



# AHP Rooftop Solar Grant Program



By the Affordable Housing Partnership & Kasselman Solar  
Funded by NYSERDA Cleaner Greener Communities Grant



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## Solar Program: How & Why



- The Affordable Housing Partnership (AHP Homeownership Center) works to promote successful homeownership and make owning your home more affordable.
- AHP received a grant to install solar panels on at least 40 homes. Funding from New York State's New York Energy Research & Development Authority (NYSERDA)
- Why Solar? Improves housing quality, increases value of home, reduces electricity bills, and renewable energy is better for the environment
- Kasselmann Solar was selected to be our solar contractor.



## About Kasselman Solar

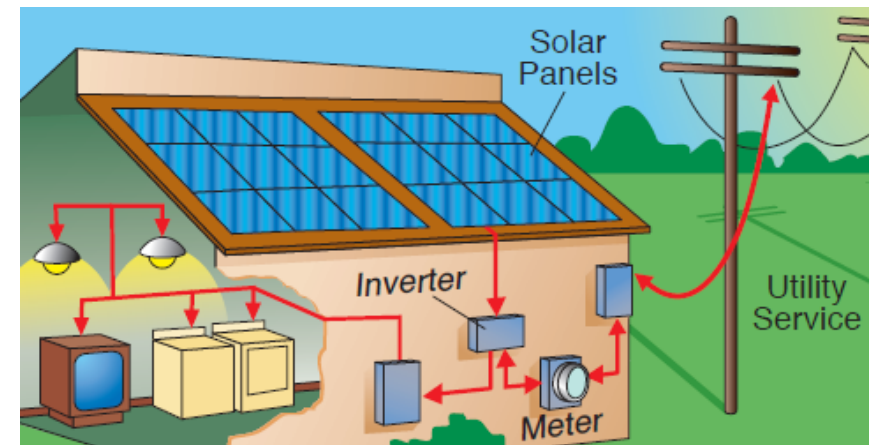
- Full-service solar electric provider specializing in the design, installation and servicing of renewable energy systems
- Designers are licensed NYS Professional Engineers
- Use only highest quality materials for longevity
- Kasselman Solar is an affiliate of Kasselman Electric, which is the largest commercial electrical contractor in the Capital District
- Family-owned, operated and founded in 1948



# What is solar electric or solar PV?



- Solar PV (photovoltaic) panels convert sunlight into electricity.
- The electricity generated goes through an inverter to allow it to be used in your home. Electricity you don't need is returned to National Grid.
- Electricity produced by a PV system is measured in kilowatt hours (kWh) of energy.
- Residents receive credits on their utility bill for the kWhs produced (net metering)



# Net-Metering



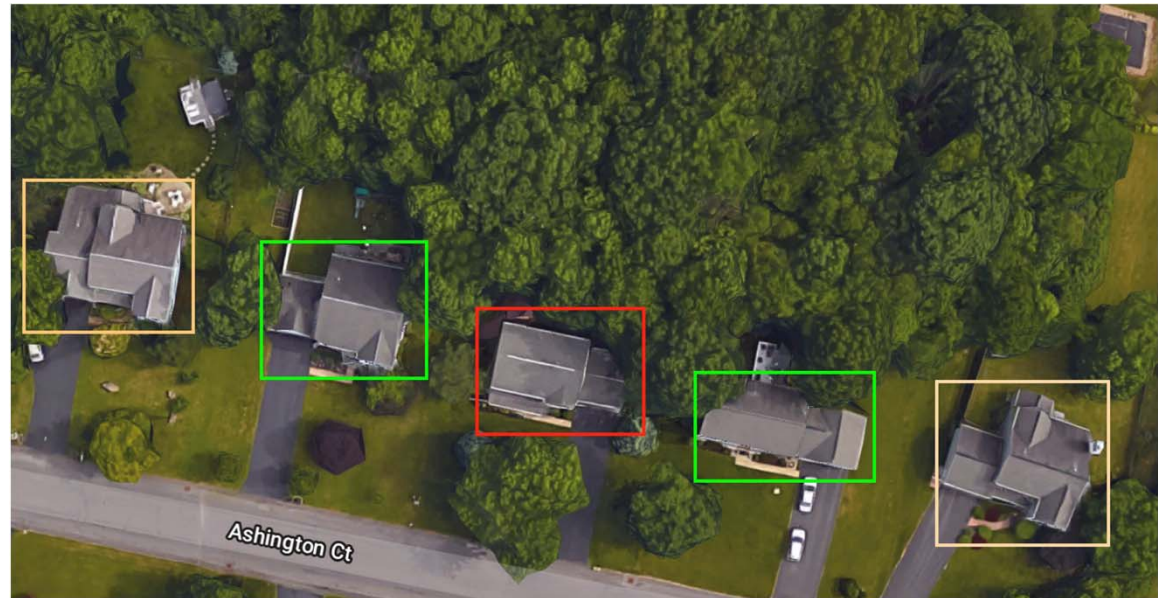
- Net-metering refers to the ability of the homeowner's PV system to send excess electricity to National Grid in return for a credit on utility bills. It is sometimes referred to as "spinning the electricity meter backward."
  - Excess electricity produced by your PV system will be credited to you and "banked" into your utility account
  - Electricity credits can be used during winter months when there is less solar energy production.
  - Any unused electricity credits carry over each year

