

SolarHomes

Installer Guidelines

Dave Corning P.Eng CEM CMVP

SolarHomes Manager

SolarHomes Installer Guidelines

- Design
- Process
- Documentation
- Solar assessment
- Eligibility
- Approved Solar Installer Criteria

What is SolarHomes?

- It is an incentive program for solar photovoltaic systems!
- Key program details include:
 - For residential single-family properties
 - Rebate is currently \$1 / Watt [of installed DC capacity] (up to a max of \$10k or 40% of project cost, whichever is less) for both grid-tied and off-grid systems
 - Pre-approval is required
 - Working with an ENS Approved Solar Installer is required

How does the program work?

Step 1

Review program details, obtain quotes from approved installers, and make decision to proceed

Step 2

Have your chosen installer submit the SolarHomes Pre-approval Application.

Step 3

Once approved, proceed with your installation. Your installer will take care of navigating you through the net-metering process and required electrical and building permits.

Step 4

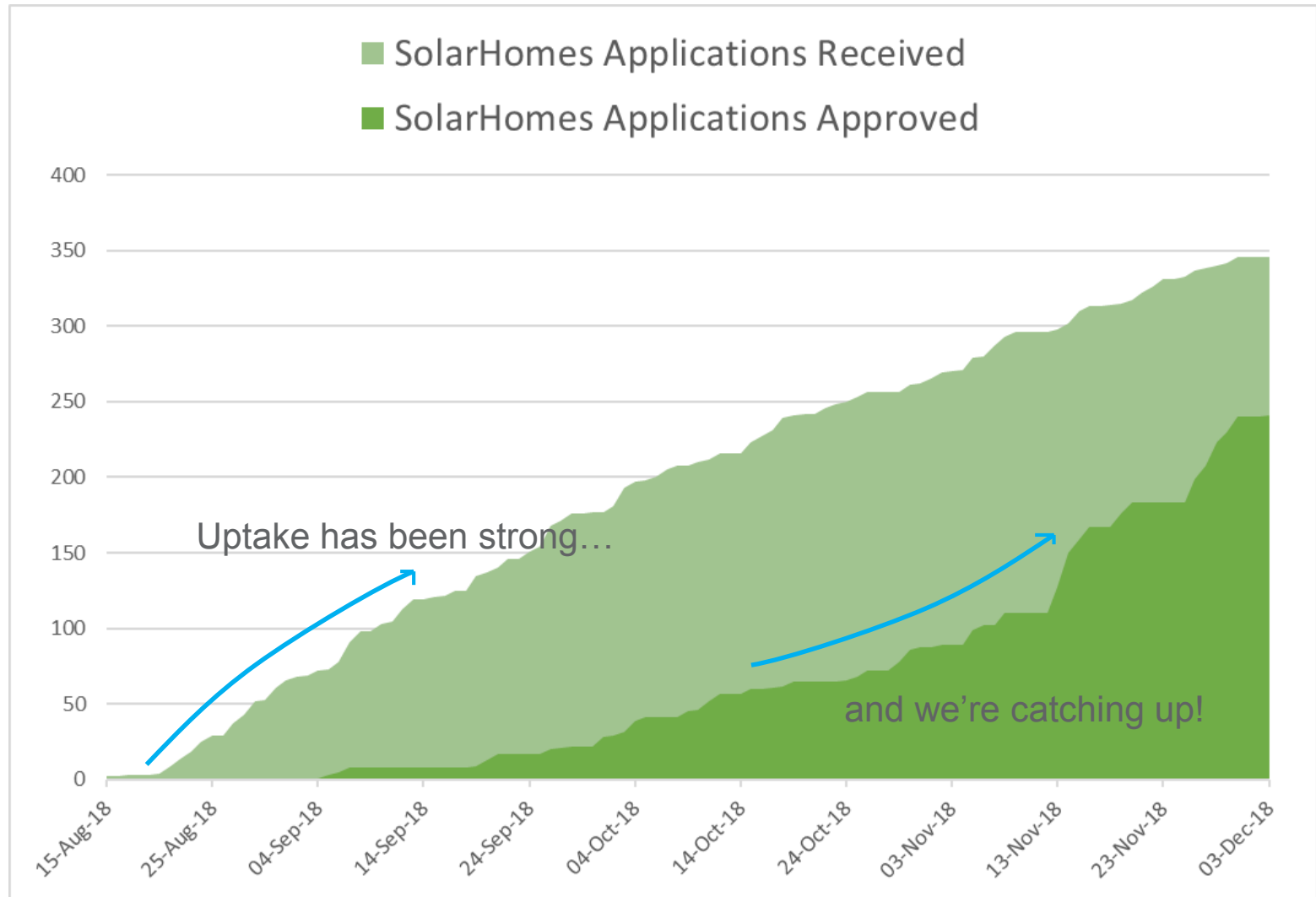
Once installation and final electrical inspection have been completed, your installer will submit the SolarHomes Rebate Application.

