



Creative, Community-Led Solar Campaigns

Presentation for VECAN Conference
Fairlee, VT December 6, 2014

By Duncan McDougall – LEAP Chair



- **LEAP was founded in 2007 on Step-It-Up Day**
- **Our goal is to become the greenest town in Vermont by 2020**
- **Became a 501(c)(3) nonprofit in 2009 . Volunteer-run.**
- **We have conducted dozens of renewable energy, energy efficiency and emissions reduction projects over 7 ½ years.**



The LEAP Energy Fair draws 75 exhibitors and 700 people every April. The 9th LEAP Energy Fair will be held **Sat. April 11, 2015**. Come join us!





- At 6th LEAP Energy Fair (April 2012) announced the *Waterbury / Duxbury Solar Year* to double local solar capacity in one year
 - Wrote periodic articles in the *Waterbury Record*
 - Spoke on WDEV and ran ads to encourage solar
 - Held LEAP Solar Fest with free pizza, ice cream, and live music. 110 people met with various solar installers.
 - Hosted a Business Solar Workshop with experts
 - Distributed info about local solar installers at public events, on our website, and through local stores, etc.
- We met the goal in only 11 months!
Governor Shumlin helped us celebrate.





- We take pictures of every solar installation in Waterbury and Duxbury. At LEAP events we display 125+ of these 8x10 photos.
 - Almost everyone finds photos matching their own situation
 - It's common to hear people say "I didn't realize I could do it that way on my home" or "I didn't know Bill had solar. I need to talk with him about it."



Distributing solar information at the Waterbury Town Meeting

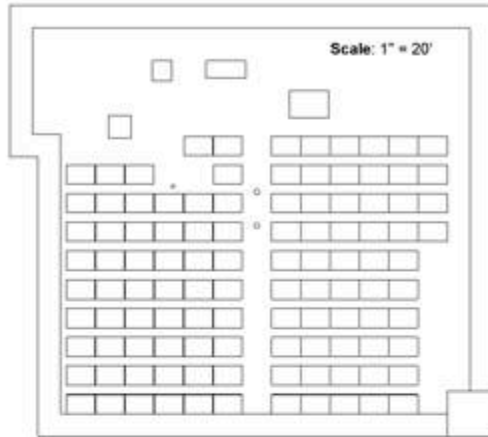




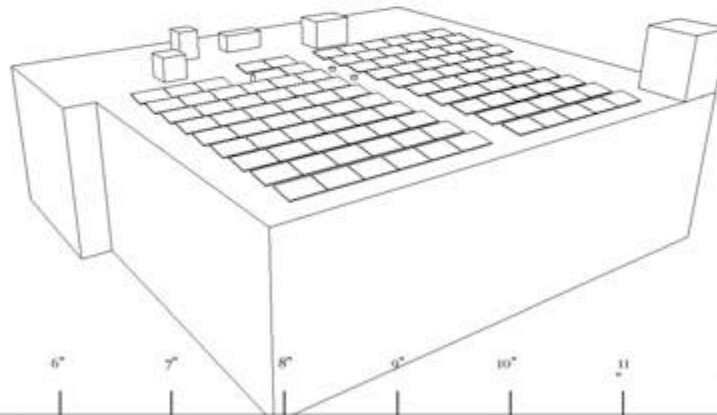
- **At the 7th LEAP Energy Fair (April 2013) we announced the 2nd *Waterbury /Duxbury Solar Year* to double solar again, thereby quadrupling local solar capacity in only two years**
 - **Continued many local PR efforts**
 - **Began ‘Solar for Scholars’ Program with Middle School**
 - **Met regularly with local leaders to let them know about the opportunities available to them to benefit from solar**
 - **Waterbury Select Board**
 - **Waterbury Village Trustees**
 - **Waterbury/Duxbury School Board**

The following three local projects occurred:

New 32.4 kW solar array on the Waterbury Fire Station



Scale and compus do not apply to isometric view



Sheet: PV-A1
Title: Site Plan
Author: JMF
Revision Date: 4/16/2013

Description: (108) SPR-327 modules
System Size: 35.316kW_{dc} (STC)
Azimuth: 143° (True)
Tilt: 10°

Client: Town of Waterbury
Site: Village Fire Dept.
Address: 43 South Main St.
Waterbury, VT 05676

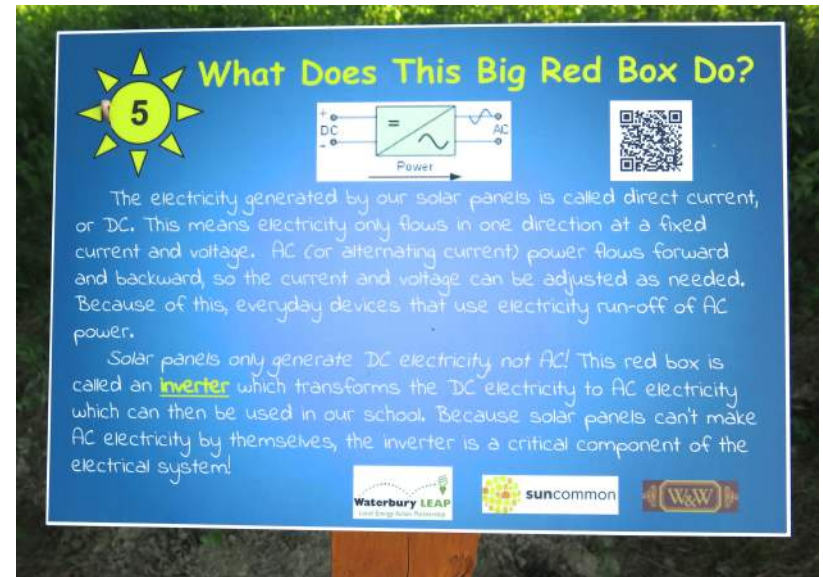


suncommon
5430 Waterbury Stowe Rd.
Waterbury Center, VT 05677
Main Desk Phone: (802) 882-8181
Design Team Phone: (802) 882-8194

**New 157 kW solar array at Crossett Brook Middle School.
With the school's 15 kW roof array (thanks to LEAP in 2010)
CBMS now has 172 kW, the most solar of any school in Vermont!**



- LEAP also helps local students get involved in green energy. This information and motivation filters back to parents:
 - We give the ‘LEAP Green Community Award’ every year to local students with the best green energy project
 - CBMS now has a sustainability curriculum. Kids study their solar data in classes. A solar monitor is in the front hall.
 - LEAP and others helped students create a 12-stop solar tour

5 What Does This Big Red Box Do?

The electricity generated by our solar panels is called direct current, or DC. This means electricity only flows in one direction at a fixed current and voltage. AC (or alternating current) power flows forward and backward, so the current and voltage can be adjusted as needed. Because of this, everyday devices that use electricity run-off of AC power.

Solar panels only generate DC electricity not AC! This red box is called an **inverter** which transforms the DC electricity to AC electricity which can then be used in our school. Because solar panels can't make AC electricity by themselves, the inverter is a critical component of the electrical system!

Waterbury LEAP Local Energy Action Partnership | suncommon | W&W

New 625 kW solar array built on village land in Nov./Dec., 2014



We believe Duxbury is #2 and Waterbury is #5 in solar capacity per capita in Vermont, although things are changing so quickly... fortunately for Vermont!

