Vermont Council on Rural Development's Summit on

Creating Prosperity and Opportunity Confronting Climate Change

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Summit Report



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Introduction

Climate change can be paralyzing. Many worry that addressing climate change can undermine jobs and diminish economic opportunity. Confronting climate change through innovative economic development, however, can be a competitive strategy, one that will build national reputation, create jobs, and attract youth and entrepreneurism to the states that lead.



Communities across the state are searching for ways

to advance their local economy and attract innovative businesses and youth to their downtowns. At the state level, a key goal of the Comprehensive Economic Development Strategy is that, "Vermont is a haven for businesses leading the world in adapting to, mitigating and reversing the effects of climate change." How do we systematically advance an agenda to model economically successful solutions and prosper while confronting climate change?

The **Summit on Creating Prosperity and Opportunity Confronting Climate Change** served as a starting point for Vermonters to begin to tackle this challenge. The event brought together over 400 innovative business, non-profit, and community leaders, elected officials, public policy advocates, students, and interested residents to frame policy and investment strategies to advance the development of the Vermont Climate Economy.

Summit participants broke into 13 breakout sessions focused on different aspects of the Vermont Climate Economy. In the morning, Summit participants heard from panelists who framed the discussion by sharing economic opportunity for development in each area that could be a foundation for a prosperous and sustainable future of the state. In the afternoon, breakout groups reconvened in each sector to answer the question, "What practical actions, business ideas or policy directions make the most sense for us to advance today?" Each group brainstormed a list of key practical actions to advance Vermont's Climate Change Economy, then prioritized the top three ideas to share to the full conference. These key ideas were reported back and are shared in this report on pages 4-6.

These recommendations will serve as starting points for the **Vermont Climate Change Economy Council (VCCEC)**, a group charged at the Summit with a one year mission to develop a structured plan with practical actions to reduce carbon emissions and stimulate green economic development in Vermont (see page 7). The Council will build a set of public/private strategies designed to promote economic opportunity, innovative business development, investment, and job creation in Vermont. VCRD will provide support to the work on the Council, and then help promote the platform of action that comes from its deliberations.

With Vermont's aggressive state energy plan, expertise in institutions of higher education, innovative utilities, and strong business leadership, we have a powerful story to tell, one that can celebrate and reinforce current efforts while growing a new generation of creative businesses that want to be at the center of this economic movement, and also want a high quality of life. The Vermont brand, and all of the state stands for, gives us an edge, if we seize it.

Summary of Priority Actions

The following is a report of the key ideas developed by Breakout Session groups and gathered at the Summit on Creating Prosperity and Opportunity Confronting Climate Change on February 18th 2015 at Vermont Technical College. Each breakout group was asked to report back to the assembly three key action items that could advance the Vermont Climate Economy. In the morning, a panel of speakers began the discussion by exploring the challenges and opportunities in each area. In the afternoon, the same group reconvened with neutral facilitators to discuss the following questions:

- 1. What are the key issues for the future of this sector?
- 2. What specific actions should Vermonters take to advance opportunities in this issue area?
- 3. Of all we've been discussing, what are the three ideas or recommendations for action we want to share with the full conference?

Action ideas from each session, are listed below and will be shared with the new Vermont Climate Change Economy Council to inform their work to frame a platform of practical action designed to rally business, policy, and community leadership to advance the Vermont economy while confronting climate change.

SESSION A: Marketing Vermont as the Innovative Climate Economy Destination

- Dedicate funding to state marketing to attract consumers, youth, businesses, and climate economy enthusiasts.
- Plan a national conference to create a rallying point around Vermont as a Climate Economy leader. For example, host a "ClimateJam" following the Tech Jam model.
- 3. Create a common language to be used consistently across business and state government, to have consistent messages and integrated communications. Leverage partnerships between tourism destinations, business organizations, and educational institutions to promote shared messages. Create Sharing Ambassadors, a group of self-identified innovators to develop their stories and promote the shared vision.

SESSION B: Advancing Community-Based Climate Action

- Build a statewide campaign to advance Vermont's Climate Economy. The campaign would be a publicprivate partnership for an initiative that would have a clear, easy framework for communities or individuals to implement. The following are examples of potential campaign ideas:
 - a. Vermont Solar Challenge in 2016 to seize the opportunity to press on investment before the ITC expires or is significantly reduced in 2017.
 - b. A campaign/challenge oriented at "Whole Building/ Home/Community," that would address heating, transportation and electric transition solutions.
- 2. Strengthen the capacity of communities and grassroots energy groups and leaders through support, funding, guidance, tools, and templates. Enact a carbon pollution tax to fund this "social infrastructure" investment.
- 3. Increase public engagement and raise awareness about

climate economy opportunities. Engage a broader segment of Vermonters, with a particular focus on youth (such as fostering, building, strengthening "green teams" in high schools or other schools) as well as "fence-sitters" through education and engagement with a particular targeted focus on the economic value of clean energy investments.

SESSION C: Promoting a Vision for Transportation Renewal

- Transform how money is generated for transportation with the development of a new funding mechanism.
 Explore where funding for implementation comes from at the state and local level.
 - a. Implement a Carbon Tax.
 - b. Implement a regional cap and trade scheme (like in California).
- Lead by example and implement a "perfect transformation" of a community that incorporates multiple concepts such as access and multi-modal transportation to create a carless experience. Capture other benefits (such as health) that are not as easily tracked.
 - a. Create a broad-based model that brings housing, transportation, and land use policies together.
 - The model would include a ban on single occupancy vehicles in designated downtown areas, parking at the edge of town, EV incentives and car share and rideshare availability.
- 3. Shift policy to address transportation inefficiencies of current land use. Incentivize settlement patterns based on integrating land use and transportation planning to make it more feasible and less expensive to live in or near a village or city center. Explore the connection to strategic disinvestment of infrastructure.

SESSION D: Innovating for Renewal, Recycling and Resource Limits

- 1. Encourage resource renewal technologies via an incubator where technologies can be tried out.
- Develop "Climate Regulatory Enterprise Zones" as regulatory incubators that act as a safe place for innovation and testing experimental regulations.
- Coordinate nutrient information regionally through a platform for sharing information around nutrient streams.
- 4. Develop an initiative where youth could work on low-income home improvements on a TV show with energy flavor. Call it "This Cold House."

SESSION E: Developing Ubiquitous Distributed Energy

- 1. Improve public understanding through the development and dissemination of a clear message on what distributed energy is and why it is important.
- 2. Ensure effective and early public participation in community energy planning and siting processes.
- Create a one-year task force to identify where alignments could be made between state agencies (Agency of Agriculture, Forest Parks and Recreation, Agency of Natural Resources), and local communities.
- 4. Develop a tariff system at the regional level that treats efficiency, distribution, and storage equally to even the playing field.
- 5. Advance a carbon tax to begin on 1/1/17.

SESSION F: Improving Education, Workforce Development, and Youth Entrepreneurship

- 1. Promote, expand and create educational opportunities for our youth in the climate economy field.
- Market the opportunities and jobs within the climate change economy in Vermont.
- 3. Create entrepreneurial competitions around climate change for students and adults.
- 4. Build affordable, energy efficient housing, or renovate housing to be more energy efficient and affordable.

SESSION G: Strengthening Farm and Forest Carbon Sequestration and Profitability

- 1. Develop better and more consistent language to communicate the benefits of carbon sequestration to individuals, families, and Vermont communities.
- 2. Identify and share case studies of innovators and best practice models.
- Identify sound data and metrics to develop a better understanding of the benefits of best practice models.
 Use metrics to demonstrate value to the public and

private sector, individuals, and communities in a tangible way.

SESSION H: Seeding a Vermont Climate Investment Strategy

- 1. Improve financing mechanisms for clean energy and cooperative projects.
 - a. Initiate a Vermont "Green Bank."
 - b. Assess and revivify the PACE Program for home energy conservation.
 - c. Institute a Vermont "YieldCo". (a publicly traded company that is formed to own operating assets that produce a predictable cash flow).
 - d. Improve networking between clean energy businesses at all stages of growth, cooperative energy projects, and all levels of interested investors.
- 2. Develop further public funding for clean energy companies and projects.
 - a. Initiate an immediate carbon tax plan to replace the waning Vermont Yankee Storage Fund.
 - b. Explore investment access to a portion of the VT State Employee Pension Fund.
 - c. Encourage and enlist investments from Vermontbased companies doing business nationally such as National Life, GMCR, Ben & Jerry's, colleges, and hospitals.
 - d. Explore additional ways for casual investors to participate by allocating portions of their stock portfolios or retirement accounts to Vermont clean energy initiatives.
- Develop an educational awareness and advocacy program to enhance Vermonters' understanding of the importance, and value of clean energy solutions and policies for investors, consumers, and youth.

SESSION I: Spurring Research and Development for New Technologies in Vermont

- Develop an interactive talent, resources and solutions clearinghouse supported by a skilled staff, like a small business development center. DesignBook or Kickstarter are possible platforms to match dollars with ideas and idea people with those with technical skills to offer.
- 2. Offer organized networking events to connect small businesses and entrepreneurs with each other and with investors.
- 3. Clearly define areas of focus for research and development.
- 4. Create more flexible RFPs and finance research and development rather than specific technologies.

Summary of Priority Actions Continued...

SESSION J: Supporting Smart Growth, Reuse, Preservation, & Downtown Development

- 1. Increase capital:
 - a. Aggregate capital sources of investment for downtown redevelopment. Look to the private sector and Vermont's smaller funds to make them more useable.
 - b. Incentivize development in downtowns vs. green fields.
- 2. Improve communication:
 - a. Make sure to reach all Vermonters. Utilize an inclusive approach.
 - b. Share case studies about resilient smart growth.
 - c. Articulate a community vision.
 - d. Market Vermont and downtowns as places to live and work, not just places for tourists to visit.
- 3. Invest in infrastructure:
 - a. Make investments to ensure buildings are resilient.
 - b. Make jobs and housing available to all in our downtowns.

SESSION K: Coordinating State Governmental Policies & Regulations

- 1. Adopt a Carbon Pollution Tax.
- 2. Repair the division between electrical and thermal energy issues. Enlist Efficiency Vermont to look at the whole energy picture, not just thermal and electric.
- Use benchmarks to measure progress towards 90% renewable energy by 2050. Poll Vermonters to determine attitudes/desires on progress. Widespread public engagement is critical.

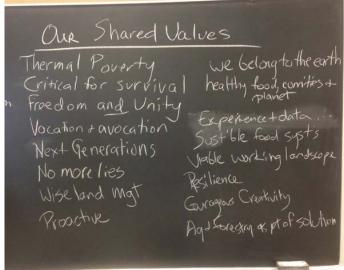
SESSION L: Advancing Next Stage in Efficiency and Conservation

- 1. Make efficiency and conservation visible.
 - a. Institute mandatory MPG stickers for commercial, industrial, and residential buildings. Offer training and education to implement an MPG program.
 - b. Mandate building codes and improve enforcement.
- 2. Make efficiency and conservation easy.
 - a. Design a package for weatherization/energy efficiency for homeowners through a network of entities like NeighborWorks of Western VT, Efficiency Vermont, other housing organizations, Regional Planning Commissions, contractors and fuel dealers, lenders, personal connections, and local groups and channels.
 - b. Design a clearinghouse and case manager to coordinate the weatherization package.
- 3. Make waste more painful and pay for it.
 - a. Institute a Carbon Pollution Tax to monetize the impacts on future generations.
 - b. Invest in efficiency and weatherization.

SESSION M: Adapting Outdoor Recreation & Tourism

- Market Vermont as an authentic and sustainable tourism destination through genuine community engagement.
- 2. Review and reform policy to support private landowners in increasing public access for seasonal recreation and tourism by addressing liability and allowing for adaptations to historical and cultural sites.
- 3. Invest in growth sectors such as State Parks and agritourism.





Next Steps: The Vermont Climate Economy Council

The Summit on Creating Prosperity Confronting Climate Change served as a launching point for the Vermont Climate Change Economy Council (VCCEC), a Council comprised of leaders in business, economic development, the environmental movement, and public policy collaborating to build a structured plan for practical action to reduce carbon emissions and stimulate green economic development in Vermont.

Over the course of 2015, VCCEC will evaluate findings, key ideas and suggested action steps derived from the Summit, lead regional public forums, evaluate and summarize research findings,

interview key stakeholder groups, and consider model economic development strategies from other state and countries. During 2015, the group will develop a strategic platform of recommendations for action, and report to the Vermont legislature, the Governor and the public in January 2016. VCRD will provide support to their work and then help promote the platform of action that comes from its deliberations.

