

2008

**Promoting and Fostering the
Green Economy in Vermont**



Our concern for the environment needs to be a part of how we think about the economy. Remember, it's a choice between both or neither.

Governor Douglas, October, 9, 2003

The balance between the environment and the economy is a concept that Governor Douglas has been promoting since his early days in office. This way – the Vermont Way – has helped shape the “Green Valley” vision that simultaneously supports environmental protection and economic development. This commitment to the dual goals builds the Vermont brand as where environmental product and services companies – or “Green Economy” companies – can find a welcome and supportive place to do business.

Vermont has long been recognized for its environmental ethos. In today’s world, we constantly are reminded to do our part to reduce our carbon footprints and the issue of global climate change is at the forefront of many of today’s policy discussions. Long before this became such a widely publicized issue, Vermont was already a leader in environmental stewardship and practices.

Our long-standing commitment is evident to visitors and residents alike. We will not permit billboards to scar the countryside. Our scenic vistas and working landscapes are internationally known. In addition, many of our green companies like Clean Earth Technologies, NRG, and Seventh Generation- who sell environmental solutions, technologies and products around the world – have been here for many years. Our academic institutions share the state’s steadfast beliefs as they relate to the environment. The University of Vermont – through its environmental programs, the Gund Institute and the Rubenstein School--help advance this culture.

Several initiatives that were proposed and implemented over the past few years by Governor Douglas and the Legislature prove - in actions rather than words- our commitment to the environment and reinforce our reputation.

Vermont was the first New England state to sign on to the Regional Greenhouse Gas Initiative (RGGI) - an effort to reduce greenhouse gas emissions from power plants; we have led the fight against EPA to allow states to regulate emissions and we have the “greenest” energy portfolio in the country. Vermont was also the first state to realize the benefits of Demand Side Management strategies through the implementation of an efficiency utility. Vermont is known as a “net sink” state; that is, we absorb more carbon than we produce.

In addition, Vermont fought successfully for an end to the International Paper tire test burn in Ticonderoga; we have seen the creation of the Clean Energy Fund which has provided funding to a variety of renewable energy projects; and we have also joined the 25 x '25 Alliance. Of course all of these activities build on the legacy of Vermont’s commitment to the environment that goes back generations. As a result, publications such as *Forbes Magazine* have rated Vermont the “greenest” state in the country.

At the same time we have also increased financial commitments to economic development programs including the Vermont Training Program and Regional Development Corporations. We have improved our business expansion and recruitment incentive program to be more competitive with other states' and we have seen significant business expansions.

In the last 5 years, we have realized success both in our economy and environment. But there is still much to do. Vermont has a great opportunity to build the Green Economy sector. It will take innovation and collaboration among public and private sector partners in order to achieve success.

WHAT IS THE GREEN ECONOMY?

The primary goal of Vermont's Green Economy strategy is adopted from a study conducted by the UCLA School of Public Affairs which is to *"transition from a net importer of green goods and services to a net exporter of green goods and services"*. (Source: *The Economic Development Potential of the Green Sector, UCLA School of Public Affairs*). We are well on our way toward reaching this goal, but we need to make sure that we have a course of action moving forward.

The "Green Economy" means different things to different people. A clear definition of the types of businesses that participate in the "Green Economy" space is necessary in directing scarce public and private resources toward growing the industry sector. (For a more detailed discussion of green economy companies, please refer to Appendix A) Vermont has limited resources and must focus its attention on components of the Green Economy that we can realistically grow in our state.

Toward that end ACCD defines a Green Economy business as one whose current activity is primarily research, design, engineering, development, manufacture or provision of services related to:

- Waste management and remediation systems, technologies, equipment and services, including, but not limited to waste collection, treatment, disposal, reduction, recycling, and remediation;
- Natural resource protection and management systems, technologies, equipment and services, including, but not limited to water and waste water, water purification and treatment, air pollution control and prevention, soil and groundwater protection, and hazardous waste;
- Energy conservation systems, technologies, equipment and services; or
- Non-fossil fuel energy systems, technologies, equipment and services, including, but not limited to solar, wind, wave, hydro, thermal, hydrogen, fuel cells, landfill gas, waste to energy, and biomass.

HOW VERMONT SUPPORTS THE GREEN ECONOMY

Vermont is uniquely poised to be a leader in the Green Economy industry sector. Our reputation for being environmentally responsible; our commitment to clean air and water and other strengths of the Vermont brand have made it possible to be a leader and promote this industry.

