

10<sup>th</sup>  
Annual

Open-House Tours

10am – 4pm

2-Solar Grid-Tied

1-Commercial Solar

1-Solar + Wind Sys

# PALMER Alaska Solar Tour

August 18, 2018

Tour Schedule

Timothy Oliver

Tour starts at 10am- TBA

World's largest grassroots solar event is coming to town

Map of sites coming soon at [www.AlaskaSolarTour.org](http://www.AlaskaSolarTour.org)

**Welcome to the PALMER Alaska Solar Tour!!!** You are invited to join the largest grassroots solar event in the USA... **to be Inspired!!!** ...and to see first-hand how **many folks in Palmer, AK** are **harnessing the power of the sun and other renewable energies, saving money, creating jobs, and changing the world by living sustainably.**

The **tour is FREE** & no registration is required. Please get a car load of friends and drive around on this **semi-guided tour**, and limit your visit to the time slot listed for privacy of the site owners and in appreciation for opening their doors to us. Please also be respectful of private property and stay within designated parking & walking areas.

This **educational service** is brought to you by **members of our community, Alaska Solar Tour; (AST), American Solar Energy Society (ASES),** and company donation listed below.

**It's AST's 10<sup>th</sup> Anniversary with ASES 23<sup>rd</sup> Annual National Solar Tour.**

To learn more check out the resource page in the back and or go to [www.AlaskaSolarTour.org](http://www.AlaskaSolarTour.org)



# Public Etiquette

If you will be attending the **2018 Palmer Alaska Solar Tour**, please read the tour etiquette for the Public's Expectations and Responsibilities below. Please remember we have been cordially invited into local homes & businesses, so please be careful, respectful, and responsible:

*Please only visit Tour sites during the tour day and hours specified by the local host.*

*Please, if the site indicates "Outside viewing only" please do not go onto the property.*

*Please follow all laws, park safely & legally, and treat persons and property respectfully.*

*Please do not bring others who may not be able to behave in a proper manner (kids welcome).*

*Please do not smoke or litter on the tour sites. Remove footwear if asked when entering a home.*

