SOLARIZE VIRGINIA

PIEDMONT

Presented by leap

SolarizeVA.org

Piedmont Environmental Council

CHARLOTTESVILLE
Acting on Climate Together

Agenda

- Introductions
- What is Solarize?
- Solar Basics
- Q&A with LEAP, PEC, and Solarize Installers

What is LEAP?

Founded in 2009, Local Energy Alliance Program delivers energy efficient solutions in Virginia to make homes safer, healthier, and more affordable while reducing energy usage and mitigating climate change.

What is Solarize Piedmont?

An clean energy initiative organized by the Piedmont Environmental Council, the City of Charlottesville Climate Protection Program, and the Local Energy Alliance Program (LEAP).

Solarize Piedmont is a one-stop-shop for community members to learn more about solar power options for their homes and facilitate the installation and financing of their own project.

Solarize Results

Since 2014, 546 contracts totaling more than 4.3MW of electricity have been signed.

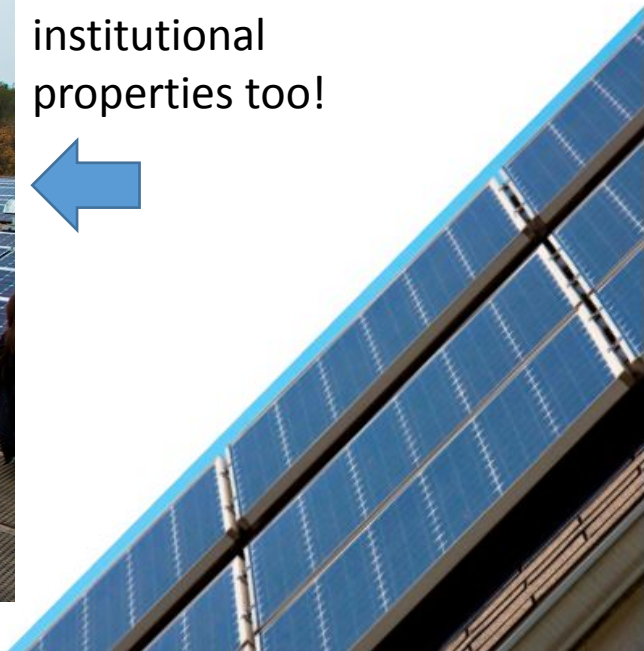
More than 112 contracts signed in Solarize 2020.

VIRGINIA ENERGY EFFICIENCY
VAEEC AWARD
WINNER
2017
LEADERSHIP AWARDS

Who Can Sign Up?

- Solarize Piedmont is for residents, organizations, and businesses within: Albemarle, Charlottesville, Clarke, Culpeper, Fauquier, Greene, Loudoun, Madison, Orange and Rappahannock.
- If you live outside of this area, we can still help you. Please contact info@solarizeva.org for more information.

Commercial and institutional properties too!



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Why Solarize?

Efficiency first!

All participants are eligible for a free home energy assessment to make sure your home is as efficient as possible, pre-solar.

Streamlined process.

We'll walk you through our step-by-step process, starting with a free solar assessment to see if you're a good fit for solar.

Vetted installers.

We ask the tough questions so you don't have to. Installers are insured, qualified, and experienced.

