

# Greater Middlebury Climate Economy Initiative

Report and Action Plan ~ September 2019



Vermont Council on Rural Development

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## **Vermont Council on Rural Development**

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# I. Introduction

Middlebury lies at the core of a region made up of many small and medium-sized towns, farms and a diverse and beautiful natural landscape. With lakes, ponds, rivers, fields, forests and mountains, Addison County represents the best of what Vermont has to offer. At the center lies Middlebury, a place with a dense and walkable downtown core, great neighborhoods, great schools, Vermont's oldest college, a hospital, a healthy and growing business community, a thriving food co-op, delicious dining options, and easy access to the aforementioned features of the surrounding countryside. The Middlebury region is well-situated to be a model for rural places that increase economic and social health while also dramatically reducing carbon emissions. The Greater Middlebury Climate Economy Initiative (GMCEI) built a portfolio of work that utilizes local assets and rallies the community together to develop new approaches to food, transportation, and building energy. These projects were designed to grow the local economy, make life more affordable, and decrease carbon emissions.

Since GMCEI kicked off in fall of 2017, tremendous effort has been contributed by participants and partners. Important steps forward have been made with accomplishments and lessons learned. An outgrowth of this initiative, the Climate Economy Action Center of Addison County, will now carry the momentum forward by building an organization that continues to engage the community, provides support for local volunteers and develops focus projects that provide a platform and launching pad for innovative approaches to carbon reduction. There is no one simple approach to tackling climate change at the local level. Often the most impactful areas of focus are also the most challenging. The Action Center will cultivate the experimentation and innovation and provide staff capacity needed to develop workable local solutions.

The Greater Middlebury Climate Economy Initiative was part of the Vermont Council on Rural Development's Climate Economy Model Communities Program. A team from Middlebury came together to apply for the program, and in a competitive process was selected as an inaugural participant in 2017. The Model Communities Program is designed to help communities build and implement priority actions that increase economic vitality and affordability in a time of climate change. The goal is to help communities model change by implementing energy efficiency, transportation system transformation, renewable energy generation, working lands development, and entrepreneurship and business incubation to spur economic progress.

Modelled on VCRD's Community Visits, the public engagement process for the Model Communities Program is designed to reach into all corners of a community to mobilize a wide mix of citizens. Over the course of the initial four-month phase, the community rallies together to brainstorm, prioritize, and develop action plans. Partners take part as visiting and resource teams to inform the action planning process and then in providing support to local task forces as they shift into implementation.

The outcome of this community conversation was a focus on four key priorities and the gathering of four task forces that came together to move those priorities forward. GMCEI has worked to:

- ✓ **Advance public transportation, facilitate more ridesharing, and make Middlebury and surrounding towns the best possible place for biking and walking**
- ✓ **Increase staff capacity at the local and regional level to coordinate climate change and energy related actions**
- ✓ **Help farmers transition to organic and regenerative practices**
- ✓ **Advance Energy Efficiency and Renewable Energy Opportunities for Homes, Businesses and Other Buildings**

The Greater Middlebury Climate Economy Initiative was only possible because of the participation and support of many working locally and a strong group of partners. The leadership and initiative of Steve Maier and the applicant team that rallied together to apply for the program brought the Model Communities

Program to Middlebury. With the support of the Middlebury Select Board, Steve and the team assembled a compelling application for the inaugural year of this new program. Middlebury's selection for participation when VCRD received 5 other compelling applications is a testament to the community's appetite to tackle this opportunity and their track record of working together to get things done.

The four months of public engagement and outreach that launched the Greater Middlebury Climate Economy Initiative required multi-faceted support from all corners of Middlebury. A first key step was the convening of a core team responsible for naming the process, planning the kick-off, and broadcasting an invitation far and wide to maximize participation.

The kick-off included six different forums and a community meal occupying an afternoon and evening on Sept. 18. The Town of Middlebury, the Isley Library, and St. Stephens Episcopal Church generously provided meeting space and the Middlebury Union High School hosted dinner and the evening forums. ACTR provided special shuttle service from downtown to the High School for the kick-off. Mark Perrin of Green Peppers provided a delicious meal of pizza and salad to entice and nourish participants. 23 visiting team members (listed later in this report) travelled to Middlebury to listen to community members and provide reflections.

The community comes back together each month after the kick-off, first to select priorities and then to launch task forces that will develop and implement action plans. The American Legion generously hosted the community meeting and the High School hosted the launch of the task forces. A resource team of facilitators and experts joined each task force as they developed action plans and identified the resources they would need to achieve success.

70 local citizens signed up to serve on the four task forces that made up the Greater Middlebury Climate Economy Initiative and four local leaders stepped forward to guide the work of those groups. The volunteers serving on each of those groups and particularly the chairs put in countless hours over the course of GMCEI as they grappled with a big and challenging set of problems. Chris Huston, Laura Asermily, Ashar Nelson, Spence Putnam, Amy Sheldon, Andrea Murray and Steve Maier all deserve recognition. The unwavering commitment of this group is a source of inspiration. All of these leaders share a deep commitment to their local community and a strong belief that an active group of committed citizens can accomplish big things.

A few key partners deserve special recognition given their ongoing commitment to the work of the GMCEI task forces. Efficiency Vermont, Green Mountain Power, and Vermont Gas Systems dedicated tremendous manpower to the development of the Neighborhood Energy Project. They also extended themselves to provide special offerings for program participants. Deb Sachs and GoVermont also deserve a special mention for the deep support she provided to the task force focused on transportation alternatives.

Steve Maier led the application for the Greater Middlebury Climate Economy Initiative and has served as the dedicated chair for the effort. Steve's deep commitment to this effort was apparent from the very beginning. At every step in the public engagement process and particularly as the task forces moved forward with implementation, Steve has been a constant presence providing calm and capable guidance and support. An effort like GMCEI is far greater than any individual, but Steve deserves special recognition given the many hours he donated to this work.

The Greater Middlebury Climate Economy Initiative only carries weight and produces results because local citizens show up and get involved. Over 150 different people participated at one stage or another in the process. Their active and informed engagement is the foundation upon which this entire endeavor was built.

The Climate Economy Model Communities Program is made possible thanks to the financial support of VLITE, Jane's Trust Foundation, High Meadows Fund, Oakland Foundation, Harris and Frances Block Foundation and the State of Vermont. Thank you to each of these funders for making this important work possible.



### III. Vision, Mission, and Values

*The following Vision, Mission, and Values originated with a community brainstorming session as part of the Greater Middlebury Climate Economy Initiative and has been adopted by the Climate Economy Action Center of Addison County.*

#### Vision

The Climate Economy Action Center of Addison County (CEACAC) works with community partners to strengthen Addison County's economic, environmental, and social resilience to achieve deep carbon reduction and support a thriving ecosystem of people, businesses, and institutions.

#### Mission

- The CEACAC nurtures connections between economic and social health and carbon reduction.
- We work to sustain our vibrant communities by organizing Focus Projects that address critical challenges facing Addison County.
- We work locally with interested parties, entrepreneurs, and potential advocates to achieve our Mission.

#### Core Values

**Economy** – Cultivating a thriving, diverse, inclusive, and resilient economy comprised of many low-carbon enterprises and small businesses.

**Energy** – Serving as a Vermont leader in home and business participation in energy efficiency, energy transformation, and renewable energy generation opportunities, while ensuring these opportunities are available to all socio-economic sectors of the community.

**Mobility and a Healthy Downtown** – Creating and supporting a transportation system that provides great, efficient and affordable mobility choices including walking, biking, transit, rail and ride-sharing. Maintaining a vibrant downtown and developing other high-density areas are essential to the success of this effort.

**Youth** – Engaging the young people of the Middlebury area by putting their energy and creativity to work in tackling the climate challenge and also attracting younger residents and families to settle in the area. Mentorship, apprenticeship, and job training are key strategies to create multiple pathways towards community engagement and employment.

**Working Lands** – Preserving and utilizing the productive lands and natural areas in and around the community to provide ecological services, forest and food production and recreational opportunities. Forestry and agricultural practices should minimize environmental impacts and maximize carbon sequestration. Preserving, using and expanding our productive lands and natural areas to provide healthy agricultural practices, ecological services, forest and food production, and recreational opportunities. We support forestry and farming practices that minimize environmental impacts and maximize carbon sequestration.

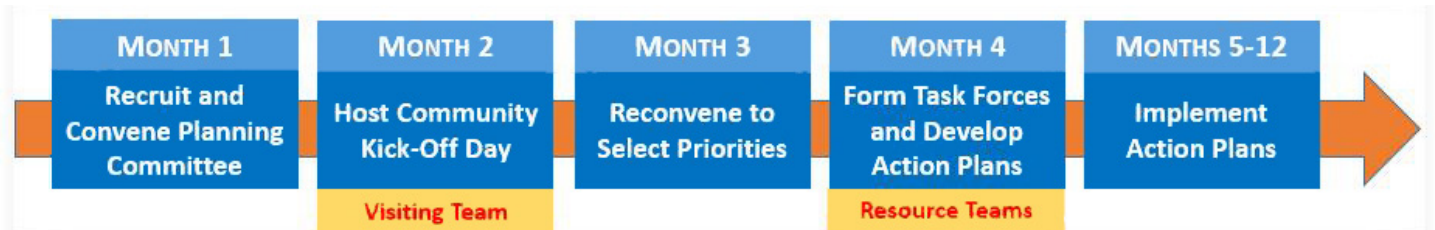
**Inclusivity** – Respecting the dignity of each individual in our community, and ensuring that good food, housing, and other necessities are affordable and that all individuals and families have what they need to thrive.

**Infrastructure** – Investing in resilient, efficient, and ecologically sensitive infrastructure that can withstand an increase in extreme weather, facilitate energy efficiency and reduce environmental impacts.

**Sustainable community** – Meeting economic, environmental, and social health challenges through integrated solutions rather than through fragmented approaches that meet one of those goals at the expense of the others.

## II. The Process

The Climate Economy Model Communities Project engages a broad swath of the community to brainstorm, prioritize, plan for, and take action on local climate economy initiatives.



### Planning Committee Meeting: 8/1/17

On August 1, 2017 25 local residents gathered at the Middlebury Town Offices to plan for the launch of the Model Communities effort. This group came up with the name for the process – the Greater Middlebury Climate Economy Initiative – and helped to plan the kick-off. They decided on forum topics, meeting locations, dinner plans, and an invitation process. Through calls, e-mails, flyers and face-to-face conversations, this team worked to promote the kick-off through all means possible.

The Planning Committee included: R.J. Adler, Laura Asermily, Nadine Barnicle, John Barstow, Peter Burrows, Ross Conrad, Bill Cunningham, Rev. Barnaby Feder, Connie Leach, Steve Maier, Emily Millard-Landenberger, Jeanne Montross, Andrea Murray, Robin Scheu, Heather Seeley, and Amy Sheldon.





## Kick-Off Forums and Community Dinner: 9/18/17

The GMCEI kicked off with a series of brainstorming forums downtown and then moved to the High School for a community dinner and additional forums. At the forums, over 200 action ideas were generated by 100 participants. 28 visiting team members participated, learning more about Middlebury and providing reflections to the community (see section V for notes from each of the forums).

Visiting Team members included: Tom Berry, *US Senator Leahy's Office*; Kathy Beyer, *Housing Vermont*; Abby Bleything, *Vermont Clean Cities Coalition*; Betsy Bloomer, *Energy Innovation Center, Green Mountain Power*; Michele Boomhower, *Agency of Transportation*; Jon Copans, *VT Council on Rural Development*; Paul Costello, *VT Council on Rural Development*; Dwight DeCoster, *Champlain Valley Office of Economic Opportunity Weatherization Program*; Ben Doyle, *USDA Rural Development*; Laurie Fielder, *VSECU*; Elizabeth Gamache, *Vermont Community Foundation*; Jennifer Green, *Burlington Electric Department*; Gary Holloway, *VT Dept of Housing and Community Development*; Adam Lougee, *Addison County RPC*; Jeff Manney, *Vermont Energy Investment Corporation*; Paul Markowitz, *VT Energy Investment Corp*; Thomas Murray, *Vermont Gas Systems*; Nancy Owens, *Housing Vermont*; Melanie Pasceovich, *Neighborworks of Western Vermont*; Craig Peltier, *VT Housing and Conservation Board*; Haley Pero, *Office of U.S. Senator Bernie Sanders*; Karen Ranz, *Neighborworks of Western Vermont*; Rick Shappy, *Neighborworks of Western Vermont*; Claire Tebbs, *Addison County RPC*; George Twigg, *Office of Congressman Peter Welch*; Carolyn Weir, *VT Community Foundation*; Kevin Wiberg, *VT Community Foundation*; Li Ling Young, *Efficiency Vermont*





## Community Meeting: 10/26/2017

After the kick-off, all of the brainstormed ideas were distilled into 21 possible areas of action. About 40 community members gathered at the American Legion on October 26, 2017 to narrow the list of priorities for community action. After lively dialogue and 2 rounds of dot-voting, 3 key action ideas emerged as key priorities of the GMCEI. In addition to selecting the 3 focus areas, the group also decided that engaging youth was a critical component of this process and that concerted efforts will be made to engage younger members of the community in all aspects of the Climate Economy Initiative as it moves ahead.

