

# **Green Mountain Energy Company**

## **1 9 9 9 C E R E S R E P O R T**



**Green Mountain Energy<sup>SM</sup>**

In April 1999, Green Mountain Energy Company endorsed the CERES principles. Our endorsement publicly affirms our belief that we have a responsibility for the environment and must conduct all aspects of our business as responsible stewards of the Earth. We believe that we have to find ways to operate that do not compromise the ability of future generations to sustain themselves.

By our endorsement, we also made a commitment to conduct an annual self-evaluation of our progress in implementing the CERES Principles. This report provides information from our 1999 operating year. On occasion, information from previous years is included for comparison.

Unless otherwise indicated, the report covers the activities of Green Mountain Energy Company's corporate headquarters located in South Burlington, Vermont. We have smaller regional offices located in California and Pennsylvania. We plan to include activities of these smaller regional offices in our 2000 CERES Report.

This 1999 CERES Report uses the 1999 CERES Short Form as its primary format, while incorporating relevant industry-specific information requested by the 1999 CERES Electric and Gas Industries Report. Note: For the reader's convenience, the introductory paragraphs of each section, set in a single column, provide an overview of that section.

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# From the Chief Executive Officer

October 2000

Welcome to Green Mountain Energy Company's annual CERES report. We are pleased with the opportunity to share our company's environmental successes and challenges. "Environmental Stewardship" is a core value of Green Mountain Energy Company. It underpins our corporate mission: *to change the way power is made*—a mission we have embarked on to help make our air cleaner and our environment healthier, a mission that takes us on the path to a sustainable society.

This past year we took significant, albeit modest, steps to realize our mission. Working with various partners, we participated in the construction of three new renewable generation facilities to serve our customers. In addition, we broke ground on a fourth. We are particularly proud of these facilities. They are among the first renewable generation sources in the nation to be constructed as a direct result of deregulation of the electric industry. They serve as tangible evidence that customer choice can lead us to a clean energy future.

In addition, we improved the environmental quality of the power blends we sell to customers by introducing electricity from other *new* renewable generation facilities. Using energy from new renewable facilities means less air pollution and greenhouse gas emissions are produced than otherwise would occur if our customers continued to power their lives with traditional fossil-fired electricity generation.

Put simply, when electricity from new renewable plants goes onto the grid to meet customer demand, we decrease our reliance on electricity generated from traditional sources like coal, oil, and nuclear energy. Because of energy supplied from new renewable resources, Green Mountain Energy Company customers prevented 12,023 tons of carbon dioxide, 71 tons of sulfur dioxide, and 26 tons of nitrogen oxide pollution last year. In 2000, we expect to triple the pollution reduced by our customers' electricity use.

Electric generation continues to be the single largest source of industrial air pollution in the United States. Deregulation empowers consumers. It gives them the freedom to choose the generation sources that will serve them. As several observers have remarked, choosing renewable energy may be the single most powerful action an individual can take on behalf of the environment.

At Green Mountain Energy Company, we began with a dream to change the way power is made by stimulating the demand for environmentally preferable electricity. With the help of more than 100,000 customers, our dream is edging toward a reality.

*Dennis Kelly*

*Chief Executive Officer*

*Green Mountain Energy Company*

# From the Chief Environmental Officer

*October 2000*

In April 1999, Green Mountain endorsed the CERES principles. More than a recognition that we have a responsibility to the environment, the endorsement was a reaffirmation of our belief in *doing well by doing good*. Business can prosper while natural systems thrive. Just two years prior to our CERES endorsement, we embarked on a mission to change the way power is made. We set out to offer consumers a way to contribute to the creation of a sustainable society through the purchase of a necessary service. In short, environmental stewardship has never been simply an adjunct to our business. Rather, environmental stewardship is the core reason we are *in business*.

Electricity generation is the largest source of industrial air pollution in the United States. Nationally, it is responsible for 67% of sulfur dioxide emissions, 25% of nitrogen oxide emissions, 40% of carbon dioxide emissions, and 33% of mercury emissions. These air pollutants damage environmental and human health. Green Mountain Energy Company provides a practical response to these problems—made possible through the state-by-state deregulation of the electricity industry.

We offer Green Mountain Energy<sup>sm</sup>, electricity for residential customers that features renewable resources like wind, water, landfill gas, and geothermal. In addition, we offer electricity from natural gas, which is a cleaner burning fossil fuel than coal or oil. Green Mountain Energy<sup>sm</sup> is currently available to customers in California, New Jersey, and Pennsylvania—the three states that have effectively opened their residential markets to competition. When families exercise their choice and elect to have Green Mountain Energy Company serve their electricity needs, they take control of the type of generation that is put onto the power grid on their behalf.

As demonstrated throughout this report, Green Mountain Energy Company's commitment to stewardship is multifaceted. It is manifested in the design of our

energy products and our efforts to educate consumers about the environmental harm resulting from electricity generation. It is also present in our efforts to engage in daily business practices that promote a healthier planet.

Recently we have launched several initiatives to push our work forward. First, we have embraced an ambitious corporate goal to build demand among our customers to bring 1,000 MW of new renewable power online by the year 2010.

Secondly, we are currently mitigating 50% of our 1999 carbon dioxide emissions from corporate travel, on-site energy use, paper use, and employee commuting at our headquarters. Our mitigation takes the form of support for an ecological restoration project that will not only sequester carbon, but will also play a direct role in helping to restore and protect sensitive habitats.

Despite our progress made in assessing our environmental footprint, we have to engage our many business partners in getting them to better manage their use of natural resources.

The exercise of reviewing and assessing the company's environmental activities in light of the CERES principles is instructive. The great virtue of the CERES report is that it has highlighted for us areas in which we have experienced success, as well as areas where we need to be more focused and energetic. As Green Mountain Energy Company's chief environmental steward, I look forward to engaging my colleagues in realizing our CERES commitments. We believe the principles are the guideposts in our journey toward becoming a truly sustainable enterprise.

*Thomas H. Rawls*  
*Chief Environmental Officer*  
*Green Mountain Energy Company*

# Company Profile

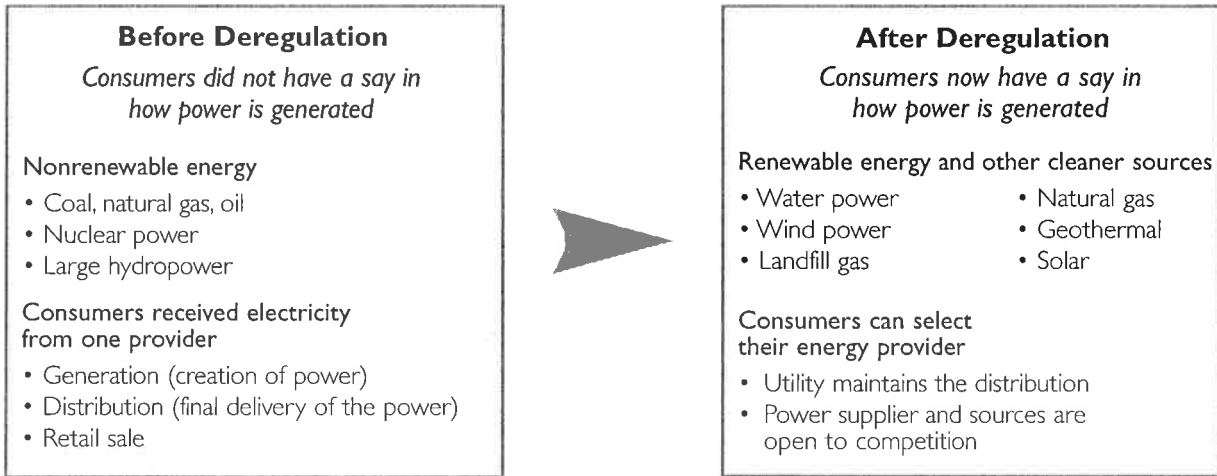
**G**reen Mountain Energy Company<sup>1</sup> is a retail marketer of Green Mountain Energy<sup>sm</sup>—an electricity service for residential customers featuring energy derived from renewable resources like wind, water, and geothermal. Green Mountain Energy<sup>sm</sup> is currently available to customers in California, New Jersey, and Pennsylvania—the three states that have effectively opened their residential electricity markets to competition.

Our corporate mission is to change the way power is made. We work to accomplish that mission by stimulating the demand for environmentally preferable electricity. By aggregating consumer demand for renewable energy, Green Mountain Energy Company encourages the construction of new renewable generation facilities. That's good for all of us, because as more energy from new renewable facilities is put on the power grid, we decrease reliance on electricity generated from traditional sources like coal and oil. Our nation's traditional reliance on those sources has made the generation of electricity the largest source of industrial air pollution in the United States.

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1. On August 1, 2000 we changed our name from Greenmountain.com to Green Mountain Energy Company.





In order to understand our business, it's necessary to be familiar with the effect that deregulation has had on the electric industry. The industry includes three basic functions: the production or generation of electricity, transmission and distribution of electricity, and retail sales to the end user. In the United States, regulated electric utilities have traditionally provided bundled electricity service that includes generation, transportation, and retail sales, within exclusive franchise service territories.

Passage of federal legislation in 1992 initiated measures to allow competition in the generation, wholesale, and retail sectors. In states that have deregulated, power generation and retail sectors have been separated from the distribution function. Green Mountain Energy Company operates as a retail marketer of energy, working with wholesale energy providers to provide electricity service to customers. We do not own transmission or distribution systems. Because of the inherent inefficiencies that would be involved in the

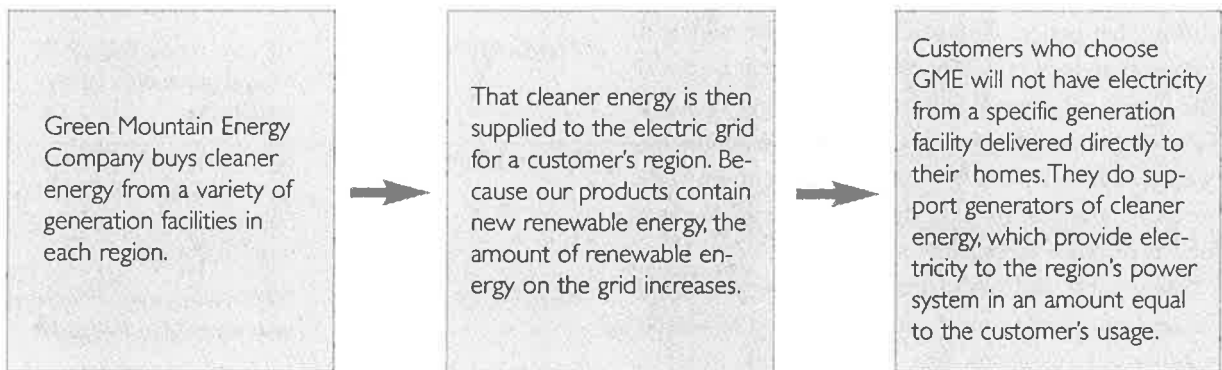
duplication of the "poles and wires" and other facilities required for the distribution of electricity, this function remains in the hands of utilities.