Solarize Piedmont 2021 Installers

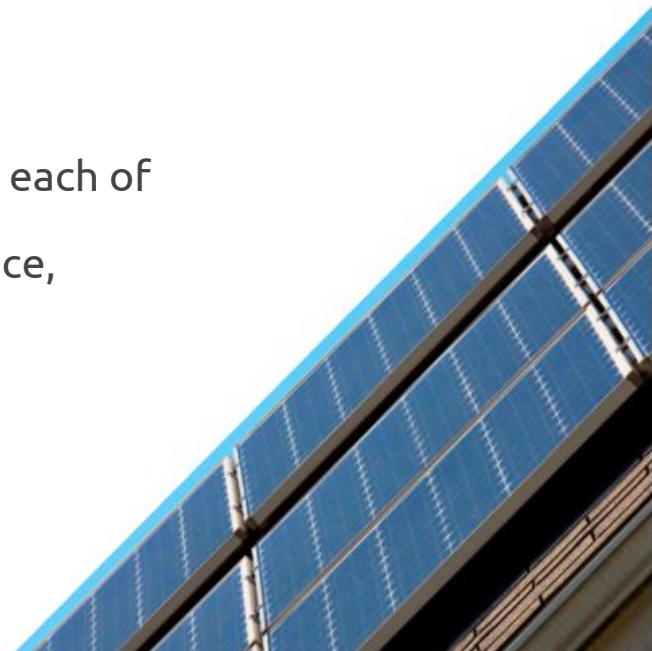
SOLARIZE

ALTENERGY

VIRTUE SOLAR

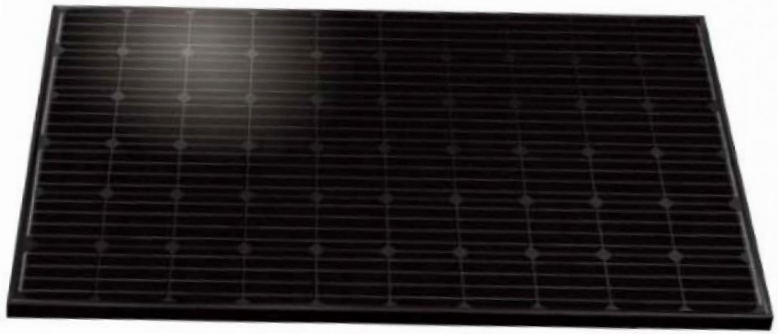
How we select our installers

LEAP issues a request for proposals to solar contractors for each of our solarize campaigns. We evaluate proposals based on price, equipment quality, and company business practices.



Solar Basics

- Panel installation generally takes 1-3 days, but the entire process (including system design, permitting, interconnection) takes 6-12 weeks.



- System Components:
  - Photovoltaic Panels
  - “Balance of System” equipment such as mounting hardware, inverter, cables and meters

- Productive life of 25+ years with minimal maintenance. All system components come with a minimum of 10 year warranty, plus a 20 year workmanship warranty.

Solar Basics

THE SUN SHINES!

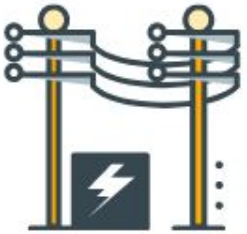
INVERTER CONVERTS DC CURRENT TO AC SO IT CAN BE USED IN YOUR HOME

SOLAR ENERGY POWERS YOUR HOME

PV PANELS ABSORB ENERGY FROM THE SUN TO CREATE ELECTRICITY

AC CURRENT TRAVELS TO MAIN ELECTRIC PANEL

SURPLUS ENERGY GOES BACK TO THE GRID



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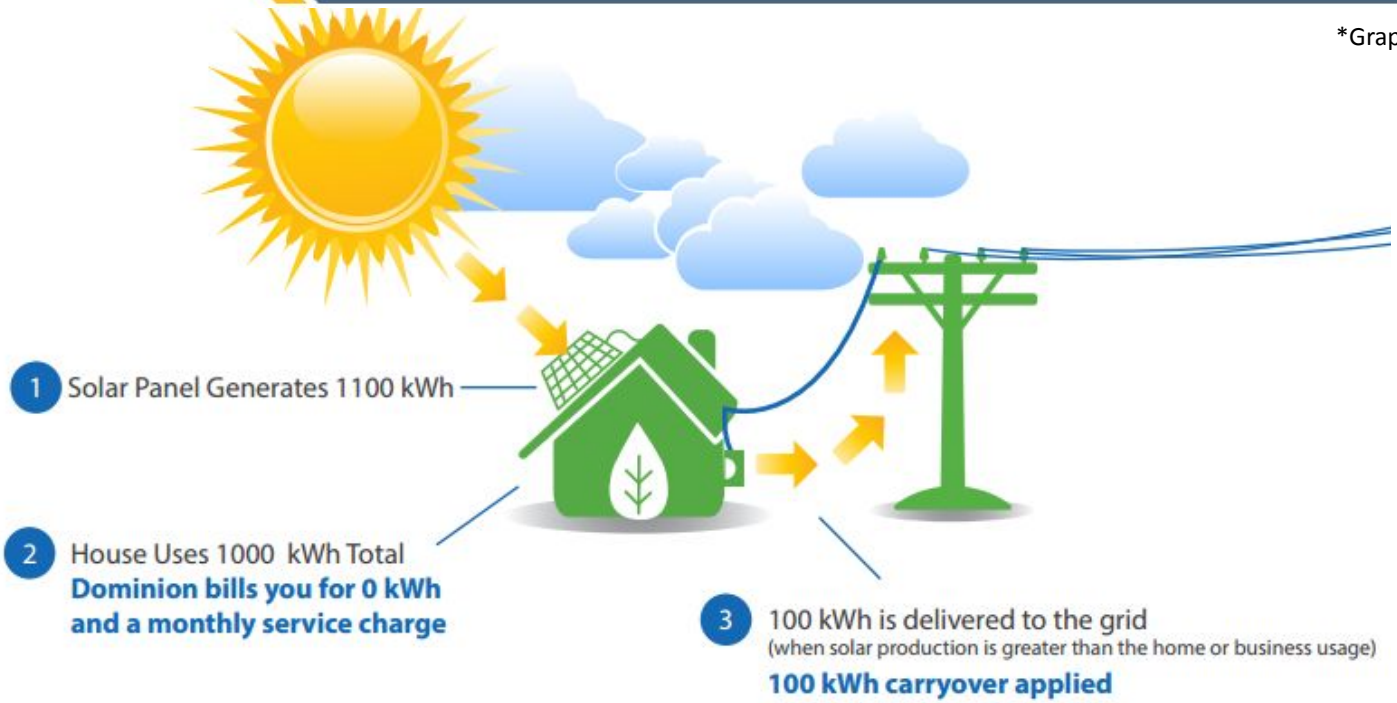
Net Metering