Vermont has done very well at advancing its Green Economy. Not only have we seen growth in the industry in the state, there are now numerous cases of our services and expertise being applied worldwide. For example, Efficiency Vermont is now offering their consulting services in other countries. And a homegrown Vermont company, Northern Power Systems, is installing energy solutions in all corners of our planet. We have welcomed BioCardel to our business community – a processor of biofuels that is on the cutting edge of its industry - and we have helped farmers offset energy costs by providing financing assistance for methane digesters. Other renewable energy companies such as Draker Labs have found that Vermont is a good place to grow their business; and one of the largest engineering firms in the world, URS, has opened an office in Rutland in part due to Vermont's focus on the environmental engineering industry.

To support the growth of Green Economy businesses, Vermont has built an infrastructure in the form of public programs and public/private partnerships focused on this industry.

Toward that end we recognized the need to focus on the key policy and program infrastructure elements that were needed such as a private sector trade association partner, incubator capacity, links with higher education, financing mechanisms, marketing programs, and incentives for green enterprise. A number of these program elements have been developed to provide a more comprehensive infrastructure that supports the growth of Green Economy companies:

PUBLIC-PRIVATE PARTNERSHIPS

Vermont Environmental Consortium

The mission of the Vermont Environmental Consortium (VEC) is to promote and foster growth of green businesses, but also provide links between academia and other members of this industry. DED's support for VEC focused on the need to organize green economy companies into a trade association that can act as a partner with the State to advance the industry. The public/private partnership model allows the State to work through a central organization to grow the Green Economy sector in a more effective and efficient fashion. The VEC has over 75 members.

Vermont Sustainable Jobs Fund

The Vermont Sustainable Jobs Fund focuses on providing assistance to natural resource based companies and networks through technical expertise and grants. Much of their work is currently focused on small scale biofuel production facilities designed to reduce the energy costs in the farm and forest industry.

INCUBATION

Vermont Center for Emerging Technologies

Through direct appropriations and investments from the Vermont Community Development Program, \$350,000 of state funds have been committed to VCET to continue to assist start-up companies with growth plans and opportunities. While VCET has a broad technology focus it is available to support incubation of Green Economy businesses – a very necessary component of a comprehensive range of services and infrastructure the State can provide to the industry. VCET works with companies at their earliest stages and offers resources such as business planning assistance, access to specialized equipment and expertise to help them successfully grow.

Vermont Innovation Kitchens

The Governor recently announced a grant opportunity to advance the specialty food industry in Vermont. Through the Vermont Community Development Program, \$1 million will be available to two municipalities who create a sound plan to create a Vermont Innovation Kitchen – a commercial space to foster the growth of small specialty food companies. The growth of the specialty food industry in Vermont will create greater diversity in our agriculture sector thereby supporting the viability of Vermont’s farmers and maintain the rural character of the State.

FINANCING

Vermont Economic Development Authority

A key component of most business plans is capital formation. The Vermont Economic Development Authority (VEDA) is the State’s low-interest financing program for business. VEDA’s agricultural lending program, VACC, has made direct loans to farmers over the past several decades. Recently, VEDA has funded several on-farm methane digesters, which help lower a farm’s energy costs. Methane digesters are a growth area for financing under VACC and more farms that can viably support such digesters will be financed through the program. VEDA has played a critical role in helping farmers transition to organic practices and they have assisted many small specialty food companies, such as Jasper Hill and Olivia’s Croutons.

Beyond that, VEDA provides low-interest financing to companies including those participating in the Green Economy.

INCENTIVES

Vermont Economic Growth Incentives (VEGI) and “Green VEGI”

The VEGI program currently assists a broad spectrum of companies, including green businesses. The Administration proposes to augment the Vermont Employment Growth Incentive program to specifically encourage the growth of existing Green Economy companies and attract more of such businesses to the

State. This proposal will boost an existing economic development tool that provides a net positive revenue benefit to the state in order to grow this sector in Vermont. If a for-profit business that fits within our Green Economy definition is considering locating to or growing in Vermont, an updated VEGI calculation can greatly increase the available incentive. The business must still add new jobs and meet the normal approval criteria for the VEGI program to qualify for an incentive.

WORKFORCE DEVELOPMENT

Vermont Technical College Green Workforce Strategy

In late 2007, the Vermont Department of Labor and Vermont State Colleges held a roundtable with employers and industry leaders to determine whether there are specific training needs for green businesses. While the needs weren't that different from other sectors', it is important to examine cross-training issues that might arise.