Goals of the Vermont Climate Change Economy Council are to:

- Identify opportunities created by climate change to strengthen Vermont's economy through strategies advancing key business clusters and economic sectors.
- Build an increased sense of unity in Vermont around policies to confront and mitigate the impact of climate change and to advance economic opportunities and solutions that respond to climate change.
- Build a public information campaign to celebrate innovation and Vermont's green business leadership; internally and externally marketing to build the Vermont brand as an economic/environmental problem solver.
- Expand Vermont's economic brand around climate change solutions to retain and attract youth and creative entrepreneurs to locate throughout the state.

Vermont can lead in setting priorities, policies, and investments for the future of our economy in ways that will gain national attention, attracting innovative young people who will be the foundation of the future prosperity of our state. Vermont has an unprecedented opportunity to lead, to develop new economic foundations, and to have an historic impact as a model if, together, we build enough unity to make the needed sacrifices for, and investments in, the future.

Members of the Climate Change Economy Council

Kathy Beyer, Housing Vermont
Peter Bourne, Bourne Energy Products
Andi Colnes Energy Action Network
Cairn Cross, Fresh Tracks Capital
Mike Donohue Outdoor Gear Exchange
Jon Erickson, Rubenstein School, UVM
Joe Fusco, Casella Waste Systems
Karen Glitman, VEIC Transportation
Efficiencies

Scott Johnstone, Vermont Energy
Investment Corporation
Ellen Kahler, VT Sustainable Jobs Fund
Tom Kavet, Kavet & Rockler Associates
Lucy Leriche, Deputy Secretary of
Commerce

Claire Humber, S.E. Group

Neale Lunderville, Burlington Electric
David Marvin, Butternut Mountain Farm
Linda McGinnis, Independent Consultant
Rob Miller, VT State Employees Credit
Union

Sue Minter, Secretary of Transportation Michael Nobles, Union Mutual of VT Ernie Pomerleau, Pomerleau Real Estate Mary Powell, Green Mountain Power William Sessions, US District Court, Chair Brian Shupe, VNRC Nathaniel Vandal, Green Peak Solar



Breakout Session Notes

Summit participants registered for one of 13 breakout topics. Morning breakout sessions heard about issues and opportunities within each focus area from a panel of leading experts in the field. During the afternoon session, each group spent time discussing issues within the focus topic, action steps that may be taken, and then identifying 3 key ideas to present to the full conference that could help Vermont realize the opportunities in the sector.

SESSION A: Marketing Vermont as the Innovative Climate Economy Destination

PANELISTS: Matt Dodds, Brandthropology | Duane Peterson, SunCommon | Bill Shouldice, VT Teddy Bear Company **SCRIBE:** Vicky Tebbetts

What are the key issues for the future of this sector?

- We need to identify the challenge, goal, our audience (and what they want to hear), measurable targets, and tactics.
- We need to define the role of marketing in this new economy, to position Vermont as the leader in bringing innovative thinking to meet the challenges of climate change.
- We have some huge strengths in terms of our brand but technology is a sublimated part of our brand. We need to marry our strengths to our innovation. As part of this we may need a cultural shift, but we also need to meet people where they are.
- In order to create economic prosperity, Vermont needs to believe what is credible and real: that we are the climate innovation state (e.g. Moran Plant, Efficiency Vermont, 350.org, 90% renewables, schools powered by biomass), in order to attract consumers, youth, businesses, and believers.

What specific actions should Vermonters take to advance opportunities in this issue area?

- Create a "fusion" or "disruptive convergence" campaign to drive awareness apart from the "pastoral bumpkinism" (the "backwater image" of covered bridges, cows, plaid).
- Create a common language to be used consistently across business and state government, to have consistent messages and integrated communications. Engage partners to lift these messages (private businesses, schools, business organizations).
- Source higher education talent to create and package aspirational narratives.
- Gather a group of self-identified innovators and develop their stories as a shared resource.
- Hold a national climate economy conference/create a think tank.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- Dedicate funding to state marketing to attract consumers, youth, businesses, and climate economy enthusiasts.
- Plan a national conference to create a rallying point around Vermont as a Climate Economy leader. For example, host a "ClimateJam" following the Tech Jam model.
- Create a common language to be used consistently across business and state government, to have consistent messages and integrated communications. Leverage partnerships between tourism destinations, business organizations, and educational institutions to promote shared messages. Create Sharing Ambassadors, a group of self-identified innovators to develop their stories and promote the shared vision.

SESSION B: Advancing Community-Based Climate Action

FACILITATOR: Lisa Gosselin, Commissioner of Economic Development FACILITATOR: Johanna Miller, VECAN, VT Natural Resources Council PANELISTS: Jamison Ervin, Waterbury Energy Committee | Jeff Forward, Richmond Climate Acton Committee | Sarah Simonds, Vital **Communities**

SCRIBE: Jenna Banning

What are the key issues for the future of this sector?

- We need to clearly identify the people we are trying to engage, and create a compelling story for the people not engaged in this issue. It is important to look beyond the people who are already "on board," and focus on the people who are "in transition," by helping these people to understand and take the "next steps" towards living more sustainably. There is often (at least the perception of) a dichotomy between those who have "bought in" and those who have different interests, which should be avoided. Also, it is not possible for all communities to fully engage all of their citizens, and these communities should not be looked down upon or viewed as having negative effects on the rest of our society. We need to adopt the perspective that "A rising tide lifts all boats," meaning that any improvements will help out all people.
- We need to create a clear articulation of our goals and how to achieve them. It is critical to communicate how people can fit into that plan, and how their actions can be part of the solution.
- Focus on community ties and community resiliency as a way to empower people to define specific actions to take, and to create more-sustainable community-based solutions (instead of relying on tech-based solutions). Focus on building strategies that will last "for seven generations down the road."
- Focus on building a sense of "Common Good." There is a sense of breakdown in our communities, and people are focusing on their own needs, instead of working collectively.
- We should connect local actions with larger (state/national/ global) movements, processes, and problems.
- We need to engage and empower young people.
- Community members need to redefine ourselves as stewards / citizens / sustainers, instead of as consumers.
- Identify ways to implement sustainable energy sources and reduce energy consumption.
- Investment opportunities are limited to really small (household) or really big (National Life) – we need to have more options for "microinvestors."
- We need funding to support important local efforts such as a carbon tax ("tax bads, not goods") to help local groups with outreach and programs.
- We could take the state's "grand goals" and create actual implementation steps and action, including increasing financial and people support (recognizing the limitations of relying on volunteers for many of the existing community groups).
- There is a sense of distrust and suspicion of the private sector and their motives (viewed as prioritizing profit, rather than the

common good). There is a "disconnect" between the businesses doing "good work," and customers seeking those services but not knowing that they are available. There is a need to work with the private sector and build up their credibility within communities, potentially through case studies and testimonials. Local energy committees can serve as impartial communicators and help to hold the community, private sector, and the local government accountable to what the community has identified as their goals.

• We need to look beyond just energy, and include issues like food, mitigation, etc - these issues are all connected, and all important.

What specific actions should Vermonters take to advance opportunities in this issue area?

- Make changes and actions easy to do, for individuals and for groups. Provide a framework or guidance for action.
- Build campaigns to rally around, such as a State-wide Solar Challenge in 2016 (which is the last year of the 30% tax credit), or a commitment for "Solar on Every School." Green Mountain Power's '100 Net Zero Homes' could also be expanded to a bigger scale.
- Empower young people by providing concrete opportunities for involvement (i.e. a position on the town Select Board, local energy committees.
- systems-thinking, which will be necessary tools for our future leaders.
- Play "Vermontivate!" an online game developed by Kathryn Blume (a Summit attendee), which features challenges for individuals to personally take action.
- Set a state-wide "CRO" day (Community Resilience Organization), where appointed teams from different sectors within a community (ie firefighters, food shelf workers, social services workers) engage in cross-collaborative actions.
- Eat more sustainably: eat locally produced and/or locally processed foods with a focus on a plant-based diet. This will help to reduce transportation costs of the food system and build a local economy, and is able to be done at the individual level.
- "Speak the same language." Focus on the goals and values that are common to many different people and groups in order to bring the community together. Resist the urge to alienate people not currently engaged, possibly by invite a friend to next year's summit. Be aware of socio-economic differences when targeting actions and messages to different populations.
- Communicate effectively.
- Focus on framing actions as part of bigger movements, which will help to make your own actions feel more valuable.
- Use local media to share a "story of transformation" towards a more sustainable lifestyle, which will help build "buy-in" from people not currently engaged by making it seem more approachable and realistic for their lifestyles.
- Utilize existing mechanisms or develop a mechanism for communication and engagement between local groups (ie planning commission, local select board), which will help to build awareness of different ideas and actions that are occurring in the community.
- There seems to be two "silos" of people working towards addressing energy: those focused on solar/renewable energy, and those focused on weatherization. We need to bring these groups together to work collaboratively, instead of competing for limited resources.

- Develop a program for Vermonters to "talk together" in order to move this conversation forward. This will help to build accountability and momentum.
- Empower local energy committees to become trusted advisors.
- Focus on building a sense of community and collective action for a common good. VCRD and the Orton Foundation provide good examples of how to do this.
- Prioritize goals based on capacity and importance.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- 1. Build a statewide campaign to advance Vermont's Climate Economy. The campaign would be a public-private partnership for an initiative that would have a clear, easy framework for communities or individuals to implement. The following are examples of potential campaign ideas:
 - a. Vermont Solar Challenge in 2016 to seize the opportunity to press on investment before the ITC expires or is significantly reduced in 2017.
 - b. A campaign/challenge oriented at "Whole Building/Home/ Community," that would address heating, transportation and electric transition solutions.
- Start specific programs in schools for environmental education and 2. Strengthen the capacity of communities and grassroots energy groups and leaders through support, funding, guidance, tools, and templates. Enact a carbon pollution tax to fund this "social infrastructure" investment.
 - 3. Increase public engagement and raise awareness about climate economy opportunities. Engage a broader segment of Vermonters, with a particular focus on youth (such as fostering, building, strengthening "green teams" in high schools or other schools) as well as "fence-sitters" through education and engagement with a particular targeted focus on the economic value of clean energy investments.

SESSION C: Promoting a Vision for Transportation Renewal

FACILITATOR: Sue Minter, Secretary of Transportation **PANELISTS:** Karen Glitman, *VEIC Transportation* | Richard Watts, CDAE and the Center for Research on Vermont | John Hollar, Mayor, Montpelier, VT | Jon McBride, Bridj

SCRIBE: Amanda Holland

What are the key issues for the future of this sector?

- Funding is currently tied to consumption of gas. This needs to
- Federal tax policy creates an environment where more funding is expected to come from population base which is small. There are challenges to using available funds.
- Highway electrification.
- Lack of public transit (perceived or not).
- We need to respond to unmet needs such as affordable/ accessible/reliable transportation/mobility.
- We need to improve accessibility of services. For example being able to have a doctor appointment from home via video chat on
- · Reducing barriers to mobility (Single Occupancy Vehicles and Ownership).

Breakout Session Notes Continued...

- Aging in Place VS. Rural Aging Population are conflicting policies.
- Are there existing land use policies that support sprawl?
- It is challenging to not have a car in Vermont; some systems in are place but they are not efficient. We need to make it easier to choose not to drive.
- How are we scaling national models to fit Vermont? If we are switching over time, changing fuels and cars (EVs) how do we deal with maintaining infrastructure and still have the trend of commuting to work centers from rural areas?
- We need to enforce current polities such as no idling.
- Our vision may be too big. We may need to take action in bite size steps.
- Freight/Trucking are challenges for industry and farming/working landscape. Challenges include trucks, loads, hours of operation, tires, fuel, and weight.
- We need to expand our system of rest areas to accommodate driver rules. Truckers need to have a set amount of time for offroad and need facilities to accommodate them.
- Regional economy (40% of freight is going through state to Canada)
- Vermont's demographic is changing.
- Energy prices are an issue.
- We should identify a funding source to market EVs.
- Cost of vulnerabilities, building resilient infrastructure, and designing for the future is a barrier.
- Funding system is siloed making it hard for transportation provider to manage and follow federal rules.

What specific actions should Vermonters take to advance opportunities in this issue area?