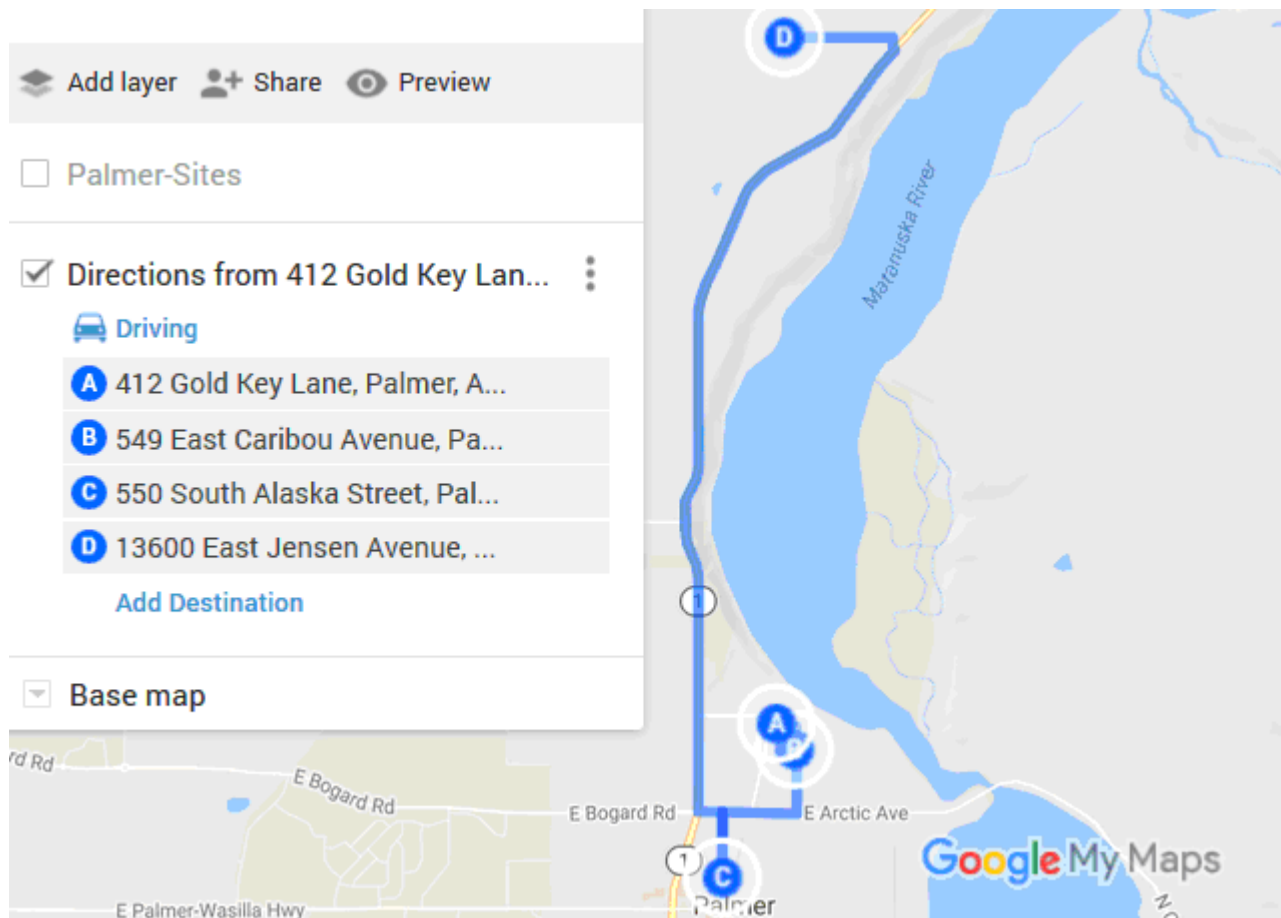
*Please be careful. Anyone accessing sites on the roof, or by ladder, stairs, stepladder, stool, or other method does so solely at their own risk. Visitors assume full responsibility for their behavior or actions. Tour hosts or related parties will not be held liable for any injury, fatality, damage or property loss that may occur.*

*Please expect guides, installers, and representatives who staff tour sites to answer questions to the best of their ability & conduct the tour in a manner appropriate to our educational mission.*

*Please be assured in the event of inclement weather the tour will still go on, though individual property owners may opt to limit access to site areas or close entirely, in which case we wouldn't be able to warn you.*

*Please remember neither, community members, installers, Alaska Solar Tour, or ASES, nor any sponsor endorses specific technologies, companies, products, or methods presented during this tour, even though they might offer suggestions to questions.*

**Please enjoy yourself, and contact us with any questions or comments. Triena 907-830-0775**



# 2018 Palmer Alaska Solar Tour Schedule

Please start at the first one on this guided tour, as each place is only open about an hour or so. Visit them all or just a few, it's up to you. Each site will only be open during the time slot listed though the tour itself is 9am-5pm. Site hosts and company installers will be there to answer your questions and show you their pride and joy.

Please read the **AST Public Etiquette Rules** for the Tour, follow them, learn lots, and have maga amounts of fun.

Join us for coffee & sweets at 945am at the 1<sup>st</sup> site, and 12pm at the 3<sup>rd</sup> site for Refreshments

## ☼ **A. 1000-1100am 2+kW Grid-Tied Home**

**412 Gold Key Ln** (*Park in driveway or Gold Key Ln*)

- Designed & Installed by Renewable Energy Systems of Alaska 2017
- 2.28kW Roof-mount Solar System - Grid Tied
- 8-285W Canadian Solar Mono crystalline Solar Modules
- 8-Enphase - IQ6PLUS Microinverters
- 1-Iron Ridge aluminum roof racking with S-5 Protea Brackets for metal roof mounting
- Designed to create 1,960 kWh/year energy savings
- ROI (Return On Investment) estimated ~ 10yrs