TECHNICAL ASSISTANCE

Vermont Global Trade Partnership

Through the efforts of the Vermont Global Trade Partnership, there has been participation in GLOBE and Americana, two trade shows that are focused on environmental technology. The State of Vermont, several of its partners and existing green businesses have attended these shows. Additionally, the VGTP keeps Vermont's environmental business community apprised of special trade rules, programs and seminars, as well as relevant data. Through international trade missions, Vermont is publicizing its green image and exploring emerging foreign markets for Vermont environmental products and services. In 2007, representatives from the Agency of Commerce and Department of Public Service participated in a trade mission to China to promote Vermont's energy efficiency initiatives and also hosted a Chinese delegation in Vermont. Also in 2007, VGTP supported UVM's in-bound mission from Chongqing of their EPA and environmental businesses.

Vermont Procurement and Technical Assistance Center (PTAC)

PTAC is one of the Department of Economic Development's premier programs. The PTAC staff can assist Vermont companies interested in accessing federal, state, local and institutional contacts. Their familiarity with federal contracting agencies and GSA practices enable them to provide technical assistance to a variety of industry sectors, including those in the green economy. They also work closely with companies who want to pursue research and development funds through the Small Business and Innovation Research program through the federal government. Companies like Triosyn have benefitted from this program.

Small Business Development Center and the Vermont Manufacturing Extension Center

The Vermont Small Business Development Center and the Vermont Manufacturing Extension Center both provide specialized technical assistance to companies and are available to assist Green Economy

companies in areas ranging from development of business plans to helping manufacturers optimally lay out their production floors.

STRATEGIC PARTNERSHIPS

Agency of Agriculture

One of the most critical partnerships to support the growth of the Green Economy is between the Agency of Commerce and Community Development and Agency of Agriculture. The team has collaborated on many occasions, specifically with respect to the Vermont Innovation Kitchens, the Dairy Task Force and methane digestion and energy projects. The Agency of Agriculture brings expertise in the form of technical knowledge, as well as excellent promotional skills. ACCD also has important Green Economy partnerships with other state agencies such as the Department of Public Service, the Agency of Natural Resources and Department of Labor.

University of Vermont

As Vermont's only research institution the University of Vermont plays an important role in developing innovative Green Economy Technologies and public policy initiatives. UVM is a major driver of the Green Economy sector and brings considerable capability and capacity to help this industry sector grow. UVM President Dan Fogel has committed the University and its resources to being a critical partner in supporting the broader Green Valley vision.

Regional Development Corporations

The RDCs are truly the front line of economic development for the state, and they have also helped advance the Green Economy sector through the facilitation of company expansions. Further, Regional Development Corporation leaders have been important voices in their communities as they work to institute more local strategies around the green economy.

STRATEGIC FOCUS – OPPORTUNITIES AND GOALS

GOAL: FOSTER THE GROWTH OF EXISTING GREEN ECONOMY BUSINESSES

The Department of Economic Development and the Regional Development Corporations have facilitated the expansion of several Green Economy business including GroSolar, ForesTrade and Clean Earth Technologies. This will remain a priority.

Activities

- **Inventory all of Vermont’s businesses that are directly or first degree indirectly engaged in the Green Economy.**
 - Estimated completion 6/30/08

- **Work closely with existing green businesses in Vermont to gauge what their specific needs are in terms of support for the industry.** For example, is there a universal need that these companies share, such as testing labs, etc.?
 - Estimated completion 9/30/08

- **Grow exports of Vermont’s green businesses**
 - Continue to support VGTP’s efforts to communicate opportunities, and provide technical assistance to Green Economy companies.
 - Ongoing

 - Through the VGTP, stay involved with the Eastern Trade Council to learn of additional programs and services for the industry.
 - Ongoing

 - Working with private sector partners, continue building Green Economy relationships in specific promising foreign markets such as China. This spring, there will be a delegation from the State of Vermont and UVM traveling to China.
 - Ongoing

 - Work with US Department of Commerce Foreign Commercial Service offices to identify emerging foreign markets and contracting opportunities for Green Economy exports.
 - Ongoing

- **Develop Innovative “Green Financing” Programs**

- Establish a Green Venture Network, or encourage the expansion of the mission of the Vermont Venture Network and/or VCET to specifically include a green business component to their mission. This would include offering tips and advice to start-up or growing green businesses seeking capital.

- Estimated completion 6/30/08

- Make presentations before the State Employees Retirement Board and the Vermont Teachers Retirement Board to encourage investments of 1% of funds under management to a fund that would support the Green Economy industry.

- Estimated completion 6/30/08

- Identify and develop new, innovative financing mechanisms for green businesses.