- Institute a carbon tax and capture the cost of the health impacts.
- Attract investors and entrepreneurs; investing in efficiency
- Institute a Cap and Trade Program for Fossil Fuels (use revenue to fund complete streets and transit).
- Change to a carbon accounting business model and put carbon "on the spreadsheet"; by charging with a unit of carbon it is then a metric that people are tracking and want to lower.
- Institute a clean fuel standard/low carbon fuel standard as a mechanism to raise revenue and fund a transition.
- Treat transportation as a utility flat fee or use based.
- Tie tax to materials and inputs to road construction as opposed to gas tax, which is an issue.
- Create a perfect Transformation "Pilot" or implement policies in a downtown that could be applicable to all sizes of communities.
 - * Implement several policies such as Complete Streets, Car sharing (zip car or Car 2Go), control parking.
 - * See how it addresses desired outcomes: ability to leave car behind, multi-modal transportation options.
- Eliminate parking requirements or use as a source of funding.
- Create a collective solution to mobility. The cost to own a car is less than \$800/month based on AAA estimates.
- Integrate planning. Linking housing, land use and transportation policy.
 - Change land use provisions and tax policy to end "drive till you qualify."
 - * Revise tax structure to incentivize use of Best Management Practices for land use development patterns.
 - * Transfer Development Rights.

- Create end to end solutions.
- Utilize technology Can we bring an Uber type system to rural Vermont?
- Institute a VTrans Policy Task Force that could address specific issues/regulations such as 11ft travel lanes.
- Try and attack 10 policy pieces that can be changed now and see if it can get at some of the solutions needed (such as complete streets).
- Strategic disinvestment. Assume there is a need to continue to fund existing infrastructure; hard to maintain based on existing community/state funding.
- Regulatory harmony between jurisdictions (US/CA) for trucking industry such as timber hauling/truck size. The sizes used in US are not allowed in Quebec.
- Implement education for non-automobile travel such as:
 - bike and walk commuting; how to commute smarter; reducing individual impact
 - * Improve school bus experience as training next generation to ride public transit
 - * Way to Go Everyday
- Conduct a social marketing campaign for EV use.
 - * Identify what moves consumer choice.
 - * Create messaging for all populations and on savings.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- 1. Transform how money is generated for transportation with the development of a new funding mechanism. Explore where funding for implementation comes from at the state and local level.
 - a. Implement a Carbon Tax.
 - b. Implement a regional cap and trade scheme (like in California).
- 2. Lead by example and implement a "perfect transformation" of a community that incorporates multiple concepts such as access and multi-modal transportation to create a carless experience. Capture other benefits (such as health) that are not as easily tracked.
 - a. Create a broad-based model that brings housing, transportation, and land use policies together.
 - b. The model would include a ban on single occupancy vehicles in designated downtown areas, parking at the edge of town, EV incentives and car share and rideshare availability.
- 3. Shift policy to address transportation inefficiencies of current land use. Incentivize settlement patterns based on integrating land use and transportation planning to make it more feasible and less expensive to live in or near a village or city center. Explore the connection to strategic disinvestment of infrastructure.

SESSION D: Innovating for Renewal, Recycling, and Resource Limits

FACILITATOR: Joe Fusco, Casella Waste Management
PANELISTS: Tom Gilbert, Black Dirt Farm | Tom Longstreth, ReSource
SCRIBE: Nate Hausman

What are the key issues for the future of this sector?

 We have to know the universe of what exists in terms of waste in Vermont and increase access to information around waste / materials is issue.

- We need improved regional coordination of nutrient management and information deficit.
- What is the scale at which a project should be done to be viable?
- We need to focus on innovations that "close the loop" by generating energy and usable resources.
- Soil building keeps the nutrients and carbon in the soil.
- Need to improve/create data on carbon information.
- Where is there accountability? Who is the watch dog?
- We need to make sure the funding mechanism is sustainable.
- Policy uncertainty and instability are challenges.

What specific actions should Vermonters take to advance opportunities in this issue area?

- Create "This Cold House" an initiative in which youth could work on low-income pilot home improvement TV show with energy flavor. This provides training and awareness and high-visibility financing for young people working to drive down cost for the lowincome families. Home selection by could be by lottery and home savings could be rolled back into lottery pool for future lowincome customers.
- Create an incubator space as a local closed-loop recycling incubator.
- Implement regional coordination of nutrient information. Build a
 platform for sharing information around nutrient streams that is
 web or app based with prospective modelling capability. This
 would functions as a market where people buy and sell waste.
- Utilize carbon credits for increasing nutrient value of soil.
 Mitigation programs like "soils for salmon put a price on soil carbon.
- Make cost of trash bags really high but compost is free. Variable rate pricing.
- Make resource renewal real business. Make markets for end of food waste market, similar to where recycling was years ago.
- Build "Climate Regulatory Enterprise Zone" or "Regulatory" incubators where non-government entities come up regulation and have a safe place for innovation. There must have some government oversight.
- Parking structures with EV shaded car-port funded through meters.
- Institute a Carbon pollution tax with full lifecycle analyses. Apply it into the waste stream.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- 1. Encourage resource renewal technologies via an incubator where technologies can be tried out.
- 2. Develop "Climate Regulatory Enterprise Zones" as regulatory incubators that act as a safe place for innovation and testing experimental regulations.
- 3. Coordinate nutrient information regionally through a platform for sharing information around nutrient streams.
- 4. Develop an initiative where youth could work on low-income home improvements on a TV show with energy flavor. Call it "This Cold House."

SESSION E: Developing Ubiquitous Distributed Energy

FACILITATOR: Chuck Ross, Secretary of VT Agency of Agriculture, Food, & Markets

PANELISTS: Kerrick Johnson, *VELCO* | Josh Castonguay, *Green Mountain Power* | Nathaniel Vandal, *Green Peak Solar* | Anne Margolis, *VT Department of Public Service*

SCRIBE: Margaret Gibson McCoy

What are the key issues for the future of this sector?

- We need to expand the discussion to more than just electricity.
- We have to recognize that no solution is perfect and come up with solutions as best we can do.
- The public doesn't understand what distributed energy is or that it is a good thing. For it to succeed, it needs general public understanding and support. We should share why it's a public good and come up with the elevator speech. The average person on the street sees the impact of renewables on the grid as a negative. How do we respond to people that say "the wind only blows at night" or "what if the sun doesn't shine?" If we are hoping to get policies, resources, and policy headed this way, there needs to be more public understanding.
- The Public Service Department wrote a report in 2014 that looks at whether a cost subsidization exists – do people without net metering projects subsidize those that have it? People that can afford to do it, are the ones that do it. The Dept. found the crosssubsidization doesn't exist but we need to be able to explain it. How do we negotiate the worlds of those insiders and the public?
- How do we deal with the NIMBY problem the primary opposition? How do we help people reconcile conflicting interests?
- We should support the creation of something like the Vermont Consensus Council that trains people how to solve problems collaboratively and reach a collaborative compromise.
- There is a need for simple and accessible financing. A lot of programs out there require so much paperwork and vetting making it too complicated for people to through the process.
- We should align policy priorities between agencies in State Government. For example, if farmers want to site solar panels on their worst producing agricultural lands, they put time and energy into paperwork and planning for the development with one agency, but then they find out that they can't site it there because it's in a class 2 wetland. So then they have to look at their more productive land and it turns out that it doesn't make sense because it's better financially for that land to be in production. We have stopped megawatts worth of those projects because they can't get through the permitting side. We need to deal with conflicting priorities between the Agency of Natural Resources and the Agency of Agriculture.
- We should work regionally to create a more level playing field between distributed generation, transmission, and storage. At the state level, we should take into account all of the costs and benefits of renewables.
- Collaboration between private sector and government on storage and distribution is key. We should look at efficient smart grids, useful scaled battery storage to store electricity generated by wind, solar, etc.
- Vermont could be more nuanced in its net-metering law so we incentivize renewables differently for different customers.

Breakout Session Notes Continued...

Legislation isn't always aligned, so if we keep incenting small-scale generation, you overload the capacity to store it and would have to build more transmission stations.

- When Federal Energy Regulatory Commission principles are adopted in 2018, we have to figure out the best siting locations.
- Incent renewables with good siting.
- Grid improvements need to happen, but it's on the last developer
 to propose a project. We need to socialize some of those costs and
 explore what grid improvements need to happen. We should move
 to a data network rather than a one way grid and have battery
 storage.
- Incent generation that comes at better times of day, then it could drive energy storage. We need to apply the smart-grid deployment so we don't repeat some of the errors of California and Germany. We could have people install a smart inverter to allow us to make informed decisions for where to put them.
- We can ensure 500 with smart inverters.
- We need to secure ISO New England tariff distribution on transmission.
- It is critical to involve the community in energy planning.
- We need to double down on VT as energy leaders.
- We have the technology, but need to figure out where to site projects and store power.
- We should build vehicle to grid technology. The Emerge Alliance supports DC power architecture that supports the relationship between the vehicle and building. It is all about DC zones in buildings and addresses parasite losses, reduces inverter losses, and allows PV panels to connect in parallel rather than in series. It is a full bag of solutions.
- We need to have conversations on where to site, and determine how to change perceptions.
- Our grid may not be able to handle all we want to do.
- We should use parity, thermal storage, and smart appliances in homes in the interim instead of upgrading the transformer.
- We need to ensure the reliability of infrastructure going forward.
- We need to help communities, campuses, industrial districts think about biomass and finance it.
- There should be a goal to have parity with demographics in the state and who has access to renewables. We need to make finance accessible, low interest, low amortization rate, whatever is needed to get more people access.
- The tax credit goes away in 2018. Assuming the feds don't continue the ITC, then we have to come up with something.
 Maybe a state incentive, something responsive to the situation. A carbon tax January 2017.
- The group identified 3 issues that need to be addressed:
 - * Public understanding
 - * Siting
 - * Reliability

What specific actions should Vermonters take to advance opportunities in this issue area?

 Communication message and method: Need a clear sound explanation/good education on what distributed energy is and why it's good. It's how you frame the discussion. If VT rolls out a carbon tax, frame it in dollars and cents, to convey the positive economics of distributed energy; should show the cost benefit to the ratepayer. Explain it as a solution. Identify a method to disseminate the

- info quickly and effectively. Needs 2 levels of the message: 1) simple and honest information dealing with the technological transition; 2) finer details without any of the jargon. Leaders (like Mary Powell, GMP) have influential voices and need to share clear messages.
- Effective, early public participation in community energy planning process. A lot of these challenges have been faced by communities for generations with zoning and town planning that we are all familiar with. Support the creation of micro-grids similar to water distribution. Has to be a policy decision to be promoted, then the financing discussion comes later.
- Tariff at a regional level: Need a tariff system that treats efficiency, distribution and storage equally to even the playing field. The only sector of the industry that is growing is transmission. Let's have more cost discipline and get accurate figures so we can compare it to non-transmission solutions.
- Advance carbon tax on 1/1/17.
- Align priorities of state government: a one year task force could identify needed alignments between Ag, Forest Dept, ANR and locals.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- 1. Improve public understanding through the development and dissemination of a clear message on what distributed energy is and why it is important.
- 2. Ensure effective and early public participation in community energy planning and siting processes.
- Create a one-year task force to identify where alignments could be made between state agencies (Agency of Agriculture, Forest Parks and Recreation, Agency of Natural Resources), and local communities.
- 4. Develop a tariff system at the regional level that treats efficiency, distribution, and storage equally to even the playing field.
- 5. Advance a carbon tax to begin on 1/1/17.

SESSION F: Improving Education, Workforce Development, and Youth Entrepreneurship

FACILITATOR: Pat Moulton, Secretary of VT Agency of Commerce & Community Development

PANELISTS: Dan Smith, *VT Technical College* | Emily Piper, *Launch Vermont* | Andrew Savage, *All Earth Renewables* | Marguerite Dibble, *Gametheory Consulting*

SCRIBE: Caitlin Lovegrove

What are the key issues for the future of this sector?

- Everyone has relocated to Burlington area. How do we help kids growing up in rural areas? We should have young entrepreneurs go to rural schools to tell them their story.
- Every school should have a Maker Space.
- There is value in identifying individuals, and identifying the narrative specific to each one to showcase these to students.
- The current goals for some lower income level individuals are not fun or ambitious.
- We need to think about gender and encourage women as entrepreneurs and as members of STEM. We also need to be thinking about issues of diversity.
- It is tough to connect students with adults in the community. It is

not just figuring out who is the right person, it's also a bigger question: how do community members become good teachers in addition to being business people? How do we do that well? How do you get kids engaged with the adults, and the adults to relate to the kids?