## ☼ **B. 1100-1200pm 3+kW Grid-Tied Home**

**549 E Caribou Ave** (*Park in school parking lot across the street*)

- Designed & Installed by Renewable Energy Systems of Alaska 2017
- 3.24kW Roof-mount Solar System - Grid Tied
- 12-270W Canadian Solar Mono crystalline Solar Modules
- - Enphase - S280 Microinverters
- 1- Unirac aluminum roof racking with Quickmount flashing for asphalt shingle roof mounting
- Designed to create aprx \$2,440/yrly savings
- ROI (Return On Investment) estimated ~ 11yrs



## **LUNCH & SPEAKER in Turkey Red Banquette Rm**

550 S Alaska St #100 Palmer, AK

**1200-1210pm** Join us for **Lite-Lunch** ½ sandwich, fruit & Salad to hear 2 presentations  
***SPECIAL THANKS to TURKEY RED for Hosting & Feeding US***

**1210-1245pm PRESENTATION: *Solar Energy Basics 101***  
by Mark Haller from Renewable Energy Systems of Alaska

**1245-115pm PRESENTATION: *Ask An Installer -1/2 hr Q&A***  
Panel of Installers on the Tour will answer your questions

⚙️ **C. 115-215pm Non-Penetrating Roof Commercial**  
**550 S Alaska St #100** (Turkey Red - Downtown Palmer)  
Refreshments Served

- Designed & Installed by Arctic Solar Ventures Corporation
- 14.4kW Commercial Rooftop Solar PV
- w/ a fully ballasted (no roof penetrations) racking system.
- USDA REAP grant awardee.
- Saves client \$70,000 over first 10-years.
- Estimated 6 year payback



⚙️ **D. 230-330pm 18.5kW Wind & Solar Home**  
**13600 E Jensen Ave** (Off Soapstone Rd)

- Designed & Installed in 3 Phases by Susitna Energy Systems
- 18.5kW Total Power from Wind & Solar Grid-Tied
  - 12-325W SolarWorld Panels w/EMI 4/12 roof-mount-2018
  - 12-325W SolarWorld Panels w/EMI 4/12 roof-mount-2017
  - 15-325W SolarWorld Panels w/EMI wall mount ((2017)
  - Skystream 3.7 Wind Turbine w/nominal power (2016)  
on 70' Sectional Monopole w/ Concrete Foundation
  - 12-285W SolarWorld w/EMI onPV Tracker (2016 by Lime Solar)
- Infloor Hydronic Heating
- Biomass Hydronic Boiler (heat+Domestic HW)
- PassivHaus -South Face w/Overhangs
- Total Production from beginning of Install



Year	Power	Location	Watthours	In Service	= Power Generation
2018	- 3.9kW	Shed Roof	- 379kWh	- 1 month	= 379kW/mon
2017	- 3.9kW	Barn Roof	- 3,574kWh	- 13 months	= 274KW/mon
2017	- 4.9kW	Barn Wall	- 2,976kWh	- 13 months	= 228kW/mon
2016	- 2.4kW	WindTurbine	- 1,190kWh	- 25 months	= 47.6kW/mon
2016	- 3.4kW	PV Tracker	- 6,472kWh	- 27 months	= 239kW/mon

# Palmer Alaska Solar Tour SPONSORS



## Alaska Solar Tour

14371 W. Hollywood Rd  
info @alaskasolartour.org  
907-830-0775 [www.alaskasolartour.org](http://www.alaskasolartour.org)