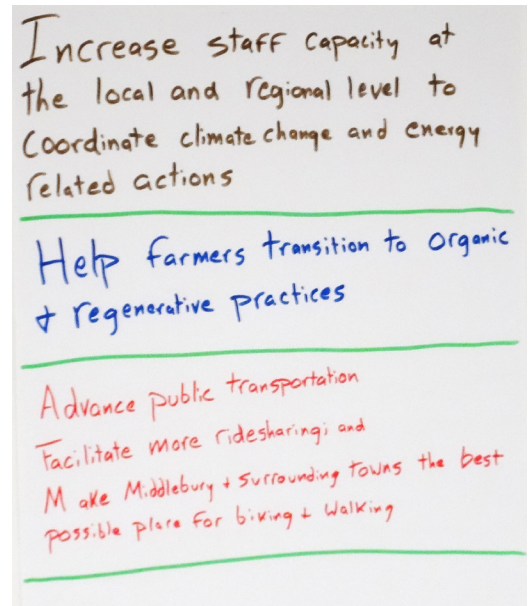


As participants filtered out of the meeting, they signed up for task forces that would convene to move these priorities forward (see section III for action priorities chosen). The 3 new task forces joined another working to promote and implement opportunities for energy efficiency and renewable energy generation for homes and businesses.

## Resource Meeting and Task Force Launch: 11/16/2017

On 11/16/17 at the High School, community members, facilitators, and resource team members gathered to form task forces, develop action plans, and identify resources to implement the priorities of the GMCEI. After intense 90 minute sessions, everyone gathered to hear reports from each group about their plans and resources needed to make them a reality. From here forward, all action of GMCEI was focused at the task force level (see section IV for task force action plans).

Resource Team members included: Jon Copans, *VT Council on Rural Development*; Paul Costello, *VT Council on Rural Development*; Ben Doyle, *USDA Rural Development*; Sally Miller, *Sustainable Woodstock*; Paul Markowitz, *Efficiency Vermont*; Jeff Monder, *Green Mountain Power*; Maddy Monty, *NOFA-VT*; Tom Murray, *Vermont Gas Systems*; Amy Rast, *Vermont Agency of Transportation*; Tom Roberts, *VITAL Communities*; Rick Shappy, *Neighborworks of Western Vermont*; Tiana Smith, *Vermont Gas Systems*; Jennifer Wallace-Brodeur, *VEIC*; Kirsten Workman, *UVM Extension and Champlain Valley Farmers Coalition*.



## IV. The Priorities

Determined by residents from the greater Middlebury area at the VCRD Prioritization Meeting,  
October 26, 2017

*Proving that those who live, work and raise their families in a community are best qualified to understand its needs and potential, community members whittled down a list of 21 issues through discussion, reasoned arguments and thoughtful reflection. In the end, voting with red and blue stickers, over 40 participants chose action ideas that offer opportunities to enhance existing resources, and to strengthen the town through exciting new ventures. Residents concluded the meeting by signing up for Task Forces in the selected areas.*

### **Residents formed four task forces for future action:**

#### **► Advance public transportation, facilitate more ridesharing, and make Middlebury and surrounding towns the best possible place for biking and walking**

The Middlebury area is well-positioned to develop a transportation system that provides great, affordable, healthy and low-impact options for community members and visitors alike. There is already a leading rural public transit system thanks to ACTR, and great options for biking and walking in and around Middlebury. And yet ownership of multiple personal or family vehicles and single-person trips remain both normal, necessary and a significant financial burden for many people in Addison County. Ridesharing represents an emerging strategy to increase options and reduce vehicles on the road. There are also innovative opportunities to increase transit ridership and to improve options to provide better service to individuals, businesses, and institutions. A more comprehensive transportation system coupled with parking on the outskirts of town could reduce the need for parking downtown and elsewhere. Working closely with partners including ACTR, this Task Force could do a holistic review of the transportation system in and around Middlebury. The Committee can then develop and implement a plan for transportation systems improvements including improved public transit options, better infrastructure and systems to support biking and walking, and increasing ridesharing options and participation. Large employers including Middlebury College and Porter Hospital could all have a role in moving this conversation forward.

#### **► Increase staff capacity at the local and regional level to coordinate climate change and energy related actions**

Implementing a successful climate-change agenda requires coordination among communities and staff resources to fully realize the potential of volunteer committees and neighborhood-based action. This Task Force can engage local citizens, select boards, the regional planning commission and other possible partners in a dialogue with the goal of increasing and deploying resources to implement climate-related programs.

#### **► Help farmers transition to organic and regenerative practices**

Transitioning from conventional farm practices to organic and regenerative practices can have a positive impact on the environment and a farmer's bottom line. This Task Force will convene to develop incentives and other approaches to encourage an increase in organic farming and carbon sequestration in Addison County.

## ► Advance Energy Efficiency and Renewable Energy Opportunities for Homes, Businesses and Other Buildings

Middlebury already is a statewide leader in community-based efforts to encourage residential and business energy efficiency. A Task Force will take these efforts to the next level by working to significantly improve energy efficiency and renewable energy opportunities for homes, businesses, and other buildings. The Task Force will work with utilities and other partners to expedite the pace of Middlebury's transformation to an efficiency and renewable energy-based economy. The goal will be to implement solutions that address the complex set of barriers to more widespread adoption.

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### Other Key Opportunities identified by the community:

*Along with the four chosen priorities, the key opportunities listed below reflect other potential ideas for action that community members shared at the Kick-Off Forums. Though these opportunities weren't chosen as priority projects through this process, community members may find the list useful as they look to expand on current projects or take on new ones.*

#### **Support existing businesses and recruit new ones**

Middlebury is home to a great mix of new businesses and those that are more well-established and with a longer history. To increase Middlebury's economic health, a task force could be established to develop programs targeted at retaining and supporting existing businesses and recruiting and supporting new ones. Connecting experienced business owners and advisors with those who are just starting out could be one aspect of this effort.

#### **Electrify school and transit buses**

School and transit buses are a critical option in helping people get around and getting children to and from school on a daily basis. Mostly running on diesel fuel, they also are a significant source of air and noise pollution. Recent technological advancements have made electric buses more affordable and suitable for a variety of purposes including school busing and transit. Meanwhile, the settlement from the Volkswagen emissions scandal means that Vermont will receive a one-time investment of over \$18 million to be spent on transportation options that reduce air pollution. A committee could work with the school district and ACTR to implement a plan to put electric buses on the road in Middlebury and surrounding communities.

#### **Create co-working and business incubation space in Middlebury**

Many living in Middlebury participate in the new economy where their work no longer requires fulltime presence in a central office. Visitors to the community also sometimes need flexible temporary work space. This creates the need for co-working and business incubation spaces. A group could be convened to develop new flexible co-working spaces in Middlebury.

#### **Grow the energy efficiency and renewable energy workforce**

Recruiting and training new workers in the building trades is essential for meeting ambitious energy efficiency and renewable energy deployment goals here in Vermont. With retirements and a growing clean energy economy, the trades also provide strong job prospects. A group could convene to develop more and better training opportunities for those interested in pursuing work in the trades. This group might also consider how to support existing contractors interested in pursuing Efficiency Vermont certification and other program participation.



### **Support Middlebury's great neighborhoods**

Great things happen in Middlebury's many great neighborhoods and they provide potential for greater community development. A Task Force could work with the town to explore the creation of a municipal staff position to support Middlebury's neighborhoods and to maximize the potential impact of neighborhood-based organizing and events.

### **Develop digesters to utilize waste for renewable energy production**

There is tremendous energy potential in the manure produced on dairy farms in and around Middlebury. A digester captures the energy from manure and other organic waste. The gas produced in this process can be cleaned and burned for thermal energy or to produce electricity. Energy users in Middlebury and surrounding towns could use this renewable energy source to heat and power their homes and businesses. A committee could be formed to research, engage partners, and develop and implement plans for the construction of a digester or digesters in and around Middlebury to serve energy needs in the area.

### **Increase and improve local and regional events for locals and visitors**

Middlebury and the region host some great events but there is the potential for more. A Task Force could be convened to help develop and coordinate local and regional events that increase the sense of community and draw more visitors to the area.

### **Realize the full potential of Exchange Street**

Exchange Street has evolved into a new economic hub in Middlebury and has tremendous potential for greater development and utilization. Possibilities include better marketing, housing, additional businesses, and improvements to the transportation options along the street. A committee could be established to develop and implement a plan to fully realize the potential of further development and improvements along Exchange Street.

### **Engage area youth**

Middlebury area youth are a great potential source of creativity, inspiration and work for progress. Targeted efforts could be made to engage younger members of the community in efforts to tackle climate change. A Youth Climate Task Force made up of high school students could be developed to work with the Greater Middlebury Climate Economy Initiative Task Forces that would engage young people in leadership and action on community priorities.

### **Develop a local farm and food network**

A local network of farmers, food producers, and food-related businesses could be formed to identify opportunities for collaboration and to share resources. This group could develop ways to connect younger farmers with available land, cultivate value-added opportunities, and address collective needs for butchering services along with facilities for storage, packaging, preparation.

### **Improve electric vehicle infrastructure and increase electric vehicle ownership**

Dropping purchase prices, low operating costs, and increased range have made electric vehicles an increasing appealing option for those buying new and used cars. The trajectory of growth in electric vehicle registrations indicate that a rapidly increasing number of local residents and visitors will be in all-electric vehicles and will need access to charging infrastructure. A working group could convene to increase the availability of electric vehicle charging at both public and private locations in the

community. The group can also develop strategies to incentivize ownership of electric vehicles and to make them accessible to all socio-economic sectors in the community.

### **Increase affordable housing options in and around Middlebury**

Many who work in Middlebury struggle to find affordable housing. A task force focused on increasing housing options in the area could perform an assessment of current needs. Depending on those needs, the group would then work on multiple approaches to improve the availability of affordable housing options for those choosing to live in Middlebury. Those approaches might include but not be limited to the rehabilitation of under-utilized buildings, development of new housing, a tiny home development, or a rent-to-own program.

### **Develop community campaigns to beautify and increase sustainability**

Many individual actions can add up to a major impact. Utilizing lawn space for gardens, composting, creating rain gardens, hanging clothes to dry, developing community gardens, and planting more trees are among a list of opportunities a task force could explore to organize by neighborhood to increase sustainability and beautify the community. This task force would also focus on engaging younger members of the community in these activities.

### **Improve the sustainability and reduce the impact of Middlebury's wastewater treatment**

Middlebury's Waste Water Treatment Facility is a critical piece of municipal infrastructure with high energy use and important water quality implications. A working group could be convened to explore opportunities to reduce energy use, produce renewable energy, increase water quality and reduce waste products as part of the wastewater treatment process.

### **Heat locally with biomass**

Wood and other biomass represent an abundant local energy source, and when used with modern wood heating equipment provide an efficient way to heat homes, businesses, schools and other facilities. A Task Force could come together to implement plans to increase the efficient use of biomass for thermal energy in Middlebury and surrounding communities.

### **Maximize the potential of downtown Middlebury**

Middlebury has a wonderful downtown with great businesses and many residents living within walking distance. This is a great foundation to build from. A group could convene to explore and develop pathways to increase building density in Middlebury's downtown core. The group could start by taking an inventory of possible sites and then work with partners to develop pathways for development of housing, retail, and other commercial or institutional uses.

### **Establish a climate change related goal for Middlebury**

To engage the community, provide vision, and guide ongoing work, Middlebury should adopt an overarching goal related to climate change, renewable energy, and/or energy efficiency. A Task Force could come together to give shape to the goal and to develop and implement a plan to engage key stakeholders and the full community in defining, adopting, and implementing the goal.

## V. Task Force Action Plans

Resource Meeting, November 16, 2017

*Greater Middlebury Climate Economy Initiative Task Forces are comprised of community members and an appointed chairperson. At the Resource Meeting, committee members worked closely with a facilitator and small visiting resource teams to develop step-by-step action plans and a list of human and financial resources to help achieve their goals. This phase of the program marks the time when residents truly take ownership of the work, and begin the exciting process of turning ideas into action.*

### ► Advance public transportation, facilitate more ridesharing, and make Middlebury and surrounding towns the best possible place for biking and walking

Community Chair: **Laura Asermily**

Facilitator: **Paul Costello**, Executive Director, VT Council on Rural Development

Resource Team Members: **Jennifer Wallace-Brodeur**, Director, Transportation Efficiency, VEIC

**Amy Rast**, Public Transit Coordinator, Vermont Agency of Transportation

The Middlebury area is well-positioned to develop a transportation system that provides great, affordable, healthy and low-impact options for community members and visitors alike. There is already a leading rural public transit system thanks to ACTR, and great options for biking and walking in and around Middlebury. And yet ownership of multiple personal or family vehicles and single-person trips remain both normal, necessary and a significant financial burden for many people in Addison County. Ridesharing represents an emerging strategy to increase options and reduce vehicles on the road. There are also innovative opportunities to increase transit ridership and to improve options to provide better service to individuals, businesses, and institutions. A more comprehensive transportation system coupled with parking on the outskirts of town could reduce the need for parking downtown and elsewhere. Working closely with partners including ACTR, this Task Force could do a holistic review of the transportation system in and around Middlebury. The Committee can then develop and implement a plan for transportation systems improvements including improved public transit options, better infrastructure and systems to support biking and walking, and increasing ridesharing options and participation. Large employers including Middlebury College and Porter Hospital could all have a role in moving this conversation forward.

### Action Steps

1. The Task Force will act as a convener to bring together ACTR with BETCHA Transit to improve collaboration and reduce redundancy in routes.
2. To Build Ridership and encourage the expansion of ACTR routes over time, the Task Force will develop a "Ride the Bus" campaign to encourage use of public transit.
3. The Task Force will lead an "Idle Free Part II" campaign to expand on idle reduction efforts and zero in on idle reduction devices for vehicles.
4. The team will work together to be a strong voice for biking safety encouraging safe shoulders, bike lanes and bringing dangerous storm drains to grade.
5. The Task Force will work to advance major bike/ped infrastructure currently in the works (planned bike paths) and for the future.
6. The Task Force will consider developing a town or region wide "Bike and Bus Community Arts Campaign."
7. The group will advocate for zoning that supports walkable neighborhoods.