When customers choose Green Mountain Energy Company to provide their electricity, they have the ability to choose the type of generation that is put onto the power grid on their behalf.

In each region that we provide electric service, Green Mountain Energy Company offers several "power blends." Each blend differs in type of renewable content, amount of renewable content, and price.

Our line of power blends is dynamic, and we take the opportunity to improve these products from year to year. For example, after the first quarter of 1999 we discontinued new sales of our Water Power<sup>SM</sup> and 75% Renewable Power<sup>SM</sup> products, replacing them with an superior 100% Renewable Power<sup>SM</sup> product.

The tables on the following page show the power blends we offered to residential customers in California and Pennsylvania in 1999.



## Additional Products

In 1999, we initiated pilots of several additional products, including solar generation equipment, natural gas service, and a co-branded credit card.

Green Mountain Solar<sup>sm</sup> systems were made available in California and Pennsylvania. These systems typically allow individual homeowners to generate from 20% to 50% of their electric power from the sun. We offered five different Green Mountain Solar<sup>sm</sup> systems—three thin film and two polycrystalline. All Green Mountain Solar<sup>sm</sup> systems were designed and installed by Applied Power Corporation, one of the largest and most experienced solar electric systems integrators in the country.

In 1999, Pennsylvania passed legislation requiring the state's natural gas utilities to allow residential customers to choose their natural gas supplier. Late that year, we began offering Green Mountain Natural Gas<sup>sm</sup> to some of our residential electricity customers in western Pennsylvania.

Through our web site, we offer a First USA credit card that we co-branded with Visa. Under our agreement with First USA, we are paid a fee for each person who signs up for the credit card, plus a royalty on credit card purchases. We dedicate a portion of these royalties to the construction of solar generation facilities on school rooftops, through our Solar Powered Schools Program.

The power blend information provided in the tables above describes the purchases of Green Mountain Energy<sup>sm</sup> products over the course of a calendar year. For each calendar year or portion thereof that a customer purchases Green Mountain Energy<sup>sm</sup>, we will deliver to the grid enough power from our energy blend resources to match that customer's energy usage during that period. These deliveries will be subject to verification in accordance with the requirements of the Green-e Renewable Electricity Branding Program. Consistent with the Green-e program requirements, we may take up to four months at the beginning of the next calendar year to make up any deficiency in a particular resource included in a blend.

Renewable and hydroelectric resource availability varies from hour to hour and from season to season, as does our customers' use. At any specific time, we

## 1999 California Power Blends

### Products Marketed in First Quarter

<b>Water Power<sup>sm</sup></b>	100% Hydropower (a mixture of small- and large-scale hydro)
<b>75% Renewable Power<sup>sm</sup></b>	75% renewables (including small-scale hydro, biomass, and geothermal). Approximately 25% will come from large-scale hydro.
<b>Wind for the Future<sup>2.0sm</sup></b>	75% renewables and up to 25% coming from large-scale hydro. 10% of this blend will come from new wind turbines. For every 3,000 customers that sign up, a turbine will be built.

### Products Marketed in Second Quarter Through Year-End

<b>100% Renewable Power<sup>sm</sup></b>	100% renewables (including small-scale hydro, geothermal, landfill gas, and/or wind power, of which 5% will come from renewables)
<b>Wind for the Future<sup>2.0sm</sup></b>	100% renewables (75% from renewable sources such as small-scale hydro, geothermal, and/or landfill gas, and 25% from new wind turbines)

## 1999 Pennsylvania Power Blends

<b>Eco Smart<sup>sm</sup></b>	1% new renewables; 99% natural gas and/or large-scale hydro
<b>Enviro Blend<sup>sm</sup></b>	50% renewables (3% from new renewable facilities; 50% natural gas and/or large-scale hydro)
<b>Nature's Choice<sup>sm</sup></b>	100% renewables (5% from new renewable facilities)

will be putting more or less of these energy sources in to the grid than our customers use. We will put system power into the grid to serve our customers' minute-by-minute consumption but will always match our customers' annual electricity use by delivering our energy blend resources into the grid. At all times our customers' electricity needs will be served.

In California, "new renewable resources" means that these facilities began commercial operations on or after January 1, 1997. In Pennsylvania, "new renewable resources" means that these facilities began commercial operation on or after January 1, 1998.

## Fast Facts about Green Mountain Energy Company

- As of December 1999, we had 83 employees nationwide. At that point, we had three full-time personnel specifically assigned to environmental management. In addition, given the nature of Green Mountain Energy Company's business, every employee spends time on environmental matters in the course of his or her responsibilities.
- Revenues for our 1999 operating year were in the range of \$25 to \$50 million dollars. That year, more than 99% of our revenues come from the sale of our electricity products in Pennsylvania and California.
- The table above illustrates Green Mountain Energy Company's approximate percent of total revenues represented by each industry sector.

## Significant Changes in Company Structure over the Past Five Years

### 1997

- Green Mountain Energy Resources, L.L.C. begins operations under an agreement between Green Mountain Resources, Inc. (a Green Mountain Power Corporation affiliate) and Green Funding I, an investment vehicle managed by the Sam Wyly family.

## Sales and Revenue by Sector

Sector	Measure of Scale*	Amount	Revenue
Electricity	Total residential customers served as of Dec. 30, 1999	107,533	>99%
Natural gas	Pilot program residential customers sign-ups as of Dec. 30, 1999	460	<1%

\*The 1999 CERES Electric and Gas Industries Report suggests, utilities provide sales information in terms of total MWh sold and MWh peak demand. As a privately held nonutility operating in competitive retail markets, Green Mountain Energy Company regards that information as confidential. Therefore, the company is reporting its total 1999 sales in terms of residential customers served.

- Green Funding I commits an additional capital in exchange for an additional equity interest.

### 1998

- Green Mountain Energy Resources, L.L.C. begins service to its first electricity customer in California.
- Green Funding I commits an additional capital in exchange for an additional equity interest, raising their total equity interest
- Green Mountain Energy Resources, L.L.C. purchases the remaining equity interest held by the Green Mountain Power affiliate.

### 1999

- Green Mountain Energy Resources, L.L.C. begins service to electricity customers in Pennsylvania.
- Green Mountain Energy Resources, L.L.C. pursues an initial public offering.
- Green Mountain Energy Resources, L.L.C. becomes GreenMountain.com Company.
- GreenMountain.com postpones its initial public offering for an indeterminate period.
- GreenMountain.com serves its one hundred thousandth customer.

# Environmental Policies, Organization, and Management

**T**he transition to renewable sources of energy is critical to creating a sustainable economy. Current fossil-based technologies perpetuate reliance on finite resources and produce environmental insults whose long-term consequences compromise both major ecosystems and the ability of future generations to meet their own needs.

By giving people the opportunity to choose Green Mountain Energy<sup>sm</sup>—power made from cleaner and renewable sources—informed and environmentally conscious consumers can be agents of change for a cleaner and healthier planet. By aggregating customer demand for the development of new renewable facilities, Green Mountain Energy Company works directly to change the way power is made. Our efforts in 1999 have led to the development of four new renewable facilities, located in California and Pennsylvania. (See chart “Green Mountain Energy Company’s New Renewable Projects on page 17.)

The principle of sustainability also compels us to engage in environmentally sound business practices every day. To that end, we have developed policies, as well as organization and management structures, to govern our daily practices. We have also launched initiatives to educate our employees on environmental issues.

## Air Impacts of Conventional Electricity Generation

<i>Pollutant</i>	<i>Percentage of All Air Emissions Released Each Year in the U.S.</i>	<i>Environmental Effect of Pollutant</i>
Sulfur dioxide <sup>1</sup>	67%	Contributes to acid rain, asthma, and respiratory illness and aggravates existing cardiovascular disease
Nitrogen oxides <sup>2</sup>	25%	Contributes to acid rain, smog, asthma, and respiratory illness
Carbon dioxide <sup>3</sup>	40%	Greenhouse gas that contributes to global warming
Mercury <sup>4</sup>	33%	Heavy metal that builds up in human tissue can damage human and animal nervous systems
Particulate matter (PM <sub>10</sub> ) <sup>5</sup>	8%	Contributes to respiratory illness

1. EPA, 1998 National Air Pollutant Emission Trends, 1900–1998.

2. EPA, 1998 National Air Pollutant Emission Trends, 1900–1998.

3. EIA and EPA, Carbon Dioxide Emission from the Generate of Electric Power in the United States, Oct. 15, 1999.

4. EPA, 1997 Mercury Study Report to Congress.

5. EPA, 1998 National Air Pollutant Emission Trends, 1900–1998.

### A Cleaner Energy Future Is Critical to Sustainability

Sustainability has been defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. For Green Mountain Energy Company, sustainability primarily means changing the way that power is made—facilitating a transition from fossil fuels to renewable resources.

It is estimated that reserves of natural gas and coal are sufficient to last well past the end of the twenty-first century. However, the continued use of fossil-based generation is ultimately unsustainable. Electricity generation is currently the largest industrial source of air pollution in the United States. Most of our nation's (51%) electricity comes from the combustion of coal. Nuclear power (20%) is the second leading source of electric generation nationally. What's worse, current environmental insults from these methods of generation are damaging our environment and human health and creating long-term risks for tomorrow.

### Environmental Risks of Electricity Generation

Environmental insults from traditional electricity generation underscore the need for a transition to renewable technologies in electricity generation.

**Environmental Consequences of Mining.** Consider that over half the electricity produced in the United States is generated from the combustion of coal. Even prior to combustion, the use of coal has extreme consequences on our nation's natural resources. According to the Renewable Energy Policy Project, since 1930, coal mining has disturbed about 2.4 million hectares of American land. In fact, coal mines supplying today's electric power plants currently disturb 680,000 hectares of land. Furthermore, coal mining accounts for 95% of acidic mine drainage. Air pollution resulting from traditional electricity generation has also been linked to several environmental problems, including acid rain and global climate change.

