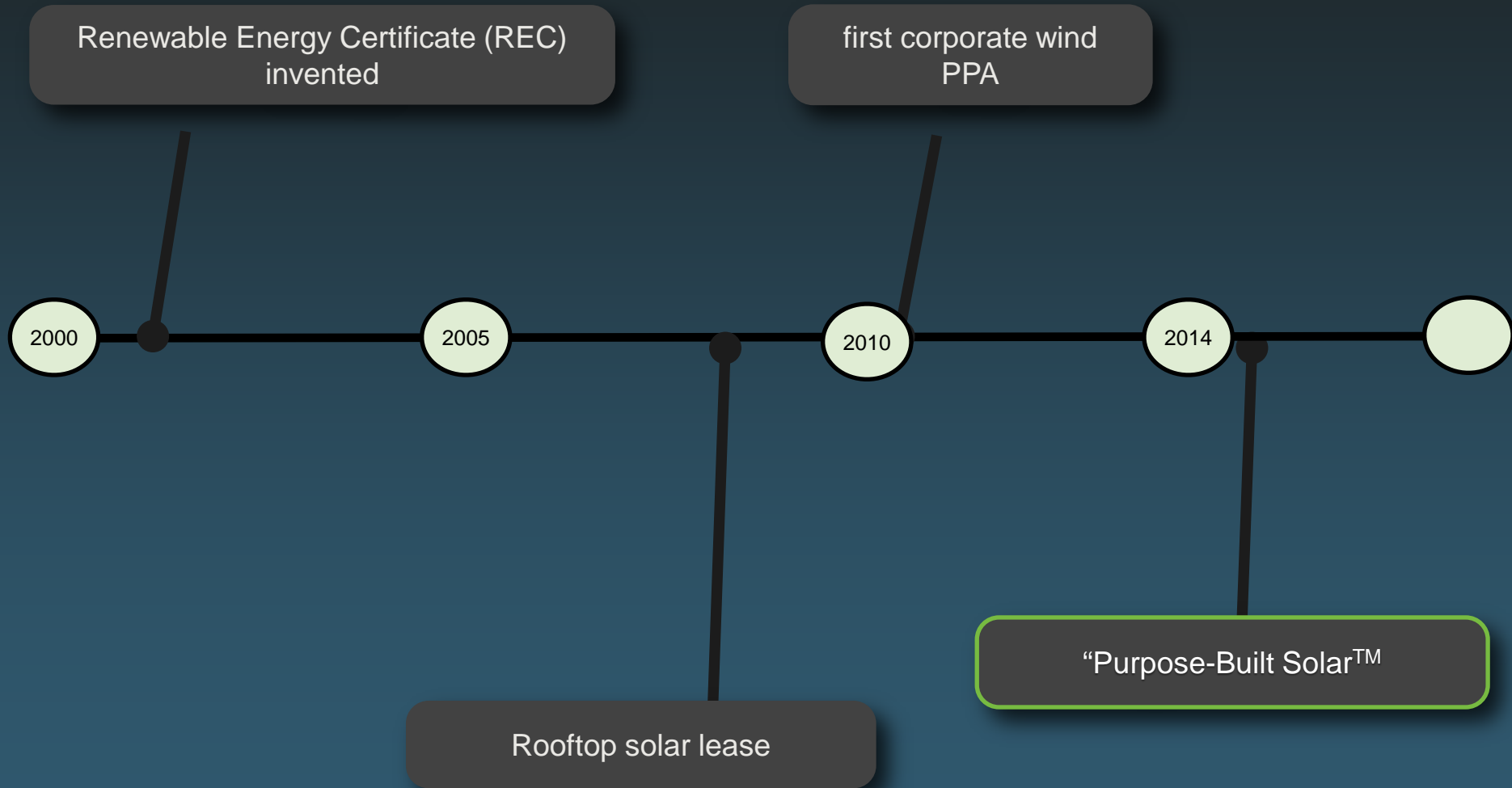


THE SOLAR PROJECT SPECTRUM



- Corporations
- Universities
- Government

THE EVOLUTION OF CUSTOMER CHOICE



SAMPLE PROJECT: CAMBRIDGE SOLAR, MD

STATUS: Under Construction

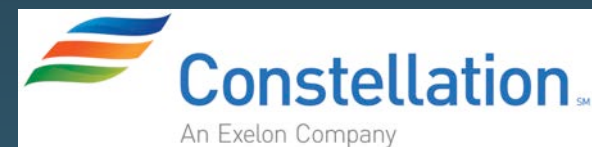
LOCATION: Dorchester County, MD

SYSTEM SIZE: 4.3 MW (DC)

