

SREC Values and the ACP

The maximum value of an SREC depends on the Alternative Compliance Payment (ACP) established in the Renewable Portfolio Standards law. Each state with a solar carve-out has taken a different approach and SREC values vary depending on both the ACP and the supply/demand dynamics in each jurisdiction.

The ACP represents the amount that an electricity supplier subject to the RPS must pay if they do not produce the amount of solar energy required in a given year or purchase the equivalent number of SRECs from other system owners. Thus, the ACP effectively represents a cap on the value of an SREC—a supplier can simply pay the fee rather than purchase an SREC. As a practical matter the value of an SREC on the open market will always be less than the ACP.

Maryland's ACP Schedule is below:

YEAR	ACP/SREC
2015	\$ 350
2016	\$ 350
2017	\$ 195
2018	\$ 175
2019	\$ 150
2020	\$ 125
2021	\$ 100
2022	\$ 75
2023	\$ 60
>2023	\$ 50

Understanding Solar Renewable Energy Credits

A Primer for Maryland PV System Owners



What's an SREC?

A Solar Renewable Energy Credit (SREC) is a tradable commodity representing the non-polluting value of 1,000-kilowatt hours (kWh) of electricity produced by a solar energy system. The SREC is separate from the value of the electricity itself and permits the owner or purchaser to claim the benefits of the clean energy production by effectively subsidizing the cost of the installed system.

More than half of the U.S. states plus the District of Columbia have enacted Renewable Portfolio Standards (RPS) legislation that require electric utilities, electricity suppliers and/or electric distribution companies to produce a certain amount of the electricity they sell from renewable sources. Several states, including Maryland, also incorporate a "solar carve-out" requiring a specific percentage for solar production within the RPS. Any company in Maryland that sells electricity must either produce the required amount of solar electricity from its own assets, purchase SRECs from PV system owners or pay an Alternative Compliance Fee (ACP) into a fund that will be used to support the construction of solar systems in the state.

Maryland's solar requirement took effect in 2008 requiring approximately 2,500-megawatt hours of solar electric production or 2,500 SRECs. In 2018, the requirement is approximately 890,000 SRECs and the amount of solar electricity required to be produced will increase steadily each year until 2020 at which time solar electricity should account for a full 2.5% of all the electricity consumed in Maryland—representing more than 1.4 million MWh (and SRECs) per year.

How to Sell Your SRECs

Clients ask us about the possibilities of selling their SRECs to brokers, traders or aggregators on the open market.

Selling to a trader or aggregator--Several companies will purchase your SRECs. Prices are usually calculated as a percentage of the Alternative Compliance Payment (ACP) for the year in which the SRECs are--or will be--earned. Currently, offers are available around 4%-5% of the (ACP). The ACP for 2018 is \$175 so you could expect to receive \$5-\$9 for each 1,000 kWh your PV system is expected to generate this year.

Selling on an exchange—Flett Exchange represents another emerging model where market participants can post bids and offers and complete transactions at any time. This approach provides transparency but the markets so far have been very weak with few bidders participating.

Selling directly through a broker or agent—USPV offers agency and brokerage services and sells directly to utilities and suppliers subject to the RPS on a commission-only basis. We believe this approach is the most likely to result in the highest returns over the life of the system and ensure that our interests are fully aligned with our clients.

We also offer long-term fixed price contracts and ten-year Advance Purchase options for those clients who would prefer to lock-in their SREC values or otherwise avoid the potential volatility of the spot market.