*Graphic from Dominion Power



What is Net Metering? a metering and billing agreement between a utility and a customer that facilitates connecting PV systems to the power grid. A new meter is installed that measures two-way flow of electricity. The energy your system makes is first used on site. When your solar system is making more electricity than you are using at the time, the excess electricity is recorded by the meter as it flows back into the grid and is credited against future electricity use.

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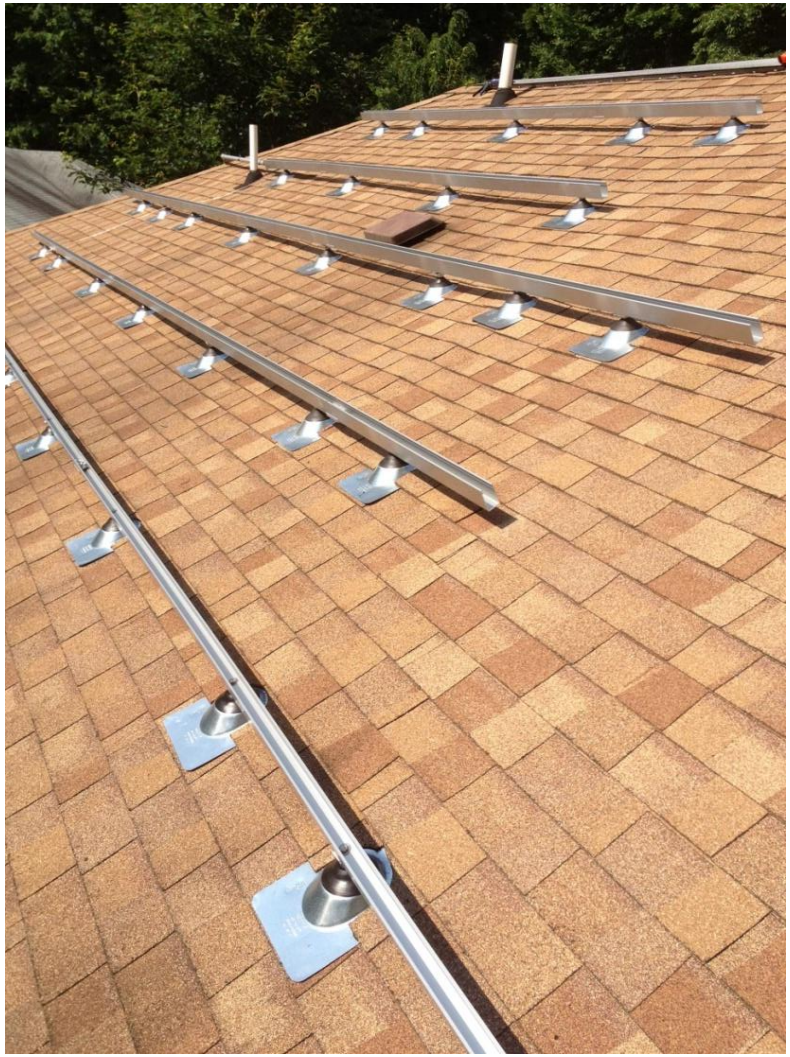
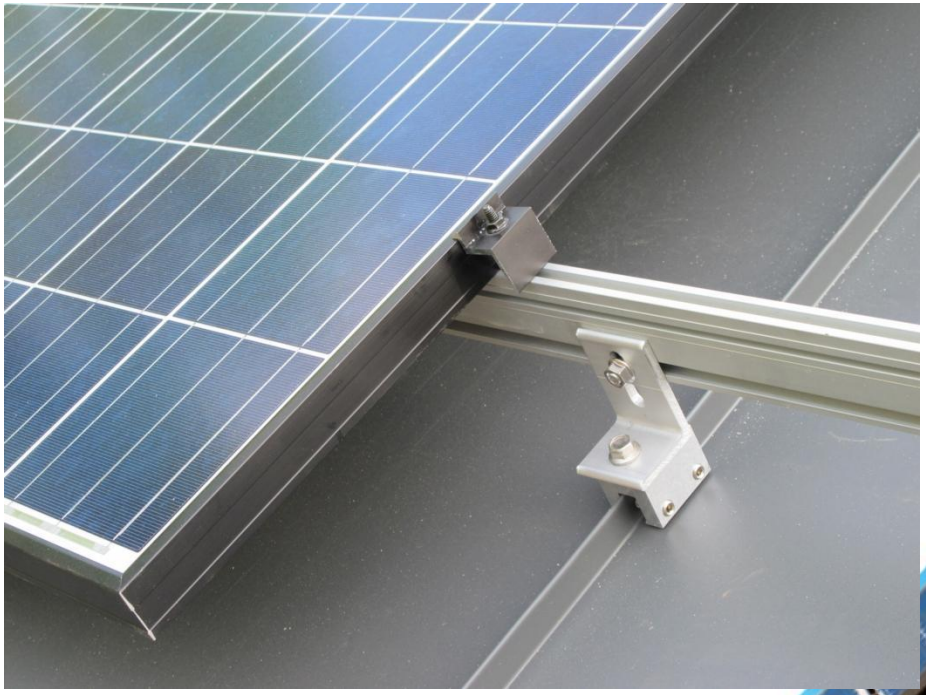
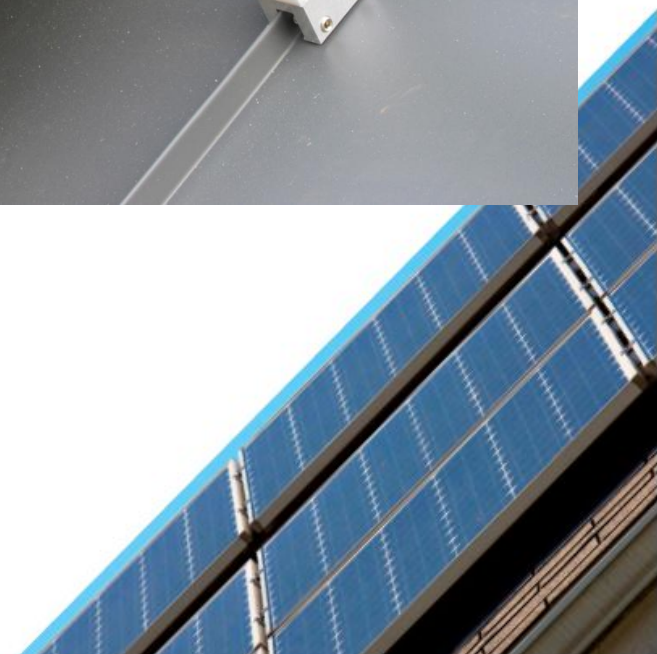
Roof + Ground Mounts