**Alaska Solar Tour (AST)** is a local project created by Alaska Center for Appropriate Technology, a local non-profit educational corporation created in 1993 in Wasilla, AK. Phil St. John and Andy Baker, members of ACAT read about ASES National Solar tour and set out to join with AST first tour in 2009. It is now our 10<sup>th</sup> year anniversary doing it. We have helped 9 different communities and many many sites over the years. A couple hundred people visit them every year. You can read about past solar tours in our Archived Files on each community page, from a 2 panel remote cabin, to a 3 bedroom urban electric solar-direct net metering home with an electric car and electric car plug in. This year for our 10<sup>th</sup> year Anniversary we hope to have more communities and many more sites, and add a few new things to our website, like an interactive forum, and a self fill inform for those wanting to share their system without being on a physical tour whether its a remote cabin or just shy. Please check us out at [www.AlaskaSolarTour.org](http://www.AlaskaSolarTour.org)



Alaska Center for Appropriate Technology  
643 S Lower Rd, Palmer, AK  
info @acat.org  
[www.acat.org](http://www.acat.org)

**The Alaska Center for Appropriate Technology (ACAT)** is a 501(c)(3) non-profit educational corporation chartered in 1993 to promote research and education for Alaskans in sustainable economic development. ACAT is committed to promoting technological advances that can provide both rural and urban communities with diverse, sustainable economies to support future generations. To make educated choices about their future, people need to know what alternatives are available, and the implications of those alternatives. ACAT continually strives to demonstrate how appropriate technology can be applied to promote sustainability, diversify Alaska's economy, and protect the environment.



National Solar Tour  
National Company  
crixham @ases.org  
[www.ases.org/national-solar-tour/](http://www.ases.org/national-solar-tour/)

**National Solar Tour** the largest grassroots solar event in the nation, involving about 150,000 participants and 5,000 solar energy sites nationwide. It offers the opportunity to informally tour innovative green homes and buildings, and see how solar energy can be used efficiently. The tour hopes to inspire people across the nation to make sustainable energy choices that reduce costs, support energy independence, protect against power outages, and reduce carbon emissions. This is a chance to see affordable and practical technologies, in your neighborhood, that benefit the environment and are part of the solution to our nation's energy problems. If you are considering solar energy, please consider visiting a business or resident participating in the National Solar Tour to learn more.



American Solar Energy Society  
National Company  
info @ases.org  
[www.ases.org](http://www.ases.org)

American Solar Energy Society established in 1954, is a 501(c)(3) non-profit that advocates for sustainable living and 100% renewable energy by sharing information, events and resource to cultivate community and power progress. We Integrate the perspectives of science, industry, policy and citizens. We believe knowledge and community re a powerful combination for change. Our members look to us to sustain the culture required to achieve a 100% renewable energy future. Through our programs, Solar Today Magazine, ASES Solar Conferences, and ASES National Solar Tour, we engage individuals, businesses, and partnering groups to advance these possibilities.



Solar United Neighbors  
National Company  
info @solarunitedneighbors.org  
[www.SolarUnitedNeighbors.org](http://www.SolarUnitedNeighbors.org)

"Solar brings people together," said Anya Schoolman, Solar United Neighbors Executive Director. "We're excited to partner with ASES to expand the reach of this great opportunity to learn about solar." ASES is the nation's leading association of renewable energy professionals and advocates. Solar United Neighbors helps people go solar, join together, and fight for their energy rights. It helps thousands of people go solar every year through bulk purchases known as "solar co-ops" as well as through a paid membership programs. Members receive on-going support for their solar system, discounts to businesses that have solar, and join a community of solar supporters to ensure their investment in solar is protected.

# Palmer Alaska Solar Tour INSTALLER SPONSORS



Arctic Solar Ventures Corp \*\*  
2000 W Int'l Airport Rd #B3  
company @arcticsolarventures.com  
907-268-4188 [www.arcticsolarventures.com](http://www.arcticsolarventures.com)

**Arctic Solar Ventures** (ASV) founded by lifelong Alaskan, Stephen Trimble in 2015, specializes in grid-direct solar photovoltaic (PV) systems and solid-state battery storage for homes, businesses, and utilities. ASV has built 500kW of grid-direct solar PV systems and was named a Top Solar Contractor in the United States by Solar Power World Magazine in 2018.

