# **2012 Peninsula Solar Vendor Directory**



### **American Sun Electric**

www.americansunelectric.com

Terry Wessel 224 Pleasant St. Blue Hill, ME 04614 (207) 374-5263 phone

Products: Full commercial and residential electrical services, Solar PV equip., system design and installation, solar power trailer rental

#### **ReVision Energy**

www.revisionenergy.com

Jennifer Albee 91 W. Main St Liberty, ME 04949 (207) 589-4171 phone

Products: Grid-tied Solar PV and Solar Thermal design, installation and service



### Penobscot Solar Design

www.penobscotsolar.com

Daryl Dejoy 615 Black Ridge Rd Penobscot, ME 04476 (207) 326-0779 phone

Products: Design, sales and installation of solar electric systems since 1988

### **Sundog Solar Store**

www.SundogSolarStore.com

Chuck Piper 18 East Main St Searsport, ME 04974 (207) 548-1100 phone

Products: Sales and installation of solar electric, solar hot water and heat pump systems. Wagner Solar, Stiebel Eltron, Sun Earth, MAGE Solar, Magnum Energy

### Solarmarine, LLC

www.solormarine.com

David Coomer 498 Varnumville Rd Brooksville, ME 04617 (207) 326-8016 phone

Products: Solar PV and Solar Thermal design, installation and service

# Solar Market

Talmage Solar Engineering, Inc

www.solarmarket.com

Naoto Inoue 25 Limerick Rd Arundel, ME 04046 (207) 985-0088 phone

Products: Solar PV design and installation

### Solartechnic Contractors, Inc.

www.solartechniccontractors.com

Clayton Cole 234 W. Corinth Rd Corinth, ME 04427 (207) 285-7886 phone

Products: Solar hot water & space heating, radiant heat, pellet, wood boiler

# Help promote smart energy solutions for Maine!

Share your successes or challenges with energy efficiency or renewable technology so we can all learn.

Or tell us about a vendor or installation that we should add to this guide.

Contact Claudia Lowd at (207) 581-4523 or CleanEnergy@MaineRural.org.

Find more energy resources you can use at www.MaineRural.org.
Or, for inspiring stories from Mainers who've used ingenuity to
power their lives visit www.MaineRural.org/InspireME

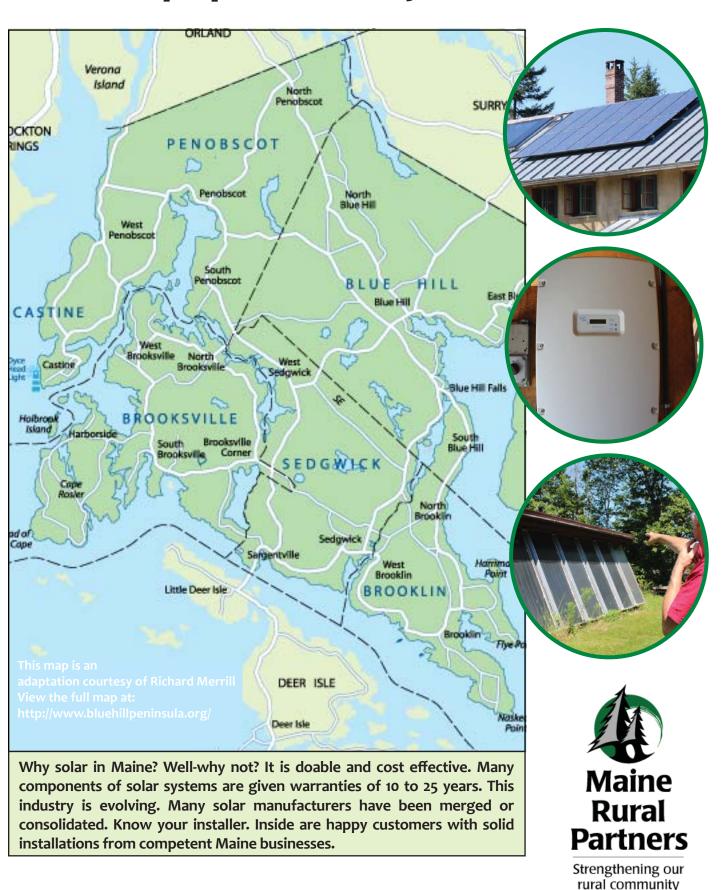


The information in this guide was provided by customers, manufacturers and installers. Perform due diligence before making any final decision. Maine Rural Partners neither represents nor endorses any manufacturer, product or vendor.

