

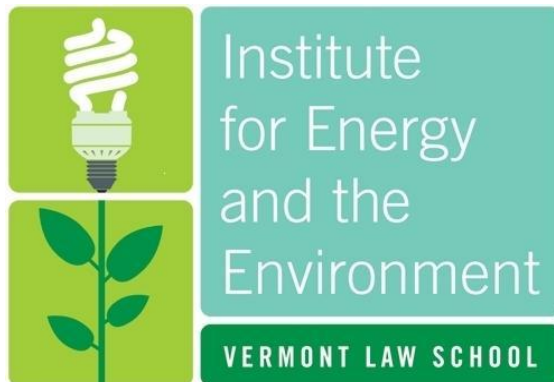
The VLS Energy Clinic: Developing and Implementing Models for Community Solar Ownership

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Overview of Today's Discussion

- ▶ Vermont Law School and the Energy Clinic
- ▶ Benefits of Community Solar.
- ▶ Our Community Solar Model.
- ▶ Boardman Hill Solar Farm Case Study



ENVIRONMENTAL LAW CENTER

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PROGRAM**

MASTER'S DEGREES

- ▶ The Master of Environmental Law and Policy (MELP)
- ▶ The Master of Energy Regulation and Law (MERL)

LLM DEGREES

- ▶ The LLM in Environmental Law
- ▶ The LLM in Energy Law

JOINT DEGREES

- ▶ JD plus an LLM or Masters

The VLS Energy Clinic

- ▶ Student staffed energy law and policy clinic
- ▶ Our services include:
 1. Community Solar Outreach and Education
 1. Initial Consultation on Group Net Metering Rules
 1. Step-by-Step Advice on Community Solar Development
- ▶ Please contact us at energyclinic@vermontlaw.edu if you would like assistance with your community solar project



*VLS Energy Clinic does not provide legal services.

Our Community Solar Vision

- ▶ Community Solar can bring the benefits of solar to more customers
 - ▶ Economy of Scale can make it more affordable.
 - ▶ Allows your solar panels to be located on a good site.
- ▶ Direct ownership of community solar array
 - ▶ Provides community control over land use and siting issues
 - ▶ Provides maximum economic financial benefits to community members
 - ▶ ITC, rate incentives, free solar following payoff
- ▶ Customer ownership of the environmental attributes (RECs) generated by the community solar array
 - ▶ Allows for the additionality of solar.
 - ▶ Reduces solar customers carbon footprint.

Solar Incentives and Financing Options are Plentiful

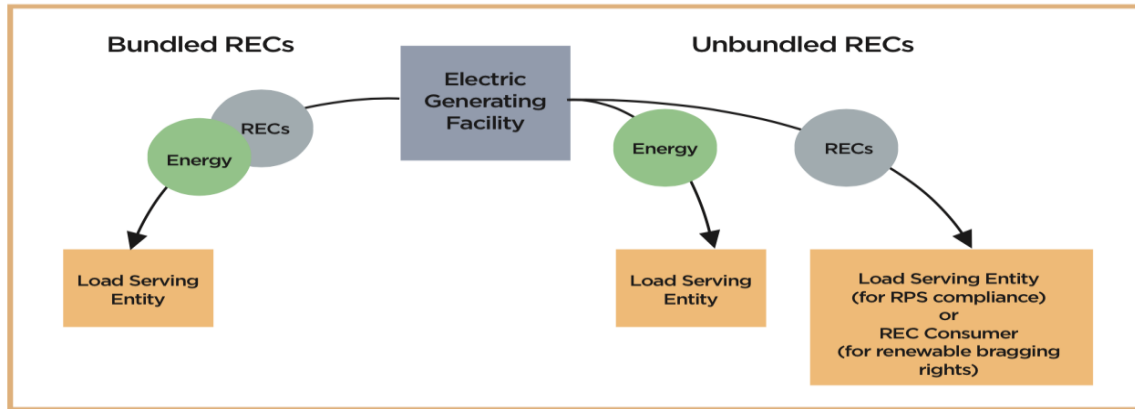
- ▶ 30% Investment Tax Credit Available
 - ▶ Expires for residences after 2016
 - ▶ Reduced to 10% for commercial customers after 2016
- ▶ Vermont Solar Adder
 - ▶ Provides bill credit of 19 cents/kWh (extra penny <15 kW)
 - ▶ Guaranteed for 10 years (will increase with residential rate for 10 years and then likely be reduced)
 - ▶ Likely to be reduced for new installations after 2016
- ▶ Bank and Credit Union Financing Readily Available
 - ▶ Affordable rates with option to finance up to 100% of costs

What are the Challenges?