**Acid Rain.** Acid rain threatens sensitive forests and bodies of water, as well as species that rely on these areas for habitat. It is formed when nitrogen oxides and sulfur dioxide, partly the result of emissions from electric power plants, react in the atmosphere with water vapor to form acidic compounds. A portion of these acidic compounds mix with precipitation and fall to the ground in the form of acidic precipitation. The rest fall directly to the earth as dry gases or in combination with dust particles. Certain ecosystems are particularly vulnerable to acidification, because of the underlying soils' inability to effectively neutralize these acids. For instance, many regions in the United States are identified as having bodies of water particularly susceptible to acid rain. These regions include the Adirondacks, the mid-Appalachian highlands, the upper Midwest, and the high elevation West.

Acid rain has the potential to damage aquatic ecosystems. In fact, in some of lakes and streams, acidification has completely extirpated sensitive fish species. In the Adirondacks alone, the EPA has identified hundreds of lakes that have chemical conditions unsuitable for the survival of sensitive species. An even greater number lakes and streams are not chronically acidic, yet they experience intermittent drops in pH after snowmelt or heavy downpours. The temporary acidification of these bodies of water can cause large "fish kills" in sensitive species. According to the EPA, if acidic deposition levels were to remain constant over the next 50 years, the acidification rate of lakes larger than 10 acres would rise by 50% or more.

Acid rain has also been linked to forest degradation, particularly in high-elevation spruce trees along the ridges of the Appalachian Mountains from Maine to Georgia. Acidic precipitation typically weakens trees by damaging leaves, stripping away vital plant nutrients in the soil, and causing toxic metals to leach out of the soil. Once trees are weakened, they are at higher risk of disease and less able to withstand cold weather. There are indications that long-term changes in the chemistry of sensitive soils have already occurred, posing a potential threat to future forest health.

**Global Warming.** Though not a regulated pollutant, emissions of carbon dioxide and other greenhouse gases like methane, nitrous oxide, and chlorofluorocarbons are the focus of international concern. Scientists believe that human-induced emissions of greenhouse gases are upsetting the earth's natural balance of greenhouse gases and altering global climate.

Normally, when the sun's energy reaches the earth, a portion of the energy is prevented from reflecting off the earth by a natural barrier made of water vapor, carbon dioxide, and other gases (collectively known as greenhouse gases). This natural greenhouse effect is not a bad thing. Rather, it a natural phenomenon that contributes to our planet's ability to sustain life. Prior to the industrial revolution, the level of CO<sub>2</sub> in the atmosphere was fairly constant—the result of a balance between CO<sub>2</sub> given off by the decay of organic matter and CO<sub>2</sub> absorbed by vegetation.

Human activities over the past few hundred years are increasing the concentrations of greenhouse gases in the atmosphere. Since the industrial revolution, CO<sub>2</sub> levels have increased by 30%, methane concentrations have doubled, and nitrous oxide levels have increased by about 15%. In the United States, making electricity accounts for more than one-third of the carbon dioxide emissions each year. As a result of increased atmospheric greenhouse gas concentration, more of the sun's energy is being trapped in our atmosphere, raising global temperatures and threatening to alter our global climate. There are indications that our climate has already begun to change within the past century. According to the EPA, global mean surface temperatures have increased 0.6 to 1.2 degrees Fahrenheit, and the sea level has risen 4 to 10 inches over the past 100 years. Moreover, the 10 warmest years of the twentieth century all occurred within the past 15 years, 1998 being the warmest.

Global warming will likely accelerate in the future, as a result of further increases in atmospheric greenhouse gas concentration. All scenarios proposed by the Intergovernmental Panel on Climate Change suggest that atmospheric carbon dioxide concentrations will increase throughout the next century—perhaps even doubling by the year 2100. Scientists believe

that increased concentrations of greenhouse gases in the atmosphere could raise the earth's average temperature by 1.6 to 6.3 degrees Fahrenheit over the course of the next century. This in turn is expected to cause more severe weather patterns, increased precipitation, melting of the polar ice caps, and increased sea level. The disruptions to human settlements around the globe and the threat to natural ecosystems are potentially enormous.

## Green Mountain Energy Company's Focus

Green Mountain Energy Company offers customers the opportunity to purchase electricity produced by sources like water, wind, natural gas, and landfill methane. These sources of generation are cleaner than generic system power and pose none of the health and safety risks associated with nuclear generation. While no energy technology has zero environmental cost, renewable technologies pose less environmental risks than conventional sources.

Green Mountain Energy Company is committed to the supporting development of new renewable generation facilities. In 1999, three new renewables facilities were brought on line in California and Pennsylvania, specifically to serve our customers. These facilities were able to be financed and built because the company entered into long-term agreements with the facilities' owners to purchase the power these facilities produce.

- In celebration of Earth Day 1999, Green Mountain Energy Company, Sun Power Electric and BJ's Wholesale Club turned on the largest solar generation facility in Pennsylvania. Green Mountain and Sun Power Electric teamed up to install the 1,400 solar panels on the roof of BJ's Wholesale Club in Conshohocken, Pennsylvania.
- Through our Wind for the Future<sup>2.0sm</sup> product, three new wind turbines were constructed in San Geronio Pass, California. These new turbines were the first new renewable resources constructed as a direct result of customer choice in deregulated electricity markets.
- On October 19, 1999, Green Mountain Energy

Company announced the completion of the first solar power plant built in California as a result of customer choice. The plant, Solar Mendocino 2000, is owned and operated by GPU Solar, a joint venture between Astropower, Inc. and GPU International. Green Mountain Energy Company purchases the energy on behalf of our 100% Renewables<sup>sm</sup> customers.

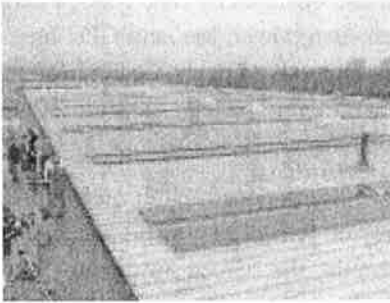
Late in 1999, we began construction on a fourth new renewable project. A 10.4 MW wind facility, the largest in Pennsylvania, the "Green Mountain Wind Farm" is located in southwestern Pennsylvania and is owned and operated by American National Wind Power and American National Power. The wind turbines began operating and putting power onto the grid in 2000. For more information about these facilities, refer to the table on the following page.

When electricity from new renewable plants goes onto the grid to meet customer demand, it decreases reliance on electricity generated from traditional sources like coal, oil, and nuclear. This transition to cleaner and renewable resources rather than from fossil fuels means less air pollution and greenhouse gases than otherwise would be produced. Section 5 of this report, "Product Stewardship," discusses the environmental impacts of Green Mountain Energy Company's products in greater detail.

## Environmental Responsibility in Business Practices

For Green Mountain Energy Company, sustainability includes making the effort to be an environmentally responsible business, engaging in daily business practices that promote a healthier planet and sustainable economy. To work toward this goal, we have: (1) articulated and implemented environmental policies and standards to guide many aspects of our internal business practices, (2) taken modest steps in educating employees on environmental matters, (3) continued to engage in external activities designed to share recent advances in environmental management and performance, (4) recently made improvements in organization for accountability in environmental performance, and (5) instituted a program to measure our corporate

## Green Mountain Energy Company's New Renewable Projects

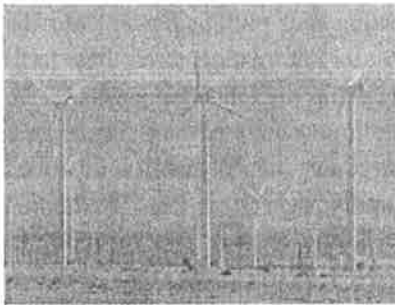


### BJ's Solar

- Located in Conshohocken, PA, it came on line on April 22, 1999.
- This facility produces 50 MWh/yr.

### Pollutants Avoided

- |                 |                 |
|-----------------|-----------------|
| SO <sub>2</sub> | 547 lbs/year    |
| NO <sub>x</sub> | 146 lbs/year    |
| CO <sub>2</sub> | 69,000 lbs/year |
- CO<sub>2</sub> equivalent of planting 4,694 trees
  - CO<sub>2</sub> equivalent of not driving 86,250 miles

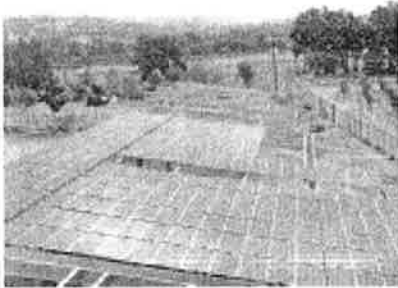


### San Geronio Wind Farm

- Located in Palm Springs, CA, it came on line on June 28, 1999.
- This facility produces 7,500 MWh/yr.

- |                 |                    |
|-----------------|--------------------|
| SO <sub>2</sub> | 4,500 lbs/year     |
| NO <sub>x</sub> | 14,250 lbs/year    |
| CO <sub>2</sub> | 6,088,500 lbs/year |

- CO<sub>2</sub> equivalent of planting 414,184 trees
- CO<sub>2</sub> equivalent of not driving 7,610,625 miles



### Solar 2000 "Real Goods"

- Located in Mendocino, CA, it came on line on September 28, 1999.
- This facility produces 160 MWh/yr.

- |                 |                  |
|-----------------|------------------|
| SO <sub>2</sub> | 96 lbs/year      |
| NO <sub>x</sub> | 304 lbs/year     |
| CO <sub>2</sub> | 129,888 lbs/year |

- CO<sub>2</sub> equivalent of planting 8,836 trees
- CO<sub>2</sub> equivalent of not driving 162,360 miles



### Green Mountain Wind Farm

- Located in Somerset County, PA, it is anticipated to come on line on June 1, 2000.
- This facility is expected to produce 25,000 MWh/yr.

- |                 |                    |
|-----------------|--------------------|
| SO <sub>2</sub> | 273,250 lbs/year   |
| NO <sub>x</sub> | 72,750 lbs/year    |
| CO <sub>2</sub> | 34,500,00 lbs/year |

- CO<sub>2</sub> equivalent of planting 2,346,939 trees
- CO<sub>2</sub> equivalent of not driving 43,125,000 miles



## Green Mountain Energy Company's Environmental Policies

<i>Policy</i>	<i>Issue Date</i>	<i>Latest Revision</i>	<i>Geographic Scope</i>	<i>Publicly Available</i>
CERES Principles	April 1999	April 1999	Companywide	Yes <sup>1</sup>
Green Mountain Paper Standard	December 1999	July 2000	Companywide	Yes <sup>1</sup>
Environmental Charter	Fall 1997	June 28, 1999	Companywide	Yes <sup>2,3</sup>
Green Mountain's Values	Fall 1997	Fall 1997	Companywide	Yes <sup>2</sup>
Recycling Policy	Fall 1997	February 1999	Companywide	Yes <sup>1</sup>

1. Available by contacting Green Mountain Energy Company's Environmental Affairs Department.

2. Available on Green Mountain Energy Company's website at: [http://www.greenmountain.com/about\\_greenmtn/mission\\_statement.asp](http://www.greenmountain.com/about_greenmtn/mission_statement.asp).