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# Solar Equipment Buyers' Guide 2012





Just starting out with solar? Here's a basic explanation, followed by six featured installations from your neighbors here on the Peninsula.

## Photovoltaic = Electricity

PHOTOVOLTAIC (PV) PANELS are connected into an unshaded array which creates electricity when the sun hits them. Solar energy is created as DC (direct current) but our homes use AC electricity (alternating current). That is why you need an INVERTER to change (or invert) the power from DC to AC. If you want to be more energy independent and go beyond grid-tied, you can store the power with BATTERIES. This makes the system more expensive and increases maintenance.



# **Conergy Photovoltaic Panels**

www.revisionenergy.com

**Approximate Cost:** \$5,000 installed with rebate and tax credit (2010)

**Specs:** 1.8 kW grid tied system

**System:** No battery back up, uses microinverters

**Additional Information:** Paired with a previously installed 1.8 kW wind turbine, the system generates 70% of the household electricity needs. The PV array installed by Revision Energy, produces more than the wind turbine.

Featured Installation: Home of Ron Poitras, Surry



### Trace Inverter

(now known as Xanthrex Trace from Schneider Electric)

www.solormarine.com

Approximate Cost: \$2,500 installed

Specs: 2400 Watt 24 volt

**System:** Part of a system bought at the Belfast Green Store in 1999. **Additional Information:** Originally sold as a power panel which included two inverters, a charge controller, and a voltage regulator. All three are needed for an off-grid or grid-tied-with-battery system.

Featured Installation: Kimball Petty and Deb Marshall, Little Deer

Isl



# **Deka Battery Backup System**

www.solarmarket.com

**Approximate Cost:** \$500 each found online

**Specs:** DEKA AGM, 12 volt 245 AH

**System:** These are AGM (absorbed glass mat) suspended electrolyte deep cycle batteries.

**Additional Information:** In place since 2005 without any problems. See the nice insulated box that is being used outside the home. This system has a grid tie plus a battery back up. A true hybrid system.

Featured Installation: Dick & Gail Bartlett, Kingdom Bikes, Blue Hill

### Solar Thermal = Hot Water

**SOLAR THERMAL** is hot water that is made in either **FLAT PLATES** or **VACUUM (EVACUATED) TUBES**. All solar hot water systems in Maine use food grade antifreeze. Evacuated tubes are very efficient – so efficient that you may need to go outside and wipe the snow off them. Flat plates are hot to the touch so they lose this energy to the atmosphere. The snow just melts off. You will make more hot water in the summer than in the winter. Summer camps, car washes, dairies and laundromats all use lots of hot water in the summer.



### **Sundra Evacuated Tubes**

www.sundasolar.com

**Approximate Cost:** \$1,500 for panels, \$6,000 entire system installed

**Specs:** Sunda Seido 24 tubes with a 80 gallon storage tank

**System:** Originally this system had a photovoltaic panel running the pump. That panel kept getting snow on it and stopping the pump. The system is now wired to a 110 volt pump with no more issues.

**Additional Information:** Furnished by Talmage Solar Engineering/ SolarMarket of Arundel who now exclusively installs PV systems.

Featured Installation: Dick & Gail Bartlett, Kingdom Bikes, Blue Hill



# Wagner Solar Flat Plate Collector

www.sundogsolarstore.com

**Approximate Cost:** \$4,950 installed with rebate and tax credit (2012)

**Specs:** (2) 4ft by 7ft collectors and an 8o gallon tank

**System:** This solar hot water system provides approximately 70% of the annual domestic hot water needs for the home. It also saved the home owner approximately \$750 off their oil bill.

**Additional Information:** The glycol heat transfer fluid flows through the collectors to melt snow and ice that may accumulate. This insures better production numbers throughout the winter.

**Featured Installation:** Home of Tom & Kim Curry, Brooklin



# **Holding Tank**

www.solormarine.com

**Approximate Cost:** \$30,000 for entire solar thermal system installed

**Specs:** 500 gallons (two tank system)

**System:** Installer now recommends American Solar Technics storage tanks, previous manufacturer out of business.

**Additional Information:** It is a supplemental system to the Buderus boiler. Installed in 2006, system has 8 evacuated tube panels. Snow can collect on tubes because of roof design. Uses well water.

**Featured Installation:** Blue Hill Laundry