

Vermont Climate Change Oversight Committee
Final Report
February 10, 2010

Submitted to
The State of Vermont Legislature

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1. Background

Vermont emits approximately 7 million tons of carbon dioxide per year, according to several information sources.¹ These emissions come primarily from transportation, heating, and electricity sources. In recent years, both the Douglas Administration and the Vermont Legislature have been hard at work identifying the challenges inherent in reducing the state's carbon emissions, and recommending how best to move forward with constructive and effective action. The Governor's Commission on Climate Change Report (2007) identified a wide range of actions to move Vermont to a climate-neutral position; further, the Legislature has passed laws related to heating and electrical efficiency targets, and to targets and incentives for the development of renewable energy for Vermont.

The Climate Change Oversight Committee (CCOC) was established in 2008 to keep track of progress on the Climate Commission's proposed actions, and to report back to both the Administration and the Legislature. The CCOC issued reports to the Legislature in January and April of 2009, documenting its progress and making several interim recommendations. The January report was a required deliverable of the Committee, under the terms of Act 209, an act relating to energy independence and economic prosperity. With this 2010 report, we believe we have fulfilled our charge in Act 209 as requested by the Legislature and the Douglas Administration.

In 2008, the following individuals were invited to participate in, and agreed to serve on, the Committee. These Committee members were: Jennifer Jenkins, John Norton, Agency of Natural Resources Secretary Jonathan Wood, State Treasurer Jeb Spaulding, Elizabeth Courtney, Bill Sayre, Ernie Pomerleau, Paul Comey, and Scott Johnstone. In summer 2009, Jennifer Jenkins left Vermont and thus resigned from the Committee. With so little time remaining in our tenure, the remaining members determined not to replace Jennifer on the Committee.

Throughout the two-year life of the Committee, we have attempted to fulfill the "oversight" role with which we were charged. We paid close attention to the efforts of the Douglas Administration regarding climate change by staying current with the activity of the Administration's Climate Change Transition Team. That group was established in late 2007 to follow up the Climate Change Commission's work with a report containing work plans to implement each of the Commission's 38 recommendations, and an assessment of progress on

¹ 7.012 million tons (6.46 million metric tons), according to ERedux, an information clearinghouse. See http://www.eredux.com/states/state_detail.php?id=1159&state=VERMONT.

the Commission's proposed 262 "action / implementation items" contained within the 38 recommendations.²

Clearly, the state's agencies and departments are taking climate change seriously. At one point in the Committee's process, we learned that action is already under way at some level on approximately one-third (90) of the 262 action steps contained in the report of the Governor's Commission on Climate Change.

The Agency of Natural Resources also has provided this Oversight Committee with a roadmap of key ongoing activities throughout state government on climate issues. As of January 2009, 22 initiatives were active in six parts of the Administration. Since then, the Secretary of Natural Resources and his staff have, through their participation on the Committee, kept the Committee aware of progress within the Administration. Forward movement continues, although it is tempered somewhat by the real-world resource constraints that have come about as a result of an ailing economy and its impact on the State budget.

The Committee also reviewed and met with the Vermont Council on Rural Development to understand how their work and report integrate into progress and solutions for Vermont. You will see the obvious nexus of their work in many of our recommendations below.

In performing our work, we have been keenly aware of the changing economic condition of Vermont and of the nation. This has driven us to consider how Vermont can continue to **move a combined climate, energy independence, and jobs agenda forward**, when a substantial investment from the state is assumed not to be available. While this limits the sphere of the possible, we found that there is still a significant opportunity to make progress in a small, motivated state like Vermont during this period of national economic recovery.

Throughout the past year, we have become aware that quite a few other groups have been tasked in some way with tracking progress on the Climate Commission's work. In addition to the COC, the Vermont Climate Collaborative and the Agency of Natural Resources (ANR) Office of Climate Change and Waste Reduction are also in the kitchen. The COC chose not to duplicate the others' efforts. The Collaborative has largely been looking at information sharing, as well as at research and development agendas, while the ANR focus has been on coordinating efforts inside the Administration. We then resolved to meet our mandate by focusing on: (1) "low-hanging fruit"—opportunities that don't cost much, can be agreed to across a wide spectrum of interests, and have the potential to make a difference; and (2) promoting other great ideas—adding our voice to help an idea gain momentum and move forward.