3. Available in this annual report.

environmental footprint in an effort to understand better the environmental consequences of our business operations.

### Environmental Policies

The table above outlines Green Mountain Energy Company's environmental policies and details surrounding those policies.

### Environmental Education and Employee Awareness

In 1999, we undertook several initiatives to educate our employees about the environment, the impacts of our business, and the ways that they can contribute toward our goal to be an environmentally responsible business.

- We conducted a three-day corporatewide staff retreat in Stowe, Vermont, at which local environmentalists and educators shared the experiences and knowledge with our employees. We kicked off the retreat with a presentation on the current and anticipated impacts of air pollution on the earth's biodiversity. In the days that followed, employees attended workshops whose topics ranged from Liv-

ing Technology's use of biological systems to treat waste, to Grassroots Environmental Fund's presentation on understanding the role and functions of small, local, environmental organizations.

- Our corporate intranet includes a range of environmental information including recycling policies and tips on reducing eco-impacts. The intranet is also home to an environmental orientation designed as a primer for new associates (as well as a refresher for current employees). The four-part orientation starts with an overview of Green Mountain Energy Company's environmental mission, vision, and environmental policies. It goes on to describe the current problems with electric generation, and Green Mountain Energy Company's solution. Its final part provides information on the corporate environmental management practices that we have in place at our corporate headquarters.
- Employees attend an environmental presentation given monthly at a companywide meeting. This presentation is intended to keep associates apprised of our company's environmental impacts. It provides an opportunity to communicate strategies to improve our internal environmental performance and receive suggestions for improved environmental performance.
- In addition to the above-described programs,



*Three-day corporatewide staff retreat in Stowe, Vermont.*

Green Mountain Energy Company offers its employees an 80% tuition reimbursement to encourage and support self-improvement and professional growth. Any employee, regardless of department, can receive reimbursement for environmental coursework. The company also provides opportunities for a number of its employees to attend environmental conferences and workshops conducted by organizations such as Business for Social Responsibility, World Resources Institute, the Environmental Protection Agency, and CERES.

### **Our Participation in External Activities**

Green Mountain Energy Company also participates in several external activities designed to share recent advances in environmental management and performance.

- We continue to be actively involved in discussions with Green-e Renewable Electricity Branding Program regarding the appropriate standards for certi-

fication of environmentally preferred electricity products in California, the Mid-Atlantic, and New England.

- We worked as a leader in developing criteria for low-impact hydropower, engaging American Rivers and others in the advocacy and hydropower community.
- We participated in activities sponsored by Coastal Rainforest Coalition and Business for Social Responsibility that focused on sourcing environmentally responsible forest products.

### **Our Environmental Management and Organization**

“Environmental Stewardship” is one of five Green Mountain Energy Company values that were formally adopted by the company. As an operational value, it applies to every employee in the company.

In our second full year of operation, we made many improvements in organization for accountability in environmental performance. In 1998,

accountability for environmental performance had rested solely on the company's environmental department, which was a single director-level position. In 1999, we created the position of vice president and chief environmental officer. Thomas H. Rawls serves in that position, reporting directly to our chief executive officer. We also staffed two environmental associates, each reporting directly to the chief environmental officer.

We instituted an Environmental Network Group, consisting of interregional and interdepartmental representatives. This group meets regularly to coordinate environmental efforts and facilitate communication on environmental matters throughout the organization.

- We have not begun to use environmental cost information to support our internal decision making. However, environmental considerations are inherent decision regarding environmentally preferred energy sources that we select, as well as internal business practices.
- Outstanding environmental performances of teams, operating units, and individuals is not formally recognized by our company. Rather, it is our ex-

pectation that employees will perform their jobs with an attention to our core value of environmental stewardship.

## Auditing

**Workplace Health and Safety.** Our efforts in workplace health, safety, and environmental auditing began in 1998 with our first on-site eco-assessment conducted by a consultant from CGH Environmental Strategies. Its scope was limited to Green Mountain Energy Company's corporate headquarters in Burlington, Vermont.

In 1999, we hired a full-time staff person who is responsible for the monthly tracking of many of our environmental impacts from our business practices. We monitor virgin fiber consumption, CO<sub>2</sub> emissions (from corporate air travel, employee commuting, paper use, and headquarters energy use), and waste stream. We normalize these environmental impacts by employee. We continue to rely on outside consultants for specialized matters like indoor air quality. Our 1999 environmental metrics are explained in greater detail in Sections 7 and 8 of this report.

# Workplace Health and Safety

**W**e do not own generation or energy distribution operations. Rather, we engage in the retail marketing of electricity. Consequently, the environmental health and safety considerations of our business operations are comparable to those of an office environment, rather than those of a traditional utility. Working with outside consultants, we've identified several components of workplace health and safety relevant to our office environment. To date, we've focused primarily on addressing ergonomics and indoor air quality.

Our earliest eco-assessment report, conducted in 1998, suggested that our efforts in workplace health and safety should be focused on four areas: ergonomics, indoor air quality, injury prevention, and employee exercise. We've taken the following initiatives in environmental health and safety:

- In 1998, we consulted with Physical Choice Therapy to assess office environment ergonomics. The consultant performed individual ergonomics evaluations and conducted an instructional session with employees that demonstrated simple stretching exercises designed to reduce stress and physical injury. We continue to make ergonomically designed office equipment available to our employees at their request.
- In 1999, we hired New England Air Quality Testing to perform an indoor air quality assessment of our corporate headquarters. The air space was screened for temperature, relative humidity, carbon monoxide, ozone, formaldehyde, and carbon dioxide. Results of the field-testing indicated that the air quality was well within workplace regulatory standards.

As part of our ongoing efforts in workplace health and safety, we contract for routine inspection and maintenance of our facility's ventilation and safety equipment by qualified third parties. This includes:

- Quarterly heating, ventilation, and air-conditioning inspections, with replacement of air filters

- Monthly inspection of fire extinguishers, semi-annual inspection of our facility's fire alarm system, and annual inspection of our sprinkler system

The following table summarizes our workplace safety performance from our inception in 1997 through 1999.

### **Work Safety Performance**

<i>Year</i>	<i>Number of Incidents</i>	<i>Description</i>	<i>Result</i>	<i>Incidents per Employee</i>
1997	1	Repetitive strain using computer	No time missed	.027
1998	1	Repetitive strain using computer	No time missed	.018
1999	4	Two instances of minor inadvertent contact while walking; broken thumb during company-sponsored offsite meeting; foreign object in eye during company-sponsored offsite meeting	No time missed	.048

# Community Participation and Accountability

**A**t Green Mountain Energy Company, we have the opportunity to engage *communities* in every sense of the word. Our customers are a community. Our company is a member of local communities, in the places where we are located and in the places where we sell our energy products. We are also a member of a broader community—the environmental community. Whether we are working to educate our customers on environmental issues through our Small Planet Press or contributing solar energy to local schools, we're proud of our community involvement.

com • mu • ni • ty *n., pl.* com • mu • nit • ties. *Abbr.* com.

- a. A group of people living in the same locality and under the same government.
- b. The district or locality in which such a group lives.
1. A group of people having common interests: *the scientific community; the international business community.*
  - a. Similarity or identity: a community of interests.
  - b. Sharing, participation, and fellowship.
2. Society as a whole; the public.
3. Ecology.
  - a. A group of plants and animals living and interacting with one another in a specific region under relatively similar environmental conditions.
  - b. The region occupied by a group of interacting organisms.

## Engaging Local Communities

Our environmental charter states, "Green Mountain Energy Company will be an educator, helping people to understand the environmental consequences of their energy choices and empowering people to choose clean electricity." Accordingly, we engage in community-oriented marketing activities designed both to inform the public that electricity generation is the number one industrial source of air pollution in this country and to emphasize that renewable energy offers a solution to the problem. In 1999, we participated in and sponsored several events:

- Over 1,500 Pennsylvanians joined Green Mountain Energy Company and American National Wind Power, as we hosted a Wind Dig Shindig to cele-

### Environmental Justice

According to Renewable Energy Policy Project's Special Earth Day Report, "the environment impacts of electricity production weigh most heavily on poor communities and communities of color:"

- Indian country holds one-third of the country's uranium and milling waste.
- At 20%, the poverty rate of communities located within one mile of coal-fired power plants is almost double that of the general population (11.3%). Such communities are 21.5% non-white, compared with 17% in the general population.
- Compared with families with incomes over \$35,000 per year, families with annual incomes below \$10,000 suffer more than twice the incidence (per thousand people) of asthma, making them much more susceptible to pollution-related illnesses.

Source: Serchuk, A., *The Environmental Imperative for Renewable Energy: An Update. Renewable Energy Policy Projects, April 2000. Web site: www.repp.org*

brate construction of our Green Mountain Wind Farm in Garrett, Pennsylvania. Educational events were held in The Academy of Natural Science in Philadelphia and Pittsburgh's Carnegie Science Center. Staff from Green Mountain Energy Company and ANWP were on hand to teach customers about wind technology and answer questions.

- We partnered with Clean Power Day '99 in San Francisco, California, to join others in educating consumers about the benefits of using renewable energy. The event was hosted by Renewable Energy Marketing Board, a collaborative effort by renewable generators, renewable marketers, and non-profit environmental organizations to inform electricity consumers about the benefits of renewable energy resources.
- We joined Health and Harmony Music & Arts Festival '99: Know Your Power for the New Millennium to bring music headliners and environmentalists to this two-day Santa Rosa, California event. Green Mountain Energy Company created an Eco-Village where festival-goers could play games, sign petitions for a cleaner environment, learn about renewable energy sources, and feast on ice-cream.
- Green Mountain Energy Company was a presenting sponsor of Solfest '99, hosted by the Real Goods Institute for Solar Living. The two-day festival took place in Hopland, California. It celebrated renewable energy and sustainable living by offering provocative speakers and more than 40 educational workshops on topics ranging from renewable technologies to social investing.

**Solar Powered Schools Program.** In March of 1999 we celebrated our first year in business by announcing the donation of solar electric systems to two Vermont high schools, as part of Vermont's contribution to the US Million Solar Roofs program. By September, Solar Works of Montpelier, Vermont, completed on our behalf the installation of the first photovoltaic system at the Cabot School, in Cabot, Vermont. We have identified a second high school in Vermont to receive a solar system.



Solar panel installation, Cabot School, Cabot, Vermont.