- ❖ **R&D Tax Credit for Green Economy companies:** Assess the viability of providing a state Research & Development Tax Credit that piggybacks on the federal credit. Determine the revenue impact and assess determine level of support such a credit would provide for more Vermont based R&D among Green Economy companies. Consider legislation.

- Estimated completion 6/30/09

GOAL: RECRUIT NEW GREEN ECONOMY BUSINESSES TO VERMONT

Since 2005, we have successfully attracted two ‘green economy’ businesses to Vermont: BioCardel and URS. We will continue to work to bring new investment to our state. The first step in that process is to develop the value proposition and message.

We will focus recruitment efforts on specific subsectors where we have existing strength/markets and where we have strategic advantage, including environmental engineering, methane digestion, solar energy and biofuels.

The Agency of Commerce and Community Development (ACCD) will lead in the implementation of a “green” marketing and promotion campaign to start as early as the Spring/Summer 2008 season. This concept was prompted by the increasing demand for “green” products, services, and technologies in markets that the state pursues – including our visitors, businesses, students, and workforce. As the Agency which houses the state’s Chief Marketing Officer and the departments responsible for marketing Vermont to both tourists and business, ACCD will play a lead role in forming this initiative; however it will include other state agencies and departments as well as state partner organizations and private industry.

The vision for the green campaign is to identify a consistent message and possibly a graphic element that would be used by all participating state agencies, departments, and other partners. This message and/or graphic would tag programs, marketing materials, events, products, or other types of external-facing activity. Other elements and ideas for the campaign are still being discussed.

Activities

- **Dedicate greater resources to special recruiting events in this sector including continued participation in leading environmental trade shows such as GLOBE and AMERICANA.** The State will lead these events and invite participants to share booth space and marketing material. We currently participate in one trade show per year.
 - An additional show will be identified by 6/30/08 with participation planned for FY 2009.

- **Develop specific lists of companies to lure to Vermont and conduct thorough follow-up**
 - Estimated completion 6/30/08
 - Target existing Vermont companies’ customers and supply chain;
 - Estimated completion 9/30/08
 - Target industry leaders who would benefit from having headquarters in Vermont;
 - Estimated completion 9/30/08.

- **Establish partnerships through VDTM with promotional entities, such as VSAA, the Burlington International Airport and others to convey the message that Vermont is a great place not only to visit, but also to grow your green business**

- Estimated completion 6/30/08

- Put banners in lift lines at ski areas for the 08-09 season.
- Put promotional material at Welcome Centers, Airport and lodging establishments

- Estimated completion 6/30/08

GOAL: NEW EMPLOYEE ATTRACTION AND SKILLS TRAINING

Activities

- **Create special opportunities for Green Economy companies through the Vermont Training Program .** Allow eligible companies to be reimbursed up to 75% of training costs, rather than the regular 50%.
- **Through our partners at the Department of Labor, work with existing organizations such as Vermont Works for Women to develop training programs that will help transition individuals into the Green Economy**
 - Ongoing
- **Continue to support PursueVT efforts in relevant Green Economy and related disciplines to attract former Vermonters to return to their home state to work in or build businesses in the Green Economy sector.**
 - Ongoing
- **Work with public and private partnering organizations to educate our 6-16 population on job and career opportunities in the Green Economy sector.**
 - Estimated Completion - 2008-2009 School Year
- **Organize a *Green Workforce Training Needs Roundtable* that builds upon the work of the Sustainability Forum organized by VDOL and VTC**
 - Estimated Completion – Summer - Fall 2008
- **Collaborate with VDOL and AGC in developing programs to help cross-train existing employees in construction trades and provide them with skills to do such work as solar panel installation, etc.**
 - Estimated Completion – Summer - Winter 2008

Appendix A

There can be wide disagreement on what constitutes the Green Valley, the Green Economy and Green Enterprise.

For the purposes of focusing resources on activities that will generate more businesses providing environmental products and services, we have chosen to define Green Economy businesses as the providers of goods and services into the market place as opposed to individuals or companies that practice being “green.”

For example, a company that manufactures groundwater pumps to clean up petroleum spills would be a Green Economy company. In contrast, a company that buys and employs a groundwater pump to clean up a chemical spill on their property would be utilizing a Green Economy product but would not be considered a Green Economy company.

There are many instances where “green” activities could be sited as being part of the overall Green Valley philosophy. From the perspective of deploying scarce resources to build businesses in Vermont we have had to more narrowly define what constitutes a Green Economy company.

VERMONT'S MESSAGE FOR ENVIRONMENTAL BUSINESSES

Vermont's Green Valley: Setting new standards for environmental solutions.