# Rooftop Solar

## A house is a good candidate for Solar with...

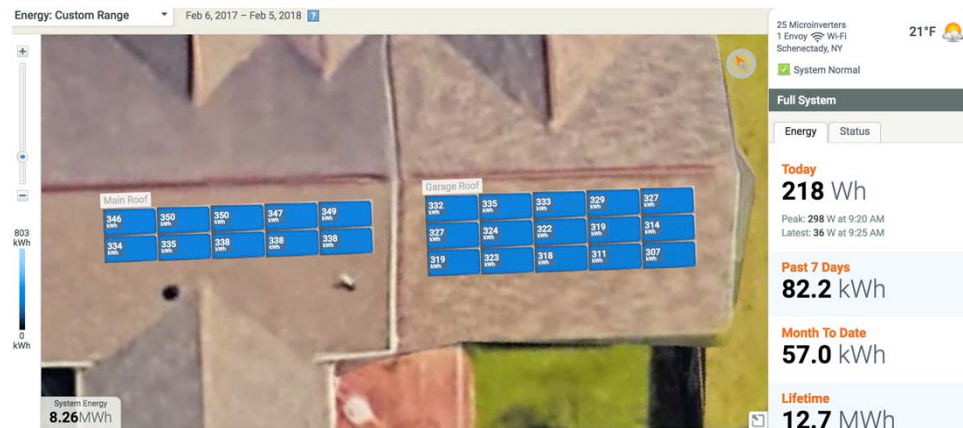
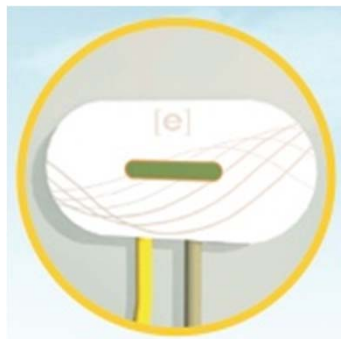
- A South-facing roof
- No shading or obstructions
- Roof in good condition
- Adequate electrical service

AHP has additional funds to make your roof solar-ready



# Rooftop Solar: Monitors

- Equipment monitors health and performance of the system.
- Plugs into any 120 volt outlet in home (preferably near home's main service panel) and connects to home's internet connection.
- System data can be viewed online or on mobile apps so you can track performance wherever you are.



# Understanding Your Utility Bill



## Enrollment Information

To enroll with a supplier or change to another supplier, you will need the following information about your account:

Loadzone Capital

Acct No: [REDACTED]

Electric Usage		Gas Usage	
Month	kWh	Month	Therms
Mar 18	226	Mar 18	155
Apr 18	215	Apr 18	118
May 18	152	May 18	27
Jun 18	147	Jun 18	10
Jul 18	225	Jul 18	09
Aug 18	161	Aug 18	07
Sep 18	209	Sep 18	08
Oct 18	117	Oct 18	26
Nov 18	207	Nov 18	132
Dec 18	180	Dec 18	171
Jan 19	218	Jan 19	231
Feb 19	360	Feb 19	207
Mar 19	197	Mar 19	158