The panels help to provide a portion of the electricity needs for the school—enough to run ten computers four to five hours a day. They also serve as an educational tool for the important role that solar generation can play in reducing our dependence on fossil fuels. Over 3,000 pounds of carbon dioxide, 26 pounds of sulfur dioxide, and 9 pounds of nitrogen dioxide emissions are avoided annually because of the panels' annual generation.

“As a local business leader, Green Mountain has made a generous offering of two solar panels for our schools. The investment in our community is admirable and the education value of this donation will serve to further the Vermont belief in environmental preservation.”

—Vermont Governor Howard Dean

In 2000, we expanded our Solar Powered Schools Program to include California. The Solar Powered School Program is funded by direct donations from Green Mountain Energy Company, half of the profits from its branded VISA credit card, and a variety of other customer promotions.

**Employee Contribution Program.** Green Mountain Energy Company employees have the option to make

individual contributions to the United Way and/or Earth Share. Earth Share, a federation of America's leading nonprofit environmental and conservation organizations, works to safeguard human health and the environment. In 1999, 28% of employees participated in the Earthshare program, raising \$4,615.00. Approximately 20% participated in the United Way donation, raising a total of \$3,248.00

## Engaging the Environmental Community

Green Mountain Energy Company considers itself a member of a larger community that knows no geographic bounds—the environmental community. Accordingly, we seek direct involvement from the environmental community in making business decisions. At a national level, we've benefited from dialogue with members of our Environmental Advisory Board, our involvement with the Green-e Renewable Electricity Program, and our engagement with American Rivers. At primarily a local level, we've successfully worked with grassroots environmental organizations in our service areas through our affiliate marketing program.

**National Dialogue.** We've assembled an Environmental Advisory Board as a forum to receive expert advice on key environmental issues and to encourage dialogue between Green Mountain Energy Company and other members of the environmental community.

The Environmental Advisory Board convenes in full at our annual Environmental Advisory Board meeting. As the need arises, we also convene special meetings of the board. For example, in 1999 as we developed our Green Mountain Natural Gas Pilot Project, we consulted members of the Environmental Advisory Board to guide our product development.

Listed on the next page are the current members of our environmental advisory board. Each member of the board serves in an individual capacity and not as a representative of the organization with which he or she is affiliated.



*Green Mountain Energy Company  
Environmental Advisory Board*

**Ralph Cavanagh**

Natural Resource Defense Council,  
Co-Director, Energy Program

**Christopher Flavin**

Worldwatch Institute, Acting President

**Hunter Lovins**

Rocky Mountain Institute,  
Co-Chief Executive Officer

**Lewis Milford**

Clean Energy Group, President

**Elizabeth Cook**

World Resources Institute, Co-Director of Management Institute for Environment and Business

For more than a year, Green Mountain Energy Company worked with American Rivers to develop a comprehensive screening process to assess the environmental impacts of hydroelectric facilities. Rating criteria include fish passage, water flows, water quality, habitat protect, endangered species, mitigation for inundated lands, and recreation.

We've also been actively involved in the nation's first voluntary certification program for environmentally preferred electricity products—the Green-e Renewable Electricity Branding Program. Our participation in the Green-e program invites dialogue with interested stakeholders in several forums.

- As a nonvoting member of Green-e's Green Power Board, we have the opportunity to engage representatives of stakeholder groups that support the greater use of renewable resources, work for consumer protection, and promote improvement of the environment.
- Green-e's Stakeholder Groups in New England, the Mid-Atlantic, and California consist of representatives of local, state, and national environmental and renewable energy organizations. Through these groups, we work to make certain that the Green-e standards are credible and workable and consistent with broader public policies and programs.

## Environmental Affiliate Marketing

Green Mountain Energy Company has also built relationships with many different nonprofit environmental organizations through affinity-marketing campaigns. Typically, Green Mountain Energy Company provides a modest incentive payment to an affinity-marketing partner that encourages customers to sign up with Green Mountain Energy Company. Our affinity partners have ranged from small, local organizations, like the Homeless Garden Project, to large national environmental groups, like Defenders of Wildlife. We worked with several organizations in 1999, including:

- **Save our Shores.** This nonprofit organization located in Santa Cruz, California, works to defend the ecological integrity of the Monterey Bay National Marine Sanctuary through policy research, education, and citizen action.
- **Homeless Garden Project.** This nonprofit organization located in Santa Cruz, California, provides transitional employment and training to homeless people through work in an organic garden.
- **Redwood Alliance.** This community-based social and environmental organization primarily focuses on advocacy and education to promote safe and efficient energy use and development.
- **Clean Air Council.** This is one of the oldest and largest nonprofit environmental organizations in the Delaware Valley. The council is dedicated to protecting everyone's right to breathe clean air.

We have plans to expand our relationship with nonprofit environmental organizations through the formation of an Environmental Alliance Program. This program will support our efforts to develop relationships with environmental organizations that share in our corporate mission "to change the way power is made" and that are working to find market-based solutions to environmental problems. Through the program, we hope to support worthy environmental causes and provide a means for greater employee involvement with participating nonprofit environmental organizations.

# Product Stewardship

**G**reen Mountain Energy Company demonstrates a commitment to product stewardship throughout the life cycle of its energy products, from generation to end-use. Our business is premised on the resale of energy generated from cleaner and renewable resources. We use environmentally preferable paper for our marketing activities and encourage our customers to be energy efficient.

Because of energy supplied from new renewable resources, Green Mountain Energy Company customers prevented 12,023 tons of carbon dioxide, 71 tons of sulfur dioxide, and 26 tons of nitrogen oxide pollution last year.

Green Mountain has also begun to develop standards to guide the selection of nonenergy products that we offer to our customers.

As a marketer of energy products, the traditional stages of product development (manufacturing, packaging, consumer use, and disposal) are not easily applied to our business. Nevertheless, we bear in mind the environmental impacts of our activities throughout the life cycle of our products. As we select generation sources to serve our customers, we consider the fuel source, as well as the potential for waste and pollution from generation. While we don't use packaging

per se, we do use extensive direct-mail marketing to promote our products. We've taken steps to reduce the environmental impacts of those activities by using recycled paper containing high postconsumer waste fiber content and soy-based inks. We've made modest initiatives to address our customer's use of our energy products by educating our customers about energy efficiency.

## Product Design Considerations

	Generation	Marketing	Consumer Use
Materials use	X	X	
Energy use			X
Hazardous materials in product			
Generation of waste	X	X	
Other pollution	X		

## Generation Source

We stake our reputation on the environmental soundness of our products. Through our Environmental Charter, we have formally committed ourselves to offering only electricity products that are cleaner than the current energy mix serving that region.

In 1999, two of our three electricity products offered to customers in Pennsylvania and both of our electricity products offered to new customers in California were certified by the Green-e Renewable Electricity Program. The Green-e Renewable Electricity Program was developed by the Center for Resource Solutions (CRS) as part of its mission to preserve and protect the environment by promoting sustainable energy technologies. Working with environmentalists, consumer advocates, and renewable energy experts, CRS formed Green-e to provide a simple way for the public to understand the benefits of renewable electricity and to establish confidence by certifying renewable power from credible companies. Green-e also ensures that retail suppliers of Green-e certified electricity actually deliver the renewable energy promised to their customers. Under the program, annual independent audits of the delivery of certified products are conducted.

In order for an electricity product to be certified by Green-e, it must satisfy the following criteria:

- At least 50% of the product must come from specified renewable sources.
- Emissions of sulfur dioxide and carbon dioxide from the nonrenewable generation component of the product must not exceed average emissions rates of fossil fuel power that is otherwise available in the electricity distribution system and the total fossil fuel emissions of the product must not exceed the average emissions rate of power that is otherwise available in the electricity distribution system.
- One year after deregulation, the product must contain at least 5% "new renewable" electricity. This requirement increases to 10% the next year.
- The product does not include nuclear power other than what is contained in any system power purchased for this product.
- The product must be offered by a company committed to following the Green-e Code of Conduct on ethical treatment of customers, including the use of simple contracts and disclosure labels.

For more information on Green-e, go to [www.green-e.org](http://www.green-e.org) or call 1-800-63-GREEN.

Recently, a new tool to evaluate electricity products has been made available on the Internet. Developed by representatives of leading environmental organizations, it can be found at [www.powerscorecard.org](http://www.powerscorecard.org).

## Engaging Customers in Energy Efficiency

Our efforts at energy efficiency are directed at ensuring our customers' wise use of our energy products. Our environmental charter states, "Green Mountain Energy Company will encourage individual consumers and corporations to use energy resources wisely and efficiently."

Our efforts to date in demand-side management have been modest, and at this point, our rate structure does not promote reduced consumption. We have identified customer energy efficiency as an opportunity for future improvement. To date, we have presented information through our web site and Small Planet Press designed to educate our customers on how they can become more energy efficient. We also worked with the Natural Resources Defense Council (NRDC) to develop an NRDC consumer action guide entitled, "What You Can Do to Save Energy and Our Environment." This publication was distributed free-of-charge to customers in our pilot program for Green Mountain Natural Gas.

## Our Products' Environmental Impacts

Our power blends contain renewable energy from facilities that were operational before deregulation, as

well as "new renewables"—energy from renewable generation facilities that come on line after a state deregulates.

The energy purchases we make on behalf of our customers from renewable facilities that were on line prior to deregulation facilities might not immediately reduce fossil fuel use or improve air quality. However, these purchases do demonstrate customer demand for these cleaner technologies.

In 1998, none of the products we offered had new renewable content. They supplied energy only from facilities that existed prior to deregulation. However, that year we spurred customer demand that led to the construction of three new turbines to serve our California customers through our Wind for the Future<sup>2.0sm</sup> product. Each turbine displaces approximately 1,000 tons of CO<sub>2</sub> per year—about the same amount of CO<sub>2</sub> emitted by a car driven 2.45 million miles.

All our power blends now include a portion of new renewables, and we encourage our customers to purchase a blend with the highest new renewable content. By supporting new renewables, customers

### Product CO<sub>2</sub> Emissions and CO<sub>2</sub> Emissions Avoided from 1999 Products

State	Power Blend	% New Renewable	Total CO <sub>2</sub> Emissions (Tons)		CO <sub>2</sub> Emissions Avoided Through New Renewable Content (Tons)		
			Using GME	From generic system power	From GME renewable facilities	From generic new renewables	From all new renewable facilities
CA	Water Power <sup>sm</sup>	0%					
	75% Renewable <sup>sm</sup>	0%					
	100% Renewable <sup>sm</sup>	5%					
	Wind for the Future <sup>sm</sup>	10%	0	68,348	1,322	1,013	2,335
	Wind for the Future <sup>2.0sm</sup>	25%					
PA	Eco-Smart <sup>sm</sup>	1%					
	Enviro Blend <sup>sm</sup>	3%	141,934	300,366	0	8,676	8,676
	Nature's Choice <sup>sm</sup>	5%					
<b>Total*</b>			<b>141,934</b>	<b>368,714</b>	<b>1,322</b>	<b>9,689</b>	<b>11,011</b>

\*Due to rounding, individual columns might not add to total amount.