This report is organized around subject areas for ease of use. As such, an idea or proposed solution may show up in more than one location. Hopefully the reader will see an idea described only once, and how it applies to the particular subject matter in that location. Then, when it comes up again, additional information pertaining to how the idea helps solve the new subject is added, without any further background. In this way, we hope the information builds for you, rather than burdens you. Now let us focus on our recommendations.

² Climate Change Transition Team, *Proposed Draft Work Plans from the Recommendations of the Governor's Commission on Climate Change (GCCC) Report*. Montpelier, Vt.: State of Vermont, September 2008; Executive Summary and p. 1.

2. Climate initiatives will require effective financial tools, if progress toward attaining goals is to be made

One cannot look at the scale of effort necessary to accomplish climate recovery and reach any conclusion other than: ***Success will require access to capital, both public and private.*** Thus, resolving challenges with existing tools, and designing and implementing new tools—with realistic and prudent approaches to funding their uses—will be imperative to our success. The committee identified two commonalities to this perspective, as follows.

A. Resolve state & federal tax credit / grant challenges to promote renewables development

During our work, we learned that complications exist between how the relevant federal and state tax credits either work or are in conflict with one another. We concluded that these complications may actually create disincentives for Vermont businesses to move carbon reduction projects forward. In short, H446 suggests that the state incentive is removed if any other public or private grant funding is received. Federal rule 188 deals with this by allowing a grant to be considered as a one-time capital influx, rather than as ordinary income. The point here is that to make these projects work well requires that both state and federal provisions apply, not one or the other. Further, the Committee has become aware that reducing levels of grant / incentive funding through the feed-in tariff is under consideration. We believe that to change the rules after businesses have built fiscal portfolios and have been investing private dollars on real projects sends the wrong message to private-sector partners. This in turn could harm Vermont's ability to make continued progress in renewables development in the coming years. In short, we heard that predictability is key to leveraging private investors; without it, real, viable projects will be stopped.

Although no tax and grant experts sit on this Committee, ***we urge the Legislature to investigate these matters and resolve such conflicts, as a way of assuring that the original intention of encouraging Vermont businesses to develop renewable energy technologies is realized.***

B. CEDF – Invest in a balanced portfolio and create clarity around which efficiency and renewables measures can move Vermont toward energy independence

In January and April 2009, the COC urged the Legislature to encourage the Clean Energy Development Fund to invest in a balanced portfolio of efficiency and renewables efforts. Although the CEDF is clearly engaged at some level in both efficiency and renewable development, the Fund's bias for action to date has been on the latter. With the Legislature's clear direction in Act 92 (S.209; 2007 – 2008) to weatherize more than 60,000 housing units by 2017 and their additional position to create a statewide all-fuels efficiency utility, it appears to us that greater focus on unregulated fuels investment is necessary. Efficiency is the most cost-effective form of energy and it provides the most rapid and direct economic and environmental benefit to Vermonters. A focus on heating efficiency further has the most direct impact on climate gases in Vermont, and holds the promise of the highest level of job creation. To be clear, in advocating a balanced portfolio for CEDF, we do not recommend that it abandon

investment in renewables. Rather, we recommend a more appropriate matching of investment with opportunity. Today, with the current level of available investment, a reduction of 25% to 30% of energy use through efficiency is quite easy to achieve and is also cost-effective. With additional funding and focus on deeper savings, a 50% reduction over current levels is obtainable; further, many experts believe that as much as a 70% to 80% reduction is possible.

We continue to recommend portfolio balancing as a central strategy for the CEDF to fulfill the promise of a stable energy future for Vermont.

C. PACE – Support the implementation of Property Assessed Clean Energy programs in interested communities to finance major energy improvements

The Vermont Energy Act of 2009, Act 45, included a provision that allows for the creation of Clean Energy Assessment Districts (CEAD). As this concept has gained popularity nationally, it has come to be generally referred to as PACE (Property Assessed Clean Energy). PACE programs have been successfully implemented in California, New York, and Colorado, and PACE-enabling legislation has been enacted in 18 states, with several additional states considering legislation in the current session.