- There is a social justice issue: effort should not just be focused on 4-year degree or higher income jobs. It should touch all the needs in the workforce.
- How do we make vocational education "hip?"
- There are 16 regional tech centers in the state without enough students to fill them up.
- How do we increase land tenure access to young and new farmers? Farming is not set up as a career, it's set up as an inheritance – let's shift that dynamic.
- How robust are "career days" across high schools?
- It is hard for somebody who is running a company to be available to schools for career days, because businesses have so much on their plates already.
- Career fairs are not fun, and it is a full day of an employer's time. How much are employers getting out of it?
- Problem: there are programs that address many of these issues, but nobody knows about them. There is no comprehensive messaging.
- We can brand, and train, and do all we want, but if we can't make ends meet, then we can't stay here. There's an affordability issue in Vermont. If I work in Boston then my pay is higher so I can carry more debt.
- There is a problem of cycle: when many people apply to the same job, it goes to the older applicant with more experience, and younger applicants leave the state.
- Cost of living is a carrier. This is not unique to the climate change economy.
- There is not enough workforce supply in Windham County. What kind of system and innovation can we bring to this process that is transformative from what we do today?
- We need to move away from the idea that the trades are not the first choice, because they are.
- Access to workforce is a constraint on the economic growth of this state. How do we ensure that access to labor and access to opportunity does not interfere with the growth of the climate economy within Vermont?
- Economic prosperity needs to be inclusive: women, socioeconomic status, new Americans, non-traditional students (across economic sectors and accommodating a variety of interests. We need to increase career exposure and cultivate broad awareness of jobs that need to be filled
- Teachers are using curriculum from the 20th century, when we need to meet the challenges of the 21st century

What specific actions should Vermonters take to advance opportunities in this issue area?

- Use an Appreciative Inquiry format emphasizing and envisioning a
 positive future rather than obsessing over what's wrong now. Be
 more effective and proactive. Clarify and committ to a shared
 vision of the future.
- Start young with engaging project-based learning.
- Every school in the state should have visible solar on it, with appropriate curriculum to go along with it.

- Engage students through TED-style talks.
- Use Genuine Progress Index to apply something other than what is standard today in measuring the success of a business and use a much broader set of standards that includes state of employees, how they interact with the communities. Rank employers by GPI
- Increase access and publicity for adults to have classes in tech centers.
- Celebrate the state's initiative to get high school students into college classes through dual enrollment programs. This is a wonderful opportunity to build relationships and start college pathways.
- Integrate a component of adult outreach in addition to youth outreach. We need to balance life's other needs around families, etc.
- Create a culture within the business community and the nonprofit community that employers are open to sharing with students.
- There are many resources, but it takes a community of people to say this can happen.
- Teach students how to do an informational interview.
- Tell Vermont students the opportunities involved in Climate Change by bringing it "home" to Vermont with examples of what types of career it will require.
- There are two programs about climate change in Vermont: Vermontivate and Vermont Energy Action Camp.
- Get students out of the classroom and doing more hands on activities.
- Create career opportunities in affordable housing by creating more efficient housing.
- Find some way to share best practices that outlive individuals or individual programs.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- 1. Promote, expand and create educational opportunities for our youth in the climate economy field.
- 2. Market the opportunities and jobs within the climate change economy in Vermont.
- 3. Create entrepreneurial competitions around climate change for students and adults.
- 4. Build affordable, energy efficient housing, or renovate housing to be more energy efficient and affordable.

SESSION G: Strengthening Farm & Forest Carbon Sequestration and Profitability

FACILITATOR: Ellen Kahler, Vermont Sustainable Jobs Fund
PANELISTS: Marie Audet, Blue Spruce Farm | Will Stevens, Golden
Russet Farm | Richard Carboneă, LandVest | Lisa Ransom, Grow
Compost of Vermont

SCRIBE: Jenna Whitson

What are the key issues for the future of this sector? (Small Group Exercise – what does it mean? What would be involved? Who are the stakeholders? What resources might be needed?)

- Scale innovative models replicate what works!
- Rethink/revamp policies based on the value of ecosystem services. Connect to brand people, natural resources.
- Play some defense. Address invasives and keep forests in forests.

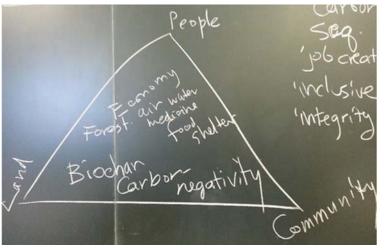
Breakout Session Notes Continued...

- Develop new economic models based on our values.
- It's all about the soil orient economy and policy around it
- Create a new culture and thinking of following natural systems.
- Carbon tax as "foregone expenses" (shadow expenditure).
- Communication about ecosystem services. (The term is a bad word 3. Identify sound data and metrics to develop a better understanding in itself and may be better understood as nature's benefit). The term is not understood. We need this issue to become part of the mainstream

What specific actions should Vermonters take to advance opportunities in this issue area? (What are tangible next steps?)

- Scaling Up:
 - * We could develop a central clearing house (example Farm to Plate network) that has a private-nonprofit partnership behind it. There are a lot of models around the state that people might not be aware of. We need to identify the resources and then implement best practices.
 - * We need clear metrics for explaining and determining what the ecosystem services are – why does it matter and measuring them – how much do they matter? Include ecosystem services in how we value GDP. "GPI" not GDP.
 - * Raise community awareness around soil stewardship:
 - * Compost production must be considered "agriculture" and we need to reflect our values in our policy.
 - * Create a healthy soil curriculum (kind of like Farm to School model).
 - * Healthy food for all. Increase access to healthy food
 - * Local communities and neighbors championing farm and forest soil health.
 - * Support farmers and foresters.
 - * Acknowledge innovators.
 - * Support others to scale up those practices.
 - * Involve consumers and community members to raise awareness of the benefits - "Grow Healthy Soil" campaign.
- See picture from chalkboard demonstrating a way that community, people, and land can engage in some kind of exchange around common values. How do we engage the rest of the state and preach beyond the choir?

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?



- 1. Develop better and more consistent language to communicate the benefits of carbon sequestration to individuals, families, and Vermont communities.
- 2. Identify and share case studies of innovators and best practice models.
- of the benefits of best practice models. Use metrics to demonstrate value to the public and private sector, individuals, and communities in a tangible way.

SESSION H: Seeding a Vermont Climate Investment Strategy

FACILITATOR: Bill Schubart, Worth Mountain Capital

PANELISTS: Andi Colnes, *Energy Action Network* | Rob Miller, *VT*

State Employees Credit Union Scribe: Michael Moser

What are the key issues for the future of this sector?

- Building consumer interest.
- Consumer education.
- Lowering the cost of capital and lowering the risk to enter the market.
- We need to understand the gaps where investment is needed.
- Matching investors with appropriate projects/programs.
- Democratizing access to capital. Existing mechanisms are small(er) scale.

What specific actions should Vermonters take to advance opportunities in this issue area?

- Engage in consumer/public education about the need to spur sector development.
- Explore Carbon tax or green bank for dedicated renewable energy fund (very different mechanisms).
- State-sponsored pool of money for renewable energy development
- Create Green Bank structures to leverage clean energy finance capacity in VT (Whole building, solar fund, EV's, Crowd Funding...)
- Utilize the clean energy finance initiative to explore funding mechanisms, opportunities.
- Investigate how IRA retirement funds can be invested in local initiatives:
 - * Credible, non-speculative SEC-viable investment strategies.
 - * Personal and public investment strategies (scale) and the legal/ regulatory challenges/opportunities.
- Explore investor/investee networking/matchmaking opportunities.
- Address inability to fund project "soft costs."
- Identify investment opportunity gaps.
 - * Scale as it relates to investors
 - * Investment types (grants, loans, investors, etc.).
- Explore best utilization of existing funds
 - * VSECU, building markets
 - * State employee pension funds re-investment
- Explore the model in Nova Scotia of a community investment fund demonstrating geography specific investing.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- Improve financing mechanisms for clean energy and cooperative projects.
 - a. Initiate a Vermont "Green Bank."
 - Assess and revivify the PACE Program for home energy conservation.
 - c. Institute a Vermont "YieldCo". (a publicly traded company that is formed to own operating assets that produce a predictable cash flow).
 - d. Improve networking between clean energy businesses at all stages of growth, cooperative energy projects, and all levels of interested investors.
- 2. Develop further public funding for clean energy companies and projects.
 - a. Initiate an immediate carbon tax plan to replace the waning Vermont Yankee Storage Fund.
 - b. Explore investment access to a portion of the VT State Employee Pension Fund.
 - c. Encourage and enlist investments from Vermont-based companies doing business nationally such as National Life, GMCR, Ben & Jerry's, colleges, and hospitals.
 - d. Explore additional ways for casual investors to participate by allocating portions of their stock portfolios or retirement accounts to Vermont clean energy initiatives.
- 3. Develop an educational awareness and advocacy program to enhance Vermonters' understanding of the importance and value of clean energy solutions and policies for investors, consumers, and youth.

SESSION I: Spurring Research and Development for New Technologies in Vermont

FACILITATOR: Ted Brady, USDA Rural Development

PANELISTS: David Bradbury, Center for Emerging Technologies | Ken Merritt, VT Venture Network | Dean Luis Garcia, College of Engineering and Mathematical Sciences, UVM

SCRIBE: Jill Chapman

What are the key issues for the future of this sector?

- There is a lack of public sector engagement in research on climate change solutions.
- There is a lack of research money. We need competitions like during the Carter Administration where a problem is defined.
- DOE does not do a good job of supporting research and innovation. USDA does a better job.
- These are multi-dimensional problems. We need to find a way of getting people together. There is a significant disconnect between those that study and those that do.
- We need to get universities to recognize the value of applied work.
- Research and Development dollars are quite limited whether public, private or mixed.
- Many public grants aren't helpful. You can't get a product to market for less than \$2,000,000. The \$10,000 grant doesn't really get you anywhere. Grants create gaps between grants. They are only project focused. We need a permanent organization which

keeps its eyes on the bigger picture.

- Grantees become unconnected separate systems desperately seeking money. They need to find a way to talk to each other.
- Sometimes the smaller entrepreneur has the better product, but the larger company will win out because they can deliver it. An example is wind turbines where a Vermont business beat out Westinghouse, but North American Rockwell was brought in to help get it off the ground.
- The public funding can be bureaucratic and disconnected. We need a cohesive network to utilize resources.

What specific actions should Vermonters take to advance opportunities in this issue area?

- Vermont needs a clearinghouse where people can say what they can offer, where specific problems can be defined and teams can be created to work together. This should be real live database of resources, talent and referral, an interactive database.
- We need something like "Quirkey", a clearinghouse for ideas and comments.
- VTC is trying to position itself as a host for research.
- Bring ideas to the areas that need to be addressed. Start big then narrow it down so researchers know what they need to work on.
- Actually, let the experts brainstorm to define a solution. Don't
 define first. Real breakthrough technologies are coming from
 people that haven't narrowly defined the problem. When funders
 make a specific request, they may miss the breakthrough.
- Work on development of a single best project, then send it out to bidders.
- The contests work. Have a local challenge to solve a specific problem.
- We need to link the inventors to people who can assist with marketing, business development.
- We need an ombudsperson to help navigate the system and know where the resources can be located. One organization is needed to take the lead.
- A network of all stakeholders is needed (inventors, entrepreneurs, builders, suppliers, lenders, etc.)
- Germany has demonstrated the value of sharing and collaboration vs. competition and the need to own an idea.
- Vermont can contribute something unique, its own flavor. For example, Argentina provides office space.
- Carbon tax proceeds should go directly to fund development of technologies to reduce carbon.
- We need a "Hacker, a Hipster and a Hustler", each contributing to create, develop a market and sell.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- Develop an interactive talent, resources and solutions clearinghouse supported by a skilled staff, like a small business development center. DesignBook or Kickstarter are possible platforms to match dollars with ideas and idea people with those with technical skills to offer.
- Offer organized networking events to connect small businesses and entrepreneurs with each other and with investors.

Breakout Session Notes Continued...

- 3. Clearly define areas of focus for research and development.
- 4. Create more flexible RFPs and finance research and development rather than specific technologies.

SESSION J: Supporting Smart Growth, Reuse, Preservation, & Downtown Redevelopment

FACILITATOR: Catherine Dimitruk, Northwest Regional Planning Commission

PANELISTS: Paul Bruhn, *Preservation Trust of Vermont* | Tad Cooke, Moran Plant Redevelopment, Burlington | Bob Stevens, Brooks House, Brattleboro | Noelle MacKay, Commissioner of Housing and Community Development

SCRIBE: Brittany Nunnink

What are the key issues for the future of this sector?

