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# University of Vermont Extension

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the Vermont Energy and Climate Action Network
welcome you to the

# Community Based Approaches to Energy and Climate Change Conference



Saturday, December 6, 2008 Randolph Center, Vermont

# **Conference Host Organizations**

The University of Vermont Extension Service's mission is to improve the quality of life of Vermonters by providing research-based educational programs and practical information concerning Vermont communities, families and homes, farms, businesses, and the natural environment. Located throughout the state, UVM Extension links Vermonters to the University of Vermont provides timely, research-based information and education on educating individuals and families, supporting agriculture and the environment, and strengthening communities.

#### Vermont Energy and Climate Action Network

VECAN is a network of statewide Vermont organizations helping communities across the Green Mountain State to reduce energy costs and climate impacts through conservation, increased energy efficiency, and conversion to renewable energy sources. VECAN support organizations include 10% Challenge Program, New England Grassroots Environment Fund, Sierra Club, Sustainable Energy Resource Group, Vermont Energy Investment Corporation, and the Vermont Natural Resources Council.

**Vermont Natural Resources Council** has been the Green Mountain State's leading environmental education, policy, and advocacy organization since 1963. Working from the grassroots to the Legislature, VNRC works to advance policies and programs that Vermonters care about—vibrant, walkable communities, clean and abundant water, working farms and forests, and an efficient, clean, renewable energy future. VNRC accomplishes its work with the support of over 7,000 members and activists.

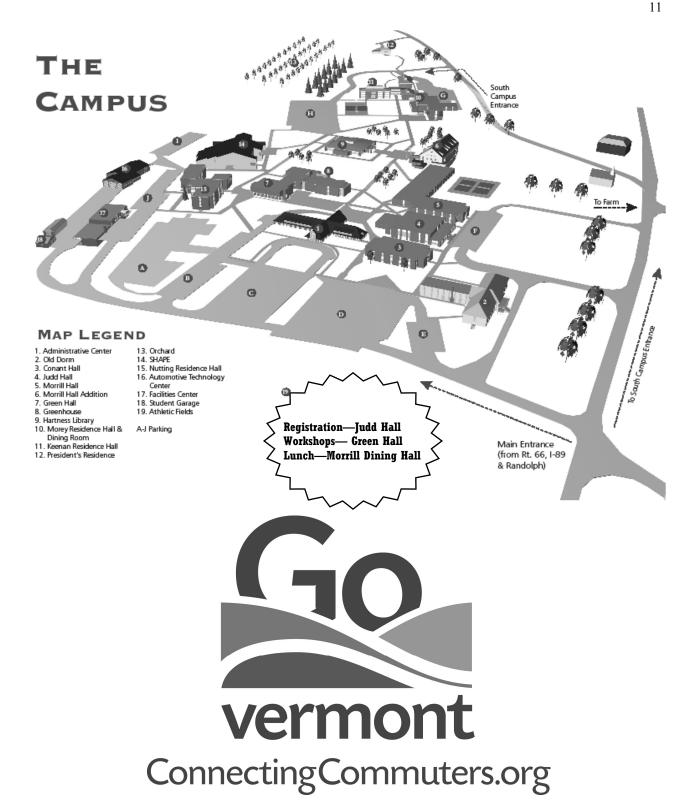
**Sustainable Energy Resource Group** promotes energy conservation, efficiency and renewables through the formation of town energy committees to help residents, businesses and the municipalities reduce energy consumption, save money, increase the sustainable use of renewables, strengthen the local economy and improve the environment. SERG has helped form and are consulting with town energy committees in numerous Vermont and New Hampshire communities.

**Sierra Club of Vermont:** Founded by John Muir in 1892, the Sierra Club is the nation's oldest and largest grassroots environmental organization. With over 1.3 million supporters nationwide in 65 chapters and over 400 local groups, the Sierra Club focuses on a wide range of environmental issues, including clean energy solutions to global warming, protecting our public lands, wild spaces and wildlife, and cleaning our air and water.

**10% Challenge** is a voluntary civic education and outreach program encouraging households, businesses, and communities to estimate their greenhouse gas emissions and take actions to save energy and reduce waste. The goal is to reduce carbon emissions by at least five percent per year by households, businesses institutions and communities with the overall goal of 25% reductions by 2012.