PACE is a voluntary mechanism that allows individuals to make eligible energy improvements by opting in to a special assessment district created by their city or town. Major energy efficiency and / or renewable energy improvements, after being qualified by an energy efficiency utility, are funded by taxable municipal bonds or other municipal debt and installed by qualified and licensed contractors. The cost of the improvements is secured by a lien on the property, and participating property owners repay their town over terms of up to 20 years as a special assessment on their own property tax bills.

The PACE concept has been strongly endorsed by the White House and federal policy-makers as a key component for stimulating increased investment in energy efficiency and renewable energy improvements, and significant associated job creation.³ In Vermont, PACE can be a primary tool in meeting the aggressive building energy efficiency goals established in Act 92. PACE implementation would provide a steady and growing demand for energy efficiency installers, as well as installers of small-scale renewable energy systems, and would help to establish a predictable demand for energy efficiency and renewable energy products, helping suppliers and retailers in the state expand their businesses.

While these programs offer great promise, one of the major obstacles to creating a PACE program is the significant upfront resources required to develop the program and set up the necessary systems and infrastructure, especially for smaller communities. Interested Vermont towns and cities need a portfolio of financial, technical, and legal services, model documentation, community education materials, and other assistance to enable Vermont communities to rapidly develop and implement effective PACE programs.

In particular, towns and cities need one or more structural options for small communities to pool PACE backroom services and raising of capital, to minimize the costs of bond issuance

³ [White House Policy Framework for PACE Financing Programs
www.whitehouse.gov/assets/documents/PACE_Principles.pdf](http://www.whitehouse.gov/assets/documents/PACE_Principles.pdf)

or other funding, debt service, and ongoing administrative costs. The current legislation does not address these vital elements of a successful PACE program.

Finally, participating communities will also need assistance in building and funding an initial loan loss reserve account, including the option of participating in a pooled account with other Vermont towns, to protect the interests of the community in the event of a shortfall or default on the part of any PACE program participants.

We recommend that the Legislature actively support efforts to implement PACE programs in cities and towns throughout the state, and especially consider ways to allow participating towns to share administrative and capital resources for maximum efficiency.

3. Climate initiatives will require close attention to Vermont's working landscape, if we are to make progress and do so in a way that maintains Vermont's reputation as a clean, innovative, and hard-working state

Vermont's working landscape is an essential component to who we are as a people and a state. It is also a vital tool for resolving climate and energy independence challenges, while putting Vermonters back to work. "Working landscape" in this context refers to the prudent management of trees, energy, and other resources that contribute to environmental and economic benefits.

A. Support "Buy Local" initiatives

Vermont has many "buy local" initiatives and they are all good, from a climate perspective. From local agriculture to our robust wood products industry, we have much to choose from. Buying local reduces by an enormous factor the transportation sector emissions related to the product, and in some cases (wood products, for example), it opens the opportunity for additional carbon sequestration to occur. We all know as well how vital these initiatives are to keeping Vermonters working, and the working landscape vibrant and alive.

We recommend that the Legislature keep the support for these initiatives in place, because of their cost-effectiveness and numerous benefits, even in these tough times; we further encourage all Legislators to add their individual voices to educating the public on the opportunities and benefits of buying local.

B. Support the Biomass Energy Development Working Group process

The efficient use of biomass to heat schools and homes and / or to fuel combined heat and power plants represents a tremendous opportunity for Vermont to move toward energy independence and lighten its carbon diet.

We support this direction for Vermont and ***urge the Legislature to support biomass initiatives, and to look closely at the results of the "BioE" working group's efforts.***

C. Support continuation of the Use Value Appraisal Program

Use value has been incredibly important in preserving Vermont's working landscape. All along, well before and during the climate debate, this program was and continues to be a key initiative that allows Vermont to sequester carbon. This, in turn, positions the state to have a laudable record on carbon—a record that translated into Regional Greenhouse Gas Initiative credits (worth \$3.2 million in the first year alone).

Even in this economy, we need to preserve this proven program and look for ways to make it even more effective. We recommend that the Legislature follow this path.

D. Support growth centers and retain their incentives

For more than 40 years, Vermont has been a national leader in focusing land use policy on the concept of growth centers and the working landscape. In the past decade alone, many programs have begun, along with incentives to support the retention and development of growth centers. As with the work of the Use Value Appraisal Program, this turns out to be an amazingly effective climate strategy—in part because it has been our most important approach to date for minimizing carbon effects from the transportation sector. It also allows our working landscape to do its job in sequestration.

