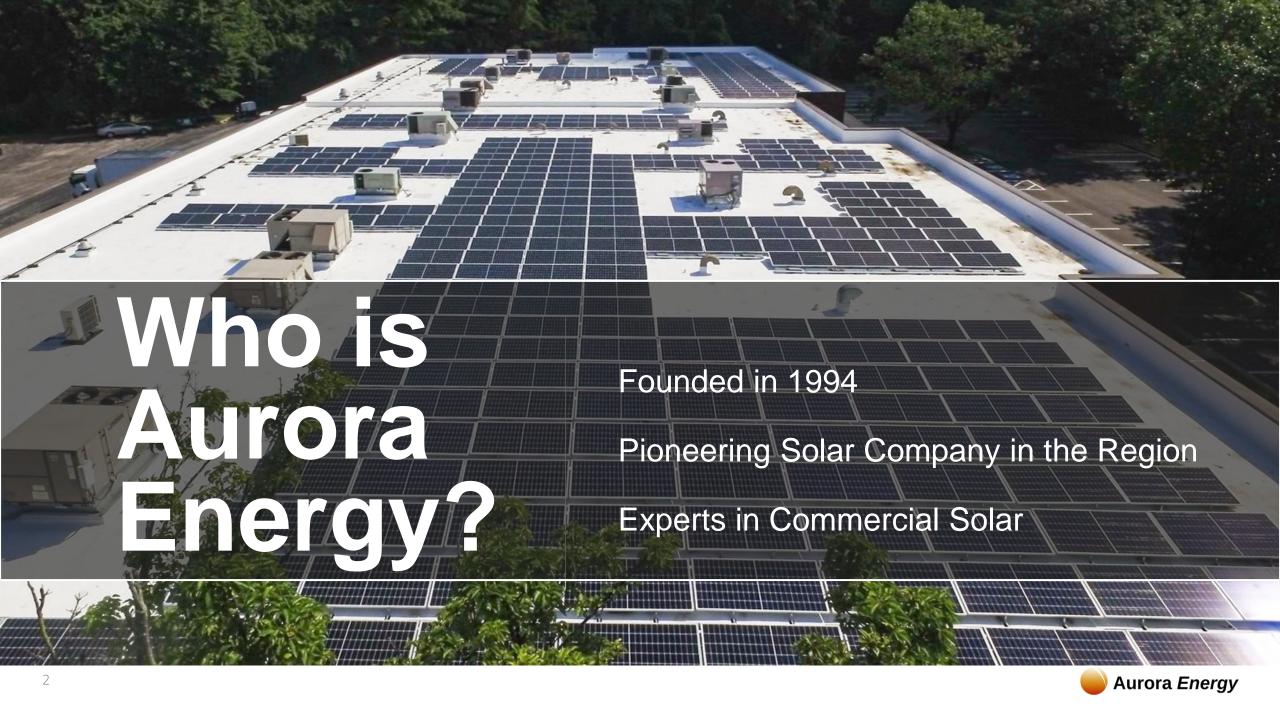


Solar for the AG Reserve

Presented by Aurora Energy, Inc.