8. The team will support the full implementation of the new train station as a multi-modal transportation center for the future.
9. The group will build a covered bike parking project
10. The Task Force will explore the feasibility of developing an electric jitney service.
11. It will connect to the medical community to advocate for walking and biking, potentially with 'Prescriptions for Exercise' and even, potentially, a contest.
12. It will encourage schools to improve biking infrastructure.
13. It will educate about ride sharing and the use of the VTrans ride share software system.

## Resources

1. The VTrans Open Trip Planner is a new structure to facilitate ride sharing
2. For Idle Reduction there are state and federal grants; contact the Air Quality Division at the VT Agency of Natural Resources.
3. The Vermont Community Foundation could be a supportive partner in this work.
4. VTrans can provide people, technical support, and, potentially, grant support to local initiatives.
5. The Addison County Regional Planning Commission could potentially lend support or help with grant writing.
6. Go Vermont! At [connectingcommunities.com](http://connectingcommunities.com) has connections to people and resources, including Ross McDonald, who can help.
7. The large employers, including the college, Porter Hospital, and Exchange Street businesses are essential partners, especially to expand bus routes or jitney services.
8. Middlebury College Students could be invaluable and eager leaders in helping to advance these initiatives and evaluate their carbon impact.

## Task Force Sign-Ups

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# Progress Report

Bringing about a change in transportation habits and patterns in a community represents a tremendous challenge ripe for a diverse mix of solutions. With over 40% of Vermont's greenhouse gas emissions coming from this sector, and about 50% of an average \$4,750 household energy budget dedicated to visits to the gas station, the importance of tackling this challenge is clear. At the same time, the habits, culture, and infrastructure surrounding the use of cars and trucks present a hefty obstacle to the adoption of alternatives.

Reducing single-occupancy vehicle trips and carbon emissions from transportation can improve quality life and the livability of communities. Throughout Vermont so much of our infrastructure has been designed around the automobile, and that is why a multi-pronged approach is necessary including the improvement and promotion of transit and ride-share options, making communities more enticing for biking and walking, and electrifying personal and business vehicles. Planning communities to reduce needed car-trips is also critical. This task force actively worked on most of these fronts.

Under the leadership of Laura Asermily with support from Dorothy Mammen, this task force successfully elevated topics including **transit ridership**, **downtown parking**, and the **location of a new Middlebury train station**:

- In collaboration with the local transit provider, Addison County Transit Resources (ACTR), the group advocated to maintain a convenient downtown location for the bus stop.
- The task force weighed in directly with the Town of Middlebury regarding the location for a new Middlebury train platform.
- The task force engaged and supported the work of the Walk-Bike Council of Addison County.
- Steve Maier and members of the task force actively explored the possibility of an electric bike and electric scooter pilot program.
- The task force worked with students from the Middlebury College Environmental Studies Senior Seminar and ACTR to survey area residents and transit riders about their transportation habits and needs.
- The Senior Seminar students also evaluated the obstacles and opportunities for a collaboration between ACTR and Middlebury's school bus provider.

The task force received great support throughout from Deb Sachs working on behalf of GoVermont, and strong participation from ACTR.

## ► Increase staff capacity at the local and regional level to coordinate climate change and energy related actions

Community Chairs: **Spence Putnam, Andrea Murray, Amy Sheldon**

Facilitator: **Jon Copans**, *Climate Economy Model Communities Program Director*, VCRD

Resource Team Members: **Sally Miller**, *Director*, Sustainable Woodstock

**Tom Roberts**, *Executive Director*, VITAL Communities

Implementing a successful climate-change agenda requires coordination among communities and staff resources to fully realize the potential of volunteer committees and neighborhood-based action. This Task Force can engage local citizens, select boards, the regional planning commission and other possible partners in a dialogue with the goal of increasing and deploying resources to implement climate-related programs.

### Action Steps

1. Establish a guiding mission statement for the Greater Middlebury Climate Economy Initiative. This will be derived from the broader vision statement. The other task forces will be included in the development of the mission statement.
2. Investigate and engage possible partners/homes for this organization.
3. Define an organizational structure and regional scope.
4. Develop a description of the work to be done and the position/positions created to do that work.
5. Identify funding sources and establish a fund to support the work of this organization.

### Other possible steps:

- Convene conversations with organizations and communities to ascertain needs
- Define tangible goals – what does a successful outcome look like?
- Decide – does this need to be a separate entity or can it be incorporated within an existing organization
- Middlebury will soon have an additional \$200k annually as a result of VGS payments – these funds could go towards this effort and used as match to secure additional funds
- There is great potential for a green business consortium that helps to establish the Middlebury Area's reputation as a hub for the climate economy
- Midd Corps is a potential workforce
- There needs to be an assessment of the limitations of existing organizations and the gaps that exist
- Things need to be professionalized – depending on volunteers is not sustainable
- Local and regional government need to be able to match and support the work that is happening on the ground. There is a need to build capacity within government. Training and leadership rotation could be helpful.
- Perform an investigation to facilitate coordination. Send out members of the task force to engage stakeholders/partners and then report back
- Define the indicators of healthy and viable organizations
- Is the focus on the work of the task forces or is it more broad than that? General consensus that this organization should start by focusing on the Task Forces and possibly expand from there.
- Convene the leaders of key organizations for a discussion about existing resources and gaps and how this new entity could fit with and support their work.
- We need a unifying message to form an umbrella for this initiative.
- Avoid/eliminate duplication.
- Host a Climate Economy Conveners Convention.



- Coalesce resources to serve as a clearinghouse and supporter.
- Communications and outreach is key.
- Send a delegation to Woodstock to learn more from Sustainable Woodstock and Vital Communities

### Other Organizations/Entities

- ACORN
- ACORN Energy Coop
- ACTR
- RPC
- Energy Committees
  - Middlebury and Weybridge
  - Energy coordinator in Leciester
  - Ripton has done an enhanced energy plan
- Activist organizations
  - Pipeline opposition
  - 350.org
- Conservation Commissions/Committees
- Town Planner in Middlebury
- ACEDC
- Walk Bike Council of Addison County
- Middlebury Safe Routes
- Addison County Bike Club
- Middlebury Area Land Trust
- Interfaith Climate Action Group
- Addison County Community Land Trust
- Vermont Community Foundation
- VT Department of Health
- Middlebury College
  - Environmental Council
  - SNEG (Sunday Night Environmental Group)
  - Sustainability Coordinator
- Addison County Teens
- Champlain Valley Farmers Coalition
- Farm Bureau

### Resources

1. Vermont Community Foundation
2. Vital Communities
3. Sustainable Woodstock
4. Towns of Hartford and Brattleboro (Municipal model)

### Task Force Sign-Ups

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# Progress Report

The founding and launch of a new non-profit organization, the **Climate Economy Action Center of Addison County** is the realization of an aspiration brought forth at the very beginning of the process. From the beginning, participants were thinking about how to grow local capacity to support local and regional climate action. The task force that came together to implement this priority worked hard and consistently over many months to get to this point. They also received some important help, both at the beginning of the process and after working for a few months. Tom Roberts from Vital Communities and Sally Miller of Sustainable Woodstock provided priceless advice as this group established a plan of action. Both organizations provide a possible model and Tom and Sally's willingness to share their respective origin stories was tremendously helpful. After a few months of convening, the task force received an additional boost in the form of locals Mary Cullinane and Stacey Rainey of Community Barn Ventures. Bringing great expertise in facilitation and business development, these two played a key role in enabling the task force to settle on an organizational structure and approach that has helped drive this effort forward.

As the overview below indicates, this group has officially formed and is busy building the foundation for long-term success. Visit <https://ceacac.org/> for the latest updates.



## Climate Economy Action Center of Addison County

### Our Vision

The Climate Economy Action Center (CEAC) works with community partners to promote a healthy economy through deep carbon reduction. As a nonprofit, 501(c)(3) organization, we focus on strengthening Addison County's economic, environmental, and social resilience. We are dedicated to supporting a thriving ecosystem of people, businesses, and institutions.

### How Will We Get There?

- The Climate Economy Action Center nurtures connections between economic/social health and carbon reduction.
- We work to sustain our vibrant communities by organizing *Focus Projects* that address critical challenges facing Addison County.
- We cooperate synergistically with interested parties, organizations, entrepreneurs, and advocates.



### History

In late 2017 Middlebury was chosen to participate in the Vermont Council on Rural Development (VCRD) *Climate Economy Model Communities Program*. This initial stage was a citizen-driven effort with VCRD and many community partners to begin cultivating economic development, innovation, and affordability in the face of climate change.

Over 150 participants attended a series of public meetings to identify strategies and develop action plans. Task forces prioritized the topics of energy, transportation, and agriculture.

### Contact Us!

Do you have more questions or ideas for us? We would love to hear from you. Email Steve Maier: [sbmaier55@gmail.com](mailto:sbmaier55@gmail.com) or visit our website: [www.CEACAC.org](http://www.CEACAC.org)

MORE INFORMATION ON BACK

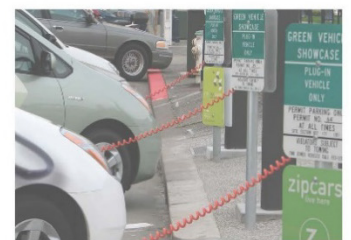
## Moving Forward

Now that CEAC has a Board of Directors and is incorporated as a nonprofit, we are seeking partners and funders who share a mutual passion for our vision and want to support our next steps:

- |   |                      |
|---|----------------------|
| ○ Secure funding to further develop the center  | Goal Date: Dec. 2019 |
| ○ Hire a part-time Executive Director   | Goal Date: 2020      |
| ○ Continue the current Focus Projects and establish selection criteria for new projects | Goal Date: Ongoing   |

## What Are Focus Projects?

The Climate Economy Action Center organizes around specific Addison County-based projects that have significant and sustained social, environmental, and economic impact. We also seek to set precedents for our region, state and beyond in the emerging economy that can thrive in the face of ongoing climate change.



### Focus Projects to date include:

- Innovative carbon reduction projects in Middlebury (<https://bit.ly/2Vo3OAS>)
- Collaboration on a Business Energy Efficiency Grant Program (<https://tinyurl.com/yv7atsij>)
- Campaign to celebrate and build ridership for Addison County Transit Resources (ACTR)

### Future Focus Projects could include:

- Facilitating energy retrofit and solar for schools
- Creating a Green Revolving Loan Fund for Addison County towns
- Greenest Street Award program
- Piloting local energy efficiency manufacturing
- Nurturing healthy downtowns and working lands

### CEAC Board Members

Steve Maier, Chair  
Spence Putnam, Secretary  
Greg Dennis  
Andrea Murray  
Amy Sheldon

### CEAC Organizers and Friends

Jack Byrne, Mary Cullinane,  
Fred Dunnington, Jeremy  
Gildrien, Fred Kenney, Adam  
Lougee, Diane Munroe,  
Heather Neuwirth, Fran  
Putnam, Stacey Rainey, Claire  
Tebbs, Thomas Wentworth

Special Thanks to Jon Copans, VT  
Council on Rural Development

## ► Help farmers transition to organic and regenerative practices

Community Chair: **Ashar Nelson**

Facilitator: **Ben Doyle**, *Assistant State Director*, USDA Rural Development

Resource Team Members: **Kirsten C. Workman**, *Agronomy Specialist*, University of Vermont Extension and Champlain Valley Farmers Coalition  
**Maddy Monty**, *Membership Manager & Policy Advisor*, NOFA-VT

Transitioning from conventional farm practices to organic and regenerative practices can have a positive impact on the environment and a farmer's bottom line. This Task Force will convene to develop incentives and other approaches to encourage an increase in organic farming and carbon sequestration in Addison County.

### Action Steps:

1. Form consensus and define "regenerative agricultural practices." Ensure that the definition is positive and inclusive.
2. Strengthen the taskforce. Each member should bring a friend to the next meeting at which the group will think strategically about who the key players are to help in this effort. While the taskforce must be open and inclusive, it's also important to do some extra recruitment of these key players.
3. Identify metrics with baseline data so that the group can measure progress. Some of this data might already exist (look to partners like UVM Extension) while additional information (i.e. awareness) might be collected through surveys.
4. Develop strategic plan(s) to communicate. Look for ways to share information/results about this effort with various stakeholders. A strategic plan for communication will help identify these stakeholders as well as best means of dissemination.
5. Create a "Climate Hero Farmer" initiative that shares the stories of local ag producers who are using regenerative farming practices. Create window displays in the downtown that serve both to celebrate these hero farmers and educate the public about regenerative practices.