We recommend that the growth center incentives be retained and strengthened to promote development in compact, mixed-use settlements and to discourage settlement patterns that presume single-occupant vehicle use as the primary mode of access to basic services.

E. Continue support for the work of the Vermont Housing and Conservation Board

The Vermont Housing and Conservation Board (VHCB) works to fulfill Vermont law (10 VSA , 15) in the creation of affordable housing, and in preserving the state's agricultural land, historic properties, important natural areas, and recreational lands. Since 1987, the VHCB has provided critical infrastructure for the support of Vermont's working landscape, and has invested meaningfully and substantially in smart growth development—with excellent results.

We recommend continued support for the VHCB's work in keeping Vermont at the national forefront in advancing this comprehensive approach to affordable housing and community development linked with land conservation and historic preservation.

4. Climate initiatives must address transportation issues if we are to make progress in Vermont

The Governor's Climate Change Commission found that transportation accounts for 46% of Vermont's carbon emissions. Yet historically this sector represents the one with the least focus and direct action for improvement. This sector may be the most challenging on which to make progress, because of its interconnectedness with land use and because any change in the status quo—even in the name of carbon reductions—will personally affect nearly every

Vermont. Nevertheless, attaining carbon reduction goals is critically important, and we cannot do so without addressing transportation. The Committee recommends that the Legislature consider the following new, first-step approaches.

A. Plug-in hybrid demonstration link with the Smart Grid

Many people today believe that an electrified transportation future is the key to addressing our climate and energy independence needs. Battery technology is advancing fast; the automobile industry is developing new-generation electric vehicles quickly; the transmission grid will soon be able to deal with cars plugging into it; and through our efficiency efforts, we are delivering more capacity to the grid—capacity that can be used to power our transportation future without the kind of massive transmission and distribution improvements that would be required if efficiency were not present.

We recommend that the Legislature begin to investigate how best to accommodate the electrification of transportation through the new Smart Grid technology and infrastructure, while at the same time staying committed to Vermont's electrical efficiency plans.

B. Car sharing

Car sharing is simply a way to “share” that extra car you need sometimes, but not always. It works wonderfully in big cities, because the relatively large number of users allows businesses to acquire vehicles and use the coordinating technology that effectively matches people to available vehicles. In rural places like Vermont, however, the economics get harder. Even so, there are now many examples of successful car sharing here. The key to car sharing from a climate perspective is this: If we have an extra car in the driveway, we're more likely to take that needless trip because the “car is there.” Instead, if we are shareholders in an infrastructure of vehicles used in common with our neighbors, studies suggest our driving of that “extra car” will decrease by as much as 50%, while typically saving significant disposable income in the process.

We recommend that the Legislature encourage and support car sharing as a new feature of Vermont's transportation infrastructure, and assist in the research, development, and deployment of car-sharing pilot programs around the state.

C. Support initiatives around lower carbon vehicles

Vermont has been a national leader in supporting low-emission vehicles, and continues to be an exemplary model for articulating the benefits of low-emission vehicles. We've shown that a small state can play a central role in moving national policy, and that our Vermont brand both helps to create this movement and is enhanced by our involvement.

Rather than be silent on this front, ***we encourage the Legislature to stay the course, and to keep Vermont's well-earned leadership voice and action at the forefront of the national debate about low-emission vehicles.***

D. Incentives for high-mpg vehicles

There are many ways to motivate Vermonters to acquire higher-mpg vehicles. Tax incentives or tax holidays on purchases, and reductions in registration fees are but two examples. We recognize that such ideas carry costs to the state, and appear to violate our “avoid cost” rule. Nevertheless, the Committee has chosen to bring this recommendation forward, in part because these may represent ways to move a market sufficiently well to help an industry (car dealers), or they might match up with an available funding source (American Recovery and Reinvestment Act (ARRA) funds that perhaps could be used to allow for—say, a two-year pilot on reducing registration fees, or to subsidize a high-mpg vehicle tax holiday). Thus, this possibility could match up with opportunities the Legislature encounters, and so it might choose to bring them forward.

We encourage the Legislature to seek opportunity to create incentives to assist Vermonters to transition to higher-mpg vehicles.

