

Greater Middlebury Climate Economy Initiative

Notes -- Energy Task Force Meeting of November 30, 2017

(Held at Addison County Regional Planning Commission)

Meeting Goals

- Review experiences and lessons learned to date in community-based residential efficiency and renewable efforts
- Review financial and technical resources available to assist in our efforts
- Identify key action steps to help determine path forward for residential demonstration project
- Explore other potential demonstration projects

Residential Demonstration Project

In reviewing the minutes from the previous two meetings, the Task Force spent a lot of time focused on the idea of a residential energy demonstration project.

Barriers: The point was raised that it is important to get clarity about the barriers to home weatherization before we start designing a program. Some barriers that were identified include:

- Lack of information on what to do, who can do the work
- Lack of trust about savings being real
- Limited financial ability of homeowners, unwillingness to increase debt
- Physical barriers – vermiculite, knob and tube wiring
- Limited financing – not available for all projects.
- Complicated process -- homeowners don't really know how to navigate the process(
- **Task:** Put together a summary of key barriers to home weatherization and solutions that have been implemented to address these barriers. Paul M. agreed to do this.

Consensus reached: The group agreed that a neighborhood-based demonstration project focused on owner-occupied residents should be the first project for the Energy Task Force.

Issues/ideas that were raised related to a home energy weatherization demonstration project include:

- o Let's push the envelope, thing big beyond what already exists
- o How to incorporate new technologies, e.g. Tesla Powerwalls
- o How can we address folks living on low and moderate incomes
- o Education should be a big piece of any efforts we undertake
- o Make sure there are the contractors out there to do the work
- o Put together list of Home Performance contractors, work with these contractors in advance
- o Make navigation very simple
- o Utilities should consider providing additional money to help homeowners weatherize, instead of coming up with \$ to buy more power
- o Put together list/descriptions of available resources
 - VGBN (<http://www.vtgreenbuildingnetwork.org>)
 - Regional Planning Commission

Review of Community-based Weatherization Efforts to Date

- We reviewed lessons learned from the eVolve Panton project that was jointly implemented by GMP and Efficiency Vermont, and from NeighborWorks of Western Vermont. We will reviews lessons learned from other projects in the future, including Weybridge's experience in the VT Home Energy Challenge and the Weatherize Upper Valley initiative.

- **Panton** – began in summer 2016 and is wrapping up December 31, 2017. Goal was to do energy transformation in as many homes as possible – with thermal efficiency improvements as the foundation of any improvements.
- Lessons learned:
 - o “Have your ducks lined up.”
 - Make sure you have key pieces lined up before you go out to residents, e.g. outreach plans, customer offer, financing, relationship/role of contractors
 - o Low fuel prices make it tough to rely on the economics of weatherization to convince people to take action
 - Even a 10 year payback can seem like a long time to home owners
 - Emphasize non-financial benefits to weatherization projects, such as comfort
 - o Customers really valued 3rd-party home energy advisors: provided at no-cost to home owners by GMP and Efficiency Vermont staff
 - o Thermal efficiency improvements should be the foundational elements of weatherization projects.
 - Home owners often not ready to invest in full suite of projects: provide homeowners with multi-tiered offers, e.g. \$6-8K is a sweet spot
 - o Primary relationship should be between home owner and contractor
- **NeighborWorks of Western VT (NWWVT)**
 - o Barrier: people don’t want to pay \$300-\$500 for an energy audit. NWWVT offers reduced costs for audits
 - o NWWVT has done extensive outreach efforts
 - o Low-income home owners have a challenge filling out paper-work, .e.g. for loan applications
 - o Some people have the resources and do not need to consider payback
 - o Homeowners need a lot of follow-up and reminders
 - o Jan/Feb is a great time to contact home owners- they’re cold, and can be reminded how to be comfortable

Technical and Financial Resource

We reviewed some of the resources available to help implement energy projects. Representatives from the following organizations/companies spoke:

- o VT Gas
- o NeighborWorks of Western VT
- o Green Mountain Power
- o Efficiency Vermont
- o Suncommon
- o Tesla

See summary of resources available in the attachment.

Other Potential Projects

Due to lack of time, we deferred this discussion until the next meeting. Potential areas that have been identified include:

- Multi-family
- Working with small and medium businesses
- Schools and municipal buildings- (Middlebury Energy Committee said they are already addressing this)
- Small and medium businesses

- Other?