### Additional Action Steps

- Increase educational opportunities for farmers around regenerative practices. Leverage existing efforts (i.e. Champlain Valley Farmer Coalition)
- Educate consumers about the market potential/positive economic impact of regenerative practices
- Investigate the role of food hubs in emerging markets for regenerative ag practices
- Identify alternative products (produced through regenerative ag) that there might be a market for
- Encourage large institutions in the area to purchase products made through regenerative practices
- Facilitate conversations about on-farm energy efficiency practices
- Identify and education technical assistance providers (seeds/fertilizer sales, veterinarians, advisors, etc.)
- Engage ACRON to see if it can help in this effort
- Look for ways to incentivize regenerative ag practices through local/state policy

### Resources

1. Local legislators (Chris Bray, Amy Sheldon)
2. Joshua Faulkner (UVM), Climate Change and Farming program
3. NOFA Winter Conference (host a roundtable)
4. Champlain Valley Farmer Coalition
5. USDA Rural Development



6. UVM Extension (Middlebury Office)
7. USDA NRCS and local Conservation District
8. Middlebury College (faculty and students)
9. ACORN
10. Rural Vermont
11. VT Community Foundation (funding for Hero Farmers window campaign)
12. Vermont Arts Council (funding for Hero Farmers window campaign)
13. Vermont Land Trust
14. Middlebury Co-Op

## Task Force Sign-Ups

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## Progress Report

Addison County is home to a significant portion of Vermont's dairy farms along with a diverse mix of other farms growing fruits, vegetables and other products. The practices deployed by all Vermonters working on the land have significant climate implications with 11% of Vermont's carbon emissions coming from the agricultural sector. This task force came together with the goal of recognizing and rewarding those area farmers employing practices that minimize climate impacts and maximize climate benefits. After substantial deliberations, the group worked through the year to develop a ranking system as a tool to recognize and ideally to reward those farmers deploying the most climate-friendly practices. The task force worked to develop a draft of the scoring system modeled somewhat on LEED certification for buildings. Members of the task force also engaged farmers directly, via scheduled interviews and at the Addison County Field Days to gather feedback.

## Climate Hero Farmer Program

The following are a list of categories and criteria developed by the task force to be used in scoring for the Climate Hero Farmer Program.

### SOIL HEALTH

- Soil Test - Depth of Topsoil
- Soil Test - Soil Chemistry
- Adopt practices to reduce Soil Compaction
- Cultivate the Soil Micro-Biome
- Use No Till Practices (without Chemicals)
- Limit Synthetic Pesticides (incl. Herbicides, Fungicides)
- Limit Synthetic Fertilizers
- Use of Bio-Char for Soil Improvement

### WATER QUALITY

- Meet RAPs (Required Agricultural Practices)
- Adopt Techniques to Preserve Soil
- Increase Soil Organic Matter
- Limit Chemical Runoff and Nutrient (Fertilizer) Runoff
- Increase Buffer Sizes
- Adopt Water-Conserving Irrigation Practices
- Enhance Wetland Function
- Manage Fuel Storage and Equipment Fueling
- Restrict Livestock from Waterways
- Limit Annual Crops in Floodplain

### CARBON SEQUESTRATION

- Register Farm with Atlas of Biological Work (<https://atlasbiowork.com>)

- Baseline Measurement of Soil Carbon
- Annual Update of Soil Carbon Measurements
- Adopt Practices to Increase Top Soil
- Composting
- Adopt Bio-Mass Planting Strategies
- Practice Agro-Forestry/Silva Pasture/Coppice Forestry
- Practice Mob Grazing/Bale Grazing/Intensive Grazing

### LAND CONSERVATION

- Document Soil Types, Especially Prime Ag Soils
- Conserve Riparian Buffers
- Conserve Flood Plains
- Conserve Entire Farm
- Adopt rotational Grazing Practices

### BIO-DIVERSITY

- Promote Soil Biota and Beneficial Bugs
- Promote Pollinators
- Use Bird-Friendly Farming Practices
- Manage for Wildlife Corridors

### ENERGY CONSUMPTION

- Document Existing On-Farm Fuel Use (min. One Year)
- Use Renewable Energy (on Farm)
- Support Renewable Energy (off Farm)
- Convert to an All Electric Farm Economy
- Reduce Equipment and Process Fuel

- Adopt Energy Conservation Practices in Farm Buildings

### GREENHOUSE GAS EMISSIONS

- Calculate Farm Emissions
- Limit Fossil Fuels
- Reduce Methane Emissions
- Use Bio-Digester (with stack cleaner)
- Develop On-Farm Fuel Sources (Solar, Hydro, Wind, Bio-Mass)
- Adopt Use of Draft Animals

### WASTE REDUCTION

- Create a Waste Management Plan
- Compost Bio-Mass
- Adopt Practices to Reduce Waste Water
- Adopt Practices to Reduce Container Use (Farm Inputs and Products)

### LOCAL CONNECTIONS

- Buy Farm Supplies Locally
- Source tracking for Supplies (total distance from manufacture)
- Local Sales
- Supports local labor force
- Provide Education to Local Community
- Collaborate with Peer Farmers (Farmer-to-Farmer Education)
- Local Seed Sourcing/Re-Use/Seed Banking

### INNOVATION

- Innovation in Farming

## ► Advance Energy Efficiency and Renewable Energy Opportunities for Homes, Businesses and Other Buildings

Community Chair: **Chris Huston**

Facilitators: **Jon Copans (VCRD) and Paul Markowitz (Efficiency Vermont)**

Resource Team Members: **Paul Markowitz**, Efficiency Vermont

**Jeff Monder**, Green Mountain Power

**Tom Murray and Tiana Smith**, Vermont Gas Systems

**Rick Shappy**, Neighborworks of Western Vermont

Middlebury already is a statewide leader in community-based efforts to encourage residential and business energy efficiency. This Task Force will take these efforts to the next level by working to significantly improve energy efficiency and renewable energy opportunities for homes, businesses, and other buildings. The Task Force will work with utilities and other partners to expedite the pace of Middlebury's transformation to an efficiency and renewable energy-based economy. The goal will be to implement solutions that address the complex set of barriers to more widespread adoption.

### Task Force Sign-Ups

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# Progress Report

This Task Force came together at the very beginning of the GMCEI process and got to work immediately to identify key action steps that would reduce carbon emissions from energy use in the Middlebury area. After consideration of various options, the group decided to focus in on a neighborhood-scale initiative. The task force worked intensively with utility partners Efficiency Vermont, Vermont Gas, and Green Mountain Power to design something called the Neighborhood Energy Project. The idea was to work with a core group of volunteers from a selected neighborhood to organize a campaign to get as many residents as possible in that neighborhood to have a free home energy visit. The volunteers performed outreach through door-to-door contact, leaflets, lawn signs, and at social events to gather sign-ups. Utility partners then followed up with one hour visits from trained professionals who did home walk-throughs, reviewed the full scope of energy use for a household and made a diverse set of recommendations. The South Street Neighborhood Energy Project was completed over the summer of 2018, and efforts in a second neighborhood, Gorham Lane, took place in the fall.



## Results from the South Street Neighborhood

*(based on a survey of participants)*

**100** homes in the neighborhood

**43** Home Energy Visits completed

**22** post-visit surveys completed

**91%** of those surveyed found their visit somewhat or very helpful

**76%** of those surveyed found the project helpful in growing their connections with neighbors

**6** surveyed households took a major action as a result of their visit (including insulation, heat pump installation, purchase of an electric vehicle)

**17** surveyed households plan to take a major action as a result of their visit

Here's what one Neighborhood Energy Project participant had to say:

*"We had been under the assumption that an electric vehicle was too expensive while we are making college tuition payments. Matt, our energy advisor, asked us if we had thought about making an EV purchase and then let us know of a vehicle within our budget. We purchased a 2015 Nissan Leaf at the end of August. I am very satisfied with this vehicle."*

## SOUTH STREET NEIGHBORHOOD ENERGY PROJECT



### Do you want to save on your energy bills?

The South Street Neighborhood, including Chipman Park, Green Mountain Drive, Benedict Lane, and Lantern Lane have launched an initiative to help increase the comfort, health, and affordability of our homes, while also reducing fossil fuel emissions. We are connecting, neighbor-to-neighbor, to introduce the program and to sign people up for some great, limited time offers for folks living in the South Street neighborhood, including:

#### **Free Home Energy Visits**

A certified energy professional will conduct a 1-1½ hour home visit to help you better understand your energy usage, identify opportunities for savings, and leave you with recommendations for moving forward.

#### **Free Smart Thermostat**

We are providing free smart thermostats for homeowners who participate in the free home energy visit.



A campaign to promote free business energy visits was also initiated under the purview of this task force. It was a collaboration with Efficiency Vermont, Green Mountain Power, the Addison County Economic Development Commission (ACEDC) and the area Chamber of Commerce. ACEDC created a small grant program to support those businesses that received visits and were interested in pursuing recommended measures. New Leaf Organic Farm was the recipient of a \$1,000 grant from ACEDC. These funds were used to increase the energy efficiency of a new workspace being developed in the barn at the farm.

*Jill Kopel, owner of the New Leaf organic Farm  
accepts the grant from ACEDC Executive  
Director, Fred Kenney*



## VI. Kick-Off Forum Notes

Compiled from focus group discussions held with over 100 Middlebury and surrounding community members and 28 Visiting Team members on September 18, 2017

*On September 18 over 100 citizens from Middlebury and surrounding communities gathered with 28 Visiting Team members from around Vermont for a series of themed forums to discuss ideas for improving the affordability, economic vitality, and resilience of Middlebury while also tackling Climate Change. Although the prioritization work requires a town to decide what is most important as it moves forward with Task Forces, nothing is lost in the process from the long list of concerns and ideas expressed in early community focus sessions. Many interesting and diverse thoughts are represented here, and are presented as a reminder of issues explored, and a possible foundation for future projects.*

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### Home and Business Renewable Energy Generation Opportunities

**Visiting Team:** Betsy Bloomer, Sarah Brock, Jon Copans (facilitator), Paul Costello, Dwight DeCoster, Laurie Fielder, Jeff Forward, Jennifer Green, Jeff Manney, Paul Markowitz, Tom Murray, Rick Shappy, Li Ling Young (scribe)

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#### What is the current lay of the land? What has been tried and what has worked in Middlebury and surrounding communities?

- Energy Dashboard, can see properties that have gone solar. Hosted events like energy expos. Tours of some of these facilities. Two already.
- SunCommon, 1 in 28 in Addison Co have solar from their company. What is the next stage of development? Increased storage capabilities.
- Home owner now heats with wood stove and 5 heat pumps. Was this a deep energy retrofit? Sounds like new construction. ACORN will soon be offering a buy-in for power from the grid.....sounds a little vague...is still secret.

---

#### What are some individual/household challenges in going solar or using other new efficient technologies?

- Too much shade; low electric use could not justify;
- Likes the chores of fire wood;
- Don't use enough electricity;
- Those without means can't afford the option;
- Indifference or unaware;
- There needs to be an emphasis- upfront—on conservation/efficiency upgrades;
- Hard to take on the debt with all the other expenses;
- Might be moving soon; what to do with the old heating system; there needs to be new ideas in thinking
- The PACE program can be tapped and can get rolled to next homeowners.
- VSECU, a lot of work to train appraisers (already 8); they order green appraisals for homes they know have PV and renewables
- SunCommon – looking at other ways to adjust traditional mindsets.

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#### What are some community-based models of encouraging deployment of residential and business-scale renewables?

- Sarah Simonds, VITAL Communities - Solarize Program and the Weatherize Program – reach out to local solar installers and determine outreach capabilities on a very grassroots level, influx of small scale contractors to help with these efforts; Upper Valley area will be training realtors and appraisers for VSECU type programs; facilities managers to talk to each other about large scale business and C&I;
- Jennifer Green, Burlington Electric Department – Solar Shopper - vendors agreed to respond to interested customers about solar installs, customers answered 5 simple questions; 40 inquiries so far...no contracts yet...still looking at financing

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#### What are some opportunities to increase participation in renewable energy opportunities?

- How to navigate through the complexity of these technologies
- Solar Shopper works well, believes in it;
- All utilities are required by law to have as part of their energy portfolio a certain amount of renewables. When will efficiency upgrades be considered marketable for individual homes?
- How can GMP and other electric utilities work with groups of residents to address these or other obstacles/issues?
- Why isn't it mandated...the savings are often there.

- Use whatever money you can have...remove cash and assets from the stock market...redirect your investments. What money do you already have?
- Continuing education from SunCommon.
- Homeowners should be aware of tools like PVWatt (online tool)....
- Inform by neighbor to neighbor action;
- Put information in the GMP bills;
- We need more volunteers, need more financing;
- Getting process into the economic mainstream;
- Scale-up NWWVT to address the problem;
- School/education;
- Get solar arrays on those large business flat roofs—make it easier to incentivize these;
- ACORN - sometimes these retrofits are difficult—not designed for arrays;
- Put into the building code where new barns can physically handle these arrays;
- Home tours of residences that have already done the work;
- Address the NPV of solar installations and investors of bonds looks are future cash flows in form of a loan;
- Why wouldn't commercial businesses be interested in the 30% tax credit;
- What bills does what take advantage of to offset the upfront costs in eventual ROI? ;
- Group net metering needs to be pushed more strongly.

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### **Who should be invited in to participate in this conversation moving forward?**

- Regional Planning Commission
- Vermont Agency of Agriculture
- Better Business Bureau
- Chamber of Commerce
- State Pension Plan
- Banks
- Credit Unions
- Facilities Managers
- Middlebury College
- Schools
- Do-It-Yourself'ers
- Legislators
- ACORN
- SEON (Brattleboro example)
- Wind experts
- Storage experts
- Weatherization Assistance Program agencies
- Churches
- Builders

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### **Reflections of the Visiting Team**

- Liked the mix of participants;
- Learned a lot, lot of expertise here, maybe biomass, too, what does future look like;
- Need need to help the LI folks;
- Don't forget your business community, Heat Squad has done great work;
- Bring value with grid system and adding storage to strategic locations;
- Home Energy Labeling, wood is the "other" renewable, town energy coordinator;
- Use Solar Shopper, Vermod for lower income folks, the nexus between health and renewables, including indoor air quality;
- Financing has to be a big piece, they finance a lot of solar projects, V green program;
- Many different ways to go forward, whether it is solar or biomass....go with one cohesive plan;
- Don't forget your non-profits;
- The power of this community is incredible, bonding comes naturally, involving teenagers, the power of the lead utilities/organizations of GMP, EVT, VGS are great.

