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Granite State Solar, LLC  
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Bow, NH 03304  
603.369.4318  
A Little Bit About Granite State Solar

- GSS was founded in 2008
- GSS is owned by Alan Gauntt and Erik Shifflett as a 50/50 partnership
- We have 24 full-time employees – who receive great pay and benefits including health insurance paid at 100%
- We do not subcontract any work – all work is performed by in-house staff
- We own all of our trucks, tractors, and everything we use for our work
- We are not encumbered by any investors or bank loans – therefore we are free to run this company in alignment with our values
  - We must always do what we say we will do
  - We must always put the best interests of our clients FIRST and FOREMOST 100% of the time
Benefits of Purchasing Solar

• New and old homes benefit equally from solar investment – with added home equity that is not taxed in all towns and cities in NH (but you need to check with your town and you may have to complete a exemption form!)

• Solar can drastically reduce electricity bills, immunize consumers from future rate hikes, and reduce oil or propane purchases by powering heating, cooling and hot water systems

• Investing in solar usually results in savings that start immediately – and savings that will continue for at least 25 years.
Solar Tech 101

• Solar modules (panels) produce DC power
• Inverters convert power from DC to AC to be consumed in a home or business or by the grid (single phase or three phase)
• Solar power is connected to the home or business’ main electrical panel.
• Excess power is sent to the grid through a Net Meter (installed by the utility after solar is installed). Excess power is accounted for by the utility as a monetary credit on monthly bills.
GSS Installs Residential, Commercial and Municipal Solar Photovoltaic Arrays

- Rooftop (Shingle, Corrugated Metal, Standing Seam Metal, Flat Rubber Membrane or Aggregate Ballasted)
- Ground-mount fixed
- Ground-mount trackers
Roof
Fixed Ground
Trackers
Commercial
Municipal
How do I know if my house or property is right for solar?

Roof Mount Considerations

• An ideal roof will face south and have a moderate to steep pitch
• The direction the roof slope faces is called the “Azimuth”. A perfect azimuth is solar south - on a compass in NH, about 194 degrees.
• Obstructions such as chimneys, skylights, vents, and satellite dishes will reduce the size and output potential of the system.
• Triangular shapes (such as hip roofs) also limit useable space.
• Roof shingles should be in good condition. Poor shingle condition warrants roof replacement in advance of solar installation.

Ground Mount Considerations

• Is the trench run feasible? Damaging septic systems is frowned upon.
• Is there access for an excavator?
• Can we maintain property setback requirements?
Products featured for Solarize Kearsarge

Solar panels Hanwha QCELL Q-Peak Duo G5
Rated at 325 watts DC
• 25-year production warranty
• 12-year workmanship warranty

Inverters: Convert DC panel output to 240v AC household power
Enphase IQ7+ Microinverters – 295W AC
• Each solar panel has its own inverter
• Maximum efficiency and minimum voltage loss
• Panel-level monitoring system
• 25 year warranty
Products GSS Uses- continued

- Mounting system for sloped roof arrays
- Black-anodized aluminum and stainless steel
- Rails cut flush – not protruding past panel edges

- Envoy IQ installed and configured for system monitoring by phone, tablet or PC
Products GSS Uses - continued

- Fixed system using earth anchors to achieve 150 MPH wind loads and 80 PSF snow loads

- AllEarth Dual-Azimuth GPS and Computer Controlled Tracker
- Our favorite ground mounted systems
Solarize Kearsarge Goals

• The Solarize concept can significantly lower the overall cost of a typical PV installation by combining the buying power of individuals (“group-buy model”) to achieve lower pricing.