1



Why
Landowners
are turning to
Solar



ENVIRONMENTAL STEWARDSHIP



DRASTICALLY REDUCE ENERGY COSTS



CREATE A NEW REVENUE STREAM



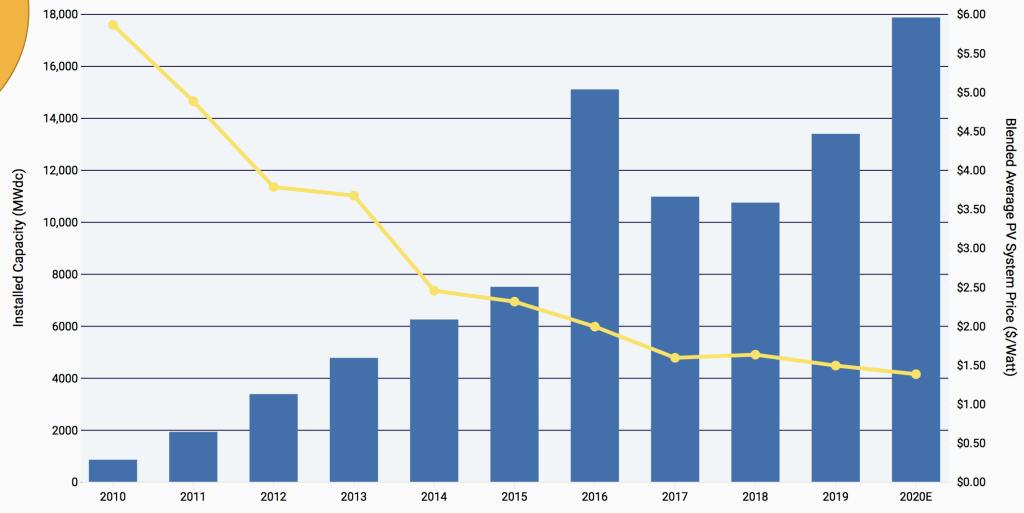
SAFE INVESTMENT





Now is the time to go solar

U.S. Solar PV Price Declines & Deployment Growth







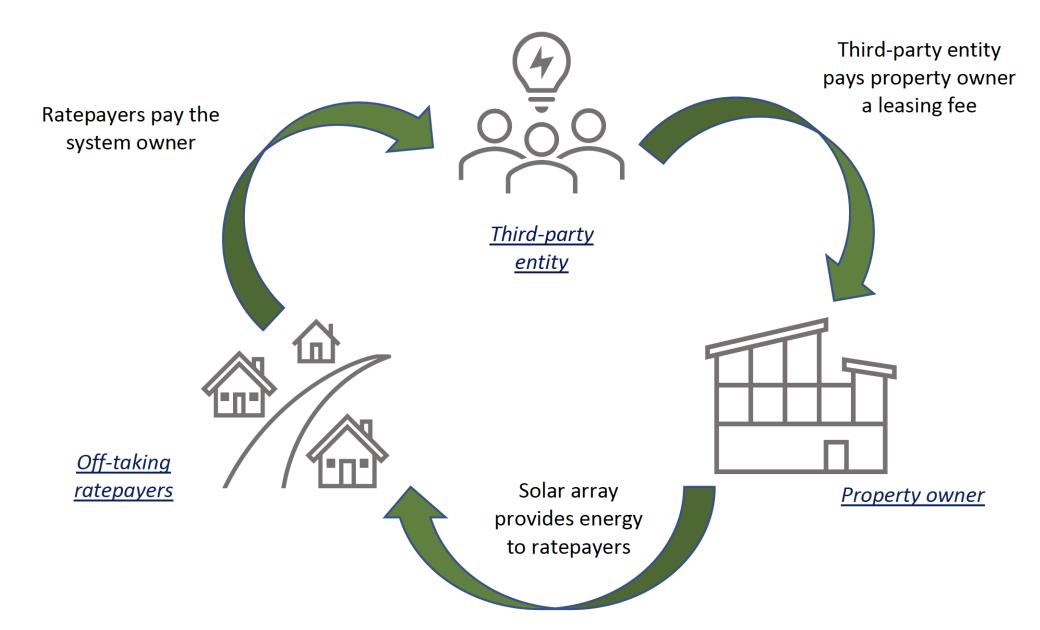
Example Solar Cash Flows- CAPEX

- Typical project can
 offset 40-50% of total
 cost in first year through
 Tax Credits, SRECs, and
 Utility Bill Savings
- Depending on project common paybacks for ground mount solar in MD are 4-7 years on a 25 asset





How Community Solar works:

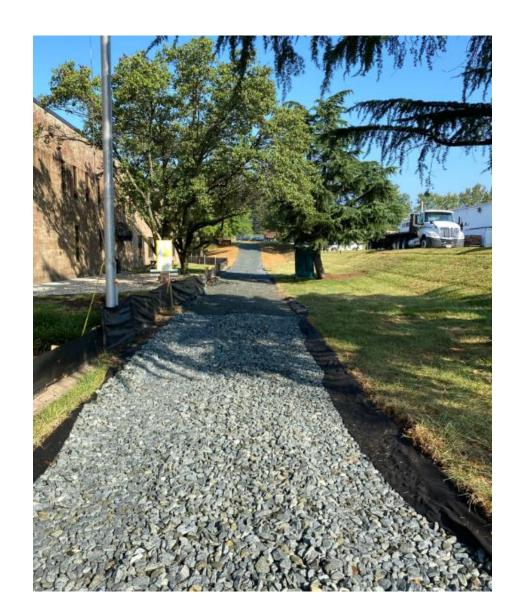




Development Processes

- Design/ Permitting
 - Topographic surveys
 - Site development plan
 - Environmental reviews- MDE/Montgomery County
 - Stormwater & grading application-MNCPPC/Montgomery County
 - Building permit
- Utility Interconnection
 - Pepco application submission (& PSC for Community Solar)
 - Cost letter and payment (CS only)
 - Approval to install
 - Permission to operate
- Construction