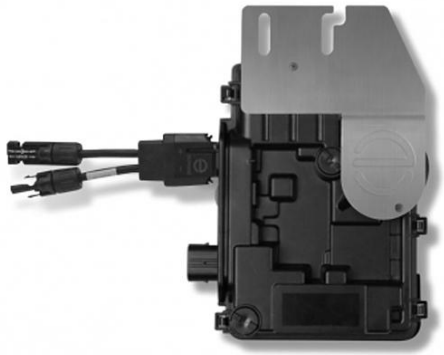


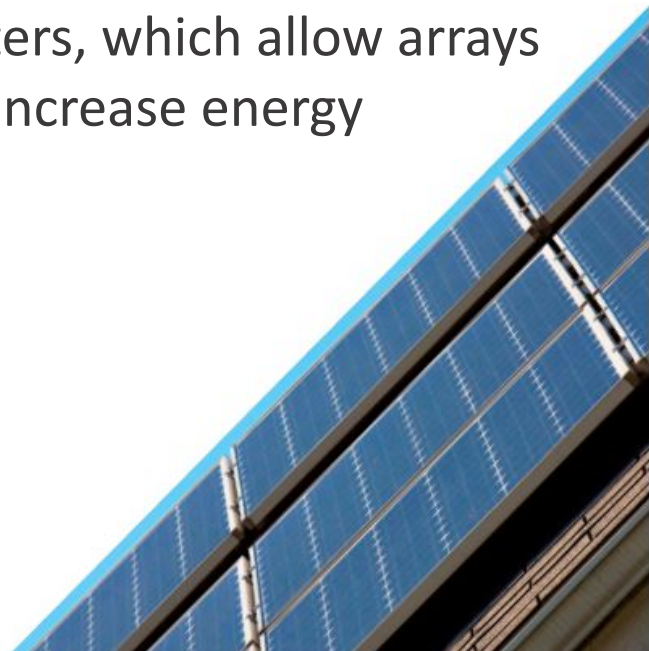




The Inverter

- Converts Direct Current (DC) electricity from solar panels into Alternating Current electricity, which powers your home.
- When shading conditions exist, installers may recommend microinverters or DC optimizers in lieu of central inverters, which allow arrays with some shading to increase energy production.