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## **Home and Business Energy Efficiency and Transformation Opportunities**

**Visiting Team:** Betsy Bloomer, Sarah Brock, Dwight DeCoster, Laurie Fielder, Jeff Forward, Jeff Manney (scribe), Paul Markowitz (facilitator), Tom Murray, Rick Shappy, Li Ling Young

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### **What is the current lay of the land? What has been tried and what has worked in Middlebury and surrounding communities?**

- Past efficiency work and efforts in Middlebury was to reduce carbon footprint, form energy committee, neighbors are spreading word to neighbors, Middlebury Unplugged was geared to reducing electrical end uses in homes and small businesses, group talks, home energy visits, best—not lowest—hanging fruit
- Weybridge energy committee- 80% of work is on energy efficiency, start with weatherization before alternative energy, did Button Up workshops, had Button Up day, they won a prize of \$10,000 (3% weatherized). Keys to Success: being a small town, great leadership and motivation

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### **What are some individual/household challenges in going solar or using other new efficient technologies?**

- education and volunteer efforts must be increased, the business community has to step up;
- Vermonters tend to be pretty resourceful and frugal and practical;
- these large, old rambling farmhouses are very difficult to maintain and to fix;
- So many costly fixes and types of fixes;
- much of this work is confusing...confusing to understand;
- Even energy efficient measures are mis-prioritized by homeowners...like new windows;
- Get loan applications for \$60,000 cars every day;
- Some homeowners have grown accustomed to other, immediate conservation fixes (heavier clothing) / love wood heat;
- A lot of the lead stuff has been done...need to get more of this work to resonate with homeowners;
- Most people make these decisions on economics and payback.

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### **Who/What are some of the existing programs to provide residential and business-scale energy efficiency and energy transformation services?**

- Dwight DeCoster, Champlain Valley Office of Economic Opportunity Weatherization Program - CVOEO is trying to get more low income folks served, are putting more emphasis on single family/mobile homes; have improved to a year and half waiting period; do full energy audit for these folks; do shell work; health and safety issue mitigation; deferred maintenance is another component that is often part of work scope
- Laurie Fielder, Vermont State Employees Credit Union (VSECU) - loans that were structured to help homeowners with energy efficiency work, such as the Heat Saver Loan; these loans have very low interest rates, including down to 0% loan; this includes business loans, too; 375 loans have been filed, must be EEN Certified contractor;
- Tom Murray, Vermont Gas Systems - team of auditors, do full reports, they are exploring many different markets and options, they have a stable of participating contractors, they do about 400 audits a year (free);
- Rick Shappy, Neighborworks of Western Vermont - does similar model as VGS, but the audits are not free, they have their own financing option (very similar to Heat Saver Loan);
- Betsy Bloomer, Green Mountain Power - their heat pump program works closely with NWWVT, they offer heat pump rental plans (much like water heater rentals), GMP has great feedback; EVT has great survey feedback;
- Sarah Brock, Vital Communities – were able to double number of solarization by coupling owners with contractors, brought all stakeholders in the room, try to figure out what was holding back the owners from going forward....cost.....so contractors scrapped the audit/estimation fee; there was also screening with online survey...they had 50% conversion rate.
- Paul Markowitz, Efficiency Vermont – HPwES program – audits, incentives; buy-down or upstream incentives with LEDs and heat pumps, etc.; offering free LEDs for committees engaging in at least two actions in your own home...then go into the community dashboard and fill in what was done;
- Laura McLaughlin, Vermont Energy Education Program (VEEP) - change the light program, students got two LEDs for free, and got more if they did work at their homes or in their schools, do Button Up too.

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### **What are some opportunities to increase participation in energy efficiency and energy transformation opportunities?**

- Addison Co has eVolve Panton...why aren't we hearing about it?
- What resources are available for homeowners to understand what is available for them;
- Did stuff right at church services...what other captive audience opportunities are there?;
- Maybe we need to think smaller for individual projects...emphasis is on too much of the comprehensive energy retrofit;
- Customer service is biggest missing piece;
- Efficiency providers need to coordinate more cohesively with each other;
- One visit, one stop type of shopping;
- Lack of contractors in Middlebury;
- Affordable efficiency bond (posed to Senator Bray);
- Incentive amount from EVT is not enough, homeowners need more than a couple thousand dollars for these more costly jobs.

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### **Who should be invited in to participate in this conversation moving forward?**

- Teachers and educators;
- Keith Wilkerson;
- Energy planner;
- Matt Couture;
- Bruce McIntyre facilities manager of the district;
- Rental property owners;
- Addison county land trust;
- Nursing community/assisted living facilities (facilities managers);
- Sarah Carpenter – national bank of Middlebury;



- Doug Nedde;
- Paul Ralston;
- Oakley Smith;
- Realtors (Bonnie Bridley);

- Matt Curran with Middlebury College;
- Harvestar in Bristol (Eric Hartman);
- John McIntyre; Silver Maple Construction.

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## Middlebury's Vision for Climate Success

**Visiting Team:** Jon Copans (facilitator), Paul Markowitz (scribe), Tom Murray

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### What are the community Assets in this area? What's working now, what's going well?

- Middlebury College says they are carbon neutral; they are an asset in terms of students and experts on campus that can be tapped into
- New town office that is new zero energy, has an energy dashboard
- Lot of support for mass transit, looking at bringing a train through
- Emphasis on using local foods in schools, elsewhere
- Individual efforts to bring renewable energy, e.g. rooftop solar
- Active energy committee in Middlebury, Weybridge, others
- Transfer station, Addison county solid waste district, composting
- Energy dashboard tracks progress
- UVM extension service to work with farmers
- Digester is Salisbury that will produce methane gas from dairy farm and will go into pipeline; folks can buy "renewable gas"
- Safe Routes to School program – encourages students to bike, walk; Addison Bike-Walk Group
- Very supportive Selectboard in Middlebury supporting economic development, this effort
- Middlebury Food Coop big hub for local food, has solar
- Energy plan developed by energy committee;
- CO2 emissions study done back in 2004 – however, limited data
- Strong community of green builders, architects who are very knowledgeable
- Bristol co-housing project in downtown Bristol
- Supportive local newspaper, Addison County Independent
- Lots of physical resources, e.g. land, hydro, wind
- ACORN – developing another 150 kw community solar array; CPG is currently before Public Utilities Commission
- Middlebury Town has committed \$\$ to combat climate; still to determine how it will be spent

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### What are the Challenges in this area? What are the issues or problems to be addressed?

- Getting individual towns to buy in and establish priority areas in their towns for community solar
- Existing fossil fuel infrastructure makes it really tough to make the big shift that we need to make
- Backlash against "green" energy happening, e.g. large solar, wind
- \$\$\$ - big obstacle
- Community engagement – how do we engage community members?
  - Lack of awareness of how serious the situation is (climate change); how do we reach people and affect them in a way that they want to change
- Climate denial has become a political reality
- People are overwhelmed by the problem of climate change, e.g. "we are already screwed anyway"; how to make it so that people aren't disempowered
  - People don't believe they can make a difference or that individual changes they make will make a difference.
- We are short on professional to do the work, e.g. thermal shell improvements
- Lack of awareness by developers who aren't aware of green building techniques; why they should build green
- People bought into myth that what's good for the environment is bad for the economy

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### What should be done? What action can be taken by the community in this area?

- Show people how alternatives/efficiency pays
- Educating young people in the schools
- Our job is to convince people that everybody can do something
  - And then share what they did with their neighbors and friends
  - Give folks very concrete actions that they can take
  - Change happens at an individual level; let's start within our own sphere of influence
  - Or – who is one more person I can do something with, do something as a group – projects where neighborhoods get together
- Educate the next generation of trades people – the ones who are doing the actual work; increase the number of people in these fields, e.g. thermal shell experts
  - Hannaford Career Center had a program on green buildings
  - Need to re-skill folks who are in fossil-fuel related jobs – for jobs of the future
- Modeling is important – if you see what your neighbor has done – can influence people
  - There are some opportunities if you think about how to turn a negative into a positive.

- There are some positives that have occurred over the last few decades, e.g. blue box recycling container
- What about commitment/declaration of community to set a forward thinking goal? E.g. net zero energy by xxx date
- Leicester has proposed a net zero goal; (Jeremy Guildiron)
- Montpelier, Burlington have set goals of net zero energy
- What about Middlebury?
  - Middlebury doesn't currently have a vision – but this process can help us develop this vision
  - Do we want to develop a vision for Middlebury?
- Working at the neighborhood level to do bulk buy for heat pumps
- Food! We have a strong agricultural base. What we do around food has a huge impact on our economy and the climate
- Incorporate climate curriculum into schools; make it real, hands-on, help create identity among school children
- Adopt a bold community goal – key first step!
  - Then start to lay out how we are going to get there
- Need to make it accessible to everyone. Develop a brand, an identity. How do we create an identity where people identify as someone who takes action around climate change?
- Climate success in Middlebury means educating children so that they are knowledgeable about what climate change means elsewhere
- We need to meet people where they are at now.
- Health network – 'Practice Green Health' – might be an opportunity to tie-in
  - Work with Porter, UVM health network
- Work with Middlebury College – key economic driver
  - Environmental Council – active student-faculty-staff group moving Middlebury college toward negative net energy use
- We need young people sitting at the table as we develop and implement ideas
  - Student from Middlebury College will be joining energy committee
- Make products here in Middlebury that help alleviate climate change impacts
- Green burial – all of our cemeteries are going to accept green burials
- Vital Communities models – Solarize Upper Valley, Weatherize Upper Valley
  - We need paid staff, establish a regional organization that works on sustainability
  - Move beyond solely volunteer efforts
- What role does Middlebury Town have in this effort? It would be great if the Town could take a greater role.
- Samso, Denmark – an island community – that has gone net zero/self-sufficient. Built upon strong community involvement.
- What would be a goal that would appeal to folks?
  - Save \$xx by xx date
  - Comfort, safety, health – benefits of efficiency/alternatives beside cost savings
- Increase # of businesses that are owned locally, owned cooperatively, owned by community
  - Community-owned businesses have more of interest in helping the community
- Should it be focused only on energy or broader to climate impacts/contributors to climate
  - Broader provides an umbrella for a lot of people to take action
  - People need to go where their passion is – provide a broad range of actions that they can take following their passion
  - Economic vitality is a strong motivator
- Creating good middle class jobs so that kids can grow up here and work when they get older
- Middlebury take a leap that puts us on the map! Go big or go home! Take a big leap forward.
- No new fossil fuel infrastructure

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## Housing

**Visting Team:** Abby Bleything, Ben Doyle (facilitator), Haley Pero, Kathy Beyer, Jenna Koloski (scribe), Adam Lougee, Melanie Pascevic, Karen Ranz, Kevin Wiberg, Claire Tebbs, Craig Peltier

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### What are the community Assets in this area? What's working now, what's going well?

- There is a lot of housing available for retirees, but especially for wealthier ones.
- The Farmers Home Administration program helps first time homebuyers afford homes. They will subsidize, or will even temporarily cover the mortgage. It is a great program that pays for itself.
- A lot of homes are located in walking distance of elementary school.
- Middlebury has a very walkable, bikeable town center.
- ACCT has just built some beautiful new homes north of downtown, replacing old less attractive ones.
- The Cottage Lane houses are narrow and close together with front porches. It is the town's most dense development. Everyone knows each other and socializes. That works really well.
- We have a number of good homebuilders interested in high quality and good home performance. Their homes tend to be higher end, but the sector is interested in green development.
- We have a decent mass transit system that helps connect the neighborhoods to the community.

- Habitat for Humanity has built 10 houses countywide. They have built very low/net zero energy homes that are affordable.
- Heat Squad of Neighborworks is a great resource and partner for weatherization in the area. They did the Cottage Lane efficiency work. They also have a buyer education program to inform homeowners and down payment assistance and energy loans.
- Middlebury has good infrastructure for water/wastewater and electric.
- We have access to goods and services in the downtown like grocery stores and other basic services and needs.
- A lot of people are putting on solar panels. There is interest in the community.
- ACCT owns 9 mobile home parks in the area. There are 14 or 15 in the county.
- ACCT has grant money to subsidize new Vermod homes to about \$100,000.
- There is a local homeshare program.