E. Support mobility options across the state

As a rural state, Vermont has worked to provide public transportation where it can. Formal public transportation should continue to expand as a strategy for climate change reduction. That said, traditional public transportation has its limitations in a rural state. Many efforts are under way in Vermont to try new methods that allow Vermonters to gain greater mobility beyond the use of their single-occupant cars or beyond public transportation. From bicycle transportation to the expansion of both “Go Vermont” and “Way to Go” brands, to AARP’s recent recommendation in “transporting the public,” new paths are emerging that expand the mobility options for rural Vermonters.

We recommend the Legislature continue to support public transportation and investigate the emerging options with new enthusiasm, because they hold promise for both enhancing mobility and reducing the effects of climate change. “Enhancing mobility” should be seen in its broadest sense—including, but not limited to, investments in the state’s pedestrian and bicycle-use infrastructure.

5. Climate initiatives are closely linked to energy independence; combining these initiatives into a single strategic approach will build support for achieving reductions in climate change

Where appropriate, co-joining climate initiatives is a useful way to build support for overall climate change reduction, while accomplishing goals. More so than with other states, climate and energy independence are linked goals for Vermont. Goals for reducing greenhouse gas emissions require a focus on efficiency and the development of renewable energy. The stronger the link between efficiency and renewables, the greater the control the state can have of its energy future. We offer ideas here on how to build such interdependency through efforts that are required by each goal.

A. Support and expand efficiency programs

As noted previously, efficiency remains the most cost-effective method for responsibly addressing our energy and climate needs. It is therefore no surprise that it is beneficial for pursuing energy independence and building a robust local green economy as well. For every megawatt-hour, BTU, or gallon of gasoline we do not consume, our environment is cleaner and we avoid having to purchase energy from outside Vermont. Thus, keeping our focus and support for efficiency programs that support lower consumption of electricity, fossil fuel heating, and transportation fuel is critical to meeting our climate and independence goals.

We urge continued support of and continued focus on efficiency programs by the Legislature.

B. Support “Buy Local”

All of the economic arguments made in **Section 3A** on supporting Vermont products apply to energy independence, too. The Committee favors the development and purchase of Vermont-based energy supplies as well. Wind, solar, biomass, and hydro are examples of Vermont products we can purchase, which will assist us in acquiring more control of our energy supply. Further, buying local sources of energy keeps dollars and jobs in our economy. Best yet, “buying local” helps position the Vermont energy industry to be in support of the state’s climate goals.

We support the continued development of renewables in Vermont, the continuation of incentives to support this development, and the promotion of measures that make the permitting process smoother for electricity generation projects while assuring that they meet our environmental laws.

C. Hydro position

Hydroelectric power has a long and historic role in Vermont. Many small-scale stations exist that supply Vermont with clean, efficient, low-cost energy. Vermont has also relied on large hydro, most recently and particularly with its contract with Hydro Quebec. Nationally and in Vermont, a debate has raged about whether large hydro fits the definition of “renewable” energy. We find this debate counter-productive, because it has been punctuated with inaccurate information, and it diverts the discussion from the more critically important concepts around energy independence.

First, hydro—regardless of size—appears to fit the definition of a renewable, because it is all about water. It comes from rain falling from the sky, fills a retention basin, flows through turbines, evaporates into clouds, and falls to earth again. The debate is really about the environmental and societal consequences of large hydro, not its renewability. There are clearly questions of consequence related to methyl mercury in water, displacement of peoples, and other and societal questions. We view these issues as relevant primarily to new facilities and not to existing facilities. For better or worse, these *are* existing facilities. If we are to become more energy independent and solve climate goals, we believe that supporting the use of EXISTING sources of large-scale hydro and considering them to be renewable resources are important and necessary activities. We therefore support the Legislature’s interest in significantly increasing the portfolio standard to account for this clarified position. Without the increase in the

portfolio standard, Vermont will create a huge disincentive for increasing new, Vermont-based renewable generation. This is a policy approach the Committee does not support.

We recommend (with one exception) that the Legislature include existing large hydroelectric power as a renewable resource in Vermont and commensurately increase the portfolio standard in Vermont.