1. In Vermont only one group per customer electric account so there is pressure to get it right the first time.
2. What happens if you move out of your current utility's service territory?
3. What warranties and insurance are there?
4. What happens to the array at the end of its useful life?
5. Cloudy days are even more depressing!



If you don't own the RECs you are not purchasing renewable energy.



If customer sells the RECs associated with the energy generated from their solar PV installations, then those customers can not legitimately claim to be using renewable power in their homes or businesses. Only the purchaser of the RECs can make that claim.

Solar Buyers Beware!



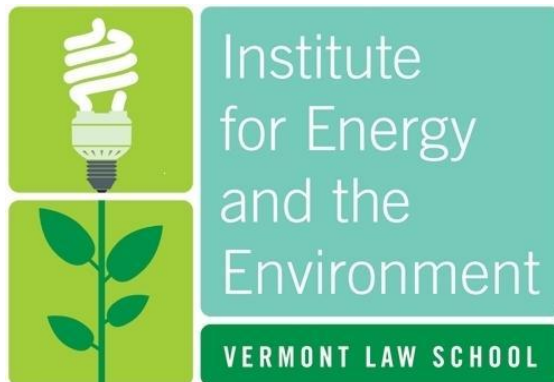
- You agree that Owner will claim and receive any Incentives (described in Section 5 below), including any renewable energy credits (aka "RECs") associated with the electricity generated by the CSAO. You may not claim publicly that You are using renewable energy or solar energy.

"If a marketer generates renewable electricity but sells renewable energy certificates for all of that electricity, it would be deceptive for the marketer to represent, directly or by implication, that it uses renewable energy."

-- Federal Trade Commission's Green Guides

Clinic Resources for Community Groups

- ▶ 7 Steps to Community Solar Ownership
- ▶ Vermont Group Net Metering: Information & Guidelines for 150 kW (AC) Community Solar Projects
- ▶ Model Operating Agreement for Member-Managed LLC
- ▶ Model Land Lease Agreement



Model LLC Operating Agreement

- ▶ We encourage solar groups to form a limited liability company (LLC) for management purposes. Under our model the individual members own the array not the LLC. The LLC manages the affairs of the community solar array.
- ▶ LLC's are easy to set up and offers some protections to members.
- ▶ Democratic governance through "member-managed" structure.
- ▶ Preserves individual member's ownership of RECs.

Model Land Lease Agreement

Our Lease Agreement:

- ▶ Directly addresses the needs/concerns of community solar groups
- ▶ Compensates the Landowner with a portion of project output. We suggest 5% as a starting point.
- ▶ Protects lender, landowner, and solar group in the case of default or ownership changes

Boardman Hill Solar Farm

Preserving Local Economic and Environmental Benefits



Boardman Hill Solar Farm

- ▶ 150 kW AC, 187.88 kW DC solar installation developed by Aegis Renewable Energy
- ▶ BHSF participants own the panels and financed the entire project, without any third-party, many of them through direct lending with their credit union.
- ▶ Sited on the homesite portion of a Vermont Land Trust conserved organic vegetable farm.
- ▶ The cost per watt is \$2.87 prior to the 30% federal tax credit
- ▶ IRS has issued a private letter ruling concluding that a particular owner of PV panels in this offsite, community shared solar array is eligible for the residential tax credit under section 25D of the U.S. tax code.
- ▶ A non-profit, member-managed LLC handles financial and administrative matters, thereby eliminating customary markups and profit margins. Members must pay annual operating costs.

Questions?

- ▶ The Energy Clinic staff would love to hear from you!
- ▶ Please contact us at energyclinic@vermontlaw.edu if you would like assistance with your community solar project