Selling your SRECs

Supply and Demand

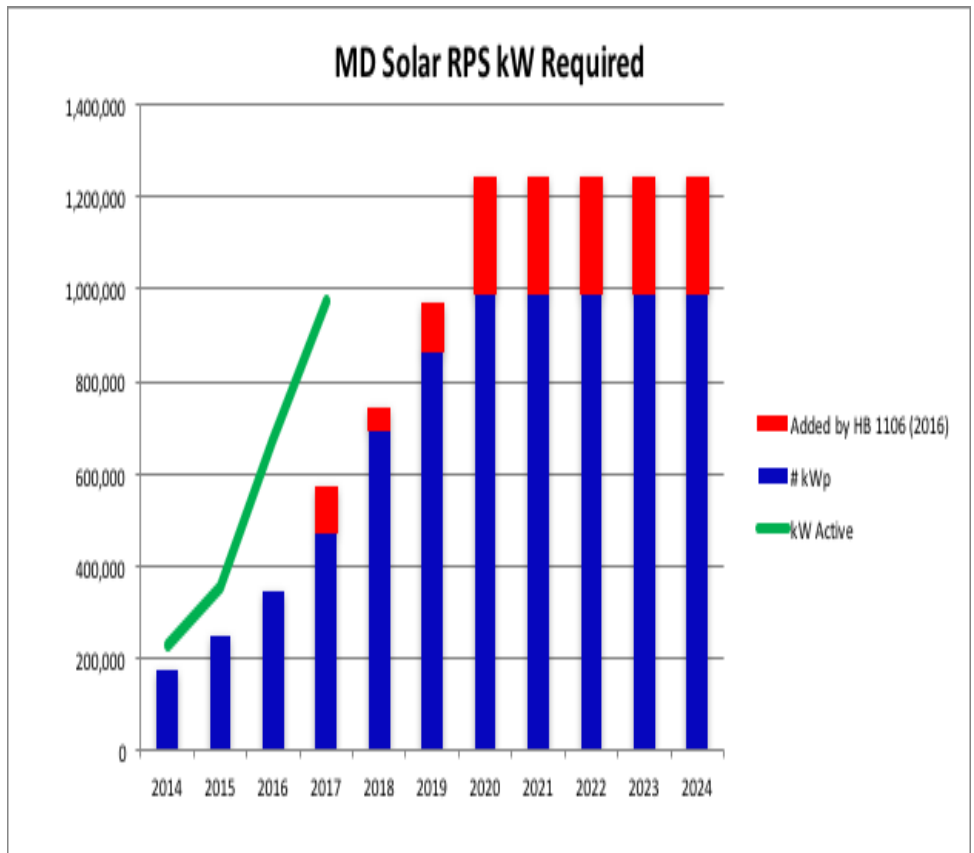
The single most important factor in determining the value of an SREC is the number of SRECs available for purchase by suppliers in any given compliance year.

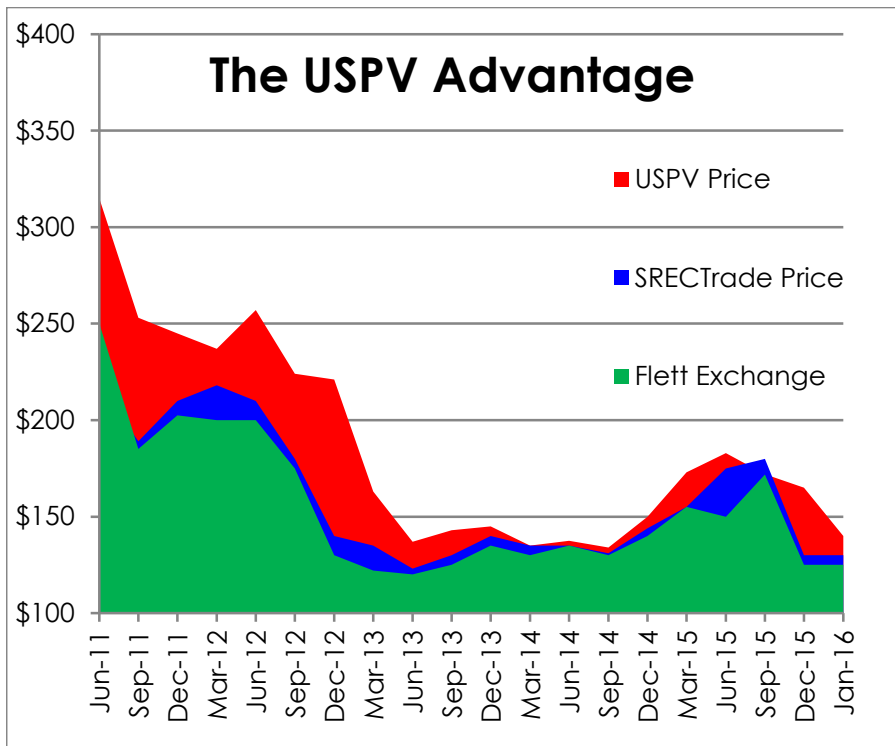
The “demand” for SRECs is established by the RPS but the “supply” depends on the number and type of systems installed throughout the state.

Maryland has seen an increasing number of larger commercial-scale systems in recent years but financing has been difficult and the ability of the state to meet its RPS targets may be a challenge late in the decade.