## Thank you to our Sponsors

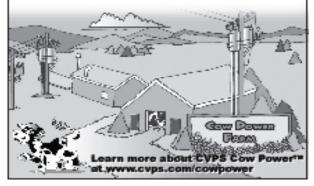
- Efficiency Vermont
- Vermont Agency of Natural Resources
- Central Vermont Public Service Corporation
- Chittenden County Metropolitan Planning Organization
- Go Vermont at VTrans
- New England Grassroots Environment Fund
- Renewable Energy Vermont
- Vermont Department of Public Service
- Vermont League of Cities and Towns
- Vermont Planners Association
- Vermont Technical College



Special thanks to the Vermont Department of Public Service and U.S. Department of Energy, State Energy Program funds for the printing of this program.



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# Conference Agenda

8:00 -	Registration table open
8:00 – 9:00	Coffee & light refreshments Exhibits available for browsing
9:00 – 9:45	General Session Welcome/Opening Remarks Keynote – Glen Brand, Director, Sierra Club's Cool Cities Campaign Generating Local Energy Solutions: Solving Global Warming One Community at a Time
10:00 – 11:15	
and pre	Choose from a mix of concurrent sessions. See pages 4-5 for titles, descriptions esenters.
11:30 – 12:30	Regional Roundtables or VECAN Website 101
	<b>Regional Roundtable Discussions</b> . Participants will have the opportunity to meet by region and share their experiences addressing energy issues at the local level, and explore opportunities for regional cooperation
	-OR-
	VECAN Web Site 101 - A Resource for Town Energy Committees  The Vermont Energy & Climate Action web site is intended to serve as clearinghouse of Vermont-based energy- and climate-action information. Each Vermont committee has their own page! Ensure your town energy committee learns how to utilize and navigate this site to suit your purposes best and share your strategies, ideas, questions etc. Web developer Daniel Hoviss will walk through how to utilize this creative site!
12:30 – 1:30	Lunch & Visit exhibits
1:45 – 3:00	Lunch & visit exhibits
1.45 – 3.00	Concurrent Workshop Session B Choose from a mix of concurrent sessions. See pages 6-7 for titles and descriptions
3:00 – 3:15	Concurrent Workshop Session B
	Concurrent Workshop Session B Choose from a mix of concurrent sessions. See pages 6-7 for titles and descriptions
3:00 – 3:15	Concurrent Workshop Session B Choose from a mix of concurrent sessions. See pages 6-7 for titles and descriptions Break Plenary Session

#### **Workshop Session A (10:00 am – 11:15 am)**

-Speaker bios begin on page 6

**A1. Vermont Town Initiatives on Energy and Climate Action**. Vermont communities are implementing a broad range of actions to promote efficiency and renewables. The workshop session will offer a slideshow on how to get a local energy committee started and a menu of local projects and activities that Vermont towns are taking to address energy and climate change.

Presenters: Paul Markowitz, Bob Walker

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**A2. Energy Planning at the Local and Regional Level.** Preparing or updating a Town Plan provides an opportunity for citizens and energy committees to take a comprehensive look at the important relationship between land use, transportation, energy and climate change; engage their neighbors in defining a future vision for their community; and identify the tools and immediate actions needed to achieve that vision. In addition, regional plans provide a means for communities to address issues that transcend municipal boundaries through inter-town cooperation and coordination. In this session, two experienced planners will discuss the framework for municipal and regional planning in Vermont, the relationship to energy and how individuals can shape plans that could help reduce energy use, generate renewable supplies and combat climate change. They will also discuss support available to communities to do this work.

Presenters: Brian Shupe, Kevin Geiger

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A3. **Promoting Public and Alternative Transit in Your Community.** Transportation is the fastest growing sector in greenhouse gas emissions in Vermont. Innovative strategies are needed to reduce vehicle miles traveled. One of the best ways is to encourage carpooling and vanpooling and use of transit, walking, biking and telecommuting. Learn how businesses, volunteers, and communities are working together to save thousands of miles of travel, fuel dollar costs and greenhouse gas emissions. Presenters will highlight examples of rural transportation solutions.

Presenters: Ross MacDonald, Peter Keating, Suzanne Hechmer, Karla Munson

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**A4. Tools and Approaches for Reducing Energy Use in Town Buildings.** Several Vermont communities pledged to reduce their energy use by at least 10 percent and to explore use of renewable sources. Learn about the results of Energy Star benchmarking and how this tool is assisting communities in prioritizing energy efficiency projects and use of alternative energy. Results of two case study communities will be presented.