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### **What are the Challenges in this area? What are the issues or problems to be addressed?**

- It is hard to find a good home for less than \$300,000.
- There is a shortage of buildable land. Developments are filled up.
- In towns outside of Middlebury, housing is at a premium, especially because of septic requirements. It is expensive to build and hard to find a lot to get a permit. That is a challenge especially for young families with children.
- There isn't a lot of housing stock available as families are staying in their homes and space isn't opening up for new families to move in.
- The quality of what is available is often not what is wanted. We have old housing stock.
- Prices are high in Middlebury whether you are renting or trying to purchase.
- Even rental costs are high. It costs \$500 a month just to rent a room in someone's house.
- If you have a family with more than one child, finding a rental is very difficult.
- Middlebury College just built a lot of new dorms which has relieved some stress, but they also do own homes in town that are used for new faculty members or different programs on campus. In certain parts of town, they do own a lot of the houses. They don't have many students living off campus.
- There are certain parts of town where parents buy a house when kids are in college just to use when they come visit. This leaves many houses that go unoccupied for months during the year.
- The college has some subsidized housing for students.
- Regulations around home construction can make it difficult for a homeowner to use alternative building techniques. We have a building code that hasn't caught up at the state and local level.
- It is difficult to value solar panels on a home. Some are worth more than others. That is an issue with banks giving loans. Two different homes have come out differently. There is inconsistency in appraisals.
- Many appraisers are not educated on appraising for green building techniques.
- Affordability is the biggest challenge. We don't have a lot of production and new building happening.
- Rental stock is old and deteriorating.
- Starter homes don't stay that way because people add to them and they get larger and larger.
- Mobile home parks are built on land with poor drainage and there is no source to make infrastructure improvements. ACCT has been piloting putting Vermods in the parks and one of the challenges to that, besides cost, is that you don't want to put a brand new home on old infrastructure systems that aren't ready and able to support newer, more efficient homes.
- The age of homes in these parks varies significantly. Some are much older.
- It is still a challenge to find a market for Vermods at the subsidized rate of \$100K.
- Lack of education about housing and particularly energy efficient housing in the county. People are aware as they should be about heat pumps, weatherization, etc. Several entities are doing some of that education, but somehow people aren't quite catching on.
- It is a challenge to convince people to spend more at the front end to spend less later.
- Sometimes it's about education, but sometimes the cost doesn't work out. Low energy costs make it harder to make that argument – it's also about timing. If you're there long term, you can make the case, but for shorter term it can be harder. For a young person, jobs aren't as secure so it's hard to plan in the long term.
- We don't have an energy rating for homes. There are tools/scores, but they are underutilized.
- NIMBYism. Sometimes there can be resistance to affordable housing or dense housing in the community. It takes a lot of persuasion to develop in that way.
- Needs are met in Middlebury, but it is less money to build outside of town. This increases the need to drive longer distances.

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## What should be done? What action can be taken by the community in this area?

- Realtors could educate the community more about availability of energy score ratings and tools. Tools exist but we need more education and marketing around it. We could build an education campaign.
- Education around allowing multi-family housing to be built in our town center.
- We need to cultivate a culture of downtown dense housing and making zoning/regulations more friendly to that development.
- Major employers can be advocates to help shift the culture.
- We should hold big events as part of an education campaign.
- Develop a toolkit for those that need to approach landowners about new energy/housing/etc. projects so we don't have to start from scratch every time.
- We need to be educating our affordable housing organizations to know what our process is. There will be public input and hearings and it is the job of planners to use our process to help people get to a point where they're reaching consensus.
- Start a local housing committee to address affordable housing.
- Put energy codes on the radar screen. We have an energy code, but it's not enforced. We need to advocate for enforcement. The state energy code should be administered by people who understand it and not the local zoning administrator.
- We should adopt a stricter energy code for new construction locally.
- We could model national programs for rent to own options to help to get more affordable housing on the ground and build communities where someone has an equity position in something they can potentially afford. Detroit has one program as well as Austin, TX.
- Build small "tiny home" type developments. We could become a model. This has started happening in Windham County.
- Identify unused parcels in town and build incentives for development there.
- Conduct an infill study for the area to identify land and inform future zoning.
- Conduct a housing needs assessment.
- Conduct a survey to get a lay of the land. Perhaps engage the college in helping to capture the current situation.
- Develop a house labeling system for energy and provide incentives to use it.
- If you put a price on carbon, it reflects the cost of fuel in the cost of heating the home.
- Work with ACCT to develop an application for the new bond funds that state is putting out. The bond dedicated funds to 60-120% of area median income. The local housing coalition is working to get a project off the ground that can help address that need.
- Apply for the New Neighborhood programs with the state.
- Scale up public transportation for the three hub towns of Vergennes, Bristol and Middlebury. There's a need for coordination.
- Starter home for starter jobs. Work with companies to identify creative ways to bring housing for workers. For example, companies could purchase multifamily houses for new workers to live.
- We need more options for long-term stay for workers.
- John Graham has a grant to do weatherization in mobile homes. It hasn't rolled out yet and will be challenging in mobile homes because sometimes upgrades can be more than the home is worth.
- Cultivate local developers rather than try to engage large developers. Train local developers in a joint program between other communities.
- Approach Hannaford Career Center to develop a green building program.
- Redevelop vacant buildings for better community use.
- Encourage regional planning to hire an energy inspector to help enforce energy codes.
- Explore the redevelopment of the St. Marys property. This space is open land with an empty brick school building and empty old Victorian home. It would be a good place for affordable housing and should be looked into as part of the assessment.
- Gather a group to engage owners or property around their plans for vacant properties as potential locations.
- We need a higher level of sophistication to help coordinate and attract development. We are planning in silos.

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## Reflections of the Visiting Team

- Looking at New Neighborhood affiliation would be a great way to bring development costs down if there is a specific need in mind, someone needs to drive that. Conversion of single family into group housing or homeshare or apartments could be a good step. I liked the idea of workshops and education – how-to. The challenge is that the market is upside down. We would like to look for market incentives or figure out incentives that make the market work better again.
- The VT Community Foundation does impact investing and that includes housing. There is always an opportunity to work with VCF when starting to look at a specific project. Middlebury has so much going for it. I would encourage you to start looking at vacancies and think creatively about using infill as a way to keep costs down. A decrease in housing costs would take a major economic event – the other strategy is to think about how to create jobs that help people afford housing available to them.



- I heard a strong theme around affordability and availability as linked issues. It's been an economic drag and an obstacle to growth.
- To what extent is it about appropriate availability? Houses may be more appropriate for people looking for a place to move – how much needs to go into new construction vs. right sizing and right “qualityizing?”
- There is a “MPG” certificate for single family homes that was developed by Efficiency Vermont. Homes built in the 50s, 60s, or earlier are the biggest challenge and weatherization could have the most impact on carbon footprint. I loved hearing talk about density – don't give up on more density in the center or neighborhoods. There are models for Accessory apartment development, or increasing density in a district over time – it can happen!
- In Windham they have done work to make an economic hub around a green development theme. They may have some thoughts to learn from. Home share is a great idea to offer affordable housing in larger homes.
- Where does the density conversation sit with the town now? Has it been explored in depth? Does the current town plan accurately reflect community view point? Encourage town committees to discuss true costs of carbon to help people make the decision to go deeper.
- You have so many assets in place – education, incentives, walkability, etc. How are you sharing that information? How would I know that if I was a developer? There may be some additional tools to help tell that story. Share what is working, recognizing you do have challenges.
- It is a great idea to start a housing committee. Maybe there is a way to develop that committee from existing committees and volunteers. There are people willing to support if there is a local charge to bring it to that level.
- We need market drivers. Energy costs are low, it's getting warmer – the energy code needs to be enforced. We need to be forced into energy efficiency. People aren't making that choice and we need to push them. The energy score is important. We need to label homes to encourage informed decisions. The market isn't asking for it and we need to push that market.

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## Neighborhood-Scale Initiatives

**Visiting Team:** Kathy Beyer, Abby Bleything, Michele Boomhower, Ben Doyle (scribe), Jenna Koloski (facilitator), Adam Lougee, Melanie Pascevic, Haley Pero, Karen Ranz, Kevin Wiberg

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### What are the community Assets in this area? What's working now, what's going well?

- Group is trying organize a plastic bag ban. Was presented to the select board and discussed with Hannaford, but the group has realized that the issue more complex than originally thought.
- There is a culture of sharing in our neighborhoods (tools, trucks, etc.)
- There are a number of recognized neighborhoods and a sense of neighborhood identification.
- The condos have formal neighborhood associations, but many neighborhoods are informal as well.
- Front Porch Forum is very active.
- There are also some identified outlying neighborhoods away from the village and East Middlebury (has its own neighborhoods).
- Neighborhoods are organized and come together very quickly to responds to challenges.
- There are also other kinds of “neighborhoods” churches, etc.
- South Ridge (neighborhood development) is new and ripe for potential. Newer development makes it easier to bring a green ethos to projects. Because the development is not complete, there might be an opportunity to request some new/higher “green” standards.
- ACORN is active (works on net metering).
- It's a walkable community and people get out and see each other.
- Amazing number of organizations that work to support this work in VT and folks in the neighborhoods are very engaged.
- Some neighborhoods have maps of properties and homeowners that are used to foster information haring.
- Access to trail systems.
- College is involved in a lot of energy efficiency.
- The schools are centrally located and near where folks live.
- Lots senior folks contribute.

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### What are the Challenges in this area? What are the issues or problems to be addressed?

- Lot sizes in some neighbors (due to privacy) are very large.
- There was a community garden (has gone defunct). How could that work again?
- College is the elephant in the room—often they do great things but also has an outsized influence.
- Participation levels are of varying degree.
- Winter is a challenge—people don't get out as much as they would in summer.
- Snowbirds (some homes are seasonal and it's tough to organize people who aren't here).
- Folks don't have a lot of time. People are often working—being neighborly is tough.
- Aging population can't do as much as they used to.

- Middlebury can be an exclusive community—people who live outside of Middlebury need to pay the county but don't get direct how the funds are (but there are two sides to this
- issues and folks in town could say the same thing about how their tax dollars are used).
- Active cooperative market that brings people together.

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### **What should be done? What action can be taken by the community in this area?**

- Think about neighborhood approach to try to increase/inform energy savings. Looking for ways to share information at the neighborhood effort. Peer to peer support.
- Revive Efficiency Vermont neighbor to neighbor informal audit program.
- Try to ban plastic bags. Model that ban for the rest of the state. Start a committee to get a bag ban. Give everyone a free shopping bag (perhaps with neighborhood name).
- In response to act 146, encourage community composting. Gets some education around that and develop collaborative neighborhood composting.
- Group purchasing for neighborhood efficiency projects. Use collective community buying power.
- Develop a systematic program for tree planting. Strengthen tree committee. Look for incentives and grants to purchase.
- Develop community gardens through garden paths (let folks walk around the community) connect neighborhoods through gardens/walking paths.
- Looks for ways to get rid of lawns or turn them into edible lawns. Do it in an organized fashion. Don't build an orchard in one place but throughout a neighborhood.
- Develop rain gardens (provide education around how to build them).
- Convene conversations at the neighborhood level about affordable housing. What is each neighborhood's plan for contributing to affordable housing goals?
- Share available neighbor lawn space (cooperative lawn) for growing food or other forms of landscaping.
- Ensure that new houses are oriented towards solar in the long-term. Folks should at put homes on north/south axis. Create zoning regulation that makes this happen. Every house should be designed for solar.
- Create wood banks for planed cutting that could be donated to community members who needed firewood. Ensure that privately owned (trust) forests are properly managed.
- Looked into biomass options as well.
- Encourage people to use Energy Action Network dashboard (is it up to date?).
- Look for ways to increase biking safety (work is already being done by the bike/pedestrian group that this taskforce can plug into).
- Lots of community activities but look for ways to engage others outside of the neighborhoods (or Middlebury proper). Make it more welcoming for folks.
- County-wide festival or activates that expand people's sense of community. Every town can have its own voice. Market county-wide, not Middlebury specific.
- Look for ways to increase bus routes (like Central American models). Look to increase routes bus routes. Paint the buses in colorful/exciting ways.
- There should be lots of bike related activities. Look to expand existing programing that exists in other town.
- Get involved on local boards/committees to provide local leadership.
- Push major employers to organize carpooling options. Use Go Vermont (software)—Michele will provide additional info. Look to Hinesburg example.
- Empower local energy committee.
- Clothes line project. Provide technical assistance/education campaign around clothesline. Condos group need to revise bylaws. (It is illegal to ban clotheslines).
- College should eliminate free parking. They should also put solar on their buildings.
- Develop community development position to support neighborhood development.
- Put solar on rental properties—what's the market barrier there?
- Engage students at the high school around project based learning. Connect students with community gardens, clothes lines.

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### **Reflections of the Visiting Team**

- Likes the idea of engaging the co-op. Expand their mission to include energy. ACORN is doing great work. Likes the wood bank idea. Look to neighborhood campaigns.
- Neighbor to neighbor campaigns really work well. The more neighbors that sign up save everyone money (purchasing power). EAN product is successful and can be used. Lawn sign campaigns worked well. Obviously it needs someone to organize.
- Love the safe routes to school program. The jitney service program is exciting is but is challenging to make work. Develop sub-committees to encourage.
- Tool sharing is great as is neighborhood purchasing power. Neighborhood composting—sell the compost back. Gamify the neighborhood to increase participation and innovation. Tap the resources of the college to move projects forward.
- Believes there is a larger conversation worth having around transportation. Look to promote electric vehicles. Enhance opportunities for biking safety and education. Similarly encourage bus trips as well too. Think outside box. Go electric on lawnmowers.
- So many ideas about physical environment. Accessory dwelling units are allowed everywhere in Vermont and

folks can look into that to explore on large notes. Look for opportunities to expand neighborly connections throughout these seasons.

- Neighborhood tours is a good idea. Purchasing power is really important. Look to students at all levels. Community gardens and composting are connected and can often find resources to both.

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## Infrastructure and Transportation Efficiency

**Visiting Team:** Abby Bleything, Michele Boomhower (facilitator), Ben Doyle, Jenna Koloski (scribe), Adam Lougee, Nancy Owens, Melanie Pasceovich, Haley Pero, Karen Ranz, Claire Tebbs, Kevin Wiberg

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### What are the community Assets in this area? What's working now, what's going well?