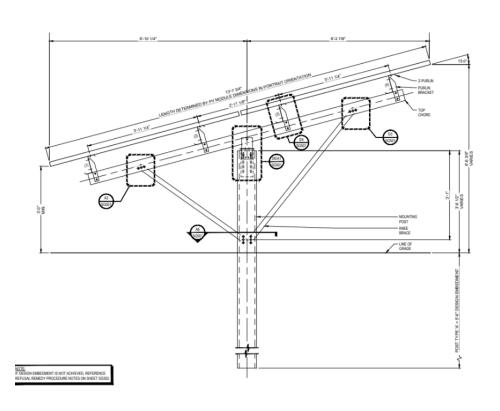
Civil Works







Racking Post Installation







Cross member and module installation







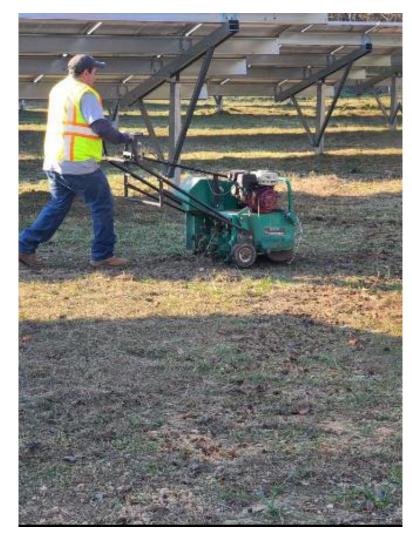
Interconnection







Landscaping & Operation and Maintenance







Solar for Agriculture



Mary's Land Farm

Location: Ellicott City, MD

System Size: 199.43 kW

Completion Date: June 2019

Annual Production: 278 MWh

Lifetime

Emissions Offset: 4,900 metric tons

Saving over \$30,000 in electricity costs in the first year and over \$1 million over the life of the system, more funds can be invested back into their business.

And with a power-producing clean energy source on-site, their farming philosophy of going beyond organic principles using a minimal amount of fossil fuels is reaping its own rewards.



Take aways

Solar for Land Owners

Types of Solar Installation and Case Studies

- Solar can be profitably installed on farmland
- Those with farm land in Montgomery County are uniquely lucky to have the Green Bank and a strong community solar program
- Solar can offset 100% of a farm's electricity costs or be exported to the grid through community solar
- While development takes awhile, installation is quick and easily and customized to different conditions

Financials and Process

- Solar revenue comes from federal tax incentives, SRECs and electricity bill savings
- Financing options are available to generate no upfront cost projects that are cash flow positive in year 1
- Ground mounted systems up to 2 MW can be utilized for community solar projects, creating a new revenue stream for landowners





Backup Slides

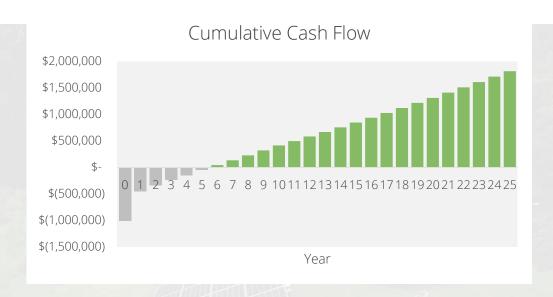


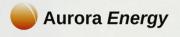
Reduce Operating Expenses

- Tax benefits (Federal tax credits and bonus depreciation
- State incentive (SRECs)
- Lock in Energy Savings for 25 Years
- Financing options- no upfront payment, cash flow positive in year 1
 OR

Add a Revenue Stream

- Become a community solar program host site
- Supplement income by making money off your solar land lease





Financial Options

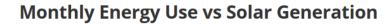
	Cash	Capital Loan	Operating Lease	PACE Financing	Power Purchase Agreement (PPA)
	One-time cost	No upfront capital cost, positive cash flows year 1	No upfront capital cost, positive cash flows year 1	No upfront capital cost, positive cash flows year 1	No upfront capital cost, positive cash flows year 1
	Own the system hardware; take advantage of depreciation and tax benefits	Own the system; full tax/depreciation benefits and SRECs	Own the system after Lease period ends; no tax benefit, partial depreciation benefits, full SRECs	Own the system; full tax/depreciation benefits and SRECs	System owned by a PPA provider, no tax/depreciation benefits or SREC, all benefit through electricity bill savings
20	Payments are made during the installation	Fixed payments made yearly over ~7-year time frame	Fixed payments made yearly over ~7-year time frame, with a buy out in year 8	Low cost, fixed-rate financing paid through property tax bill for 20 years	Fixed contract that offers a discount to prevailing electricity tariff for 25 life of system Aurora Energy