Presenters: Rocky Martin, Paul Conner, Dr. Ihab Farag, Sc.D.PE

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**A5. State-Level Energy Policy and Legislation.** This workshop will cover energy-related legislation that passed in 2008 and its impacts on the local level, as well as energy- and climate-related legislative plans for 2009. Workshop leaders will also facilitate a discussion about how Vermont communities might seize powerful opportunities to shape legislative or other state-based efforts to support local innovation.

Presenters: James Moore, Andrea Cohen, Ginny Lyons, Dave Lamont, Johanna Miller

**A6.** Energy-Related Funding Opportunities for Town Initiatives. This panel will discuss grants and low-interest loans available to help towns and energy committees investigate. plan and implement projects promoting energy efficiency, renewable energy, and combined heat and power.

Presenters: Ginny Callan, Beth Sachs, Anne Margolis

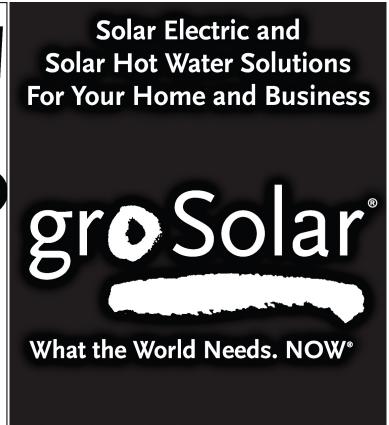
**Workshop Speakers, continued** 

and beyond, he works

Wes Sanders serves on the Board of the Vermont Interfaith Power & Light, where in this capacity and beyond, he works with communities and congregations across the state to implement the energy-reducing 'Low Carbon Diet' program. Wes is also an active member of Burlington's Kitchen Table Collaborative — a citywide initiative which is challenging community members to reduce their carbon footprints by 10 percent.

- **Brian Shupe** is the Sustainable Communities Program Director at the Vermont Natural Resources Council. Prior to joining VNRC, Brian has served as Director of Programs at Smart Growth Vermont, as a principal at Burnt Rock Associates, and Planning Director for the Town of Stowe and the Mad River Valley Planning District.
- **Lyall Smith** is the Director of Buildings and Grounds, Milton School District. Prior to his current position, Lyall worked as Director of Facilities and Transportation for the South Burlington School District and other school districts. Lyall will describe the experience and process to convert from fossil fuels to wood-chip boiler systems and how energy committees and concerned citizens can help play an important role.
- Anne Stevens is Chair of the Greensboro Town Energy Committee and Greensboro Selectboard, and coordinates the development of the Greensboro Small Hydro Project. Peter Roudebush is a retired architect, land use, transportation and engineering systems consultant, now living in Greensboro, Vermont. The Town of Greensboro has been working for three years on development of a small hydro project for Greensboro Brook which will generate enough electricity to power the Town buildings.
- **Henry Swayze** is a member of the First Branch Sustainability Network and the Vermont Peak Oil Network. Henry has a long-term focus on environmental issues of climate, low chemical farming, and sustainable practices, and now focuses on unleashing the energies of our community through the Transition Initiative process.
- **Bob Walker** is founder, president and executive director of Sustainable Energy Resource Group, a nonprofit organization which promotes energy conservation, efficiency and renewables. Bob is also a certified Home Performance with Energy Star contractor.





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#### Workshop Speakers, continued

- **Paul Markowitz** is Coordinator for the Vermont Chapter of the Sierra Club helping Vermont communities address energy and climate change issues. Paul has 25 years experience working on community-based environmental solutions, facilitation, and environmental advocacy in non-profit institutions, state government, and academia.
- **Rocky Martin** is the Buildings and Facilities Director for the Town of Hinesburg where he is actively involved in energy efficiency projects ranging from a boiler upgrade in Town Hall to a solar powered parking lot light installation in the Town's park and ride lot. Rocky will talk about how the Town's pledge to participate in the EPA Community Energy Challenge is helping staff and decision-makers prioritize energy efficiency projects in municipal buildings and facilities and how this program is working in a small rural Vermont town.
- **Duncan McDougall** is the founder of Waterbury LEAP (Local Energy Action Program), a volunteer organization dedicated to engaging its community in reducing carbon emissions and promoting energy efficiency and the use of renewable resources in Waterbury and surrounding areas. Duncan will talk about how LEAP was started, and what's involved in keeping a town energy committee active and productive.
- Johanna Miller is the Outreach Director and Energy Program Coordinator at the Vermont Natural Resources Council.