Continuous On-Line Monitoring

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Dashboard | Layout | Chart | Reports | Alerts | Admin

Choose a site (insert at least 3 letters to search):

Grigsby Solar

Overview

Current Power	Energy today	Energy this month	Lifetime energy
4.04 kW	6.2 kWh	589.53 kWh	957.32 kWh

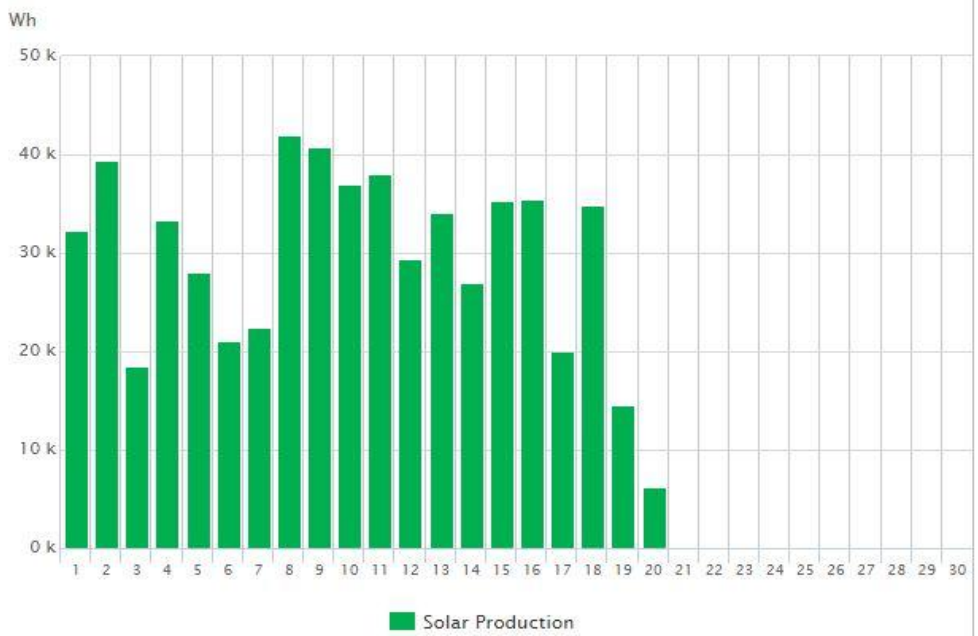
solaredge

Power and Energy

Week | Month | Year

04/01/2017 - 04/30/2017

System Production: 589.53 kWh



Site summary

Site status: ✓

Id	433556
Name	Grigsby Solar
Country	United States
State	Virginia
City	Richmond
Address	Forest Hill Avenue 3152
Installed	03/16/2017
Last updated	04/20/2017 10:56
Peak power	6.08 kWp

Weather

Partly Cloudy
67 °F
Feels like 67 °F
Wind SW, 3 MPH
Humidity 79 %
Sunrise at 06:28
Sunset at 19:51

Thursday	Friday	Saturday
84 - 68 °F Partly Cloudy	84 - 63 °F 30% Chance of Rain	70 - 57 °F Mostly Cloudy

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How it Works

1 SIGN UP

Interested in solar, but not sure where to start? Curious about what you should be looking for or what is a good price? Fill out our interest form at PECVA.ORG/SOLARIZE and let us know!

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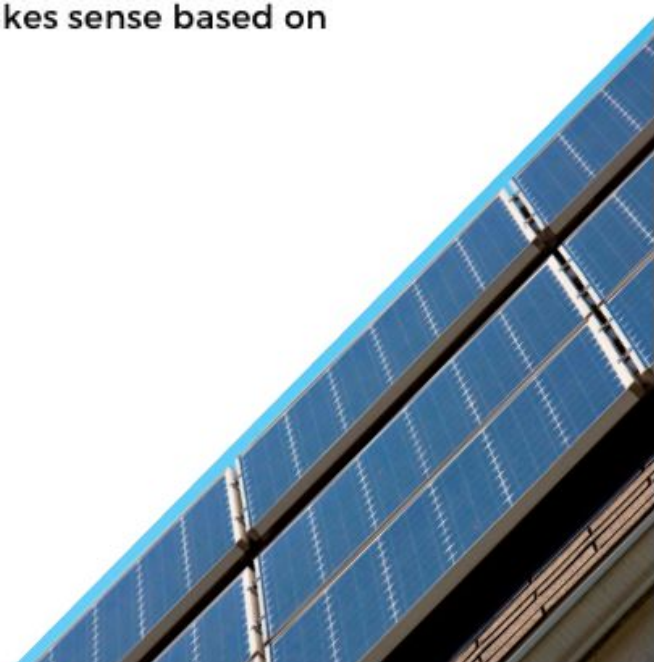
How it Works

2

SOLAR ASSESSMENT

Within 3-5 days, we will do a FREE satellite assessment and let you know if your home is a good fit for solar. If it is, we'll ask for a copy of your electric bill to see if solar makes sense based on your energy usage.