ASV is a Certified B-Corp (Triple Bottom-Line business) and a Co-Owner of the Amicus Solar Cooperative.



Renewable Energy Systems of AK \*\*  
145 W Dimond Blvd, Anchorage  
info @arcticak.com  
907-561-7941 [www.renewablealaska.com](http://www.renewablealaska.com)

**Renewable Energy Systems of Alaska** had its start-up back in 1998. Since then a new owner took over in 2014, continuing its success in Anchorage & expanding to Fairbanks. RES has established itself as the first solar store front in Alaska that stocks everything it sells, including off-grid equipment & grid-tied equipment. As our own contractor we perform & install either system from start to finish; from the simplest to the most complex; residential or commercial. We have multiple service vehicles at both locations, trained & certified solar installers, on staff electricians, sales & design staff. We stock off-grid inverters, batteries, RV products, grid-tie inverters, solar panel mounting solutions, wind turbines, & virtually everything necessary for any renewable energy application. We are doing our part supporting the industry, between the two stores; and minimizing our carbon footprint using over 40kW of solar panels on our own buildings; which also saves on our electrical energy expenses! RES is the Go-To business in Alaska for every aspect of any renewable energy project you may have!

\*\* These companies help supply the yummy foods that you enjoy during this tour. Please remember to thank them. Thank you.

## RESOURCES

Alaska Center for Energy and Power  
Alaska Energy Authority  
Alaska Energy Efficiency  
Alaska Craftsman Home Program  
Alaska Housing Finance Corporation  
Cold Climate Housing Research Center  
Renewable Energy Alaska Project  
RIC AHFC  
The Alaska Center  
USDA -Energy  
US Dept of Energy  
US Dept Energy -NREL  
DSIRE (Databases for Funding)  
DSIRE -AK



907 Solar  
17599 W Lesser Canada Dr, Big Lake  
coley@907solar.com  
(907) 302 2372 [www.907solar.com](http://www.907solar.com)

**907 Solar** is a Renewable Energy company located in Wasilla. The Owner, Coley Foster has a 2 year Renewable Energy Degree from UAA, and has been designing & installing power systems for 6 years after retiring from Army. He opened a shop in Wasilla in 2017, conveniently located near customers. All of our staff & installers live Off-Grid, so we have real life experience using what we sell. We can design & install any size off-grid and grid-tie system. One of our grid-tie systems is the 5th largest connected to MEA! We stock a full line of off-grid and grid-tie inverters, solar panels, batteries, charge controllers, generators, and much more. We are able to assist you with any type system from Weekend Cabin to full size commercial grid-tie.



Susitna Energy \*\*  
2507 Fairbanks St, Anchorage  
info@susitnaenergy.com  
907-337-1300 [www.susitnaenergy.com](http://www.susitnaenergy.com)

**Susitna Energy** systems is dedicated to the idea of energy independence, not just for our nation as a whole but for each and every Alaskan community and individual. We strive each day to find the best renewable energy and off-grid solutions for our customers as well as offer reliable and affordable heating alternatives. In an ever changing economy we understand that to our customers need to feel confident that they are getting the best value for their investment, so it is our goal to help them make the best decisions possible by providing them with the knowledge necessary to make informed decisions. We not only sell these products, but because some of our staff live and work off-grid, Susitna Energy Systems is uniquely qualified to offer real world advice and share real experiences that we have faced when challenged by the divergent climate here in Alaska.

[www.uaf.edu/acep](http://www.uaf.edu/acep)  
[www.akenergyauthority.org](http://www.akenergyauthority.org)  
[www.akenergyefficiency.org/](http://www.akenergyefficiency.org/)  
[www.achpalaska.com/homeowners](http://www.achpalaska.com/homeowners)  
[www.ahfc.us](http://www.ahfc.us)  
[www.cchrc.org](http://www.cchrc.org)  
[www.realaska.org](http://www.realaska.org)  
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<http://www.dsireusa.org/resources/>  
<http://programs.dsireusa.org/system/program?state=AK>