

## RENEWABLE ENERGY & TRANSPORTATION

**12:20 AM, Roosevelt House Introduction to Solar - Danielle Laberge; 50 min.** We will discuss the basics of how solar works. How do the cells provide power to your home? The difference between off-grid and grid-tied. What is net-metering and how do you add a battery?

Danielle Laberge is Technical Designer and Head of Sales for Grassroots Solar, Inc in Dorset VT. They have been installing off-grid and grid-tied solar systems, with battery backup, in Southern VT and Puerto Rico.

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**12:20 PM, Barn Small Wind Technology - Jason Day; 80 min.** A description and history of small wind turbines and the renewable energy programs in Vermont, how a small wind turbine works and what the advantages are. Also, what makes a good wind site and how to install a small wind turbine. Discussion concerning the "how and why" of small wind turbine performance, low sound, shadow flicker, and visual impact, plus the procedures to get a CPG permit, tax rebates, cash grants, and financing.

Jason A. Day is the owner and managing member. Star Wind Turbines, LLC: BSEE Engineering degree. His background involves the manufacturing of propellers and drive control systems for experimental aircraft and vertical takeoff drones. Customers included U.S. Marine Corp and Israeli Army. As a manager at Mitsubishi Electronics, he was involved in the production high reliability electrical power systems for satellites. Founded 2012, Star Wind Turbines LLC has been developing new small wind turbine technologies that make more energy in low winds with less sound. The shop is located in East Dorset, VT and is the center for prototype development. The low sound turbines mounted on hydraulic lifted towers can be seen along the VT route 7 Highway. Visitors are welcome.

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**12:20 PM, CSA Shed Electric Vehicles; the Real-World Experiences – Dave Conna Moderator; 50 min.** How EVs compare to ICE vehicles and why they are such an important part of the solution to dealing with Climate Change. A panel of people who own and drive EVs answer real-world questions.

Dave Conna is a designer and project manager in the energy conservation field and tries to practice what he preaches. He loves to share his enthusiasm and information about all things that help us to achieve a truly sustainable existence. [dave.conna@gmail.com](mailto:dave.conna@gmail.com)

**2:00 PM, CSA Shed Lithium Iron Energy Storage – Jing Yu & Alex Lepore; 50 min** Energy storage safety, applications, and proper sizing and installing the Lithium Iron Energy Storage to PV Arrays.

Jing Yu is Managing Director of Fortress Power [jingyu@fortresspower.com](mailto:jingyu@fortresspower.com); [www.fortresspower.com](http://www.fortresspower.com) Alex Lepore is Sales & Marketing Specialist for Fortress Power [alexl@fortresspower.com](mailto:alexl@fortresspower.com); [www.fortresspower.com](http://www.fortresspower.com)

**2:00 PM, Roosevelt House Solar plus Storage; What does it all mean? - Bill Laberge; 50 min.** How does solar work in VT and how can I store it for use when the power goes out? Bill will talk about battery storage options and the ways you can use them for energy management.

After volunteering at Solarfest for almost two decades, Bill has been installing Solar and batteries for the last six years. He is active in the community having served on Manchester Riverwalk Association board of directors. He was appointed to the Vermont Governor's Climate Action Committee, to make recommendations on how to stop Climate Change. [bill@grassrootssolar.com](mailto:bill@grassrootssolar.com); [www.GrassrootsSolar.com](http://www.GrassrootsSolar.com)

**3:00 PM, Barn Photon vs. Carbon: The Global Impacts of Solar & Grid-tied Batteries - Li Ling Young; 50 min.** Net-metering has led to rapid growth in distributed renewable energy. But what's the truth, inconvenient or otherwise, behind the net energy you see on your electric bill? This new analysis provides an in-depth look into how a household solar system impacts the electricity grid, and how the minute-by-minute operation of the grid makes your solar electricity more or less environmentally beneficial.

Li Ling Young is a Senior Energy Consultant with VEIC. Through Efficiency Vermont she has supported hundreds of residential projects from design through construction for healthy, comfortable and affordable homes. With a focus on existing homes Li Ling works to grow the Zero Energy Homes industry: transforming our housing stock through efficiency improvements, electrification and renewable energy. [lyoung@veic.org](mailto:lyoung@veic.org); [www.encyvermont.com](http://www.encyvermont.com)

**3:00 PM, Roosevelt House Electric Vehicle Developments in New England - Pete O'Connor; 50 min.** Plug In America will provide an update on what's new with electric vehicles in the Northeast, what we've been up to on policy and outreach, and what you can do to support this clean transportation option.

Pete works for Plug In America in the Northeast and Mid-Atlantic regions, promoting policies and programs that will transform the transportation sector and encourage more EVs on the road. Prior to his work at Plug In America, Pete was a post-doctoral fellow at the Union of Concerned Scientists (UCS), researching how electric vehicles and renewable energy can work together on the grid. He has over ten years of experience working on energy and environmental policy and technology issues. He holds a Ph.D. in Geography from Boston University, where he completed a dissertation on energy transitions in societies. He also holds a Bachelor's degree in Physics from Harvard University. [poconnor@pluginamerica.org](mailto:poconnor@pluginamerica.org)