  Johanna is an organizer, writer and coalition builder who works from the grassroots to the Legislature to help advance solutions to the important community development, natural resource and energy and climate challenges facing Vermont. Johanna works closely with partners in the Vermont Energy and Climate Action Network to start and support town energy committees in their efforts to realize a more efficient and renewable energy future for Vermont. (Moderator)
- **Wayne Michaud** is director of Idle-Free VT, a non-profit, grassroots campaign formed in 2006 to raise awareness of unnecessary vehicle idling (idling when parked) in Vermont. Wayne has worked with campaign advisors to run petition drives, lobby the legislature and be an ongoing presence in statewide media. Wayne will talk about Idle-Free Vermont's campaign to encourage the passage of local town-based no-idling resolutions or policies. (Moderator)
- James Moore is the Clean Energy Advocate for the Vermont Public Interest Research Group. James leads VPIRG's energy-related advocacy efforts in the State House and represents VPIRG on a number of state and regional leadership committees, where he crafts and advances policy solutions to the energy and climate change crisis facing Vermont.
- Lawrence H. Mott is the Director of New Generation Partners, a startup not-for-profit distributed energy development group focused on community-scale projects. Lawrence has been in the renewable energy industry over twenty years and has focused on integrating renewable energy into isolated grids including wind turbine technology, solar generation, and combined heat power systems, most recently with FirstWind.
- **Karla Munson** is a volunteer of the Town of Hinesburg, Village Steering Committee, and Program Coordinator of Hinesburg Rides. Karla will talk about how "Hinesburg Rides" evolved, where its at now, the problems to date, and future plans.
- Chris Recchia, Executive Director, Biomass Energy Resource Center. Chris was former Commissioner of VT DEC and has worked in the environmental field for over 25 years. He has a BA degree from the UVM, a Masters in Environmental Law from Vermont Law School, and a Masters in Natural Resource Policy and Management from Yale University School of Forestry and Environmental Studies. Chris will be speaking about community biomass energy systems and sustainable fuel supply
- **Beth Sachs** serves as the Director of "KAOS" (new business ventures) at the Vermont Energy Investment Corporation (VEIC) and is the co-founder of the non-profit Vermont Energy Investment Corporation (VEIC) and served as its Executive Director from its creation in 1986 until this year. She has been involved in designing, managing, financing, researching, educating and advocating for efficiency and renewable energy programs. Beth will talk about an innovative financing mechanism for home energy efficiency improvements.
- **Debra Sachs** is Director of the 10% Challenge Program and is a founding partner of Vermont Energy & Climate Action Network. She has supported efforts to mitigate global climate change at the local level for nearly 15 years. Deb was the project manager for development of "Heating Communities with Renewable Fuels; The Municipal Guide to Biomass District Energy". (Moderator)

#### Workshop Session B (1:45 pm - 3:00pm)

**B1. Community-Supported Renewable Energy Projects.** Vermont has an abundance of renewable energy resources at its disposal. Learn about how some Vermont communities are moving ahead with exploring community-supported wind, hydro, and solar projects, including undertaking feasibility studies, financing options, and potential barriers.

Presenters: Anne Stevens, Alan Berolzheimer, Lawrence H. Mott, Paul Markowitz

**B2.** Transition Towns: Responding to the Challenges of Peak Oil and Climate Change. The Transition Town movement unites people concerned about climate change, peak oil, and improved quality of life through strengthening their community. Key tools are the re-localization of food, energy, and the economy. This rapidly growing and evolving international movement has found many ways to engage people to grapple with coming changes, to change their own lives proactively, to change their community, and to celebrate.

Presenters: Carl Etnier, Henry Swayze

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**B3**. **Building an Effective Town Energy Committee.** This workshop will cover how town energy committees are effecting positive change in their communities, including working cooperatively with municipal officials, businesses, and others. Workshop presenters will also address how they have sustained volunteer efforts and keys to effective action.

Presenters: Duncan McDougall, Laura Asermily, Dawn Francis

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**B4.** Implementing a No Idling Campaign. Vehicle idling is unnecessary, wastes energy, and contributes to harmful emissions that impact our air quality and contribute to climate change. This workshop will address how to implement a successful town-based no idling campaign and the successful work of Vermont communities in implementing no-idling policies and resolutions.