D. Vermont Yankee

Vermont Yankee is **the** urgent energy and political topic for debate in Vermont today. Is it safe? Because it is our primary baseload supplier, can we attain our energy goals without it? Is there a responsible waste solution for spent fuel rods and other products of nuclear-power generation? Are the dry cask / container storage methods prudent and safe for the area populations surrounding the reactor? Because the number and substance of these and other questions were so significant, the Committee was frankly unable to reach agreement on Yankee. We offer this statement and its questions as our only comment on an item in which we could not reach agreement. It is presented here as an indication that the topic was taken up, discussed with careful thinking, and diligently considered, even though it resulted in no clear recommendation.

6. New regulatory concepts and methods to be implemented for progress on climate initiatives and energy independence

Policy and regulatory structures offer a time-tested method to move an entire jurisdiction to a new standard. Vermont has a long history of delivering results from the considered use of such an approach. Meeting our climate goals will require additional such strategies over time. We recommend that the Legislature look at the following initiatives now, as a way of being introduced to new ways of thinking about the policy issues that are likely to evolve from the nation's changing energy trends.

A. Support Smart Grid initiatives and policies

Recently, Vermont was awarded a federal investment grant to build the infrastructure of the state's Smart Grid. This investment provides a tremendous opportunity on many fronts, once the infrastructure has been built and is operational. A state with a well-developed Smart Grid infrastructure will enable utilities to reduce costs of reading meters, thus lowering the costs of supplying energy to homes and businesses. Informed by Smart Grid technology, ratepayers can adjust their behavior as well.

The corollary to this new way of viewing energy delivery is that Smart Grid infrastructure policies can be developed to drive different energy consumption behavior. Examples include time-of-day pricing and dynamic pricing. Utilities could set variable prices during the course of any 24-hour period or real time pricing, hopefully driving consumers to use energy in a way that reduces peak loads, ultimately bringing stability to the grid itself. Successfully implemented, such pricing models can help utilities avoid the higher cost of obtaining spot-market energy supply during peak times. Its corresponding benefits include a lower carbon diet for Vermont and a higher percentage of power obtained from in-state sources. That is, peak power is frequently purchased from out-of-area, higher-carbon sources.

We recommend electric utility time-of-day and dynamic pricing policy and related Smart-Grid-friendly policies be enacted over the coming two years, in anticipation of the completion of the construction of Smart Grid infrastructure.

B. Statewide building code enhancements

Efficiency in buildings remains a huge challenge to and opportunity for Vermont. Strong codes guiding both new construction and retrofit standards are a cost-effective mechanism for raising the standard of the state's building stock over time. Vermont has strong codes already; but without regular review and updates, the state jeopardizes its position as a national leader in code development. The value of this leadership lies in the high level of comfort, safety, and environmental stewardship that makes Vermont an attractive place to live and work. The Northeast Energy Efficiency Partnerships routinely updates leading regional codes to be considered for adoption. They are currently in the process of another update. Vermont should be consistently engaged in the development of NEEP's updates and should actively consider updating the state's building codes to at least the standards that emerge from the effort.

Code enforcement is critical, as well. Codes without enforcement are both minimally effective and create disparity and unfairness among users of the system. Consistent enforcement has been a challenge in Vermont. Being vigilant about the need for strong enforcement and searching for new ways to create uniformity are important to seeing the adopted codes actually create the change our building stock needs.

We recommend the State be continuously engaged in developing model building codes with organizations like NEEP and assure enforcement is available and efficient.

7. Climate initiatives will require close attention to progress; how we organize the structure of climate change policy oversight may well determine our success or failure in achieving climate change goals

With this report, the work of the Governor's Climate Change Oversight Committee will cease. We considered many options for continuing the oversight of progress on achieving climate goals in Vermont. One option was to continue our role. Another was to rely on the Agency of Natural Resources as the oversight body. A third was to consider the Vermont Climate Collaborative for this purpose.

The Climate Change Oversight Committee decided to recommend that the Vermont Climate Collaborative be tasked with oversight, in addition to the other roles already assigned to it. The Collaborative has a wider membership than the Committee; it is staffed (although minimally); and it is positioned to take on the charge.

We recommend that they accomplish this task by creating four work groups (corresponding to the topics identified in the Governor's Climate Commission Report) that:

- continuously review progress on the Commission's recommendations;
- review progress by the Administration in achieving the climate goals;
- review the development and progress of relevant legislative initiatives; and

- consider new ideas that would further the work of those topical areas.