- We need to learn from our past failures so as to recurring failures.
- We should seek out federal funds for projects.
- We need a universal statewide policy with no exceptions and easily attainable construction permits. Let's have a language that we understand so we don't need a lawyer to carry out these projects.
- There are nay-sayers who disagree with these growth projects
- Affordability is a barrier.
- When growth and change happen, we'll be best off if we can harness that change for good, but often it can be difficult to shape • We need a funding investment incentive that's more than a tax change in a way we want. How do we have the courage and resources to shape what we want? We need to use growth to our advantage.
- How do you reinvent yourself? It's different for each downtown.
- There is a lack of data or professional capacity. How do we communicate long-term cost savings? We often don't have money to do that.
- There are so many tools and organizations that volunteer to do the technical research. We need to make better use of those resources.
- We need to have greater conversation about smart and resilient growth and highlighting what that means statewide.
- We need to design guidelines.
- We need to find the nexus between jobs and the avoid environment, between tradition and innovation and finding those policies that push in the same direction.
- We could share the risks more broadly, and not always have just a small group of people discussing it as is often the case in VT.
- Land use is an issue: For example: solar farms vs. land for agricultural use - can we have multiple uses for land?
- Access to capital is an issue and dealing with brownfield sites.
- Water and waste water infrastructure in the downtown areas is a critical issue.
- We should implement energy retrofits in existing buildings.
- Are there ways to aggregate capital from different sources? We could create mechanisms where existing pools of capital are available for investment.
- Flooding and watershed management is an issue.
- Spatial literacy for communities.

- Enhance communication. Find ways to communicate around the state and not reinvent things.
- Space time and money are all significant factors in decision making.
- Land preservation.
- Demographic trends.
- Make our improvements available and accessible.
- Make it inclusive.
- We are the second oldest state in the nation. We need to make this a place that welcomes young people and entrepreneurs.
- Meaningful jobs.
- Community gathering space.
- Housing.
- It needs to cost less!
- We are too remote.
- ACT 250 adds a lot of cost to redevelopment projects.

What specific actions should Vermonters take to advance opportunities in this issue area?

- We need incentives for people with money and capital to reinvest in the small village centers throughout VT. Maybe via tax credits, or some sort of actual dollars to incentivize these people to renovate existing buildings rather than build new.
- credit for renovation.
- Should we look at taxes rather than incentives?
- Two large federal tax credit sare not available to Vermonters: New Market Tax Credits (you have to have a huge project to utilize this) and the Federal Tax Credits, but for most small entities you cannot get access. If we can figure out a way to build a system in the state that could tap into these tax credits, it would be hugely helpful. Maybe some sort of intermediary that could help us to access these federal tax credits.
- We need to target resources but also there must be a business model, otherwise you cannot sell it to the banks.
- How do you choose where to put our money? Pair together investors with community supported project. If there's demonstrated support, there's a higher likelihood of success: create a mechanism for people to invest and then create a matching fund.
- Keep wealth in the community. Look at how much money leaves our community, and assess how much could stay there.
- Look at marketing opportunities to support local businesses. Marketing our downtown is important.
- Host events where the town/city transparently lays out their problem and the collective community creates a solution.
- What would a significant influx of people do to these plans? People will be moving here as climate refugees in the future.
- Maximize housing stock.
- Tell our story. Market our downtowns.
- Communicate our story with people outside of VT too.
- Engage press in these conversations to help them understand how best to report on the story.

- Follow the Farm to Plate Collective Impact model.
- How do we use data to quantify and prioritize our problems?
- Reinvent and change our assumptions.
- Manage wastewater.
- Institute internet sales tax to create a level playing field.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- 1. Increase capital:
 - a. Aggregate capital sources of investment for downtown redevelopment. Look to the private sector and Vermont's smaller funds to make them more useable.
 - b. Incentivize development in downtowns vs. green fields.
- 2. Improve communication:
 - a. Make sure to reach all Vermonters. Utilize an inclusive approach.
 - b. Share case studies about resilient smart growth.
 - c. Articulate a community vision.
 - d. Market Vermont and downtowns as places to live and work, not just places for tourists to visit.
- 3. Invest in infrastructure:
 - a. Make investments to ensure buildings are resilient.
 - b. Make jobs and housing available to all in our downtowns.

SESSION K: Coordinating State Governmental Policies & Regulations

FACILITATOR: Greg Brown, VCRD Board Chair

PANELISTS: Chris Brooks, *Vermont Pellet Company* | Geoff Hand, *Dunkiel Saunders Elliott Raubvogel & Hand, PLLC* | Gabrielle Stebbins, *Renewable Energy Vermont* | Deb Markowitz, *Secretary of Agency of Natural Resources*

SCRIBE: Ruth Wallman

What are the key issues for the future of this sector?

- Bring young people & entrepreneurs to VT to solve problems.
 Don't just add new taxes, e.g. carbon tax. VT's economy can get an economic benefit from worldwide interest in what is happening here.
- Why look at policies and regulation? Carbon tax is good but it will hurt small businesses. How do we create policies that help them?
 We need to build consensus with a statewide conversation.
- Some state has to try things before they become widely accepted.
 E.g. CA set auto pollution limits, now they are the Federal standard. The solar industry exists solely because of the 30% tax break. It ends in 2016. We need a long-term version of tax credits that phase out only when the free market economy can pick it up.
- Young people come to VT because of what the state is doing, e.g. GMO's.
- 90% renewable by 2050 should include everything: pellets, wood, particulates. Energy efficiency creates jobs.
- The pipeline to Middlebury is going to cost rate payers, so we need to do something different.
- Include disaster recovery and resilience, not just renewables. Adaption reality.

- We need to consider a range of risks, not just floods. We need a mitigation plan. We need to protect agriculture, wetlands, etc. in perpetuity. This is politically difficult to achieve.
- Develop political will. Get people involved in the conversation, not combat. The system is broken and needs to be inclusive and transparent.
- We have adversarial relationships with people we need to work with.
- Distribute resilience with fewer regulatory hurdles.
- How can we make communities stronger in case we get knocked off the grid?
- There are energy procurement issues. The SPEED program helped, and we need it. We aren't mitigating climate change.
- We know what to do and the tools exist. Where is the political will? How do we mobilize that?
- There is no moral imperative and there are too few people. We need to look at all the other ways to create businesses.
- Political will comes from discussion. This conference helps build political will.
- Build political will by demonstrating what works.

What specific actions should Vermonters take to advance opportunities in this issue area?

- Institute a Carbon pollution tax.
- Efficiency VT needs to look at the whole energy picture, not just thermal and electric. Reducing energy use means more electricity use.
- All policies or regulatory ideas must go through an economic screen that includes the cost of taking no action.
- Make all processes more transparent and inclusive.
- We need benchmarks to measure progress to get to 90 x 50. We need polling to find out public attitudes/desires on progress. We need widespread public engagement and information.
- Enforce existing regulations in a consistent manner.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- 1. Adopt a Carbon Pollution Tax.
- 2. Repair the division between electrical and thermal energy issues. Enlist Efficiency Vermont to look at the whole energy picture, not just thermal and electric.
- 3. Use benchmarks to measure progress towards 90% renewable energy by 2050. Poll Vermonters to determine attitudes/desires on progress. Widespread public engagement is critical.

SESSION L: Advancing Next Stage in Efficiency & Conservation

FACILITATOR: Gaye Symington, High Meadows Fund
PANELISTS: Paul Zabriskie, Capstone Community Action | Beth
Sachs, Vermont Energy Investment Corporation | Jennifer Chiodo,
CxAssociates | Ludy Biddle, Neighborhood Works of Rutland County
SCRIBE: Joel Rhodes

What are the key issues for the future of this sector?

Breakout Session Notes Continued...

- Are we wedded to the idea of cost-effectiveness? Costeffectiveness is a large factor in commercial and industrial building and multi-family building.
- Monetize impacts on future generations.
- Customer service needs to be emphasized. Make things happen by positive human interactions and not just monetary incentives.
 Make it easy for people.
- Communication, awareness, education, training, and public attitude on sustainability issues are important.
- Having enough technical expertise to deal with complex building is crucial.
- How to we address advances in the rental market?
- Personal freedom vs. tragedy of the commons: someone's 'right' to use more.
- Increase social acceptability.
- Focus on regulation and enforcement.
- We need more sticks to spur innovation.
- Make energy efficiency visible.
- Highlight the health benefits of energy efficiency.
- Take a whole perspective on people and energy use: transportation, heat, electricity as one.
- Steward our resources, i.e. water/time/energy/soil.
- Focus on jobs and economic opportunity.
- Look at codes and enforcement on new buildings.

What specific actions should Vermonters take to advance opportunities in this issue area?

- Include health: life safety under enforcement.
- Provide warranty insurance (performance guarantees).
- Turnkey delivery.
- Design a package for weatherization/energy efficiency for homeowners through the network of entities like NeighborWorks of Western VT/Efficiency Vermont, other housing organizations, Regional Planning Commissions, contractors/fuel dealers, lenders, personal connections, and local groups and channels. Design a clearinghouse/ bundler/case manager (coach) for the above and conduct outreach.
- Carbon (pollution) tax/tax pollution/monetize the impacts on future generations:
 - * Look at the British Columbia model as a guide.
 - * Develop a tiered system.
 - * Lower and address other regressive taxes.
 - * Pay attention to low income communities.
 - * Pay attention to those for whom energy spending is a financial burden.
 - * To affect behavior, you have to give people options.
- Access money for investment in energy efficiency and weatherization.
- Codes/enforcement/benchmarks. Due to the lack of visibility for energy efficiency, it doesn't get the attention that renewable energy does.
- Mandatory labels (like MPG ratings) for residential homes, commercial, and industrial buildings with training and education.

Of all we've been discussing, what are the three Ideas or

Recommendations for Action we want to share with the full conference?

- 1. Institute mandatory MPG stickers for commercial, industrial, and residential buildings. Offer training and education to implement an MPG program.
- 2. Mandate building codes and improve enforcement.
- 3. Make efficiency and conservation easy.
 - a. Design a package for weatherization/energy efficiency for homeowners through a network of entities like NeighborWorks of Western VT, Efficiency Vermont, other housing organizations, Regional Planning Commissions, contractors and fuel dealers, lenders, personal connections, and local groups and channels.
 - b. Design a clearinghouse and case manager to coordinate the weatherization package.
- 4. Make waste more painful and pay for it.
 - a. Institute a Carbon Pollution Tax to monetize the impacts on future generations.
 - b. Invest in efficiency and weatherization.

Session M: Adapting Outdoor Recreation & Tourism

FACILITATOR: Megan Camp, Shelburne Farms

PANELISTS: Louise Lintilhac, Lintilhac Foundation | Laura Peterson, VT

Dept of Tourism and Marketing | Claire Humber, SE Group

SCRIBE: Kianna Bromley

What are the key issues for the future of this sector?

- A shorter winter results in less snow which effects the Ski Industry.
 We may see changes in seasonality which will effect how we market and sell these tourism opportunities.
 - * The outdoor industry means unpredictable or dramatic weather, changing weather patterns. This has impacts on recreation and food.
 - * There will be ground saturation in spring which will impact infrastructure, recreation, etc.
 - * We may see effects on sugaring and on foliage colors.
- Damage of roads will increase during extreme weather, freeze/ thaw cycle, etc. which will impact access.
- Outdoor events will need safety plans for storms, flash floods, and wind gusts.
- Changes in the ecosystem will impact bird patterns, tree populations, wildlife, flora, pests, etc.
- Invasive species that wipe out natural flora may become more prevalent.
- Economics: ski industry no snow = less \$\$ into VT (effects a lot of secondary businesses)
- We may see an impact on cultural heritage sites. We will need to
 determine what to preserve and develop historic preservation
 standards. For example, covered bridges, farms, and mills may be
 affected. There may be a visual impact if we change and
 modernize historic areas to save them (for example in flood areas).
- We are not integrating community members into the planning process. There needs to be an increased understanding of planning and the type of planning that is now needed.
- There is an issue of marketing: how can we be more productive and competitive in our marketing?

- There is a lack of public transportation.
- There could be public health impacts such as effects of air quality, algae blooms, disease breakout, Lyme disease, etc.

What specific actions should Vermonters take to advance opportunities in this issue area?

- We could institute a "SuperHosts" programs and offer classes (civics, environment) to be advocates in exchange for discounts.
- Make your "users/residents" ambassadors: increase investment of community. Maybe offer a tax incentive to participate.
- Invest in capacity to provide a quality experience
- Civic Engagement + Youth.
- High-speed rail NYC to VT, Boston to VT.
- Invest in State Parks.
- Market Vermont as a sustainable tourism destination through authentic community engagement. We propose an Ambassador Program that empowers Vermonters to be trained advocates.
- Institute an Assistance Program to help farmers start and overcome the hurdles of agro-tourism.
- Invest in "summer camps."

- Look into New Landowner Orientation by revisiting public access public/private interface.
- Identify grant opportunities for new and diverse projects.
- Remove policy barriers for adapting infrastructure (historic, trails, etc.).
- Reform policy to address liability, needed adaptations to historical and cultural sites, support for private landowners, and public access.

Of all we've been discussing, what are the three Ideas or Recommendations for Action we want to share with the full conference?

- 1. Market Vermont as an authentic and sustainable tourism destination through genuine community engagement.
- Review and reform policy to support private landowners in increasing public access for seasonal recreation and tourism by addressing liability and allowing for adaptations to historical and cultural sites.
- 3. Invest in growth sectors such as State Parks and agritourism.