For decades, Vermont has been growing businesses that are worldwide leaders in new technology, clean energy, and environmental stewardship. Growing the environmental sector is a major priority for Vermont's business and civic leaders. This is evident in our nearly 100 environmental businesses and our numerous public and private programs aimed at finding solutions for global environmental problems.

Vermont. Where Green business is growing. –

Our commitment to the environment runs deep in our history and is part of our culture, which makes environmental technologies and services an important part of Vermont's future. Imagine your business here:

- **Skilled workers who understand the value of what you're doing**

From waste-water remediation to micro-hydro generation, our talented innovators are tackling some of the world's big environmental problems. We have a deep and loyal talent pool - skilled production laborers and talented engineers, with innovative thinking honed at organizations like IBM, thrive in our climate of innovation and entrepreneurship.

- **Access to researchers leading the nation - and the world**

With our passion for education and learning - demonstrated by our 25 excellent colleges and universities - Vermont is home to researchers tackling just about every environmental issue. The University of Vermont's status as a leading environmental and academic research center places it squarely in the forefront on environmental issues. Middlebury College is actively moving to become a carbon-neutral campus, breaking new ground with its use of biodiesel. And we've developed technology incubators to move ideas forward: from the Vermont Center for Emerging Technologies to the Bennington Microtechnology Center, the state is focused on turning great ideas into business reality.

- **Government, colleagues and peers who support your efforts**

From carbon-offset leader Native Energy to toxin-free household products champion Seventh Generation, Vermont businesses have a deep and practiced understanding of sustainable and responsible business. The business world looks to Vermont for best practices - and our policy makers and entrepreneurs are ready and willing to share ideas, resources, and connections.

Join your peers in environmental leadership - and find your place in the Green Mountains. See firsthand how innovative environmental policies, products, and practices become the standard for businesses, communities, and a state.

Setting the Standard for “Green”

The Department of Tourism and Marketing is taking the initial step with defining the current and historic attributes that define Vermont’s green culture, heritage, and business environment. Both Commissioner Hyde and Deputy Cook have met with Todd Comen of Johnson State College who is a consultant for sustainable development in fragile communities. An outside consultant such as Mr. Comen would assist in the following initiatives.

Collect an inventory of Vermont’s existing “green” programs, attributes, and initiatives. Define Vermont as a “green” state.

- Develop criteria for ongoing promotion of Vermont as a “green” state.
- Seek opportunities for cross promotion with other State organizations and non State industries and businesses.

Potential Participants

The ACCD anticipates drawing active promotional partnerships into this program. The Department of Tourism & Marketing, Department of Economic Development, and the Chief Marketing Officer have been discussing this concept together and with state agencies and partners to gather input and get feedback on interest.

The Department of Economic Development has worked closely with the Chief Marketing Officer to develop marketing messages (See Appendix B) and materials (See Appendix C) focused on attracting businesses in the environmental industry. These will be completed by March 2008 for use at GLOBE 2008, the 10th Biennial Trade Fair and Conference on Business and the Environment.

Commissioner Hyde and Deputy Commissioner Cook of the Department of Tourism & Marketing have been actively meeting with groups within state government and the private sector. This includes:

- Department of Environmental Conservation - discussed collaborative marketing with Vermont’s Green Hotels Program, which has been in place for 10 years.
- Vermont Chamber of Commerce - expressed an interest in similar messaging.
- Travel Recreation Council (TRC) - has been briefed and totally supports the direction we are proposing.
- Commission on the Future of State Parks - conceptually proposed focusing on a “Vermont Green” concept; we were encouraged by a diverse audience to pursue this initiative.
- Agency of Agriculture, Food & Markets – discussed a natural link for the Buy Local campaign along with Vermont Fresh Network, Specialty Foods, and farmers markets.
- The Windham Foundation in Grafton - is interested in hosting and facilitating meetings and seminars to move the Green project forward.

- The Vermont Convention Bureau - is excited to refocus their marketing efforts to capitalize on the “green” concept.

Our Challenges

The challenge of this project is to ensure that Vermont is portraying itself with an honest representation of the state’s environmental focus and can highlight strong advantages over the competition. Green marketing has become common practice in both manufacturing and tourism development all over the globe. Many states and regions are positioning themselves to capture this market and they too offer a desirable quality of life.

In the marketplace, organizations and businesses that are not forthright in their green advertising are often accused of “Greenwashing” or being untruthful with their message. It is imperative that before Vermont moves ahead with a program such as this, we must ensure that we have an honest and open message that is transparent, authentic, and genuine and one that can be proven accurate through Vermont’s practices