### Product SO<sub>2</sub> Emissions and SO<sub>2</sub> Emissions Avoided from 1999 Products

State	Power Blend	% New Renewable	Total SO <sub>2</sub> Emissions (Tons)		SO <sub>2</sub> Emissions Avoided Through New Renewable Content (Tons)		
			Using GME	From generic system power	From GME renewable facilities	From generic new renewables	From all new renewable facilities
CA	Water Power <sup>sm</sup>	0%	0	51	1	1	2
	75% Renewable <sup>sm</sup>	0%					
	100% Renewable <sup>sm</sup>	5%					
	Wind for the Future <sup>sm</sup>	10%					
	Wind for the Future <sup>2.0sm</sup>	25%					
PA	Eco-Smart <sup>sm</sup>	1%	0	2,379	0	69	69
	Enviro Blend <sup>sm</sup>	3%					
	Nature's Choice <sup>sm</sup>	5%					
<b>Total*</b>			<b>0</b>	<b>2,430</b>	<b>1</b>	<b>70</b>	<b>71</b>

\*Due to rounding, individual columns might not add to total amount.

### Product NO<sub>x</sub> Emissions and NO<sub>x</sub> Emissions Avoided from 1999 Products

State	Power Blend	% New Renewable	Total NO <sub>x</sub> Emissions (Tons)		NO <sub>x</sub> Emissions Avoided Through New Renewable Content (Tons)		
			Using GME	From generic system power	From GME renewable facilities	From generic new renewables	From all new renewable facilities
CA	Water Power <sup>sm</sup>	0%	9	160	3	2	5
	75% Renewable <sup>sm</sup>	0%					
	100% Renewable <sup>sm</sup>	5%					
	Wind for the Future <sup>sm</sup>	10%					
	Wind for the Future <sup>2.0sm</sup>	25%					
PA	Eco-Smart <sup>sm</sup>	1%	420	633	0	18	18
	Enviro Blend <sup>sm</sup>	3%					
	Nature's Choice <sup>sm</sup>	5%					
<b>Total*</b>			<b>429</b>	<b>793</b>	<b>3</b>	<b>21</b>	<b>24</b>

\*Due to rounding, individual columns might not add to total amount.

help us to change the way power is made. When electricity from new renewable plants goes onto the grid to meet customer demand, it decreases reliance on electricity generated from conventional sources like coal, oil, and nuclear. Replacing fossil-based energy with energy from renewable sources means less air pollution and greenhouse gases than otherwise would be produced.

The tables on the preceding pages estimate air emission impacts from products sold in 1999. Emissions avoided through new renewable content are broken down into two categories. The first, "From Green Mountain Energy New Renewable Facilities," accounts for energy from facilities that we had a direct part in developing. The second, "From Other New Renewable Facilities," accounts for energy purchased by Green Mountain Energy Company from new renewable facilities that we did *not* play a direct role in developing.

## **Green Mountain Energy Company's Durable Product Standards**

While the bulk of our business comes from the sale of energy, we have also experimented with offering our customers durable products—both through our web site and as incentives in our marketing acquisition and retention efforts.

In 1999, we began the process of developing our own environmental standards to guide the selection of these products. This work is still in its initial phases. Our biggest challenge is developing meaningful standards that are at the same time easily communicated and not burdensome to implement. By developing standards, we hope to ensure environmental superiority of our nonenergy offerings, inform consumer decision making by conveying the environmental consequences of product-purchase decisions, and ultimately "close the loop" with suppliers by demonstrating a strong market for environmentally preferable products.

# Supplier Relationships

**G**reen Mountain Energy Company offers energy products that are cleaner than a region's system power. Some of our products are certified by the Green-e Renewable Electricity Program. In order to design these products, we examine generation source and air emissions of the generation facilities supplying our energy. We stipulate specific environmental criteria for generating facility performance in our contracts with wholesale energy providers.

The company has also begun to engage its paper suppliers in order to verify that the paper it uses for its customer communications are free of old-growth fiber.

## Energy Suppliers

As we purchase electricity from energy suppliers, our primary consideration is obtaining electricity that enables us to create blended products that meet our product specifications. For our non-Green-e certified products, our energy blends must be cleaner than regional system power. For our Green-e certified products, the Green-e requirements for generation source and generation-related air emissions govern the eligibility of the facilities that provide us energy. To ensure that we meet Green-e requirements, Green Mountain Energy Company stipulates specific environmental

criteria for generating facility performance in its contracts with wholesale energy providers.

For all its energy products, Green Mountain Energy Company uses Green-e guidelines in defining renewable and new renewable content. Green-e defines renewable sources to include technologies using biomass (including landfill gas), geothermal, small hydroelectric (<30MW), solar, and wind to generate electricity. Green-e standards can vary from region to region. For example, in New England and the Mid-Atlantic, specific NOx standards have been established for biomass generation. Green-e likewise prohibits the use of coal or nuclear power into certi-

**Pennsylvania Power Content Label**  
**Projected Electricity Supply Mix for 1999**

Power Source	Percent Supply <sup>1</sup>		
	Eco Smart <sup>sm</sup>	Enviro Blend <sup>sm</sup>	Nature's Choice <sup>sm</sup>
<b>Eligible Renewal</b>	<b>1%</b>	<b>50%</b>	<b>100%</b>
Biomass (landfill gas)	—	—	—
Geothermal	—	—	—
Small hydroelectric <sup>2</sup>	—	—	—
Solar (PV)	—	—	—
Wind	—	—	—
Energy efficiency	—	—	—
Coal	0%	0%	0%
Large Hydroelectric and/or Natural Gas	99% <sup>3</sup>	50% <sup>3</sup>	0%
Nuclear	0%	0%	0%
Oil	0%	0%	0%
Other	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

1. These figures reflect the power that we have contracted to provide. Actual figures may vary according to resource availability. We will annually report to you the actual resource mix of the electricity you purchased during the preceding year.

2. Small hydroelectric facilities are defined as those less than or equal to 30 megawatts in size.

3. Our power supply agreements require that 99% of Eco Smart<sup>sm</sup> and 50% of Enviro Blend<sup>sm</sup> will consist of large hydroelectric and/or natural gas. To the extent available, renewable resources may be substituted. For comparison, the average mix of resources supplying Pennsylvania includes: coal (58%), nuclear (36%), oil (2%), natural gas (2%), hydroelectric (1%), and other (1%).

**Pennsylvania Power Content Label**  
**Actual Electricity Supply Mix Purchased in 1999**

Power Source	Percent Supply		
	Eco Smart <sup>sm</sup>	Enviro Blend <sup>sm</sup>	Nature's Choice <sup>sm</sup>
<b>Eligible Renewal</b>	<b>2%</b>	<b>64%</b>	<b>100%</b>
Biomass (landfill gas)	2%	51%	79%
Geothermal	—	—	—
Small hydroelectric	—	11%	18%
Solar (PV)	—	—	—
Wind	—	2%	3%
Energy efficiency	—	—	—
Coal	0%	0%	0%
Large Hydroelectric	8%	3%	0%
Natural Gas	90%	33%	0%
Nuclear	0%	0%	0%
Oil	0%	0%	0%
Other	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

fied products other than what may be contained in any *generic* system power purchased for the product.

The intent of the Green-e Program is to help promote renewable energy use by consumers and spur the development of new renewable generating plants. Green-e requires that certified products contain a portion of "new renewable" content. New renewable generation facilities are those facilities that have come on line after a state has deregulated. One year after deregulation, a Green-e certified product must contain at least 5% new renewable electricity. This percentage requirement increases to 10% in the next year. Accordingly, to obtain Green-e certification of products, we include generation from new renewable facilities in our electricity blends.

Green-e encourages the selection of low-emission generation facilities in three ways. First, Green-e requires that emissions of sulfur dioxide and carbon dioxide from any nonrenewable generation component of the product cannot exceed average emissions rates of fossil fuel power that is otherwise available in the electricity distribution system. Second, Green-e mandates that the total fossil fuel emissions of a product not exceed the average emissions rate of power that is otherwise available in the electricity distribution system. Third, they require low NOx emissions for biomass burning.

The tables on this page and the next summarize the projected and actual electricity energy supply mix purchased in Pennsylvania and California in 1999.



**California Power Content Label**  
**Projected Electricity Supply Mix for 1999**

Power Source	Percent Supply <sup>1</sup>					1998 CA Power for Mix (for comparison)
	Water Power <sup>sm</sup>	75% Renewable Power <sup>sm</sup>	Wind for the Future <sup>sm</sup>	100% Renewable Power <sup>2.0sm</sup>	Wind for the Future <sup>2.0sm</sup>	
Eligible Renewal	0%	75%	75%	100%	100%	11%
Biomass (landfill gas)	—	—	—	—	—	2%
Geothermal	—	—	—	—	—	5%
Small hydroelectric <sup>2</sup>	—	—	—	—	—	2%
Solar (PV)	—	—	—	—	—	<1%
Wind	—	—	—	—	—	1%
Coal	0%	0%	0%	0%	0%	20%
Large Hydroelectric	100%	25%	25%	0%	0%	22%
Natural Gas	0%	0%	0%	0%	0%	31%
Nuclear	0%	0%	0%	0%	0%	16%
Oil	0%	0%	0%	0%	0%	<1%
Other	0%	0%	0%	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

1. These figures reflect the power that we have contracted to provide. Actual figures may vary according to resource availability. We will annually report to you the actual resource mix of the electricity you purchased during the preceding year.  
2. Small hydroelectric facilities are defined as those less than or equal to 30 megawatts in size.