Community Leadership Awards

The February 18th Summit on Creating Prosperity and Opportunity Confronting Climate Change also served as an opportunity for the Vermont Council on Rural Development to recognize community leaders who have had a transformative impact on advancing the vitality and prosperity of their Vermont community.

COMMUNITY LEADERSHIP AWARD

The 2015 Community Leadership Award was presented to the community leaders who have led the renaissance of downtown St. Albans. VCRD presented its 2015 Community Leadership Award to St. Albans residents City Manager Dominic Cloud, Mayor Liz Gamache, Warren Hamm from the St. Albans Historical Society, and Emerson and Suzanne Lynn, publishers of the St. Albans Messenger. Past recipients have included the Rutland Creative Economy Leadership Team, the Center for an Agricultural Economy in Hardwick, Al and Marcia Perry of Richford Vermont, and Robert McBride and Richard Ewald of Bellows Falls. Awardees are recognized for work that has had a "transformational effect on their communities."

City Manager Dominic Cloud and Mayor Liz Gamache were especially recognized for the tremendous accomplishments made in refurbishing historic downtown buildings, developing a critically important new parking facility, advancing the construction of a downtown hotel, encouraging over \$85 million dollars in manufacturing investment at the St. Albans Coop and Mylan Techologies, and supporting the development of a new 18,000 square foot building on Main Street for Ace Hardware. Admiral Warren

Hamm was praised for his wonderful leadership in the revitalization of the top notch St. Albans Museum and the St. Albans Raid Anniversary Festival produced last year. Finally, Suzanne and Emerson Lynn were recognized for their energy in organizing the Franklin County Wine and Cheese Festival, the Annual Running of the Bells and other events, but most especially for the powerful contribution of the St. Albans Messenger to local pride, momentum and community. In the words of VCRD co-presenters Catherine Dimitruk of the NWRPC and Tim Smith of Franklin County Industrial Development Corporation, this team has made St. Albans, "a better place to shop, a better place to dine, a better place to do business and most importantly, a better place to raise a family."

LIFETIME LEADERSHIP AWARD

Also at the Summit, VCRD presented its firstever *Lifetime Leadership Award* to John Ewing of Burlington Vermont. As former president of the Bank of Vermont, founder of the Vermont Forum on Sprawl, and past Chair of the Vermont Housing and Conservation Board, John has stood as much as any Vermonter for maintaining the balance between a strong economy and conserving the best of the culture and landscape of Vermont.



VCRD's 2015 Community Leadership Award presented to Community Leaders of St. Albans Vermont

From left: Mayor Liz Gamache, City Manager Dominic Cloud, Warren Hamm, Suzanne Lynn and Emerson Lynn



VCRD's first ever Lifetime Achievement Award presented to John Ewing From left: Paul Bruhn, Executive Director of Preservation Trust of VT, Noelle MacKay, Commissioner of Housing and Community Affairs, John Ewing, Greg Brown, VCRD Board Chair, and Paul Costello, VCRD Executive Director

Meet Keynote Speaker: Jigar Shah



Jigar Shah is one of the today's leading cleantech champions. As founder and former CEO of SunEdison he pioneered "no money down solar" and unlocked a multibillion-dollar solar market, creating the world's largest solar services company.

Shah co-founded Generate Capital, a specialty finance company focused on funding businesses that are part of the Resource Revolution – doing more with less of our critical resources like energy, water, food and materials. And he was former CEO of the Carbon War Room, a non-profit organization whose mission is to replace high impact carbon business applications and practices with low-carbon and nocarbon alternatives that can help reverse or stop global warming.

Today, as CEO of Jigar Shah Consulting, he works with global companies in a multitude of industries to deploy existing clean energy and resource efficiency solutions fueled by new business models. In his recent book "Creating Climate Wealth: Unlocking the Impact Economy," Shah outlines how entrepreneurs and investors can unlock the massive potential that climate change represents with business model innovation as the key to attract mainstream capital and unlock transformational change.

Video of Jigar Shah's Keynote Presentation is available at http://vtrural.org/programs/climate-economy/summit/

Bios for the Speakers, Panelists, and Moderators

Bob Ackland, Steep Management | Bob Ackland is a retired ski area executive and owner with over 40 years' experience in outdoor recreation. He currently manages a small consulting company serving the ski resort industry in North America offering specialty technology solutions in the area of mountain operations. Bob serves as Chair of Mad River Planning District, Vice Chair of Warren Selectboard and chair emeritus of the Vermont Council on Rural Development.

Peter Adamczyk, Energy Finance and Development
Manager, Vermont Energy Investment Corporation | Peter is
a Principal Consultant at Vermont Energy Investment Corporation. He
leads the development and implementation of financing strategies
and services that support VEIC's goal of reducing the economic and
environmental costs of energy use. He manages relationships with
financial partners, including development, analysis, and advocacy
activities regarding energy efficiency and renewable energy.

Marie Audet, Blue Spruce Farm | Marie Audet is a member of a large multigenerational dairy farm family, who own and operate Blue Spruce Farm and Audet's Cow Power located in Vermont's Champlain Valley. Milk from the farm supplies the nearby Cabot Cheese plant where they proudly boast of award winning cheddar cheese. In 2005 the family started generating electricity from their cows manure, currently producing 2.4 million kWh of renewable electricity per year.

Dr. Alan Betts, *President*, *VT Academy of Science and Engineering* | Dr. Alan Betts of Atmospheric Research has worked on weather and climate problems for 45 years. He is the author of 160 scientific papers. He gives talks to professional, citizen and religious groups in Vermont, and is a columnist for the Times-Argus and the Rutland Herald. His goal is to help society understand the challenge of global climate change. His web-site, alanbetts.com, will answer many of your burning climate questions!

Ludy Biddle, Executive Director, NeighborWorks of Western Vermont | Ludy Biddle has been director of NWWVT, a nonprofit housing organization, since 2001. Prior to NeighborWorks she produced a Holocaust education program; was director of an arts presenting organization; worked at the National Endowment for the Arts and at the Folger Shakespeare Library. Ms. Biddle's most recent

work has involved an energy efficiency program at NWWVT called the HEAT Squad. The HEAT Squad will achieve 1000 efficiency retrofits in Rutland County. Ms. Biddle lives on a farm in Vermont raising grass fed beef and boarding horses rescued from the racetrack.

David Bradbury, *President, Vermont Center for Emerging Technologies* (*VCET*) | VCET is an independent nonprofit technology business program offering business mentoring, venture capital, three coworking facilities, and substantive networking to the region's entrepreneurs and next generation employers. Over 40 firms have been formally incubated and/or invested in by VCET, and together employ over 260 people today. Each year, an additional 200 entrepreneur teams and start-ups are assisted. David enjoys snowboarding, surfing and mountain biking with his wife Emily and two young sons in Stowe, Vermont.

Ted Brady, *State Director*, *USDA Rural Development* | Ted Brady was appointed to his current position by President Obama and Agriculture Secretary Tom Vilsack as USDA Rural Development State Director for Vermont and New Hampshire in 2013. USDA Rural Development makes grants, loans, and loan guarantees in the housing, community and business sectors in rural communities. Prior to joining USDA, Brady served as U.S. Senator Patrick Leahy's senior economic development, community development, housing and transportation field representative.

Chris Brooks, *CEO*, *Vermont Wood Pellet Company* | Chris Brooks is the President &CEO of the Vermont Wood Pellet Company. A Vermont community scale wood pellet manufacturer.

Greg Brown, Board Chair, Vermont Council on Rural Development | Greg Brown has worked in regional and state planning in Vermont for 35 years. Greg began his career with the Windham Regional Planning Commission. He then served as Director of Planning for the Vermont Department of Housing and Community Affairs where he administered state programs supporting local and regional planning. In 1998 he was appointed Commissioner of Housing and Community Affairs where he played a major role in crafting the Vermont Downtown Program. Greg currently devotes volunteer time to the Vermont Council for Rural Development and, to the Windham

Bios continued...

Regional Commission. He lives in Dummerston with his wife Carolyn.

Paul Bruhn, Executive Director, Preservation Trust of Vermont | Paul Bruhn is the Executive Director of the Preservation Trust of Vermont which he helped to found in 1980. The organization is a statewide non-profit organization founded in 1980 whose mission is to help communities save and use historic places.

Megan Camp, Vice President/Programs Director,
Shelburne Farms | Megan is the Vice President and Program
Director for Shelburne Farms, a nonprofit organization and 1,400-acre
working farm, forest, and National Historic Landmark, located on the
shores of Lake Champlain whose mission is to educate for a
sustainable future. She currently serves on several boards including
the Vermont Council of Rural Development, the Vermont Natural
Resources Council, and the Energy Action Network. This year along
with other public and private partners she helped to initiate the
Vermont Agritourism Collaborative.

Richard G. Carbonetti, *Senior Vice President Timberlands*, *LandVest Inc.* | Richard Carbonetti's (Carbo) responsibilities within LandVest primarily focus on the forest management and consulting side of the business on over 1,700,000 acres of management in ME, NH, VT, NY, & PA, Included in this work has been participation on carbon sequestration projects on nearly 300,000 acres. Carbo works out of LandVest Timberland's Newport, VT Office and lives in Albany, Vermont with his wife Emily a 5th grade teacher. He and Emily are also owners of over 1900 acres of conserved timberland in Glover & Greensboro, VT.

Josh Castonguay, Director of Generation & Renewable Innovation, Green Mountain Power | Josh Castonguay's responsibilities include oversight of GMP's existing generation assets, development of new renewable energy projects and working with the Strategic Products and Services team to transition GMP into the energy company of the future. Josh graduated from University of Maine with a Bachelors degree in Electrical Engineering Technology in 2003 and has been with GMP since that time. Josh lives in Colchester, VT, with his wife and two children.

Jennifer Chiodo, Managing Principal, Cx Associates |
Jennifer Chiodo has over 30 years of experience creating and managing new approaches to energy efficiency in the business sector.

Ms. Chiodo leads projects including the Impact Evaluation of NYSERDA's C&I New Construction Program and working with the Massachusetts Energy Efficiency Advisory Council on achieving aggressive, state-wide efficiency goals. She is engaged in addressing global warming through her volunteer work on her town energy committee, as Advocacy Chair on the Board of the Vermont Green Building Network, and on the Board of Directors of VBSR.

Andi Colnes, Executive Director, Energy Action Network |
Andrea Colnes currently serves as Executive Director of the Energy
Action Network, a systems-based effort to transform Vermont's
energy economy to one based on efficiency and renewables. Prior to
joining EAN, Andrea spent much of her career working on natural
resource public policy and coalition building in New England and
nationally, focused on large-scale land conservation, sustainable
forestry and energy. She has a master's in Wildlife Conservation from
the University of Maine and a BA in Political Science from Williams
College. Andrea currently serves on the boards of the New England
Forestry Foundation and the Coalition for Green Capital.

Tad Cooke, Project Leader, New Moran, Inc. | Tad Cooke is a

Vermont native and 2014 graduate of the University of Vermont. He began researching the Moran Plant in July of 2012. Responding to an open competitive process, they raised \$19,579 on Kickstarter to fund the completion of a proposal to renovate the Moran Plant. In March 2014, their proposal won a year-long competitive City process and earned a \$6.3M allocation in TIF funding from Burlington voters. Together with Partners Charlie Tipper and Erick Crockenberg, Cooke works full-time as the co-founder of New Moran, Inc — a Vermont non-profit created to secure funding, guide the redevelopment and steward the future of the Moran Plant.

Paul Costello, Executive Director, Vermont Council on Rural Development | Paul joined VCRD as Executive Director in 2000. Paul is a UVM alumni and holds a PhD in intellectual history from McGill University. In addition to his work at VCRD, Paul is a member of the Housing Vermont Board of Directors and President Emeritus of the national Partners for Rural America organization.

Cairn Cross, Founder and Managing Director, Fresh Tracks Capital | Prior to starting FreshTracks Cairn was a strategic and financial adviser to Vermont banks and growth businesses, the Assistant General Manager of Green Mountain Capital, L.P. from 1996 to 1998 and spent a decade working as a commercial banker. Cross presently serves on the boards of Vermont Teddy Bear, NativeEnergy, Faraday and Budnitz Bicyles, and the Vermont Sustainable Jobs Fund. He earned a B.S. (1981) from Montana State University and an MBA (1987) from New Hampshire College (now Southern New Hampshire University). He received a graduate certificate from the Stonier Graduate School of Banking in 1995.

Marguerite Dibble, Founder and CEO, GameThoery

Consulting | GameTheory is a consulting and development
company located in Burlington ,VT that focuses on motivating people
with game design and behavioral psychology, making tasks and
challenges accessible and engaging rather than demanding and
obstructive. The company also focuses on using game design to
develop evolved apps for clients and create game products.