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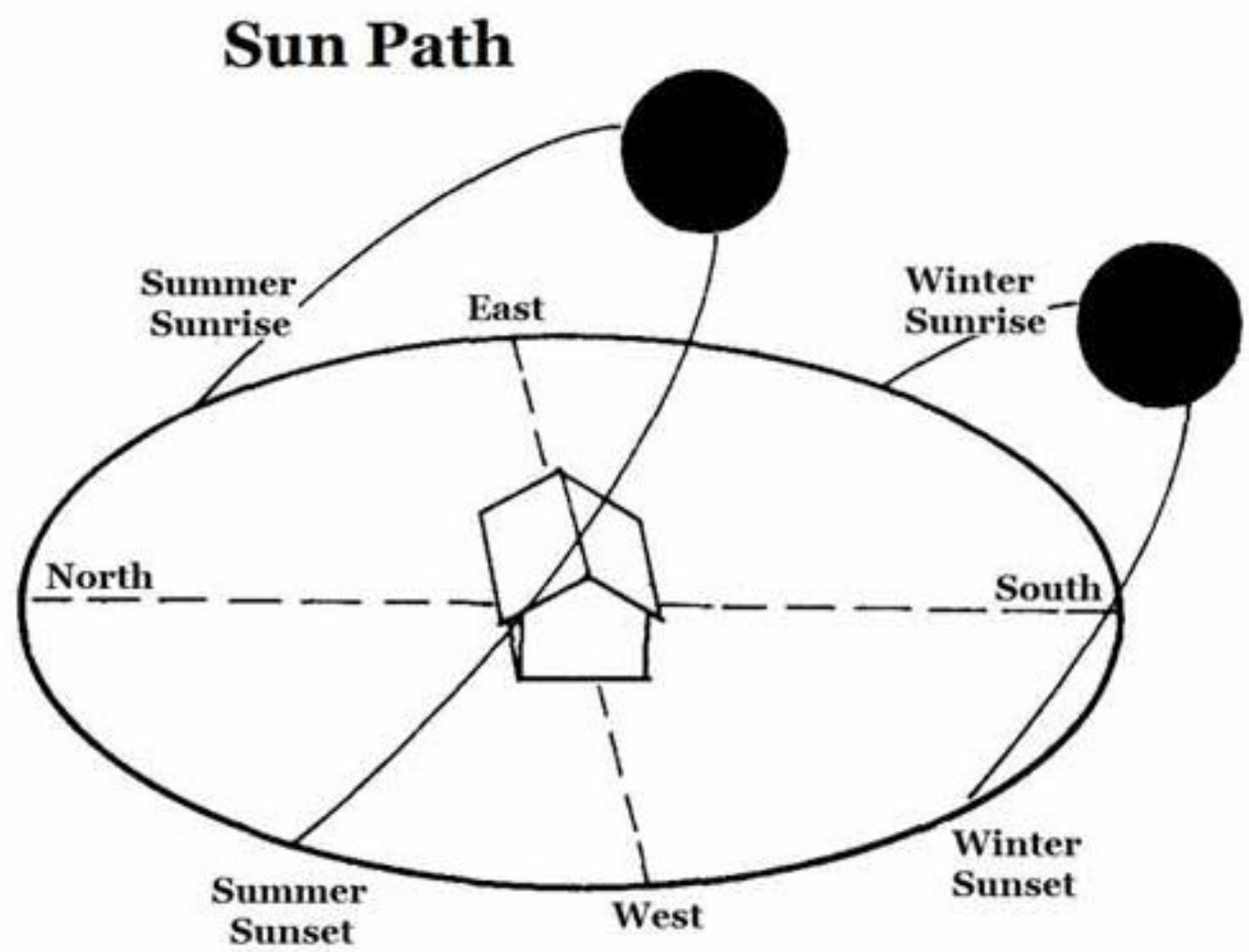
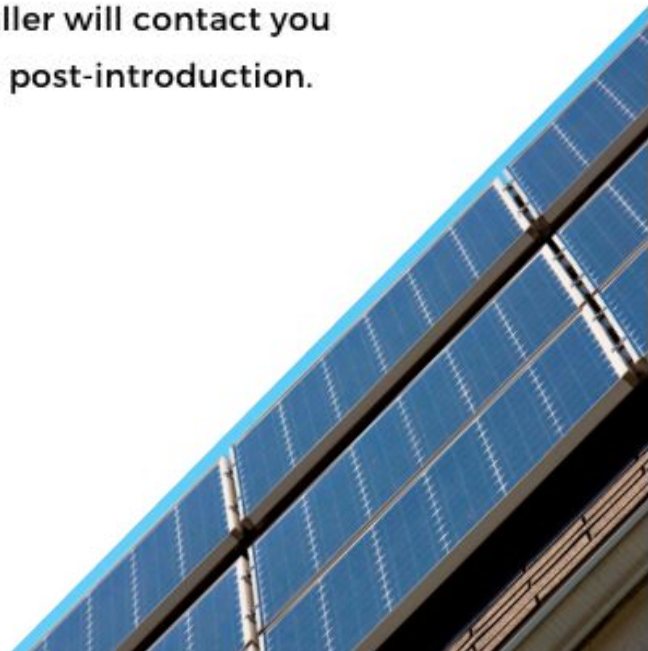
How it Works