Program Design

Efficiency NS designed the program to be *simple for the homeowner to take part*

There are only two touch points for each project (pre-approval and rebate applications), and you the installer play a strong role in helping them complete and submit their applications.

We do recognize there have been some growing pains and we're open to program improvement ideas.



Pre-approval Documentation

Pre-approval Application

The purpose of this application is to demonstrate that an eligible system is being proposed, by an eligible approved installer, on an eligible property. It also serves as a mechanism to reserve the approved rebate amount for that particular client, and allows for a 3rd party review of the project information provided to clients.

This should be completed at the same time the net metering application is completed for a client. Both forms require a client signature, so doing both concurrently helps to ensure the information is correct and matches on both forms.

Documentation to be included can be found on the application...

Pre-approval Documentation

Additional Information

All additional information listed below must be provided with this application in order to receive approval for a rebate. Please confirm the criteria below and provide additional details where necessary:

- The participant has reviewed Efficiency Nova Scotia's site guideline recommendations (efficiencyns.ca/solarhomes) and agrees that the property and home is suitable for a solar PV installation.
- A quote for the proposed system is included with this application, and the system meets all requirements specified in this application.
- Photos of the proposed system location are included with this application, showing an unobstructed view of the roof and its surroundings.
- A solar production analysis report is included in this report, and meets requirements detailed in this application.
- A copy of the completed Net-Metering Interconnection Request and Equipment Information Form (ICR) and supporting documentation are included with this application.



Enjoy the good things
efficiency brings.



ENS-00000-V1



Rebate Documentation

Rebate Application

This application verifies that the system installed was the one being proposed, that it was actually installed on the given property, and helps to verify that the client has received and paid for the system.

There is a mechanism to have the rebate paid directly to you the installer with consent from the property owner.

Documentation to be included can be found on the application...

Rebate Documentation

Send in the rebate application package

Please check the boxes to confirm that all of the items below are included with this application:

- Final invoices with the following information: Installer name(s), address(es), phone and invoice numbers; purchaser name and address where installed; date of purchase; manufacturer make(s) and model number(s) and quantities; and a breakdown of eligible system costs (separating equipment and installation costs). Note - Efficiency Nova Scotia's rebate will not increase by more than 5% of the approved quote.
- Photos of the installed system (mounted system showing all panels, inverter(s))
- Copy of passed final building inspection (where applicable)
- Copy of final electrical inspection
- Copy of participant signed Interconnection Agreement (for grid-tied systems)

Solar Assessment

Its really important that the public knows what it is they are buying into.

Its unfortunately easy to overstate the benefits of a proposed system.

Whatever tool used, *make sure the production estimate is realistic for Nova Scotia.*

It would be great if the industry as a whole used consistent terms when selling solar systems and their benefits. And you should always state your assumptions.

Solar Assessment

- kWh/year (describes the size of the system)
- First year savings (in \$, at \$0.153/kWh) is probably the most useful accurate number to use to describe financial benefits
- \$/Watt project cost (describes cost effectiveness of the proposed system)
- kWh/kW (describes how much sun falling on that site is being converted into electricity. Most of Nova Scotia is in the 1050-1150 kWh/kW range)
- Lifetime return on investment or rate of return can be a useful metric as well but its very prone to the assumptions being used (RECOMMENDED ASSUMPTIONS: 25 year life, 2-3% estimated rate increase, and a -0.5% production decrease on the modules)

- Eligibility Criteria

- Residential single family dwellings

- Single detached (includes mobile homes on permanent foundations), semi-detached, and row housing
 - No commercial properties
 - No MURBs, (including electrical accounts providing service to multiple rentals)

- Approved Solar Installer criteria
 - The last thing we want to see is low quality workmanship, or worse, people being unsafe and getting injured or killed, or roofs collapsing or houses burning down. Solar PV installations is serious business.
 - Quality of work and safe work practices are vitally important to us, but also to the industry as a whole.
 - We'll be rolling out quality assurance activities through 2019

Thank you for your time!

Feel free to reach out any time with questions or feedback.

Dave Corning
SolarHomes Manager
dcorning@efficiencyns.ca