**California Power Content Label**  
**Actual Electricity Supply Mix Purchased in 1999**

Power Source	Percent Supply				
	Water Power <sup>sm</sup>	75% Renewable Power <sup>sm</sup>	Wind for the Future <sup>sm</sup>	100% Renewable Power <sup>2.0sm</sup>	Wind for the Future <sup>2.0sm</sup>
Eligible Renewal	100%	100%	100%	100%	100%
Biomass (landfill gas)	—	10%	—	1%	—
Geothermal	—	90%	94%	95%	75%
Small hydroelectric	100%	—	—	—	—
Solar (PV)	—	—	—	—	—
Wind	—	—	6%	4%	25%
Coal	0%	0%	0%	0%	0%
Large Hydroelectric	0%	0%	0%	0%	0%
Natural Gas	0%	0%	0%	0%	0%
Nuclear	0%	0%	0%	0%	0%
Oil	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

## Primary Sources of Energy for Power Blends

Power Source	Source of MWh Sold
Oil	—
Natural Gas Combustion	Archbald Hay Road Other natural gas <sup>1</sup>
Hydro (excluding pumped storage)	APX Small Hydro <sup>2,3</sup> Essex 1 <sup>3</sup> Lake Lynn Lake Siskiyou <sup>3</sup> Slate Creek <sup>3</sup> Other small hydro <sup>1,3</sup>
Nuclear	—
Solar	—
Wind	APX New Wind <sup>2</sup> San Gorgonio Wind Farm Wyoming New Wind Green Mountain Wind Farm
Geothermal	APX Geothermal <sup>2</sup> Geysers
Biomass	APX Biomass <sup>2</sup> APX New Biomass <sup>2</sup> Archbald Landfill Gas Joseph C. McNeil Generating Station Ryegate Other landfill gas <sup>1</sup>

1. Due to contract confidentiality requirements, these sources cannot be disclosed to the general public. The Green-e program is designed to ensure that retail suppliers of Green-e certified electricity actually purchase the renewable energy promised to their customers. As required by our Green-e certification, fuel mix percentages by product are disclosed to all customers. An annual independent audit of delivery of certified products is conducted.

2. The Automated Power Exchange (APX) is a wholesale electricity market operator of electricity commodities. APX operates an online exchange where an entire community of wholesale buyers and sellers can exclusively trade renewable power.

3. Indicates that generating facility is small-scale hydro power (<30MW).

## Low-Impact Hydropower

Green Mountain Energy Company has worked with American Rivers and other environmental organizations to develop a more comprehensive screening process to identify low-impact hydroelectric facilities. Large hydroelectric plants are often associated with serious environmental problems, and all hydroelectric plants can affect fish and wildlife habitats, and water quality. Many hydroelectric facilities received their permits over 20 years ago, before extensive environmental review was a part of the permitting process. Under the current Green-e standard, small-scale hydroelectric facilities (plants less than 30 megawatts in capacity) are considered renewable; large-scale hydroelectric generation is not. Under the more comprehensive standard being developed by American Rivers and Green Mountain Energy Company, screening criteria will include: fish protection, satisfactory river flow, preservation of water quality, mitigation of inundated lands, threatened or endangered species protection, protection of cultural resources, facilities removal recommendations, and availability of recreational opportunities.

In November of 1998, we began to further develop our own energy supply standard to complement the Green-e standard. The draft standard proposes an examination of the supplier's environmental philosophy, compliance, and environmental awareness. Efforts in developing this standard are ongoing.

As a cleaner fossil fuel, we believe natural gas service compliments our electricity products. We began a natural gas service pilot program for existing residential customers in western Pennsylvania late in 1999. As part of the offering, Green Mountain Energy Company encouraged its natural gas suppliers to join the Environmental Protection Agency's Natural Gas STAR program. That program is designed to prevent or reduce gas loss and improve the production, transmission, and distribution systems of natural gas companies.

## Paper Suppliers

As a marketing company, we use a significant amount of paper for our direct mail advertising (see Section 7: Internal Use and Conservation of Natural Resources for more information). In 1999, Green Mountain Energy Company began the process of identifying and discontinuing use of any old-growth forest fiber in its operations. By the end of that year, we had laid the groundwork to express a formal corporate commitment, whereby we will: (1) inform our suppliers that it is our policy not to purchase forest products that contain old-growth fiber; (2) actively work with our

suppliers to verify that the forest products we purchase and use do not contain old-growth fiber; (3) ask our suppliers to verify in writing the companies and regions from which our forest products are derived; and (4) measure and benchmark the amount of forest products we use, as well as their content of postconsumer waste, alternative fiber, and FSC-certified fiber.

We additionally plan to give preference, where price and availability allow, to products derived from postconsumer recycled and alternative fibers, and forest products that are derived from well-managed, sustainable forests, certified by organizations accredited by the Forest Stewardship Council.

# Internal Use and Conservation of Natural Resources

**G**reen Mountain Energy Company has undertaken several initiatives that focus on wise use and conservation of natural resources in its business practices. We have developed policies and adopted stewardship principles relating to natural resource use—both independently and through our endorsement of the CERES principles.

We've instituted business practices emphasizing reduction, re-use, and recycling. Our paper consumption has the potential to be a significant depletion of natural resources. Therefore, we've made a point to (1) use paper that has reduced ecosystems impacts over its life cycle and (2) develop complementary strategies to decrease the amount of paper we use in our offices and in our billing.

Cognizant that even renewable facilities can have unintended effects on the natural environment, we've taken steps to ensure that facilities we participate in developing have minimum impact on their surroundings.

## Our Corporate Mission and Conservation of Natural Resources

By working to change the way power is made, Green Mountain Energy Company strives to alter the status quo of energy generation and the harmful consequences that conventional technologies have on our natural environment.

## Our Policies

Green Mountain Energy Company has formal policies regarding materials and resource conservation, reduction, reuse, and recycling. The accompanying table outlines stewardship principles embraced through our endorsement of the CERES Principles, and adoption

of the Green Mountain Environmental Charter and Environmental Management Policy.

In 1999, we initiated an environmental metrics program to measure the character and quantity of forest fiber used, our energy use, and the character and quantity of our waste stream. By monitoring these indicators, we are able to gauge our performance with regard to these policies.

## Our Paper Use

As a marketing company, most issues surrounding our use of natural resources are more akin to those of an office environment, rather than a traditional utility. As the accompanying table indicates, our paper use is substantial. We monitor fiber consumption in our corporate headquarters by tracking the volume and fiber composition of 20 of our most commonly ordered office products.

Early on in our operation, we were aware of the impact that our paper use could potentially have on the natural environment. We attempted to limit that strain by using recycled paper that had high postconsumer waste content. In 1998, our direct mail was printed on recycled paper (100% postconsumer waste). We also worked with our billing partner to find the highest postconsumer content paper that would work with their equipment, and arrived at a 100% recycled sheet (20% postconsumer waste) for our billing communications.

With the postponement of our initial public offering in June of 1999 and consequent fiscal constraints on our operations, we had to take a hard look at the

## Stewardship Principles Adopted

	GMEC Policy	CERES Principle
Reduced consumption of virgin materials through product or process design	X	X
Water conservation		X
Energy conservation	X	X
Habitat conservation		X
Risk reduction		X
Procurement of re-used goods	X	X
Recycling of solid waste	X	X
Recycling of hazardous material (nickel cadmium batteries used in pagers)	X	X

price premiums that accompanied the paper we had been purchasing. Realizing that we would have to step away from the paper we had been using, we wanted to ensure that we still maintained our environmental responsibilities. As a result, we developed a direct-mail paper standard that addressed five key areas: (1) recycled postconsumer fiber content, (2) old-growth fiber content, (3) processing method, (4) basis weight, and (5) ink composition.

We attempted to draw bright lines where possible—no additional chlorine in paper processing and no old-growth fiber. Realizing that guidelines for postconsumer waste are more arbitrary, we looked to the recommendations of organizations like Green Seal, Rethink Paper, the U.S. Federal Government, and the Coastal Rainforest Coalition. In December of 1999, we arrived at a target to use paper that has at least 50% postconsumer waste fiber content, is old-growth free, has minimal chlorine processing, and printed with soy-based inks. Where practical, we would attempt to decrease the amount of

## 1999 Paper Consumption (Pounds)

Quarter	Customer		Totals
	Communication	Corporate Office	
First	249,319	2,059	251,378
Second	328,184	2,695	330,879
Third	21,466	2,041	23,507
Fourth	34,567	2,366	36,933
<b>Total</b>	<b>633,536</b>	<b>9,161</b>	<b>642,697</b>

fiber used per sheet by up to 10%, by decreasing the paper's basis weight.

## Paper Conservation Strategies

Because the traditional office environment is so paper intensive, early on we adopted the following conservation strategies:

- All employees are given personal e-mail and voice-mail systems and are encouraged to use them as a means of communication, rather than paper and transparencies
- Computers are networked to provide company-wide access and electronic retrieval.

In 1999, we undertook several new initiatives to reduce the amount of natural resources that we use.

- In an effort to make employees more aware of our natural resource consumption, we began to measure our wood-fiber use, and provide monthly reports to employees in corporatewide meetings.
- We developed our corporatewide intranet, the Small Planet IntraNet (SPIN), to facilitate greater efficiency in communication. Accompanied by an employee awareness campaign and educational training sessions, we encouraged our employees to use "Nothing But Net" in lieu of hard copy communication.
- We began our TreeFree<sup>sm</sup> Billing Program to reduce our billing paper use. TreeFree<sup>sm</sup> Billing uses electronic transactions in lieu of a paper bill. With TreeFree<sup>sm</sup> Billing, a customer receives an e-mail message each month notifying them that their bill has been updated and is ready for viewing on our web site. Ten days after they receive e-mail notification, the full amount of their bill is automatically deducted from their bank account or charged to their credit card. A relatively small number of customers are currently enrolled in the program. Consequently, the environmental benefit of the program has been modest.

## Reducing On-Site Energy Use

Green Mountain Energy Company consumes energy in operating its facilities, as well as in employee commuting and air travel. As an endorser of the CERES Principles, we have made a commitment to "conserve energy and improve energy efficiency of our internal operations and of the goods and services we sell."

Our first efforts in on-site energy efficiency were in late 1997, when the first energy audit was conducted at Green Mountain Energy Company's corporate headquarters. Representatives from our local utility conducted an audit focused on our four primary factors of energy use: lighting, electrical appliances, heating ventilation and air conditioning, and building envelope. Our goal has been to implement all the cost-effective changes recommended in the audit. Since then, we have acted on several of the opportunities for improvement, including the installation of high-efficiency lighting and improved insulation to our building envelope. Unfortunately, Vermont has not yet deregulated, so we do not have the option of choosing environmentally preferable energy for our corporate headquarters.

We realize that our employee commuting and corporate air travel also take a toll on natural resources by depleting fossil fuels and producing air emissions. We've worked to educate employees on the greenhouse gas impacts of our commuting and corporate travel by estimating these emissions and providing monthly updates on the CO<sub>2</sub> impacts of these activities. Recognizing the need to address the damage from these activities, we've developed a CO<sub>2</sub> mitigation program, the details of which are provided in the following section, Section 8: Emissions and Waste.