How it Works

3 CONNECT WITH VETTED INSTALLER

We'll connect you with our pre-vetted, selected campaign installer. The installer will contact you for a site visit within 3-5 days post-introduction.



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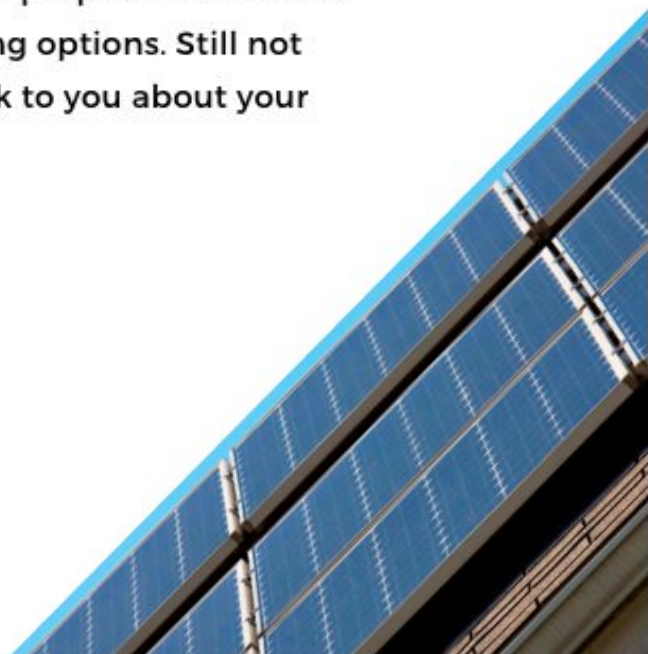
How it Works

4 ON-SITE INSPECTION + PROPOSAL

The installer will do a site visit to evaluate your property and identify the best system for your needs. Then, they'll send you a proposal tailored to your home, including financing options. Still not sure? Let us know! We can talk to you about your questions or concerns.



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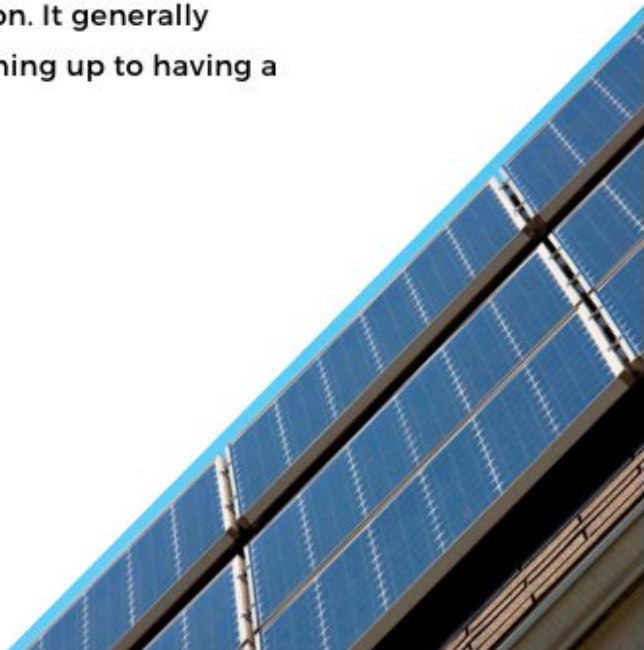
How it Works