A recent PSC ruling may lead to some out-of-state systems being certified for Maryland SRECs and several large utility-scale projects are under development which could result in a significant oversupply and lower prices.

The Maryland legislature is likely to consider amendments to the RPS which may help absorb this supply but it remains unclear whether enough systems will be developed to create an even greater oversupply of SRECs in 2018 and beyond.





* SRETrade prices are reported bid prices at end of quarter. Flett Exchange prices are settlement prices as of last day of each quarter. USPV prices are quarterly average of transactions.

Requirements for PV System under Maryland's RPS

If you wish to generate and sell Solar Renewable Energy Credits in Maryland, you must:

1. Complete and file an application for certification as a Solar Renewable Energy Facility (REF) with the Public Service Commission.
2. Upon receipt of your REF certification, you must establish an account with PJM EIS GATS within 30 days.
3. Before offering any RECs created for your system to a third-party, you must offer the SRECs your system will create to electricity suppliers subject to the RPS by posting the availability of your SRECs on a PSC-approved website for 10 days.
4. In the event your system ceases to operate as designed you must notify the PSC in writing within 30 days.

Our Agency contracts are cancelable at anytime upon 60 days notice. If market conditions change or you decide to sell your SRECs through another broker or platform, you are not locked in.

We handle all administrative issues, reporting and accounting. Call or email us for details.

We're here to help

U.S. Photovoltaics, Inc.

Making Solar Simple

Whether you choose to use our agency services, sell us your SRECs-- or not--we are happy to answer any questions about Maryland SRECs.

Phone: (240) 439-4597

fred.ugast@uspvinc.com

U.S. Photovoltaics, Inc.
37 N. Market St, Ste 200
Frederick, MD 21701

www.uspvinc.com



Leading the way to a brighter future

Long-Term Utility Contracts

When Maryland initially passed the solar carve-out to its RPS in 2007, the legislation envisioned system owners receiving an up-front payment at a predictable price directly from a utility subject to the RPS. Unfortunately, it hasn't worked out that way.

Indeed, under the law as originally written, system owners are not permitted to sell their SRECs directly to a supplier or utility subject to the RPS except under a contract that is fully prepaid. Before selling their SRECs to a person or entity not subject to the RPS, the law also requires system owners to publish the availability of their SRECs on a Public Service Commission-approved website.

If a supplier or utility subject to the RPS does not offer to purchase all of the SRECs the system will produce during the fifteen-year period of its certification within 10 business days, the system owner is

free to sell their SRECs to any willing buyer.

While we haven't seen any indications that utilities are likely to offer up-front payments, other investors have been willing to buyout SREC contracts, albeit at a steep discount. We are seeing some utility interest in longer-term contracts with three year terms widely available.

As new opportunities emerge, we will continue to keep you informed of your choices and offer our perspective for your consideration

Making Solar Simple

SREC Value Calculator

Estimated Range of Values for MD SRECs per kW of DC System Capacity:*

YEAR	# SRECs	ACP/SREC	60%	50%	40%	30%	20%
2016	1	\$350.00	\$210.00	\$175.00	\$140.00	\$105.00	\$70.00
2017	2	\$200.00	\$240.00	\$200.00	\$160.00	\$120.00	\$80.00
2018	1	\$200.00	\$120.00	\$100.00	\$80.00	\$60.00	\$40.00
2019	1	\$150.00	\$90.00	\$75.00	\$60.00	\$45.00	\$30.00
2020	1	\$150.00	\$90.00	\$75.00	\$60.00	\$45.00	\$30.00
2021	2	\$100.00	\$120.00	\$100.00	\$80.00	\$60.00	\$40.00
2022	1	\$100.00	\$60.00	\$50.00	\$40.00	\$30.00	\$20.00
2023	1	\$50.00	\$30.00	\$25.00	\$20.00	\$15.00	\$10.00
2024	2	\$50.00	\$60.00	\$50.00	\$40.00	\$30.00	\$20.00
2025	1	\$50.00	\$30.00	\$25.00	\$20.00	\$15.00	\$10.00
2026	1	\$50.00	\$30.00	\$25.00	\$20.00	\$15.00	\$10.00
2027	1	\$50.00	\$30.00	\$25.00	\$20.00	\$15.00	\$10.00
2028	2	\$50.00	\$60.00	\$50.00	\$40.00	\$30.00	\$20.00
Total Projected Payments:			\$1,170	\$975	\$780	\$585	\$390

* Estimates Only. Actual Payments may be different from these projections