We recommend the Legislature formally charge the Vermont Climate Collaborative with oversight responsibilities, centered on (add topical areas), and further recommend that \$100,000 annually be appropriated from CEDF funds to support this role.

8. Climate initiatives will require all of us to modify our current behaviors to some degree

For Vermont to meet its climate goals will require the clear attention and support of her citizenry. Each of us must modify our behaviors if we are to head off later, far more onerous changes—and if we are to succeed in achieving our climate goals. The Committee offers a few ideas for persuading Vermonters to consider new behaviors:

A. Be persuasive in supporting Smart Grid initiatives and policies

The need to support the building and maintenance of Smart Grid infrastructure in Vermont has been articulated in **Section 4A** and **Section 6A**. The Smart Grid cannot be a key player in affecting climate change if it is seen merely as an innovative technology. It can help the state achieve its climate change goals only if: (1) ratepayers fully understand why it's important that they modify their energy consumption behavior; and (2) they accept the new Smart Grid policies and regulatory constructs as prudent, useful, and necessary. *Smart Grid* is an amorphous term in public dialogue today. It needs to turn into a term that has household meaning. Expecting the public to modify personal behavior, based on the promise of a technology called the *Smart Grid*, is asking a lot.

We recommend a focused educational effort be undertaken to explore the Smart Grid fully and explain its necessity and benefits to Vermont.

B. Focus on opportunities to educate Vermonters on climate initiatives, via media stories about the initiatives' success

If Vermont is to succeed in establishing effective, productive climate initiatives, the state needs to position them to take on a structural presence in Vermont. They must not become the political flavor of the month. Consistency of message and effort is required. The Governor's Climate Commission recommended a wide and continuous educational process. We support all measures to keep the climate change message in front of the public view. Supporting the work of Vermont's Community Energy Committees (which currently number more than 90) is one way of encouraging this discussion and assuring that the education will continue.

Further, we strongly believe that blending climate policy, energy independence, and job creation through our green economy is a strategy that should be adopted. This blending is appropriate, since the activity on each is interdependent with the others, and it provides the opportunity to build a much stronger body of Vermonters ready for action. Each topic—climate policy, energy independence, and the economy—has a constituency, and each constituency is somewhat different. When we blend them together, we provide an exceptionally strong

community of people who can mobilize to build informed, meaningful responses to any obstacles that might emerge.

We recommend that Legislators blend these agendas together and find every opportunity to support voices (such as the community energy committees) that are providing well-informed and relevant education to Vermonters, and raising your voices to accomplish the same.

C. Incentives for high-mpg vehicles

One way we all learn is by enticement. How many of us as children were encouraged to adopt a new behavior, with the promise of a cookie if we complied? Incentives provide a useful method for encouraging new behavior to both citizens and businesses. Whether we continue incentives for building renewables, encourage efficiency, or promote the purchase of higher efficiency vehicles, some people's behavior will change, just from the reminders and inducements to change. This is particularly the case for creating a stronger market for high-mpg vehicles. ***We recommend the creation of a specific purchase incentive program for high-mpg vehicles.***

9. Climate initiatives will move forward most effectively if there is clear leadership by example from government

Through the Committee's year-long process, we heard a great deal about the good works of state employees who showcase state government as a positive example of change. The Agency of Natural Resources (ANR) Center for Climate Change and Waste Reduction is at the forefront of these efforts. Their work is good and necessary. For any major initiative such as progress on our climate goals, the public will need to see examples of what works, and individuals will be more likely to act if they see that state government takes its own recommendations seriously. To that end, we offer several additional ways that government can set a positive example:

A. ANR climate grant support

ANR has created and funded climate grants over the past two years, with the proceeds coming from a supplemental environmental project source (in other words, funds provided by a polluter for remedial environmental projects, in lieu of a fine levied against the polluter). Dozens of good climate initiatives have emerged across the communities of Vermont, showcasing how we can make solid progress in reducing greenhouse gases. This program is due to end when the State Energy Program funds are exhausted (expected at the end of 2011). In the very near term, the ARRA funds awarded through the Clean Energy Development Fund, as energy efficiency block grants, function in a similar way. That said, that program will also have a very short shelf life, because ARRA funds are limited to disbursement through 2011. We believe such exemplary projects, awarded in a competitive manner, are and will continue to be important to the progress of climate change work in Vermont.