• We hope to meet or exceed 50 installation contracts in the Kearsarge region during the six-week program, which ends May 31st.
Incentives

Tiered Pricing Discounts

Federal Investment Tax Credit (ITC)
- Tax payers will receive a tax credit equal to 30% of the total system cost
- If a consumer does not have enough tax liability to claim the full value of the tax credit in the first year, it can be claimed over multiple years
- GSS provides the proper IRS form and all supporting documents to customers for their tax preparations

Public Utility Commission (PUC) State Rebate
- $1,000.00 State rebate for systems 5kW or larger (while funds last). Systems below 5kW are calculated at $.20 per-watt

Renewable Energy Credits (RECs)
- A REC is generated for each 1,000 kWh of production.
- REC values vary and are currently low, however pending legislation could increase the value of future RECs
Program Timelines

• Sign up for a free site evaluation by May 31st, 2019.

• Sign contract within 30 days of proposal provided by your GSS Solar Advisor.

• GSS submits all required documents: Roof Reports for roof mounted systems, interconnection, permits, state rebate, Certificate of Completion, Knollwood (RECs).

• When permits and interconnection applications are approved, GSS will schedule installation. All Solarize installations are guaranteed to complete within 2019 (no risk of tax credit reduction).
Job Costs

Every job is custom quoted because variables such as actual electricity usage, roof direction, roof pitch, shade, etc... are factored to determine the production of the array...

GSS has worked with our distributors to be able to provide Kearsarge residents with below-market rates that take advantage of the “group buy” or “volume discount” model

What’s included in the pricing quoted on the following page?
• Powerful and efficient modules and inverters with a comprehensive monitoring system
• Great-looking racking and quality workmanship with extra care taken for aesthetics
• Sense Whole-home consumption monitoring system
• No hidden costs. No maintenance fees. Permits, paperwork, etc... all included

All of the above means equity added to your home, immediate energy savings and future electric price stability
## Solarize Kearsarge Pricing

<table>
<thead>
<tr>
<th>System Description</th>
<th>Tier 1: 1-19 contracted installations</th>
<th>Tier 2: 20-49 contracted installations</th>
<th>Tier 3: 50+ contracted installations</th>
<th>Discount Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q-cells 325-watt DC 60-cell modules, (or higher wattage as 2019 product roadmap projects) Rooftop Solar Client-Funded or VSECU Financed, 4,500 watts DC or larger</td>
<td>$2.85/watt</td>
<td>$2.75/watt</td>
<td>$2.70/watt</td>
<td>Rebate paid by check at final walkthrough after final payment has been received by client. If tier is achieved after final walkthrough, a rebate check will be mailed within 60 days of tier achievement.</td>
</tr>
<tr>
<td>Q-cells 390-watt DC 72-cell modules, Nuance Fixed Ground Array 4,680 watts DC or larger (must be installed in multiples of 12 panels)</td>
<td>$2.95/watt</td>
<td>$2.85/watt</td>
<td>$2.80/watt</td>
<td></td>
</tr>
<tr>
<td>AllEarth Series L-20 Dual-Azimuth Ground-mounted tracking system with Q-cells 390-watt DC 72-cell modules, SolarEdge SE7600H RGM inverter and P-400 Optimizers</td>
<td>$31,500</td>
<td>$31,000</td>
<td>$30,500</td>
<td></td>
</tr>
<tr>
<td>Sonnen Installed Pricing: Eco-10. Add $2,000 for each step-up in system size, (Eco-12, Eco-14, Eco-16)</td>
<td>$16,250</td>
<td>$16,000</td>
<td>$15,750</td>
<td></td>
</tr>
</tbody>
</table>
# Solarize Kearsarge Pricing