- Middlebury is a hub and the intersection of all transportation options. We're special that way.
- We are doing a round bridge construction project.
- We are planning a transportation center to receive rail.
- We have the ACTR transportation center.
- We support bussing, walking, and biking to school.
- We have a lot of bike/ped infrastructure – crosswalks, sidewalks, etc.
- There is a wonderful Trail Around Middlebury through the Middlebury Area Land Trust.
- We're recognizing that electric vehicles are more than just cars and have held events related to that.
- We are working on trying to publicize and expand EV charging.
- We are looking at parking – not just traditional cars, but a full spectrum of vehicles that will need to access building and services.
- Middlebury has just rewritten our town plan and are maintaining and sharing the data.
- We don't have an interstate highway. This contributes to the kind of place we are in that it doesn't allow for sprawl outside center.
- We have a fairly dense settlement pattern and a village with things we want to access and services.
- It's not too hard to get to where you want to go without using a car.
- In many cases it is easier to walk than to drive places. On the path to elementary school for example.
- There is a long serving public works director with a lot of experience on these issues.
- Relatively new wastewater treatment plant.
- Good stormwater management system – could use some upgrades, but do a pretty good job.
- Great water supply.
- Basic needs are met.
- Efficient street lighting in place.
- The College has a district heat facility for the campus that is a biomass system.
- We are lucky to be in a safe place in the world. There are some flooding concerns, but in terms of climate change we're quite lucky.
- The railroad line through town is a transportation asset.
- Great schools.
- Relatively vibrant agricultural sector.
- A lot of social services are available. We have collaborative social services.
- The Middlebury - Burlington Link buses are very well used. ACTR would like to add more routes. The 116 route continues to grow.
- It helps that the college is behind and subsidizes sustainable transportation. It increases ridership.
- At the college students have done a lot of surveying to understand barriers around culture and convenience. Student data shows that if you build it, it will come. The tri-town shuttle has improved 23% this year after their work.

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### What are the Challenges in this area? What are the issues or problems to be addressed?

- There are no streetlights in Budolph Acres. Many would like to have them, but the developer wasn't required to install them.
- When we talk about walk to school events, schools outside of Middlebury are challenged in bike pedestrian access.
- There is no interstate.
- Despite the concentrated settlement pattern in Middlebury, there is still a challenge of people living very scattered around the county. It is not amenable to mass transportation solutions.
- It is hard to change people's mindset to take the bus.
- Since the 60s, we have developed in a suburban model with only single access to each school. That creates traffic problems for people getting to school. When the new middle school was built it was built separately from the other schools, This is inefficient.
- There are housing challenges. People want to live in downtown but the housing isn't available there due to both affordability and availability.
- The infrastructure is aging and needs to be replaced, but it's expensive. There are property tax limitations to improving roads, sidewalks, sewer, water, etc.
- The transportation infrastructure was built along river corridors. That worked fine, but with the changing climate it presents challenges. Rt. 125 is washing out annually.
- There is a sense of isolation here. Until the railway is ready to move people and freight, this is a relatively inaccessible place.

- There is a cultural challenge in Vermont. Amtrak train service hasn't been that popular. It is going to take some time to build that culture.
- Technology will help a rural state like Vermont because they can depend on availability and accessibility of transportation.
- Awareness and education and outreach. There is always more to do.
- We are a car-focused culture. We need to move to a culture around alternative transportation.
- The roads are challenging to bike commute on. Cycling can be harrowing.
- Self-driving vehicles are a "looming factor." There is uncertainty around how that will change the dynamic.
- Flying adds significant emissions and there are a lot of airplane flights. It adds up.
- Students are also not riding the bus. We promote a non-driving culture in our kids.
- There are barriers to using the school bus system for transit purposes.
- Our sense of time is a cultural reality. We tend to be in a hurry all the time and think we need to get to where we're going immediately.
- This is also an economic issue. Public transportation is successful in countries where many can't afford a vehicle.
- The town is paying for duplicative bus services to ACTR. We need to improve coordination.
- Road Maintenance is a challenge in the long-term. We need to think about the material we use and maintenance in the long term as the climate changes.
- VNAP is doing a smaller scale system with composting. There are good models out there. How can we generate heat and energy from waste we send to landfills?
- Railroad causes blockages in the transportation system and limits a couple of places where pedestrians cross informally. Is there any way to make that formal?

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### **What should be done? What action can be taken by the community in this area?**

- Develop a solar powered street lighting project.
- We should think more broadly about parking and claim parking for electric motorcycles, e-bikes, or bicycles.
- Create more park and ride options at the end of bus routes and all over the place.
- Build wider shoulders on streets for bikes to ride.
- Get a critical mass of bikes up to a level where cars expect to see bikes on the road.
- Advocate for the "Idaho Stop" – if you come to a stop sign you can treat it as a yield sign on a bike. Make this the local and state policy.
- Develop paved bike paths.
- Improve traffic calming measures. There are certain roads that cars fly down. We should use visual devices to cue vehicles to slow and do a "road diet" – keeping the road width the same but limiting traffic lanes.
- Middlebury is currently working on multiuse path in Middlebury on Exchange Street and rotary at end to help improve traffic issues.
- Develop incentives to walk/bike to school such as offering first dismissal where cars are last to be dismissed, or require students to pay for parking at the school.
- Work with Middlebury College to be more restrictive on student vehicles. Parking isn't priced to discourage. We could use revenue for other travel options for students.
- Find a way to slow traffic on unpaved roads.
- Provide bikes at college for students to get around town.
- We need a place close to downtown for commuter parking. There is space available just north of town owned by Agency of Transportation. This would be an asset for both passenger rail and commuter bus parking.
- We need to build these principals in as we develop from the get go.
- A lot of international students want to get to Burlington and don't have cars. We should help a more diverse student body and community access services.
- The Goodrich Farm methane digester project has been approved but we are unsure about the current status.
- Capture waste and turn that into energy for the area. We could do a waste mechanism to utilize gas infrastructure for energy like Essex has done. We do have opportunity for that here in Middlebury but would have to redo the current system. Right now we are going into a planning process for upgrades with the existing plant, it is our biggest electric draw.
- Build awareness around electric assist bikes and trikes
- Build awareness around Go Vermont and build involvement. Work with large employers to map where people are coming from and incentivize carpooling – like National Life and NRG do.
- Think locally. Think about where we can source things locally.
- Purchase hybrid or electric buses. This is being trialed in Burlington. We haven't found a suitable smaller bus, but ACTR is always looking and trialing and getting closer all the time. The buses have 5-7 year life so it may take a couple of cycles but we'll get there.
- Protect or improve pedestrian crossing over railroad.
- Build pedestrian bridges in town as an alternative to railroad allowing crossing.
- Paid parking/enforced parking in the downtown to limit day long parking downtown and encourage people who work in downtown to use peripheral parking.



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## Reflections of the Visiting Team

- It seems like a great idea to hold a campaign to draw attention to concrete action steps to ride the bus! Engage the college – this is a real opportunity. USDA RD invests in rural communities to improve the quality of life and Middlebury actually qualifies for grant programs in a way other communities will not. There are ways to access resources that you have access to that others don't.
- I've been impressed by the depth and breadth of this conversation. My work centers around affordability in housing. One asset is the new gas line because we look at heating homes and propane and oil are 3 times the price. To reduce the cost of heating is an asset. We also see the cost of water increasing in communities around the state. One interesting comment was the idea about how we've settled communities around rivers, wetlands, etc. thinking about how climate change will affect our settlement patterns is an important topic overall. In order to get change you need dissatisfaction – have a demo week – close down the town to cars – bike and ride and take the bus and show people that the bus works because you have to do it!
- Thinking regionally – Middlebury, Vergennes, Bristol could be low hanging fruit in this county. It's all there in the 3 towns and they can easily lead by example to whole county. Really think about our village as village centers and allow villages to mimic larger towns in infrastructure, wastewater and design and alternative technologies that are out there. Middlebury can really be a multi modal transit hub, but don't have to start there – can think regionally. Incentivizing that culture shift is key at all scales.
- Even though electric vehicles are critical, the focus of this conversation has really been on public infrastructure. That is further ahead than a lot of communities. Efficiency VT does have a program for wastewater treatment facilities so make sure you're taking advantage of that and connecting with other communities that have made improvements.
- I was glad autonomous vehicles came up. They are on the horizon and good to think ahead. The state is putting together a working group on that. The CNG pipeline exists – and its actually reducing petroleum use quite a bit because limiting diesel trucks. There could be an opportunity for local energy through RNG and there is an exciting pilot project for that is happening here. I would love to work with Middlebury to strategize around reducing travel to campus community.
- There are sister communities in Vermont working on efficiency to connect with like Montpelier and Burlington. The Governors climate commission will be looking for ideas at the community scale that can be replicated in other parts of the state. They will be watching communities closely.

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## Local Food, Agriculture, and Health

**Visiting Team:** Tom Berry, Paul Costello (facilitator), Liz Gamache, Gary Holloway (scribe), Craig Peltier, Claire Tebbs, George Twigg

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### What are the community Assets in this area? What's working now, what's going well?

- The co-op food movement has been expanding supporting local food
- We have more organic farms per capita – Addison county has more farms per capita
- Data suggests that summer meals and after school meals are resulting in declining hunger
- ACORN Statistic – Addison county local food index captures wholesale value of local food Vermont + 30 miles – Middlebury college, Addison NE co-op, Middlebury co-op – \$4.5 million and growing
- Ben Gleason finding someone to purchase farm
- ACORN supports through events – farmers to coordinate distribution, matchmakers and financing education
- Middlebury co-op identified key need several years ago as better food storage
- Paul Hawken – keynote at VCRD event - key leader in country – solution #6 on top list is food waste – another one is refrigerants which are many more times potent than methane
- Carbon sequestering – not enough work being done – not part of the conversation viewed locally but Addison County is having the conversation, regenerative agriculture, rotation grazing – Champlain Valley coalition is growing fast
- Perception of Vermont branding is very good

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### What are the Challenges in this area? What are the issues or problems to be addressed?

- We are surrounded by industrial farming – polluting water
- Seniors and hunger continue to be an issue and needs to be addressed – income barrier
- Food insecurity – total amount 41% down coming into local food shelf – due to erratic amounts of rain and cold weather
- Year-round local food being grown here – climate change, seasons – outdoor food vulnerable to pollutants – growing year-round would help food insecurity
- What are niches? – who is selling honey berries, aronia berries, oils, grains – more of coordinated change between

- farmers and suppliers and buyers such as schools to focus effort so farmers know that there is an income consistently
- Accessibility to food kitchens/food hub such as Hardwick
  - Decline in local stores
  - Mowing programs – impermeable roads, waste pollinators that could sequester carbons – cut out mowing program or cut back

- No till relies on chemicals which is critical to sequestering and adds nitrogen – need cover crops
- Spray to kill the rye which defeats purpose of no till
- Too much organic milk has driven down costs of milk
- Lack of labor force from production to processing to distribution

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### **What should be done? What action can be taken by the community in this area?**

- Health care reform – developing medicine and funding healthcare at state level
- Food waste – law for grocery stores to sell imperfect products – eliminates food waste and provides for needy
- Dig below earth to store products without using refrigeration
- Organic – health for people and soils – have a committee tied into legislature comprised of people knowledgeable of permaculture, organics, farmers, businesses owners – considers health, energy use, water, etc. – holistic approach
- Incentive for becoming organic farmer at state level – farm viability and working lands board has invested in that – fed farm bill for transitioning farms to organic
- California has a new label for regenerative and organic
- Need to grow production and be sensitive to how we grow market – processing and storage facilities will support a short growing season – Bennington County and Brattleboro and Hardwick are doing some work on this – Addison County is oldest agricultural base in state. Every man for himself – successful farmers have grown their own infrastructure. Hardwick has had sources of financing and built it together. Cautious about other food hub stories such as Mad River – what is the failure rate for products – successful growers going to Boston and NY.
- Statewide goal of reducing pesticide use over time to 100% - Middlebury puts in bylaw to limit pesticides would help improve ag system, marketing, and improved products
- Aquaponics uses less resources, and have proven successful
- Rent pieces of farm to young aspiring farmers – matchmaking – Is there a shortage of good soil for vegetables? Fewer soils for veg production. Lead growers are aging out and looking to pass on operations and save for retirement. Work with Intervale Food Hub, many have settled in Addison county.
- Get VT land trust involved to help parcel off land to younger growers – need coordinated effort
- Meat, grain, dairy – share infrastructure
- Food storage – communal drying facilities for fruits and vegetable – powdering them makes it easy to store and transport.
- Subsidize infrastructure – drying, root cellars – identify what infrastructure is needed for a specific project
- Solar panels on farms – GMP wants to buy green energy – farms are good solar collectors – match farmers with GMP for \$\$ to support infrastructure
- VT Gas, work with engineering experts to look at most cost-effective strategies for bio digesters – VT Gas could back feed to the bio digesters – Jasper Hill Farm is supported by 80 cows in a closed system – 1000 cow system at Monument Farm (450 feeding system at any one time) – VT Tech is unsustainable – closing system on methane digesters
- Addison County Farm network – ACORN is a member
- Generate electricity through bio digesters
- Champlain Valley Creamery – has income to support staff – apprenticing young cheese makers that want to own business – Champlain Valley Creamery – business needs help to foster this
- Aquaponics solves many problems - \$20M in northern VT to produce these farms – look at perspective of scale that will work where there is big return that is sustainable
- Solar arrays in conjunction with GMP – Sun Common has farmers that want to host but recent legislation has created a barrier for that opportunity - modernization in regulatory changes to support solar arrays to generate income for farmers – barn roofs could be a good option to explore for farmers
- Waiting period to have meat butchered and packed – shortage of butchers in state – 6 month waiting list for one steer
- Teach incarcerated how to cut meat – don't have enough students to keep program viable – not a livable wage and other issues – very small state and should continue to brand state – can't compete with commodities / Costco
- Specialty food products bring a premium so focus on those products – value added
- Champlain Orchards – how to get out of commodities – top apples, ciders, oils, etc. – they can help others through this complicated process
- Hard Cider – apple orchards are doing well if they are linked to hard cider
- Bring in out of state funds to help invest in VT because of strong label – movement to go beyond the local to aquaponics fresh – some product goes to high end restaurants and other go to schools, institutions, etc. New England is a larger market and can support paying people a living wage – the investors would support expansion of VT farm – culinary herbs for restaurants, mushrooms, etc.
- Addison County – has advanced hard cider, spirits, beer – largest in state – Exchange Street is a mecca in this area in the industrial park and should expand up it and market

- Hemp Industry – what are the possibilities for Addison County? Not a large margin. Need to have large quantities to make a profit
- WIC program – families served don't prepare food any more – teaching people how to cook again – grow garden beds – educate the importance of - Everyday chef – Rutland Area Farm and Food Link (RAFFL) – is doing this very well
- Middlebury College Students run food hub being started – purchasing food from around the state and sell as close to wholesale – students are not paid. There is a very thin margin and still they make it work. Serve 150-250/month – 6 pick-ups around the area – offers program 1x per month. Looking for additional funding to expand program – demonstrates local demand if there is a reasonable price. This has been run through support of the ACORN Board – conducting research around shared facilities. Visiting facilities such as Hardwick Food Venture Center trying to understand what the specific need is in a concrete way. This concept should remain on the list as they develop a business plan with VEDA, SBDA – finding suitable space for this is necessary
- Entrepreneur, incubation, storage, shared spaces
- Funds to set up properties, hold them until a project is ready – Preservation Trust of Vermont is a good resource for how to do something like this
- Community purchased property
- What happened to local slaughter house proposed? Plan fell through due to margins.
- Green Pastures is doing well butchering
- Exchange Street – people want to build houses, condos – develop branding around ag economy. No sidewalks but they are coming – used to be 2 slaughter houses on exchange street. Businesses are already branding on Exchange Street – 250 businesses – the tasting trail helps to benefit area businesses. College owns property – town would like to be included in conversation with food/beverage conversation.