OUTPUT: 6,000 MWh/yr 1

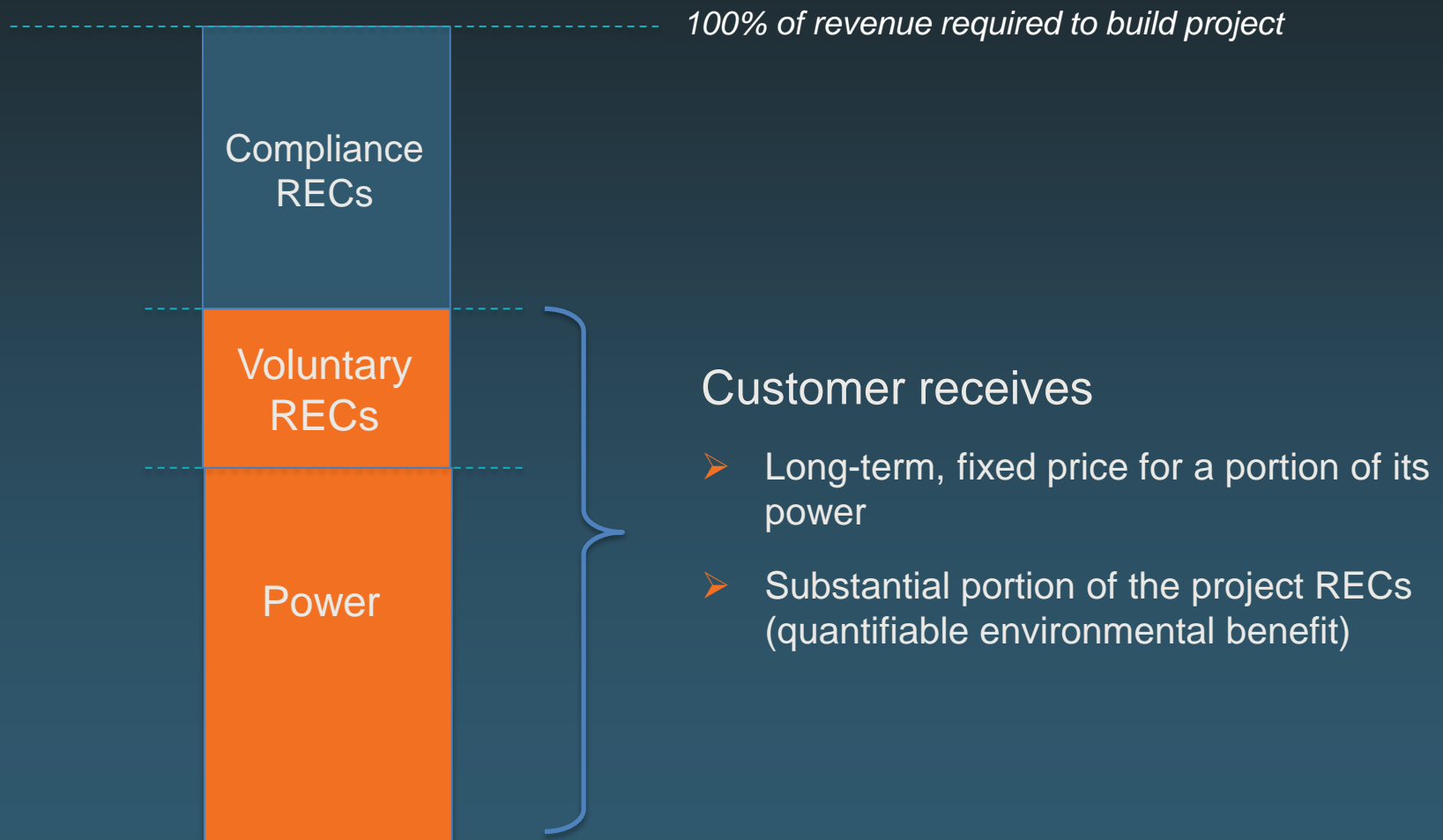
ONLINE DATE: Spring 2015

OFFTAKE CUSTOMER: The National
Aquarium, Baltimore



- ▶ One of the first offtake agreements from an offsite PV project with a non-utility end user
- ▶ Aquarium receives fixed price electricity for 25 years (approx. 40% of load)
- ▶ Aquarium receives SRECs in years 16-25; replacement green-e RECs in early years
- ▶ [Link to Announcement](#)

PURPOSE-BUILT SOLAR™



CLAIMS

- ▶ National Aquarium is employing an innovative model to stabilize energy costs and bring a new, large-scale solar energy project online.
- ▶ By locating the project offsite, National Aquarium can help create a larger, more economical project with greater financial and environmental impact.
- ▶ National Aquarium's long-term power purchase commitment and Maryland's strong incentives for solar development combine to ensure the financial viability of this project.
- ▶ National Aquarium will receive 100% of the energy produced by the project for 25-years, and approximately 40% of the solar renewable energy certificates ("RECs") produced during that time.
- ▶ National Aquarium will also retire additional wind RECs to match 100% of its power needs not met by the solar project.

CONTACT

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