## DETAIL OF CURRENT CHARGES

### Delivery Services

#### Electricity Delivery

Service Period	No. of days	Current Reading	-	Previous Reading	=	Total Usage
Feb 25 - Mar 26	29	85896 Actual		85699 Actual		197 kWh
METER NUMBER [REDACTED]		NEXT SCHEDULED READ DATE ON OR ABOUT Apr 29				
RATE <b>Electric SC1 Non Heat</b>						
<b>Basic Service (not including usage)</b>						<b>17.00</b>
Delivery		0.050534	x	197 kWh		9.96
SBC		0.005045	x	197 kWh		0.99
Legacy Transition Chrg		0.002932	x	197 kWh		0.58
RDM		-0.00171	x	197 kWh		-0.34
Transmission Rev Adj		-0.00343	x	197 kWh		-0.68
Tariff Surcharge		3.09278 %				0.84
		3.0 %				0.84
<b>Total Electricity Delivery</b>						<b>\$ 29.19</b>

Basic Service Charge (\$17) will remain.

### Supply Services

#### Electricity Supply

SUPPLIER National Grid

Electricity Supply	0.04129	x	197 kWh	8.13
Merchant Function	0.00187978	x	197 kWh	0.37
ESRM	0.006012	x	197 kWh	1.18
Tariff Surcharge	1.0101 %			0.10
Sales Tax	3.0 %			0.29
<b>Total Electricity Supply</b>				<b>\$ 10.07</b>

A solar electric system will reduce the **electricity supply** that you purchase, *to little or nothing*. All **electricity delivery** charges that are calculated per kWh will also decrease as you reduce your electrical supply consumption.



# Changes to Your Utility Bill



## Before

## After

SERVICE FOR [REDACTED]	BILLING PERIOD May 26, 2016 to Jun 28, 2016	PAGE 2 of 4
ACCOUNT NUMBER [REDACTED]-33103	PLEASE PAY BY Jul 22, 2016	AMOUNT DUE \$ 226.65

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**DETAIL OF CURRENT CHARGES**

**Delivery Services**

**Electricity Delivery**

Service Period	No. of days	Current Reading	-	Previous Reading	=	Total Usage
May 26 - Jun 28	33	98814 Actual		97398 Actual		1416 kWh

METER NUMBER [REDACTED] NEXT SCHEDULED READ DATE ON OR ABOUT Aug 1

RATE Electric SC1 Non Heat

Basic Service (not including usage)	17.00
Delivery	0.04758 x 1416 kWh = 67.37
Incr State Assessment	0.00078 x 1416 kWh = 1.10
SBC	0.006686 x 1416 kWh = 9.46
Legacy Transition Chrg	-0.000423 x 1416 kWh = -0.60
RDM	-0.00004484 x 1416 kWh = -0.06
Transmission Rev Adj	-0.00407 x 1416 kWh = -5.76
Tariff Surcharge	2.04082 % = 1.81
Sales Tax	4.0 % = 3.61
<b>Total Electricity Delivery</b>	<b>\$ 93.93</b>

SERVICE FOR [REDACTED]	BILLING PERIOD May 26, 2017 to Jun 27, 2017	PAGE 2 of 4
ACCOUNT NUMBER [REDACTED]-33103	PLEASE PAY BY Jul 21, 2017	AMOUNT DUE \$ 47.98

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**DETAIL OF CURRENT CHARGES**

**Delivery Services**

**Electricity Delivery**

Service Period	No. of days	Current Reading	-	Previous Reading	=	Total Usage
May 26 - Jun 27	32	99048 Actual		99061 Actual		-13 kWh

METER NUMBER [REDACTED] NEXT SCHEDULED READ DATE ON OR ABOUT Jul 31

RATE Electric SC1 Non Heat

Cumulative Credit	-1119 kWh
Net Metered	-13 kWh
New Cumulative Credit	-1132 kWh
Anniversary Month	3
Basic Service (not including usage)	17.00
Tariff Surcharge	2.04082 % = 0.35
Sales Tax	4.0 % = 0.69
<b>Total Electricity Delivery</b>	<b>\$ 18.04</b>

## Benefits of Owning Solar PV

- **Reduce monthly electric bills**
- “Lock-in” your electric rates and gain **energy independence** (National Grid plans to increase electric delivery costs by 17% over next 4 years )
- Add resale value to your home without raising property tax
- Environmental impact: Reduce pollution with **clean energy**
- **Little to no service/maintenance costs**
- Rooftop solar panels are safe for your roof



# Energy Efficiency Measures



The Rooftop Solar program includes an Energy Efficiency component

- While Solar generates electricity for your home, energy efficiency measures reduce your energy usage.
  - LED light bulbs save money
  - Additional insulation makes your home more comfortable
  - Updated heating systems and hot water tanks can reduce energy costs.
- Start with a free home energy audit.
  - Receive a list of measures to take to reduce your energy bill.
  - Grants available to finance improvements
- Solar plus Energy Efficiency equals a more comfortable home and real savings!