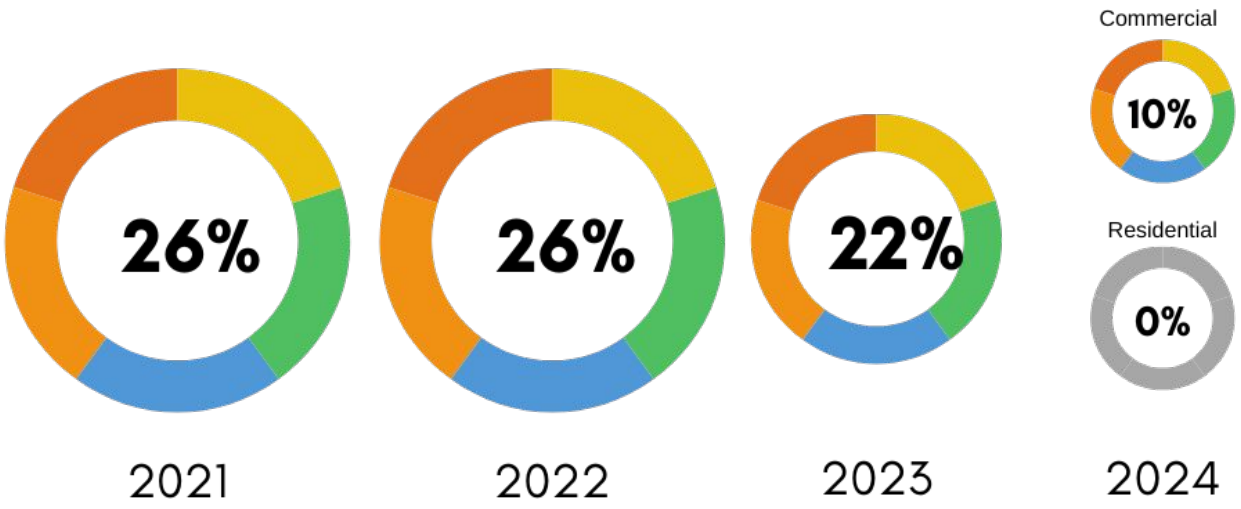
5 INSTALLATION

If the proposal and price work for you, it is time to sign the proposal. The installer will obtain all necessary permits, materials, and equipment, and will get started on the installation. It generally takes from 2-4 months from signing up to having a functional system in place.



Tax Credits

Solar Income Tax Credit



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leap
local energy alliance program

SOLARIZE VIRGINIA
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2021 Pricing

Prices provided by Altenergy and Virtue Solar,
Selected Solarize Piedmont Partners.

	ROOF MOUNT			GROUND MOUNT	
	3-5KW	5-10KW	>10KW	5-10KW	>10KW
STANDARD+ MICRO INVERTER/ DC OPTIMIZER	$2.45	$2.34	$2.34	$2.74	$2.64
US MADE+ MICRO INVERTER/ DC OPTIMIZER	$2.55	$2.45	$2.44	$2.85	$2.75
EV CHARGERS	EV with Solar $1,150				

*Compare to the state average price of **$3.01/watt**.**

*https://www.solar-estimate.org/solar-panel-cost/virginia

2021 Pricing

Average size system = 10kW

Per watt price = $2.45 (US Made/DC Optimizer/Microinverter)

Total Cost = $24,500

Cost after FITC = $18,620

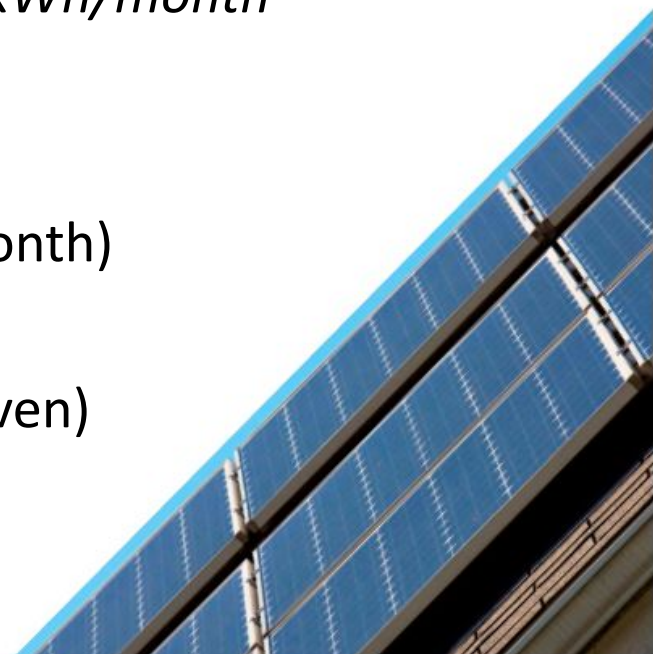
A 10kW system will produce between 600-1,300 kWh/month (http://pvwatts.nrel.gov/)

Estimated one year savings = $1,384 ($115/month)

Estimated 10 year savings = $13,840

Estimated 13 year savings = $18,000 (breakeven)

Estimated 20 year savings = $27,680



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Sign up at SolarizeVA.org
through June 30

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