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### Reflections of the Visiting Team

- Lack of labor force – consider folks in other states that may want to relocate
- Transportation efficiency?
- Reduce food waste, prescription idea – awareness of eating healthy or reducing meats
- Shared infrastructure
- Old generation farms – need for labor – senior population need jobs, incarcerated youth – matchmaking
- Organic transition needs more support, food hubs, expertise is available locally, bio digesters are working well in Addison County
- Outdoor recreation link to food scene in Middlebury
- Is there a gap for food venture center in Addison county? Could Hardwick model work here?
- Demographic reality and pressure – seniors and food insecurity – living in poverty – free up and attract labor force – career exposure jobs – VEEP
- Dependent upon price structures, be cautious, do it efficiently, costs effective structure, can't take a big risk. Are there opportunities for young entrepreneurs to test and fail? What is the pipe line that is not quite developed? Should be a doorway to this in Addison County.
- Capitalize on successful businesses on Exchange Street – market, attract new businesses, expand, support farms, start-ups, new business concepts, shared facilities.

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## Business Innovation, Entrepreneurship, and Jobs

**Visiting Team:** Tom Berry, Paul Costello (facilitator), Liz Gamache, Gary Holloway, Craig Pelletier, Claire Tebbs, George Twigg (scribe)

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### What are the community Assets in this area? What's working now, what's going well?

- Over the last nine years, there are many more young people working here today, especially in adult beverage industry. In agricultural industries also. The college also has an expanding view of entrepreneurship.
- Connecting students to local opportunities. Help fund internships, including in the summer. Connect students with mentors. Working more with alumni who stay in Vermont. More students want to stay here. Focus on exposure to local opportunities here and in Burlington.
- VCET is an incubator. Six or so businesses at any given time in Middlebury. Three have graduated recently. They stay for varying periods.
- Architectural Firm - Started in an economic downturn, focused on energy efficiency. But very well received, people wanted to save money. Triple bottom line business. Commercial and residential customers. Rapid growth.
- A solar installer had a hard time getting locals interested in solar projects. Working as an individual. Built an array near Rutland. Surprised at lack of interest.
- Middlebury College is an economic asset. Brings intellectual oomph - lectures and other offerings. Partnership between college and environmental program. Information sharing.
- Surprised there aren't more college students. They are very interested in this topic. Town-gown divide?
- Less town-gown divide than in years past. But they are looking for projects to do that involve the town. But they don't get off campus that much.

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## What are the Challenges in this area? What are the issues or problems to be addressed?

- Dairy has challenges, but not sure they are unique to our area. Same problems as Franklin County.
- Lots of small farmers are doing veggies. Beverage industry is huge - Woodchuck started it - and Otter Creek. Exchange Street is a huge success. Act 250 is all done. Land is available.
- There is a lack of affordable housing. Lots of dining workers commute from New York. Cheaper even if you have to commute an hour. Discourages young people from staying. Cost to build is higher than appraisal, nobody can afford to build. This challenge is not unique to this area.
- There is a high local tax rate - one of the highest in the state. Hard for businesses and residents.
- There is a lack of child care options, especially for infants. Hard for working parents.
- We are not taking advantage of the internet - live here, telecommute to remote employer. More co-working opportunities needed. People working in coffee shops etc.
- Solar developers can't find substations for large solar projects to tie in to. Can't meet state goals because of grid constraints. GMP analysis shows most of local grid is stressed. (Suncommon - grid is good in middlebury, Northern Addison is a no go, Southern Addison also has issues)
- Looked at retrofitting old buildings like barns but they can't bear the weight. Downtown solar is a work in process - many downtown buildings can't do a large solar array. Too expensive to retrofit.
- Marble Works has done lots of solar. Heavy duty buildings.
- Project with septic issues. Cornwall village. Town has revival plan with new town center. Wants a facility with inside seating. But current septic doesn't allow for customer seating - employees only. Lack of municipal wastewater system is a constraint. Can't develop and expand. Can't make a profit under the current restrictions. The state needs to work with the town to resolve these issues to support more development.
- Cornwall has no country store or anything. No place to buy a gallon of milk.
- Old assumption was that solar would be the preferred energy source. But it has created a lot of tension. Projects built close to roads because of utility rules the projects need to be close to roads. Could utilities socialize the cost of longer connection distances so projects aren't right next to the road? Would require regulatory changes and approvals.
- Quality of the housing stock. Needs a lot of help to be energy efficient. But cost to make those improvements might exceed the value of the home itself. Bonding is one option for advancing this goal, or others. Similar to the new housing bond that just passed.
- Instead of building new affordable housing, what can we fix up?
- Another issue is banks failing to value high-efficiency homes. But Craig / VHCB says that's not an issue any more, real issue now is the up-front cost. Banks are being supportive.
- NeighborWorks is around but not doing much.
- Only one Efficiency Vermont approved contractor that can do projects that qualify for incentives. Lack of demand is part of the problem.

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## What should be done? What action can be taken by the community in this area?

- Mentorship. Lots of interested young people, lots of older experienced people, need to set up those relationships. Work through Chambers etc.
- Some mentorships happening between students and businesses, need to scale that up though. Mentor doesn't have to be a business owner - just a professional role model.
- What about all the people who aren't entrepreneurs? Need to support them too.
- Support more co-working and remote workers. How do we connect those people. There used to be a telecommuting workgroup. Initially had lots of interest 30-40 people.
- Vergennes has a co-working space with lots of vacancies. Why? Not cool enough?
- Isolation is an issue - no support network. Appreciated the inclusive framing of climate conference at UVM - spoke to me even though I'm not an energy expert. Need to find ways to be inclusive and account for more diverse motives and interests. Not just solar experts. Need to be welcoming, and avoid silos.
- Issue isn't attracting new businesses, focus needs to be on building and retaining the ones that are already here.
- When we talk about the jobs we need, be clear what we are talking about. We need jobs in trades and construction, not just sending everyone to college.
- Took a timber framing class at Yestermorrow. Wants to connect Cornwall space to Middlebury College. Maybe add an artisan space - blacksmith, etc. some kind of hands on school or courses. Take a break from the books. Renaissance man. Connection to the land isn't what it used to be.
- What about the career center? Used to have a green building program. It died during the recession. Maybe bring that back?
- Analysis shows most of the good paying jobs are related to manufacturing and green construction. VTC trying to lure more women into the workforce by pitching home building and trades as a human / social service.
- Provide more respect to people in the building trades. Need to engage and include them. That perspective is lacking. Builder/carpenter. Probably still working!

- Would be great to have one place where all these resources were available entire region. Not just Middlebury - entire county. Step up from the no wrong door approach. Others are looking at issues related to county level structures and approaches.
  - Incentives for contractors to be certified for Efficiency Vermont incentive programs? Not much demand for single family retrofit. Process is hard. Someone needs to find a way to make that easier.
  - What is to come out of this? Local goals, or statewide? Vermont has very limited resources to pay for anything. Solar boom was a product of tax credits. Look at all the regulations that go into building a house, try to maintain high standards but reduce regulations.
  - Maybe Middlebury can reduce taxes for high efficiency homes, to adjust the playing field. Lots of really old housing stock out there, need to provide incentives and ways for limited financial resources to flow to this goal.
  - Tax system is out of whack. Added value for sustainable home results in higher taxes.
  - Some things like electric vehicle incentives can't happen at the town level.
  - We should have a goal of more electric vehicle charging stations to show that we are welcoming those tourists and drivers.
  - Support for changing tax system to reward, not penalize, sustainable construction and green building. Stagnant growth here, need ways to reverse that.
  - Middlebury does have a designated downtown with a growing youth cohort. One of just a few in the state.
  - Parking should be reduced in downtown. Look at what Seattle did. Zoning rules set parking requirements. Surplus parking spaces encourage more people to get cars. Seattle did demo projects with parking spaces - pocket parks etc. Zoning was changed to reduce parking space requirements. But you then need to increase public transportation. Look at how great church street is.
  - Public transit downtown is pretty constant. But only a few buses a day for commuting to Burlington. Lots of local gaps though like east midd. affordable.
  - Change the frame of how we talk about young people. "Attract and retain" is the wrong language. Doesn't sound like a cool place to be.
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### Reflections of the Visiting Team

- Opportunity to support co-working spaces, comradery, inclusive job spaces. Dynamic economy here. Invest in homegrown businesses, instead of attracting new ones.
- likes idea of parking rule changes. Increase in young entrepreneurs is great. Housing issues ... quality vs. quantity. Property tax rate idea is interesting. Involving others.
- Addison is one of the first solar storage sites in the state. Vermods in Vergennes will all have storage. GMP doing that, and Tesla home storage. Get more trades involved. Look at social cost of carbon. How do we get that into the conversation? Low cost of oil is a challenge. Regional approach to carbon pricing is one option. People respond to prices. Incentives matter - link local initiatives to broader efforts.
- Three themes. 1 lack of turnout and lack of diversity. engage young members of population. 2 training - guide students to where the jobs are going to be. 3 regulations and barriers, lack of incentives - current governor cares about housing - New housing bond as an example. Need to find ways to improve housing stock.
- Middlebury students did an award winning tiny house...there are skills waiting to be tapped. Lots of skilled people in the ag community - pioneers on digesters etc. Recreational economy has lots of potential. Interesting that nobody talked about that all day.
- Local bond to pay for those who can't pay for their own efficiency upgrades, to address social justice and equity issue.



## VII. Greater Middlebury Climate Economy Initiative Participants

R.J. Adler	Greg Dennis	Connie Leach	Katheen Ramsay
Lise Anderson	Tom Dickinson	Kevin Lehman	Erik Remsen
David Andrews	Gary Dir	Jay Leshinsky	Doug Richards
Kristen Andrews	David Disque	Glenn Lower	Chris Robbins
Laura Asermily	Tom Dunne	Michele Lowy	Molly Robinson
Shelia Austin	Fred Dunnington	Nancy Luke	Robin Scheu
Barrie Bailey	Chris Eaton	Russell Luke	Ted Scheu
Dinah Bain	Alice Eckles	Angelo Lynn	Lucy Scott
Irene Barna	Sophie Esser Calvi	Laura MacLachlan	Heather Seeley
Gary Barnett	Rev. Barnaby Feder	Steve Maier	Rick Shappy
Nadine Barnicle	Laurie Fielder	C Malloy	Amy Sheldon
Dana Barrow	Jeff Forward	Dorothy Mammen	Yvette Shi
John Barstow	Adam Franco	Bethany Mankart	Susan Smiley
Nicole Bartlett	Elizabeth Frank	Amy McAninch	Michelle Smith
Jennifer and Spencer Blackwell	Erika Garner	Stuart McAninch	Cooper Smith-Stackhouse
Josh Borionk	Ruth Gilbert	Mary Mester	John Snyder White
Christopher Bray	Jeremy Gildrien	Emily Millard	Chris Stackhouse
Colleen Brown	Peg Goldman	Landenberger	Claire Tebbs
Elizabeth Burdine	Hans Goudey	Charlie Mitchell	John Tenny
Peter Burrows	Jennifer Green	Jennifer Molineaux	Steve Terry
Margaret Carothers	Barbara Greenewalt	Jeanne Montross	Jean Terwilliger
Peter Carothers	Kate Gridley	Alan Moore	Dick Thodal
Rich Carpenter	Jeremy Grip	Andrea Murray	Robert Turner
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The Greater Middlebury Climate Economy Initiative is part of the Vermont Council on Rural Development's (VCRD) Climate Economy Model Communities Program – a community-driven process with local leaders, VCRD, Green Mountain Power, and Efficiency Vermont to cultivate economic development, innovation and affordability in the face of climate change.