Marguerite is a Vermont native and has been working hard on
expanding creative and tech economies while retaining the culture
and heritage that makes Vermont so unique.

Catherine Dimitruk, Executive Director, Northwest
Regional Planning Commission | Catherine Dimitruk has been
Executive Director of the Northwest Regional Planning Commission in
St. Albans, Vermont for 18 years. She works with communities and
regional organizations on comprehensive planning and project
implementation. She is a past member of the Vermont Council and
Rural Development Board and is currently Chair of the Board of the
Chittenden County Transit Authority.

Matt Dodds, Chief Brandthropologist, Brandthropology | Matt is a seventh generation Vermonter, and a Green Mountain Boy descendant with a global past. Before founding Brandthropology, a marketing firm in Burlington, Matt served as a global advertising executive. He served in postings in New York, Korea, Japan, China and Singapore, where he helped define and implement marketing strategies for Fortune 500 firms including P&G, Unilever, Exxon, General Motors, Visa and PepsiCo. His insights and experiences have made him a sought-after commentator on branding's impact on consumers in developing countries and, more recently, on how to evolve Brand Vermont.

Jon Erickson, Professor of Ecological Economics, UVM

Rubenstein School of Environment and Nat. Res. | Jon Erickson is Professor of Ecological Economics in the Rubenstein School of Environment and Natural Resources at the University of Vermont. He has published widely on climate change policy, renewable energy economics, and environmental management; led international research and education programs as a Fulbright Scholar in Tanzania and visiting professor in the Dominican Republic, Iceland, and Slovakia; produced Emmy award-winning documentary films on water, energy, and food system transitions; and founded and led numerous non-profit organizations including the U.S. Society for Ecological Economics, Adirondack Research Consortium, Deportes para la Vida, and Bright Blue EcoMedia.

Jamison Ervin, *Waterbury LEAP* | Jamison Ervin serves on Waterbury LEAP, the independent, non-profit organization that serves as the energy committee for Waterbury and Duxbury. She has a Ph.D. in natural resources planning, and works for the United Nations in biodiversity conservation

Jeff Forward, Forward Thinking Consultants, LLC, Richmond Energy Committee | In addition to being Richmond's Town Energy Coordinator and the chair of the Richmond Climate Action Committee, Mr. Forward has nearly 25 years of professional experience working on energy efficiency and renewable energy issues and projects. He has worked with hundreds of schools; hospitals and other institutional facilities throughout the country to help them evaluate their energy opportunities related to biomass, solar and energy efficiency technologies. He is also presently Chair of the Board of Directors for Renewable Energy Vermont, Vermont's renewable energy trade association.

Joe Fusco, *Vice President*, *Casella Waste Systems* | Joe Fusco is an advisor to the chairman & chief executive officer of Casella Waste Systems, Inc. and is an adjunct instructor and member of the Board of Advisors for the University of Vermont's Sustainable Entrepreneurship MBA program. He is a former member of the board of directors of the Vermont Council on Rural Development, and served as a member and chair of the 2014 Vermont Comprehensive Economic Development Strategy steering committee.

Gillian Galford, Earth Systems Scientist, VT Climate

Assessment, University of Vermont | Gillian Galford is an earth systems scientist interested in deforestation and land-use change and its impacts on climate. Dr. Galford has led the Vermont Climate

Assessment to evaluate impacts of climate change in the state. She has worked on carbon and nitrogen dynamics in a range of settings, from the large-scale soybean farms of Mato Grosso, Brazil, to small-holder agricultural systems of Malawi. In addition to these research projects, Gillian teaches courses at the Gund Institute.

Dean Luis Garcia, *Dean, College of Engineering and Mathematical Sciences* | Dr. Luis Garcia joined UVM as the Dean of the College of Engineering and Mathematical Sciences in 2013. Prior to coming to UVM, Dr. Garcia was a member of the Colorado State University Faculty since 1991 and served as the Head of the Department of Civil and Environmental Engineering at Colorado State University since 2005. Dr, Garcia is an accomplished researcher with 54 refereed papers published in leading civil or environmental engineering publications.

Tom Gilbert, *Owner*, *Black Dirt Farm* | Tom owns and operates Black Dirt Farm in Stannard, VT with his wife and two daughters. Black Dirt is a diversified operation that includes laying hens, hay-making,

vegetables, meat birds and beef, horses boarding, custom grazing, composting, and draft horses. The farm also provides food scrap collection services to businesses and institutions in Lamoille County and the Northeast Kingdom. Previously, Tom was Program Director then Executive Director of the Highfields Center for Composting. Tom serves on the Board of the Center for an Agricultural Economy, and is the Stannard Supervisor for the Northeast Kingdom Waste Management District. Tom has a BA from the Evergreen State College and a technical composting certificate from the University of Maine.

Karen Glitman, *Director of Transportation Efficiency*, *Vermont Energy Investment Corporation (VEIC)* | Karen Glitman develops and oversees the strategic direction for VEIC transportation efficiency efforts. She served as the Director of the UVM National University Transportation Center (UTC) and interim codirector of the UVM TRC and is the author of numerous publications including the annual Vermont Transportation Energy Report. She has also served as the Vermont Clean Cities Coalition Coordinator, the Vermont Agency of Transportation's Director of Policy and Planning, Deputy Secretary and Acting Secretary of the Vermont Agency of Transportation.

Lisa Gosselin, Commissioner, VT Department of Economic Development | Lisa Gosselin was appointed by Gov. Shumlin in July, 2013 and has directed the first statewide Comprehensive Economic Development Strategy and worked on the Great Jobs in Vermont campaign. Previously, Lisa spent seven years helping to grow EatingWell Media Group into a successful multi-platform media company. Lisa has been editor-in-chief of Islands, Audubon and Bicycling magazines, and executive editor of SKI. Lisa earned a French Baccalaureate in Economics before receiving her B.A. from Yale University. She lives in Stowe and Middlebury, Vermont.

Geoff Hand, *Partner, Dunkiel Saunders Elliott Raubvogel & Hand* | Geoff Hand's practice focuses on renewable energy development, environmental litigation, land use permitting, municipal law, and general civil litigation. Geoff works with developers to plan, permit, and construct a wide range of projects, including all types of renewable energy facilities. He regularly represents clients before the Vermont Public Service Board and the Environmental Division of the Vermont Superior Court as well as the Vermont Supreme Court. Outside of Vermont, Geoff works with national environmental nonprofits on national and international litigation strategies to address climate change.

Stuart Hart, *Professor*, *University of Vermont School of Business Administration* | Stuart L. Hart is one of the world's top authorities on the implications of environment and poverty for business strategy. He is the Steven Grossman Endowed Chair in Sustainable Business at the University of Vermont Business School and the S.C. Johnson Chair Emeritus in Sustainable Global Enterprise and Professor Emeritus of Management at Cornell University's Johnson Graduate School of Management, where he founded the Center for Sustainable Global Enterprise. He is also Founder and President of Enterprise for a Sustainable World, Founder of the BoP Global Network, and Founding Director of the Emergent Institute in Bangalore, India.

John Hollar, *Mayor*, *City of Montpelier* | John has been actively involved in Montpelier public life for many years. He has served as mayor since 2012, and he chaired the Montpelier school board from 2002-2010. He helped lead the city in the adoption of Net Zero Montpelier, a policy under which all of the city's energy needs will be met or offset by renewable energy by 2030. John is a partner

Bios continued...

with the law firm Downs Rachlin Martin. He is an avid mountain biker and cross country skier.

Asa Hopkins, Director of Energy Policy and Planning, Vermont Public Services Department | Dr. Asa Hopkins directs the Planning and Energy Resources Division of the VT Public Services Department which houses the state energy office and Clean Energy Development Fund, develops and works to implement Vermont's Comprehensive Energy Plan, reviews utility resource planning, and conducts regulatory oversight for the state's regulated efficiency utilities. Before joining the Public Service Department, he worked at the U.S. Department of Energy and served as the assistant project director for the DOE's first Quadrennial Technology Review. He holds degrees in physics from Haverford College and the California Institute of Technology

Claire Humber, *Principal*, *SE Group* | Claire Humber has been part of the SE Group team for 20 years leading resort projects throughout the world. Claire is a "big picture" strategic thinker, and balances her creative approach to planning and design with the practicality of project management and implementation.

Kerrick Johnson, *Vice President of Communications*, *Systems and Strategy*, *VELCO* | Kerrick Johnson joined the Vermont Electric Power Company (VELCO) in 2006. He previously served as Director of Government Affairs for Central Vermont Public Service and Vice President of Associated Industries of Vermont. He attended Johnson State College until joining the Air Force where he served four years an airborne Russian linguist after graduating from the Defense Language Institute in Monterey, CA.

Mark Johnson, Host, Mark Johnson Show WDEV Radio | Mark Johnson hosts the Mark Johnson Show, WDEV's flagship talk show. Every weekday, Mark addresses major issues affecting Vermonters with in depth interviews and expert commentators and reporters.

Louise Lintilhac, *President, Lintilhac Foundation* | Louise Lintilhac balances freeride skiing and interests in land conservation. Working through the Lintilhac Foundation, The Vermont Mountain Bike Association, and the Vermont Parks Forever Foundation, she spends time off the slopes trying to increase access to the beloved landscapes of Vermont. Her current ski projects include filming with Williston Based Meathead Films, and Jackson Hole based Unicorn Picnic Productions in addition to her own freelance exploration initiatives.

Tom Longstreth, Executive Director, ReSource

Tom Longstreth joined ReSOURCE in 1996, five years after its founding. Under his leadership, the organization has expanded its geographic reach, impact, and scope of services. ReSource now employs over seventy staff, annually serves more than 200 trainees, and operates multiple social enterprises that protect the environment while reducing poverty and serving the community in five locations. Tom has a master's degree in Public Policy from Harvard's John F. Kennedy School of Government and a Bachelor's degree from Dartmouth College. He lives in West Bolton with his wife Julie and three children.

Noelle MacKay, Commissioner, Commissioner, VT
Department of Housing and Community Development |
Noelle MacKay was appointed by Governor Shumlin in January 2011.
She has led community and economic development recovery efforts after Tropical Storm Irene, worked to restructure and stabilize staffing to enhance customer service and communication, collaborated with

policy and funding partners to increase program impact, and directed efforts to update the state's smart growth designation programs and land use regulations. Prior to her appointment Noelle served as Executive Director of Smart Growth Vermont and served as the Deputy Director at the Stony Brook-Millstone Watershed Association. Noelle received a B.S. in biology from Mount Allison University and an M.E.S. from Dalhousie University.

Deborah Markowitz, *Secretary, VT Agency of Natural Resources* | As Secretary, Deb Markowitz has shaped the environmental agenda of the state, focusing on the challenges of climate change, habitat fragmentation and the need to make Vermont more resilient to flooding. Markowitz served as Vermont's Secretary of State from 1999 – 2010. A graduate of the University of Vermont (B.A., 1983), Markowitz received her *Juris Doctorate* degree from the Georgetown University Law Center (*magna cum laude*, 1987). Secretary Markowitz and her husband Paul live in Montpelier with their three children where they spend their free time hiking, paddling, gardening and cross-country skiing.

Jon McBride, Operations Director, Bridj | Jon McBride, Operations Director, has been with Bridj since September 2013. He oversees daily scheduling and travel operations, as well its BreakShuttle service, the largest college and university break transportation service in the United States. Bridj is an everyday transportation system that connects a city by using mobile connectivity, big data, and machine learning algorithms, coupled with flexible vehicle assets that adapt in real time to where users live, work and play. Jon is an innovative leader bringing experience, vision and humor to the challenge of crafting sustainable business models and radically hopeful visions of the future. He moved to Burlington, VT from Los Angeles in 2012.

H. Kenneth Merritt, Jr., Managing Director, Merritt & Merritt & Moulton | Merritt & Moulton is a boutique corporate, securities and intellectual property law firm based in Burlington, Vermont. For over 35 years, Ken has concentrated in general corporate and securities transactions as well as the formation and governance activities of privately and publicly held companies, non-profit organizations, venture capital firms and financial institutions. Ken is deeply involved in the entrepreneurial community and active in multiple professional organizations and various angel and investor groups.

Johanna Miller, Energy Program Director, Vermont Natural Resources Council | Johanna Miller is an energy policy expert, organizer, writer and coalition builder at the Vermont Natural Resources Council. Johanna works to shape clean energy and climate action solutions from the grassroots to the Legislature, including serving as the coordinator of the Vermont Energy and Climate Action Network. Prior to VNRC, Johanna was an organizer, editor, and policy specialist for the Michigan Land Use Institute. Johanna currently serves on the Clean Energy Development Fund board, the Vermont Energy Education Program board, the Vermont System Planning Committee and the Montpelier Energy Advisory Committee. Johanna received a B.A. in English and Environmental Studies from the University of Vermont.