<table>
<thead>
<tr>
<th>Pricing:</th>
<th>Solarize Kearsarge Pricing Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar Production Panel-Level Monitoring System</td>
<td>Included</td>
</tr>
<tr>
<td>Revenue-grade meter (eversource) or revenue meter socket (as required by NHEC)</td>
<td>Included</td>
</tr>
<tr>
<td>PowerDash 10-year pre-paid subscription (3rd party REC reporting monitor as required by NH PUC for systems selling RECs)</td>
<td>Included</td>
</tr>
<tr>
<td>SENSE whole-home consumption monitoring system</td>
<td>Included</td>
</tr>
<tr>
<td>Membership in NESEA</td>
<td>Included</td>
</tr>
<tr>
<td>Building and Electrical Permit Fees</td>
<td>Included</td>
</tr>
<tr>
<td>Roof Reports (PE Stamps)</td>
<td>Included</td>
</tr>
<tr>
<td>Interconnection Application</td>
<td>Included</td>
</tr>
<tr>
<td>State PUC Rebate Application</td>
<td>Included</td>
</tr>
<tr>
<td>Town Inspection / Exhibit B Submission</td>
<td>Included</td>
</tr>
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## Solarize Kearsarge Pricing – Cost Adders

<table>
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<tr>
<th>Cost Adders</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roof arrays under 4,500 watts DC</td>
<td>Add $0.10/Watt DC</td>
</tr>
<tr>
<td>Trenching for Roof Arrays (Between a house and a detached garage for example)</td>
<td>$9.00/foot</td>
</tr>
<tr>
<td>Trenching over 200' for ground arrays</td>
<td>$9.00/foot for each foot over 200</td>
</tr>
<tr>
<td>Roof Vent Pipe Relocation</td>
<td>$700.00 - performed by subcontracted licensed plumber</td>
</tr>
<tr>
<td>In Person Engineering Visit for complex PE stamp</td>
<td>$500.00</td>
</tr>
<tr>
<td>Supplimental Review Fee, charged by Eversource for systems over 10,000 watts up to 30,000 watts</td>
<td>$125.00</td>
</tr>
<tr>
<td>Supplimental Review Fee, charged by Eversource for systems over 30,000 watts up to 50,000 watts</td>
<td>$500</td>
</tr>
<tr>
<td>Supplimental Review Fee, charged by Eversource for systems over 50,000 watts up to 100,000 watts</td>
<td>$1,000</td>
</tr>
<tr>
<td>Transformer Upgrade Fees if required for systems over 10,000 watts AC</td>
<td>Custom quoted by EverSource or NHEC</td>
</tr>
<tr>
<td>Service panel Upgrade (100 amp to 200 amp)</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>Rafter reinforcement</td>
<td>Custom quoted, typically around $500.00</td>
</tr>
</tbody>
</table>
Financing

Customers may finance 100% of their project costs with no money down:

• Financing is offered through Vermont State Employee’s Credit Union at 3.99% for 12 years
• Loans are unsecured – no lien on property
• No early payment penalties
• Requires credit score of 680+ and a good debt to income ratio

Example: An average-sized system of 8,125 watts using 25 QCELL 325-watt solar panels on a productive roof producing about 10,000 kWh/year

• Total cost of system: $22,344 (approximately $1,000 less than non-Solarize!)
• Federal tax credit: $6,703
• NH State Rebate: $1,000
• Net solar array cost: $14,641
• Monthly loan payment (with ITC and PUC rebate paid in): $128
Warranties

- Granite State Solar’s workmanship guarantee is 12 years
- Panels: 25-years production, 12-years workmanship
- Enphase inverters: 25-years
- SnapNrack roof racking: 25-years
- Nuance fixed ground mount: 25-years
- AllEarth trackers: 10-years

Maintenance? Usually, there is none.
- If solar needed maintenance, we would sell a maintenance plan 😊. *Don’t be impressed when you hear “maintenance included” related to a solar claim!*
- *AllEarth trackers need grease once annually, there is a single grease fitting.*
Interested in Learning More?

• Fill out the yellow form and leave it in the basket on your way out.

• Visit vitalcommunities.org/solarize

• GSS employees are available to answer questions and set up site evaluations Monday-Friday 8am-5pm at 603-369-4318.

• Learn more about solar in general on the GSS website GraniteStateSolar.com
Thank You!

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