Wrap-Up

- **Residential neighborhood pilot project – sub-group:** We agreed to establish a sub-group to focus on the residential neighborhood pilot project. A sign-up sheet was sent around for those interested in serving on this sub-group. Suggestion was to engage more youth to participate in the group. The first meeting of the sub-group will be held before the holidays.
 - o **Action item:** Chris Huston will send out a doodle poll to find an agreeable time for folks to meet. All Task Force members are welcome to attend.
 - **Full Energy Task Force meeting:** The next meeting of the Energy Task Force will be held in early January. We agreed to shift the day of the week from Thursday to Wednesday – due to some conflicts.
 - **Compiling resources:** Jon Copans and Steve Maier will look into establishing a website/google docs platform that all task forces can use to post resources/doc.
 - **Barriers and solutions:** Paul M. will put compile a document before the sub-group meeting on key barriers to residential weatherization efficiency and solutions that have been attempted.
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Attachment: Technical and Financial Resources

Neighborworks of Western VT: (Rick Shappy)

- o Non-profit organization based in West Rutland
- o Conducts energy audits and subs out work to Home Performance contractors
- o NWWVT has a loan program: weatherization, renewable energy, and work on the house
- o NWWVT is implementing a limited-time project in 30 homes where they are covering ½ the project costs for folks in medium income range. Still difficult to get people to sign up. Projects for 80% of median income or below

VT Gas

- o Willing to conduct free energy audits for all homes who sign up for gas
- o For project that pass an energy intensity threshold of 50K BTUs/sq. ft/year – they cover 1/3 of the project costs in grants and provide low-interest loans for the remainder
- o Has very specific goals for hook-ups and weatherization
- o or more= qualify for projects
- o Provided a more detailed hand-out at the meeting.

GMP

- Residential: reliability, reduce carbon footprint
- Partner with many organizations
- Benefits: cost-sharing
 - o 1) Peak-shaving: Tesla power-wall program= great example of cost-sharing
 - \$15/month= customer cost
 - “The power-wall looks fast just hanging on the wall.”
 - o 2) Programs: Cold-climate heat pumps; resistance hot water heaters; in-home level-2 charger at no cost if they simultaneously buy an EV (electric vehicle); flat-rate fee for car-charging (off-peak charging); Tesla Power-Wall program (2000 residential power-walls targeted for install);

- Scope of projects: Innovative Pilot Filing: (exists in VT and not many other places): describe projects to regulators and execute in a stream-lined time-frame.

Suncommon

- Established 5-years ago in Waterbury
- ~3000 installations; community-solar
- Benefit-corp- “B-corp”
- Residential and commercial solar
 - Res: no up-front cost; financing via VSECU
- Also offering heat-pumps now
 - When paired with solar, full financed project
- Rock Art Brewery named a beer after Suncommon after they installed a solar project at their brewery
- GMP community solar array specifically for low-income customers: power-share is discounted; fits with social justice mission of Suncommon (priority to Addison County)
- SATEC: K-8 school: roof-top array there: 640 Kw, 2000 panels
- Community outreach and education: canvassing
- ~100 solar home owners in Middlebury

Tesla:

- First of its kind to test the power-wall (partnership with utility/GMP: no other utility is partnering with Tesla, or a similar company)
- Offer financing
- Education: projects require info and buy-in; lots of legwork
- Residential or really big commercial
 - Will eventually focus on EVs (electric vehicles)
 - How can Middlebury get-ahead of the EV curve?
- Power-Pack= commercial; Power-Wall= residential
 - Almost all went to Puerto Rico after Hurricane Irma
- Install solar also

Efficiency Vermont

- Manages the Home Performance w/ENERGY STAR program – consists of private contractors around the state who do thermal efficiency improvements
 - Incentives up to \$2000/home, focused on thermal efficiency
- Wide range of programs: e.g. rebates for efficient appliances; subsidizes the cost of LEDs; works with municipalities, schools, others, etc.
- Middlebury: Targeted Communities Program; working with VCRD
 - Home Energy Advisors – Efficiency Vermont staff conduct free home energy visits. EVT is committed to conducting up to 50 homes in Middlebury
 - DIY program: forthcoming
 - Small and medium businesses: also has staff capacity to conduct free walk-throughs of small and medium businesses
- Workshops
 - Conducts a wide-range of workshops – include heat pumps, home weatherization, a workshop specific to rental property owners and owners of multi-family buildings

Other resources – not at the table

- USDA- Rural Dev
- CVOEO- ready to assist low-income home owners