Rob Miller, *President and CEO*, *VSECU* | VSECU is a statewide credit union with 55,000 members, \$650 million in assets, and 160 employees. Rob Miller graduated from UVM and started a career in financial services with Citibank in New York and Chicago. He relocated back to Vermont as a state employee and public servant; working for

the Vermont Department of Economic Development where he ultimately served as Commissioner. Prior to joining VSECU, Rob spent the last thirteen years in various business development and executive roles in the institutional investment management industry with Dwight Asset Management (now Goldman Sachs Asset Management) in Vermont and Conning in Connecticut.

Sue Minter, *Secretary*, *VT Agency of Transportation* | Sue Minter was appointed as the Secretary of VTrans in January, 2015, after serving as the Deputy Secretary since 2011. Minter played a leadership role responding to catastrophic flooding from Tropical Storm Irene in August, 2011. Sue served in the Vermont Legislature for six years. A graduate of Harvard University (BA) and MIT (MA in City Planning) Sue has worked over the past 25 years in the public, private and non-profit sectors, as a professional planner and policy maker at the state, local, and international level. Sue is the mother of two children and lives with her husband, David Goodman, in Waterbury Center, Vermont.

James Moore, Co-President, SunCommon | James manages all things solar at SunCommon — including design, sales, procurement and installation. James has deep experience in energy policy, clean energy technology and government relations. He worked in Washington State, Connecticut, Florida, New Jersey, Washington DC, New Hampshire and New Mexico before moving to Vermont in 2004. James directed VPIRG's Clean Energy Program and co-directed, with Duane, the successful VPIRG Energy project. James lives in Montpelier with his wife Mia and their two sons.

Pat Moulton, Secretary, Agency of Commerce and Community Development (ACCD) | Patricia Moulton was appointed by Governor Peter Shumlin on June 1, 2014. Prior to serving as Secretary, Pat was Executive Director of the Brattleboro Development Credit Corporation (BDCC), Deputy Secretary and Director of Economic Development for ACCD, VP of Public Affairs at the Vermont Chamber of Commerce, and Commissioner of the VT Department of Labor under Gov. James Douglas. Prior to this work, Pat had spent 22 years in the practice of economic development on the local, regional, and state levels.

Brian Otley, Senior Vice President and COO, Green Mountain Power | Brian Otley is responsible for the overall operating performance of the company. He joined GMP in 2008 as the Leader of Information and Innovation. Prior to GMP, he spent twenty years in the software sector with organizations such as PerSe Technologies, IDX and GE Healthcare developing systems to improve the delivery of healthcare. Brian is a graduate of Dartmouth College.

Duane Peterson, *Co-President*, *SunCommon* | Duane Peterson is responsible for SunCommon's marketing, internal business operations, and investor relations. He is a social entrepreneur with an eclectic 35-year career in socially responsible business, campaign management, government services, and community involvement. Previously, he worked at Ben and Jerry's for 12 years. He is also a member of the national Social Venture, Vermont Venture Network, and VBSR. He is on the Boards of Directors of the Howard Center and VPIRD. Duane lives in Essex with his wife and two sons.

Laura Peterson, *Communications Director*, *VT Department of Tourism and Marketing* | Laura Peterson is a communications professional with a passion for telling stories that motivate and educate brand activists. She is currently using her storytelling skills for the Vermont Department of Tourism and Marketing as its Director of Communications. Prior to that, she was corporate communications

manager for Keurig Green Mountain, where her emphasis was in sustainability. Earlier gigs included a position at Vermont Businesses for Social Responsibility, and 13 years in television news.

Emily Piper, Executive Director, Burlington Young Professionals and LaunchVT at Lake Champlain Regional Chamber of Commerce | Emily's primary focus is to help young professionals and entrepreneurs in the State of Vermont, find career opportunities. Both organizations are Statewide programs to assist in economic development for Vermont

Lisa Ransom, *Owner*, *Grow Compost of Vermont* | Lisa Ransom owns Grow Compost of Vermont with her husband Scott Baughman where organic nutrients are reclaimed to feed animals, create exceptional compost and make renewable energy (though a partnership with VTC). Lisa has a Masters degree in Theology, postgraduate work in ecology and an art degree. Lisa lives with Scott and their three teenagers in Moretown.

Chuck Ross, Secretary, VT Agency of Agriculture, Food & Markets | Chuck Ross was appointed to his current position by Gov. Peter Shumlin in January of 2011. Prior to his current role, he served as Senator Patrick Leahy's State Director for 16 years. Before joining Leahy's staff, Ross was a farmer and legislator from Hinesburg, VT.

Beth Sachs, Founder, Vermont Energy Investment

Corporation (VEIC) | Beth Sachs co-founded VEIC in 1986 with partner Blair Hamilton, and served as its Executive Director until 2008. She now holds the title of Founder, and in this role, fosters stewardship of the mission, values, and goals of VEIC in the workplace and in the community. She also participates in VEIC's education, advocacy, and business development activities. Beth serves on the Board of Directors of Vermont Works for Women, the Vermont Energy education Program, the Renewable Energy Vermont Education Fund, and is Secretary of the VEIC Board.

Andrew Savage, Chief Strategy Office, AllEarth Renewables

AllEarth Renewables is a solar manufacturer in Williston, VT. A Middlebury College graduate, Andrew was previously deputy chief of staff and legislative director for Congressman Peter Welch. He is a member of the Board of Directors of the Vermont Council on Rural Development and also serves on the board of the national Solar Energy Industry Association.

Bill Schubart, *Writer and Consultant* | Bill Schubart has lived in Vermont since 1947. He is a retired businessman, VPR commentator, and fiction writer living and working in Hinesburg. He is currently Chair of the Vermont College of Fine Arts in Montpelier. www.schubart.com

Joshua Schwartz, Executive Director, Mad River Valley Planning District | The Mad River Valley Planning District is a unique three-town planning entity developed in 1985 by the towns of Fayston, Waitsfield, Warren, and Sugarbush Resort to carry out a program of planning for the Valley directed toward its physical, social, economic, fiscal, environmental, cultural and aesthetic well being. Joshua holds a Masters in Urban and Regional Planning from Virginia Polytechnic Institute and State University.

Bill Shouldice, *President and CEO*, *Vermont Teddy Bear Company* | Bill Shouldice joined the Vermont Teddy Bear Co. in Shelburne as President and CEO in January 2013. Prior to his work at VT Teddy Bear, he was president and CEO of the Vermont Country Store for more than seven years.

Bios continued...

Gov. Peter Shumlin, *Governor*, *State of Vermont* | Gov. Peter Shumlin is a small business owner, public servant and father of two from Putney. Since his inauguration, he has been working hard to create jobs for those who need them and raise incomes for those who have jobs, control skyrocketing healthcare costs, expand broadband and cell service to every corner of the state, reduce recidivism, invest in quality education opportunities, and rebuild our roads and bridges. He is the 81st governor of Vermont.

Sarah Simonds, Energy Program Director, Vital

Communities | Vital Communities is a non-profit organization serving the Upper Valley of Vermont and New Hampshire. Through her work managing the Energy Program, Sarah engages businesses, municipalities, and volunteer energy groups to move the Upper Valley toward energy independence. Since 2013, Sarah has led the development and successful launch of Solarize Upper Valley, partnering with 15 towns to help residents go solar.

Dan Smith, President, Vermont Technical College | A native of Middlesex, Vermont, Dan is a lawyer by training and has worked in higher education and economic development in Vermont for the last decade. As Vice President and General Counsel the Greater Burlington Industrial Corporation, he developed an economic development strategy focused on environmental and energy enterprises. Dan is a graduate of both the University of Virginia and the UVA School of Law. Dan returned to Vermont to serve as a law clerk to Justice James L. Morse of the Vermont Supreme Court. Dan lives in Wilder, Vermont, with his wife, Dr. Lindsay Smith Together, they maintain an active outdoors lifestyle, backcountry skiing, running, and cycling.

Tim Smith, Executive Director, Franklin County Industrial Development Corp | Timothy Smith is currently the Executive Director of the Franklin County Industrial Development Corporation and has served in that capacity for 15 years. Prior to his role at FCIDC he and his brother owned an office supply store based in Newport VT. He has been a lifelong resident of Vermont, mainly in St. Albans Tim currently lives in St. Albans with his wife Denise and three kids Mackenzie, Duffy and Nellie.

Ross Sneyd, Vice President, National Life Group's Charitable Foundation | Ross Sneyd is director of corporate communications and community relations at National Life Group, where he has been for the past two years. Prior to that, he spent six years at Vermont Public Radio, including as news director. He covered politics, government and business for the Associated Press for 18 years and at The Burlington Free Press for three years.

Michael Snyder, Commissioner, VT Forests, Parks, and Recreation | Michael Snyder was appointed by Gov. Peter Shumlin in December 2010. Prior to that he served for 14 years as Chittenden County Forester, providing land stewardship assistance to private landowners and municipalities. He also taught, for 12 years, two courses in Forestry at the University of Vermont and he continues to write the Woods Whys column for Northern Woodlands Magazine. He lives in Stowe and owns and manages a 91-acre forest in the northern Connecticut River valley of Vermont. He received both his Bachelor's and Master of Science degrees in forestry from the University of Vermont.

Gabrielle Stebbins, Executive Director, Renewable Energy Vermont | Renewable Energy Vermont is a nonprofit, nonpartisan trade association representing nearly 300 businesses, individuals, colleges and others committed to reducing our reliance on fossil fuels

and expanding the availability of renewables sources of power in Vermont. Prior to leading REV, Stebbins served as Program Manager at Vermont Energy Investment Corporation in Burlington.

Bob Stevens, *President*, *Stevens and Associates* | Robert Stevens is a professional engineer with over 25 years of experience leading teams in a variety of projects and disciplines. He is the founder and president of Stevens & Associates, PC, an Architecture, Landscape Architecture, Civil and Structural Engineering firm in Brattleboro, Vermont. In addition to the design of projects, his experience includes planning, urban design, public bond campaigns and project finance & development.

Will Stevens, Co-Owner, Golden Russet Farm | Will Stevens and his wife Judy co-own Golden Russet Farm, a certified organic vegetable farm and greenhouse plant operation in Shoreham. Will was a State Representative from 2007-2014, during which time he served on the House Agriculture and Forest Products Committee, including three years as ranking member. His fingerprints can be found on legislation that created the Working Lands Enterprise Fund in 2012 and the Farm to Plate Initiative in 2009. It is his belief that Vermont's agricultural and forest product sectors represent areas of significant economic growth and opportunity in the years ahead.

Gaye Symington, *President*, *High Meadows Fund* | The High Meadows Fund promotes vibrant communities and a healthy natural environment by supporting initiatives that encourage sustainable agriculture, clean and efficient energy use, and resilient land use in the context of a changing climate. Prior to joining High Meadows in 2009, Gaye served in the Vermont House for 12 years, four of them as Speaker of the Vermont House. Gaye serves on the board of the Public Assets Institute and chairs Vermont's Clean Energy Development Board.

Nathanial Vandal, Principal, Green Peak Solar | Green Peak is a Vermont-based solar company that focuses on developing large-scale energy systems for utilities, towns, school districts, businesses, and manufacturers in Vermont and New England. Nathaniel cofounded Green Peak Solar in 2012 with Chris Cadwell when they decided to bring their skills and background in renewable energy development on the west boast back to their home state.

Richard Watts, Director, Community Development and Applied Economics and the Center for Research on

Vermont | Richard A. Watts is an interdisciplinary scholar whose research focuses on the relationships between public communications and policy outcomes. Richard examines the role of strategic communications in the development and implementation of public policy related to energy, transportation and public health. This research builds on his experience as a policy and communication professional in public policy and political campaigns, as a journalist and a consultant to government agencies, advocacy organizations and business groups. Richard teaches courses in research methods, public policy and transportation and energy planning.

Paul Zabriskie, General Manager, Energy Smart of

Vermont | EnergySmart of Vermont is an energy renovation contracting company which is a social enterprise of Capstone Community Action. Paul Zabriskie leads this initiative which offers services to help owners and tenants make their buildings more energy efficient, comfortable and safe.

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The Vermont Council on Rural Development is a non-partisan, non-profit organization charged to provide coordination to rural development efforts and to advance public policies that will support the progress of rural communities. The VCRD Board unites state, federal, non-profit, regional, business, and congressional staff leadership to boldly propose unifying directions for public policy from the ground up - based on the needs and aspirations of rural communities throughout the state.



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