## Rooftop Solar Eligibility Requirements

The grant covers 100% of the cost of installing Solar Panels

- Earn less than 80% area-median income (see below)
- Own your home in Sheridan Hollow, Arbor Hill, or South End
- Sign up for a free energy audit by NYSERDA

### Maximum Income Guidelines for Albany County

Household Size	1	2	3	4	5
AHP Solar Grant	\$54,350	\$62,100	\$69,850	\$77,600	\$83,850



## Eligibility for Additional Resources

- **Assisted HPwES** is a **discount of 50%, up to \$5,000** of approved energy efficiency project costs (NYSERDA)
- **EmPower** will **pay for 100% approved energy efficiency project costs, up to \$10,000** (NYSERDA)
- **Energy & Home Improvement Grant** will **cover the balance** of project costs, and can address repairs that NYSEDA won't, like **fixing your roof** to be solar ready (NYS Affordable Housing Corporation)

### Additional Grant - Income Guidelines for Albany County

Household Size	1	2	3	4	5
NYSEDA - Assisted HPwES	\$50,350	\$57,550	\$64,750	\$76,752	\$89,040
NYSEDA – EmPower	\$29,928	\$39,144	\$48,360	\$57,564	\$66,780
Energy & Home Improvement Grant	\$54,350	\$62,100	\$69,850	\$77,600	\$83,850



## AHP Program Steps

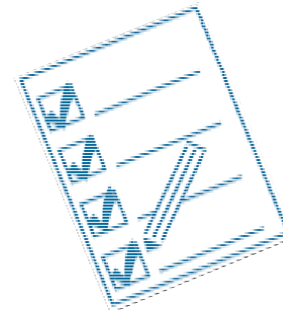
We guide you every step of the way!

- Apply with Susan by submitting required documents to determine eligibility: [scotner@ahphome.org](mailto:scotner@ahphome.org); 518.434.1730 x 403
- AHP will use this information to complete the applications for your review and signature.
- Energy audit will be scheduled and applications for financing submitted. A proposal for energy work will be provided and financing options reviewed.
- Kasselmann Solar will handle all aspects of solar, from assessing your home to installation.



## Required Documents

- Copy of your **deed**
- Copy of recent **utility bill** (all pages)
- **Proof of household income** for all non-students over 18
  - Most recent Federal Tax Return (please sign)
  - W2s from most recent tax year
  - Two most recent Pay Stubs
  - If applicable:
    - Benefit Letter(s) (social security, HEAP)
    - Business or Rental Profit & Loss Statement, etc.
- You may be asked to provide **proof of assets**
  - Statements for Checking, Savings, Certificate of Deposit, Stocks, Bonds, Investments, value of property owned ***other than*** primary residence, vehicle.





## Solar Steps with Kasselmann Solar

- Site Assessment



- Our Site Assessor will need access to the exterior and interior of your home.
- Information from the site assessment is required to finalize your solar design.
- Our solar design team reviews the information & we will request your approval before moving to the next step.



- Financing & Incentives

- Once you approve of your final solar design, we reserve your Affordable Solar Incentives and any other funds granted through AHP Rooftop Solar Grant Program to finance your solar installation.



- Permitting & Utility Approval

- Once you approve your final solar design, we apply for any permits and utility approvals required.
- Your Project Manager at Kasselmann will make sure all of the permitting and utility paperwork proceeds smoothly.





## Final Program Steps with Kasselmann Solar

- Installation



- A crew of electricians and a crew of solar installers will work together.
- The electricians will scout multiple ways to run the circuits for the best aesthetics and request your approval before beginning work.
- By the end of the day the electricians and solar installers will have your system ready for inspection!

- Activation



- Activation is when we cross the finish line and turn your system on!
- Your Kasselmann Project Manager will schedule an electrical inspection of the system and receive permission to operate from your utility.
- Once we are ready to turn the system on, your Project Manager will show you how it works, and create an online account for you so you can monitor your system through our smartphone app or website!



# AHP Rooftop Solar Grant Program

## Contact Information

Susan Cotner – AHP Homeownership Center

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Kasselman Solar

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