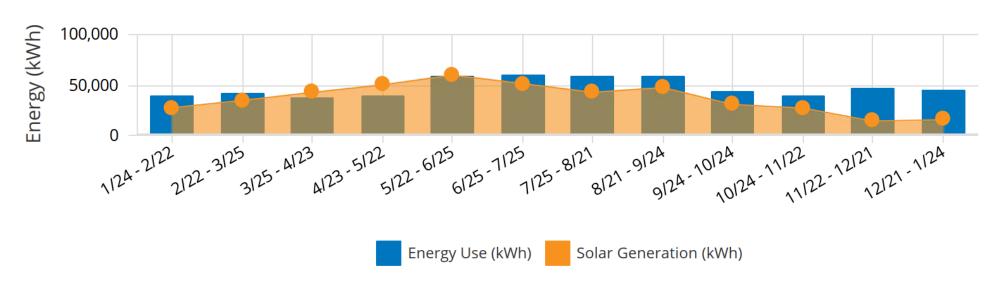
Electricity Bill Savings Keep Costs Low for 25 years+

Electricity Bill Savings from Solar: These come from offsetting your current bill.

- Solar electricity is always used before electricity from the grid.
- Every kWh from Solar replaces one usually taken from the Utility
- Even if solar produces more electricity then a building is using at any given moment, this "excess" solar electricity can be used as a credit to offset future use.

Solar Generation







Maryland SREC Incentives Drive Profitability

Solar Renewable Energy Credits (SRECs)

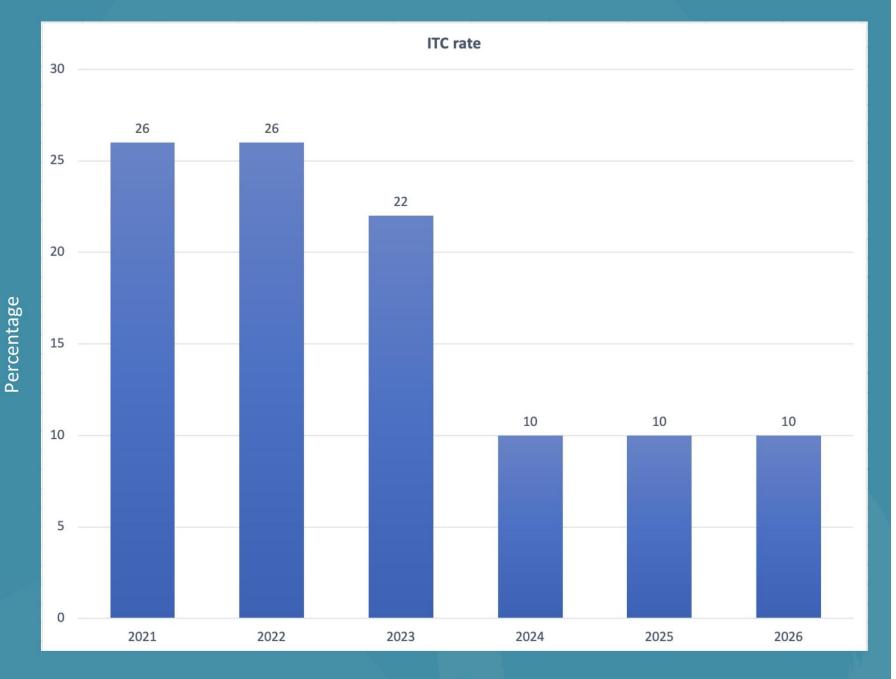
Payment made by state market for each 1,000kWh (1MWh) of solar generated.

Rates are driven by state renewable energy targets and supply and demand. Maryland, has strong solar targets meaning that SREC pricing is likely to stay high for years to come.

MD

Latest Bid Price: \$59.50



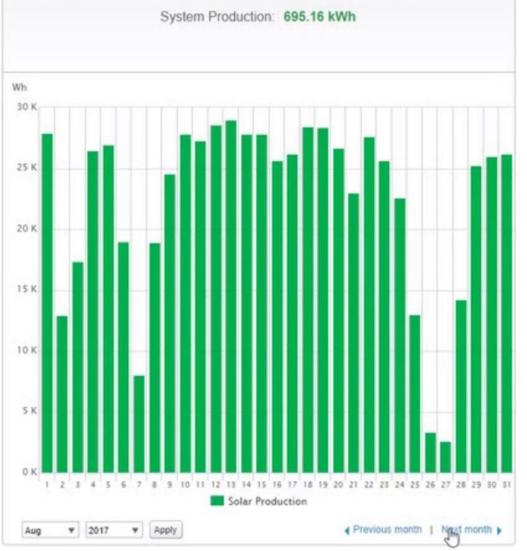


ITC (Federal Solar Tax Credit) *30% coming soon!

Bonus Depreciation



Solar Monitoring for Display and O&M



Installed 04/15/2017
Last updated 09/20/2017 15:22
Peak power 5.22 kWp