Presenters: Wayne Michaud, Steve Bower, Paul Cameron

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**B5.** Biomass Heating for Municipal and School Buildings. Vermont communities are designing and implementing renewable heating and hot water systems in their municipal and school buildings. What are the factors to consider in converting schools and public buildings to wood chips and other biomass? What are the key questions to assessing feasibility including costs, fuel demand and supply, and appropriate technologies?

Presenters: Lyall Smith, Chris Recchia, Jules J. Chatot, Debra Sachs

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**B6.** Creative Community Campaigns to Reduce Energy Use. Communities and regions are tapping into Vermonter's creativity and innovation to help raise energy awareness, reduce consumption and tackle climate change. This workshop will highlight a few successful community-driven strategies to engage individuals, households, businesses, municipalities, congregations and others in reducing their energy use, including the Low Carbon Diet EcoTeam campaigns in the Mad River Valleys Carbon Shredders, Burlington's Kitchen Table Collaborative and Vermont Interfaith Power & Light's outreach to communities of faith.

Presenters: Gregor Barnum, Wes Sanders, Bob Ferris

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## **Conference Speakers**

### **Opening Speaker**

Glen Brand is co-founder and director of the Sierra Club's national Cool Cities Campaign (<a href="www.sierraclub.org/coolcities">www.sierraclub.org/coolcities</a>) -- the organization's major grassroots organizing vehicle to global warming solutions. The Sierra Club is the nation's oldest and largest grassroots environmental organization with over 1.3 million supporters nationwide. For nearly twenty years, Mr. Brand has been active in the environmental movement, working for national and regional environmental organizations. He has been quoted in print media including the New York Times, Washington Post, Boston Globe, San Francisco Chronicle, Los Angeles Times, Christian Science Monitor and Time Magazine. Glen lives with his family in Portland, Maine. Glen will talk about what communities throughout the United States are doing to promote local energy solutions and combat climate change.

### **Closing Speaker**

**Dick Valentinetti,** Director, Center for Climate Change and Waste Reduction, Vermont Agency of Natural Resources. Mr. Valentinetti will speak about the role of the new Center and the new **Community Climate Change Grant Program** 

#### Workshop Speakers (speakers are listed alphabetically by last name)

- Laura Asermily is the Middlebury Energy Coordinator and works closely with town selectboard and officials to implement Middlebury's climate action plan to reduce fossil fuel use by 10 percent by 2012. She identifies and convenes stakeholders to facilitate campaigns and projects, including the area's first Green Energy Expo at Middlebury College, the Local Solutions Energy Resource Directory, and a prototype Home Energy Audit Kit to teach conservation and efficiency.
- **Gregor Barnum** is the Director of Corporate Consciousness at Seventh Generation, Inc the leading brand of natural household products in the United States in Burlington, Vermont. Gregor will talk about the efforts of the Carbon Shredders to reduce home fossil fuel consumption.
- **Steve Bower** is a senior consultant for Optimal Energy, Inc. (Bristol, VT), which provides planning and support services to energy efficiency programs. He is a founding member and chair of the Richmond Climate Action Committee, and is a Certified Energy Manager. He worked with the Town Energy Coordinator in 2007 to get Select Board approval of a Town Energy Conservation Policy.
- **Alan Berolzheimer** founded the Norwich Energy Committee in 2001. He also serves on the board of the Sustainable Energy Resource Group. His presentation will describe the process shepherded by the Norwich Energy Committee that resulted in the installation of photovoltaic panels at the town's elementary school.
- Ginny Callan has been a Program Officer at the New England Grassroots Environment Fund (NEGEF) for the past seven years, working with groups from Massachusetts and Vermont. She has been a grassroots organizer since the 1970's, focusing on energy, environmental and human rights issues. Ginny will talk about grant programs available at NEGEV as well as other grants available for local non-profits. (Moderator)
- **Paul Cameron** is the Executive Director of Brattleboro Climate Protection, a nonprofit organization that works closely with the Town of Brattleboro to develop local solutions to global climate change. As the Town's Energy Coordinator, he successfully advocated for adoption of the Town's no-idling resolution in 2007.
- Jules J. Chatot (AIA, LEED AP) is a Principal with Banwell Architects and has done advanced integrated design and integrated development work, including biomass heating projects in schools, dating back to 1995. He has been directly involved in the design and completion of nine biomass systems and is currently working on the design of three new systems. Jules will talk about design integration with wider project goals.
- Andrea Cohen is the Manager of the Public Policy Program at Vermont Businesses for Social Responsibility (VBSR) where she works to advance the statewide trade organizations' public policy priorities including environment, health care reform, and sustainable economic development. Previous to VBSR, she worked for 16 years at the Vermont Agency of Natural Resources in a variety of positions involving pollution prevention, resource conservation, and solid and hazardous waste management.