We recommend the ANR Climate Grant program continue, either through new SEP funds that may become available, through appropriation of a portion of available CEDF funding or through other appropriate funds as may become available.

B. Car sharing as a way to reduce or eliminate the state fleet of vehicles, and use of private autos by employees

Car sharing was discussed in **Section 4B** as a new way to provide mobility while lowering emissions. The rationale won't be restated here. Rather, we build on the argument that state government can be a significant and effective actor in creating this new infrastructure. State government requires a large fleet of cars to move employees to meetings. When the state fleet is busy, individual cars are used. If the state were to blend a much smaller fleet with deep investment in car sharing, it would not only likely save money on operating expenses, but also require less capital investment (as it does not need to own the cars), save carbon, and be a major actor in building a car sharing infrastructure across the state. When employees are not using vehicles, those vehicles would be available within the communities for non-state-employee car-sharing members. Thus, these vehicles can be used nights and weekends (as well as when they are available in the daytime) by entire communities. This is a real win-win strategy.

We recommend the state seriously investigate how it might use car sharing as part of its fleet management system.

10. A time to be innovative

A. Use climate change and energy—and specifically the interconnectedness of agriculture, forestry, working landscape, economic development, transportation, and energy independence—as the filter for re-orienting Vermont government and the state's economic platform

In the previous recommendations, we have attempted to stay very focused on items we think are relatively easy to move forward and require very little investment. In short, we've tried to find ways to create progress in a difficult economic climate. Occasionally, it is helpful also to be provocative, as this can spark new debate and open each of us to new paths of thought. To that end, we offer an innovative thought of our own for you to ponder.

In our tough economy and with our state budget difficulties, Vermont moved from trimming budgets, to more major cuts, to debating how best to "reform" government. While not a solution for all reform, we have considered one platform that could be considered as part of this debate.

If progress on climate is a high priority for Vermont, one could consider a reform effort that centered on ***climate progress*** as an overarching filter. Through this report, the reader has likely noted the web of interconnectedness of climate with agriculture, forestry, working landscape, economic development, transportation, and energy independence. How then to leverage this interconnectedness?

One could consider a new Agency of Energy and Climate (such as the United Kingdom's Department on Energy and Climate Change) or a gubernatorial Czar and / or Cabinet to accomplish the same. These alternatives could be costly for the state, however. We offer,

rather, the idea of using available personnel and leadership in the agencies of Natural Resources, Transportation, Economic Development, Public Service, and Agriculture to work jointly as a type of Climate Cabinet to implement the Policy Options of the Governor's 2007 Climate Commission Report. This group would form a leadership team to work closely with the Vermont Climate Collaborative and any other relevant groups or individuals to assist it in providing oversight, policy, and implementation recommendations—and drive them to completion.

In a legislative year that will be full of reform ideas, we call on you to keep climate progress at the forefront of the debate, and progress as an essential element that we must continue to deliver, even in these tight fiscal times.

11. Summary

Vermont has a rich history as a national leader in energy and environmental policy and action. Climate initiatives have been and should remain among these areas of innovation and progress. This is particularly true when one considers the amazing congruence of climate challenges with the issues of energy independence, and our ability to create jobs and put Vermonters back to work. Meaningful work on climate issues will serve these other two important aims at a time when each is critical to our common future.

Recognizing challenging times, we've attempted to accomplish our legislated mandate with a practical eye toward low- to no-cost ideas and concepts. We understand both that the times we live in are challenging and that we have to keep making progress if there is to be a 22nd century, if we are to acquire control of our energy future, and if we are to have a strong Vermont economy. Thus, our balanced approach offered herein—to take small, meaningful steps to move the agenda forward, not only because of the times we're in, but because our future requires it of us.

The Climate Change Oversight Committee would like to thank the Legislature and Governor Douglas for this opportunity to serve Vermont. We have learned a great deal. We feel privileged to have been asked to serve. And we are struck by how much a small state like ours has accomplished and can still accomplish. We are prepared for and are enthusiastic about briefing any committee of the House or Senate on our work, if requested. I would be pleased to attend and join in a conversation on behalf of the Committee, and I know other Committee members also have in interest in doing so.

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Respectfully submitted on behalf of the Vermont Climate Change Oversight Committee,



Scott Johnstone, Chair