## Workshop Speakers, continued

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- Paul Conner is the Director of Planning & Zoning for the City of South Burlington. He has a Master's in Urban Planning from McGill University in Montreal. Prior to joining the City in the summer of 2008, he worked with Environmental Planning & Design, based in Pittsburgh, PA and with the Rutland Regional Planning Commission in Rutland, Vermont. Paul will talk about the City's efforts to benchmark energy use in its municipal buildings through EPA's Portfolio Manager and the steps it will begin taking to meet its 10% reduction challenge.
- **Carl Etnier** is Director of Peak Oil Awareness in Montpelier, Vermont and has worked with sustainability issues since the 1980s, particularly on sustainable water and wastewater treatment issues. In 2006, he turned his attention full time to educating people to prepare for peak oil.
- **Dr. Ihab Farag,** Sc.D., PE, is Professor of Chemical Engineering at University of New Hampshire and Director of the UNH Pollution Prevention Internship program. He is active in pollution prevention, energy efficiency and biofuels. Dr. Farag will provide an overview of the UNH Pollution Prevention Internship Program and its assistance role in the EPA Municipal Energy Challenge Program. (Moderator)
- **Bob Ferris** is a member of the Mad River Valley's active 'Carbon Shredders,' which is a growing network of concerned citizens and institutions focused regionally on energy conservation and education. Bob is the former Executive Director of the Yestermorrow Design/Build School and has held senior positions at the Community Environmental Council, Chesapeake Bay Foundation, and Defenders of Wildlife.
- Dawn Francis is co-chair (along with her husband) of Hinesburg's Energy Planning and Sustainability Task Force formed in December of 2006. Dawn works as the Government Affairs Director for the Lake Champlain Regional Chamber of Commerce and GBIC, a regional development corporation. Prior to that, she worked for 19 years for the Town of Essex in various capacities including town planner, community development director and assistant town manager.
- **Kevin Geiger** is a Senior Planner for the Two Rivers-Ottauquechee Regional Commission (TRORC). Prior to coming to TRORC, Kevin was Assistant Director at Northeastern Vermont Development Association and has served on many non-profit boards and state committees.
- **Suzanne Hechmer** is the Director of the Downtown Montpelier Community Association. She worked with a coalition to bring Way to Go! to Montpelier because pedestrian activity is essential for a thriving downtown. Suzanne will talk about how to bring "Way to Go! Commuter Challenge" to your community.
- **Peter Keating** is Senior Transportation Planner with the Chittenden County Metropolitan Planning Organization located in South Burlington. Peter focuses his work on addressing pedestrian and bicycle problems, public transportation, and long-range transportation plans. Peter will talk about alternative transportation options and how to promote these programs in your community.
- **Dave Lamont** is the Director of Regulated Utility Planning for the Vermont Department of Public Service. He is responsible for preparing the State's Comprehensive Energy Plan and 20 Year Electric Plan, documents which guide energy policy and decisions made by Vermont regulated utilities. He also active in the "nuts and bolts" side of regulation, representing the positions of the DPS as an expert witness in rate cases and other energy maters before the Public Service Board.
- **Ginny Lyons** will begin her fifth term in the Vermont Senate and is Chair of Senate Natural Resources and Energy Committee, member of the Health and Welfare Committee and Co-Chairs Vermont's Commission on International Trade and State Sovereignty, member of the Legislature's Joint Energy committee, and other state wide groups. She provides leadership on legislation which supports energy efficiency, smart growth development, all fuels utility, renewable energy, and other important initiatives.
- **Ross MacDonald** is the Public Transit Coordinator and the Go Vermont Program Coordinator for VTRANS. Ross has a degree in economics and has served as an Economist for a land use agency and for the Commissioner at the New Jersey Department of Environmental Protection. Ross will talk about the State's program to promote ridesharing and alternative transportation. (Moderator)
- Anne Margolis is the Manager for the Clean Energy Development Fund Manager for the Vermont Department of Public Service. Prior to joining DPS, Anne worked at Northern Woodlands magazine as managing editor, and at Atlantic Orient Corporation, a wind energy developer, as marketing manager. Anne will talk about funding available through the Clean Energy Development Fund.