## Locating Renewable Energy Facilities and Habitat Protection

As part of our work to market energy, we've worked with environmental advocates to develop reasonable criteria that support the use of renewable resources, while at the same time ensuring that they are not exploited thoughtlessly.

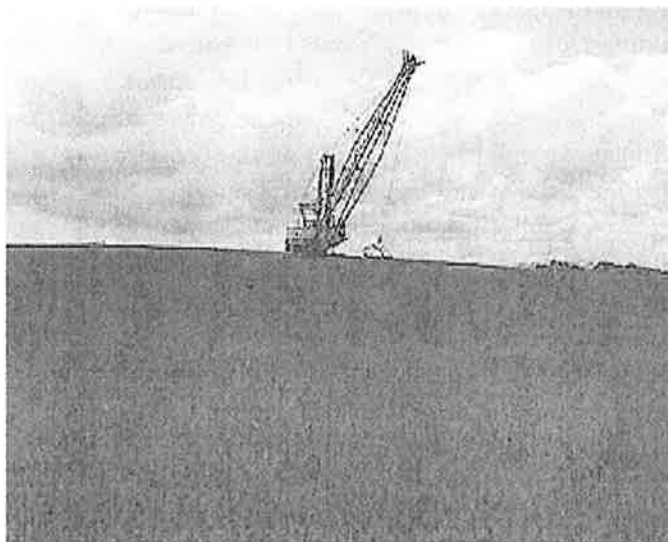
In a few cases, we've actually been a participant in the development of new generation facilities. In 1999, we selected a site in Garrett, Pennsylvania, for the Green Mountain Wind Farm and conducted extensive review that far exceeded mandatory requirements. The review assessed environmental as well as acoustic impacts from the proposed development.

One year later, community support for the completed project remains positive. In fact, we frequently receive inquiries from other community members who are interested in having us assess the potential of their land for wind generation.

The Phase I Avian risk study of the site was performed by an independent consultant experienced in avian impact review. The environmental review of the site's wildlife and plant communities relied on existing and newly acquired sources of information, including a literature search, an examination of the site by a trained biologist, and interviews with experts affiliated with state and federal agencies and nonprofit environmental organizations. This review included:

**Bird Risks.** A Phase I Avian Risk Study was conducted. This study consists of a site visit, a search of the literature and existing databases, and interviews with knowledgeable individuals, including: federal and state wildlife agencies, statewide and local environmental organizations, and unaffiliated parties who have knowledge of the area's bird species and population. This risk assessment used the information gathered, in concert with what is known about avian risks at existing wind power facilities, to determine the level of risk that is likely to result at a new development. This study concluded that the project would have minimal impact on birds. We continue to monitor the site in order to ensure that the conclusions of our Phase I Avian Risk Study were accurate.

**Endangered and Threatened Plants and Animals.** This study involved development and review of a list of known and potential use of the site by endangered



*The site of Green Mountain Energy Company's Green Mountain Wind Farm was formerly used in a mining operation, as evidenced by this photo of a coal drag-line that was abandoned on the site when mining operations ceased.*

and threatened species, as well as species of concern (plant and animal). No federal or state listed species were located during site visits, and the habitat was deemed unsuitable for these listed species. Furthermore, no listed species or species of special concern are within one mile of the site.

**Wetlands Review.** In accordance with state law, an assessment was made to determine the presence of wetlands at or near the site. Site visits verified that wetlands were not present within 300 feet of the proposed turbine locations.

**Sensitive Habitats.** This study entailed an on-site evaluation and examination of the habitat present on the project sites as well as land adjacent to the sites. Discussions with local environmentalists and state agency staff were an integral part of this process. The turbines, roads, and associated construction were on or adjacent to reclaimed coal strip mine land that is currently used for agriculture or are fallow. The habitat was categorized as either active agriculture (disturbed regularly) or planted grasses with some small trees.

**Habitat Impact.** This study included an analysis of the degree to which habitat would be impacted by development of the sites. This impact assessment included an examination of the type and amount of habitat that will be changed as a result of constructing the turbines and their long-term operation. The study concluded that the project would have minimal habitat impact.

Green Mountain Energy Company also engaged in dialogue with local community members prior to commencing construction. We hosted an open meeting in Garrett and invited community members to express any opinions or concerns about the proposed development. The community had witnessed firsthand the

impacts that coal mining can have on the natural environment. In fact, part of the proposed site had formerly been used as a strip mine. The community expressed overwhelming support for developing the new renewable generation facility.

There was one community member who voiced apprehension about the avian impacts of the site. In order to better address his concerns, we arranged for that person to walk through the site accompanied by the third party consultant who had performed the avian impact study and a representative from the state fish and wildlife department. These professionals detailed the methodology of the study and its finding of minimal impact.



# Emissions and Waste

**G**reen Mountain Energy Company has begun to look at air emissions directly and indirectly attributable to its business operations. To date, we have focused our attention exclusively on CO<sub>2</sub> resulting from business operations. Specifically, we've worked to: (1) define which aspects of our operations should be included within the boundaries of our footprint, (2) estimate the amount of CO<sub>2</sub> emitted from those included operations; and (3) develop a program to decrease and mitigate those emissions.

We have also developed policies regarding waste from our facilities, including policies for materials reduction, re-use, and recycling. We have also developed a program to monitor the character and quantity of waste coming from our corporate headquarters.

## Defining our CO<sub>2</sub> Footprint

Global warming and the threat of climate change resulting from increased atmospheric CO<sub>2</sub> concentration warrant that environmentally responsible companies identify the greenhouse gas emissions caused by their business operations. While we have not formally adopted a climate change policy, our efforts to change the way electricity is made are motivated in part to reduce the threat of climate change resulting from coal-based electricity generation.

Two years ago, Green Mountain Energy Company set out to identify key components of the company's CO<sub>2</sub> footprint. From that work, we began to understand the magnitude of our direct and indirect CO<sub>2</sub> emissions and identified the need for a more comprehensive method of measuring, and then reducing and mitigating our global warming impact.

Our assessment of Green Mountain Energy Company's CO<sub>2</sub> footprint in 1998 was limited to estimating emissions from energy use at our corporate headquarters. Our total CO<sub>2</sub> emissions for that year

were approximately 68 tons. In 1999, we expanded the scope of our environmental metrics to include CO<sub>2</sub> from our Vermont employees' daily commuting and corporatewide air travel and manufacturing emissions from purchased paper.

Due to widening the boundaries of our footprint, our CO<sub>2</sub> footprint for 1999 was measured as approximately 1,721 tons. To compare between 1998 and 1999, one need only examine each year's CO<sub>2</sub> emissions solely from energy use: CO<sub>2</sub> increased from 68 tons in 1998 to 75 tons in 1999. Normalization by employee reveals that CO<sub>2</sub> emissions decreased from 1.7 tons of CO<sub>2</sub> per employee per year to 1.1 tons of CO<sub>2</sub> per employee per year.

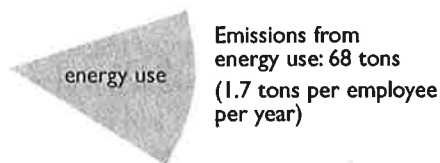
It is important to note that while all Green Mountain Energy Company's products are cleaner than what would be produced with generic system power, some products nevertheless emit CO<sub>2</sub> when generated. In our 1999 operating year, 141,934 tons of CO<sub>2</sub> were emitted in generating the power we purchase for resale to our customers. However, had our customers used generic system power, 368,714 tons of CO<sub>2</sub> would have been emitted into the atmosphere.

## Mitigating Our CO<sub>2</sub> Impact Through Ecological Restoration

In 1998, we began to examine ways to moderate the greenhouse gas impact of our operations. The resulting action was largely symbolic, but was a first step toward an expanded program. Having estimated that our three most traveled employees were responsible for 112 tons of CO<sub>2</sub> emissions through their 250,068 miles in air travel, we sought to reduce the impact of those emissions by engaging in carbon sequestration through tree planting. Working with American Forests, we arranged to have 500 trees planted in Pennsylvania—sequestering 205 tons of CO<sub>2</sub> over the next 40 years.

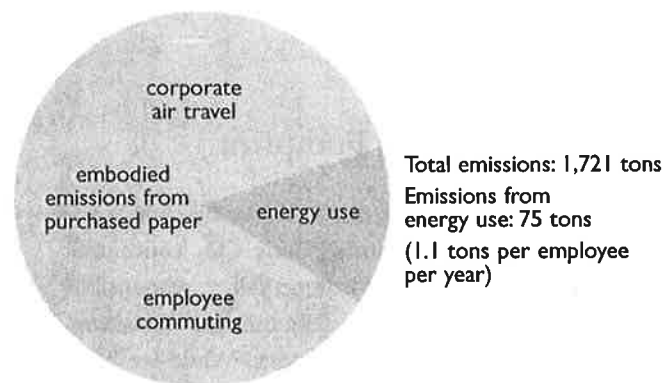
In 1999, we spent considerably more time estimating the CO<sub>2</sub> impact from discrete components of our operations: energy use at our corporate headquarters; employee commuting to our corporate headquarters; corporatewide air travel; and embodied emissions from the paper we use. Based on those estimations, we've made a commitment to use ecological restoration to offset 50% of the total CO<sub>2</sub> resulting from these business activities.

### 1998 CO<sub>2</sub> Emissions from Energy Use



### 1999 CO<sub>2</sub> Emissions from All Activities

CO<sub>2</sub> footprint is expanded to include activities other than energy use.



CO<sub>2</sub> emissions from energy increased from 68 tons in 1998 to 75 tons in 1999. However, when normalized by employee, CO<sub>2</sub> emissions from energy use decreased to 1.1 tons of CO<sub>2</sub> per employee per year.

At the time of this writing, we are engaged with Pacific Forest Trust, a nonprofit organization located in Boonville, California, to provide the necessary carbon offset credits. Through its conservation easements, Pacific Forest Trust works with private landowners to ensure sustainable forest management and conservation, in such a way as to restore threatened areas in the Pacific Northwest to a condition that approximates old-growth forest habitats.

In 1999, we continued to work with American Forests to plant trees in California and Pennsylvania. We tied donations to the number of customer sign-ups for TreeFree<sup>SM</sup> Billing and sign-ups at our sales events. At the time of this writing, we have funded the planting of over 10,000 trees by American Forests. By American Forests estimates, these 15 acres of trees will sequester 3,000 tons of CO<sub>2</sub> during their lifetime. That is the carbon dioxide equivalent of not driving 7,500,000 miles.

In 1999, our efforts in landfill waste reduction were recognized by the Chittenden Solid Waste District. Green Mountain Energy Company was presented the "Partners in Recycling Award" for exceeding the mandatory recycling requirement.

We have directly contacted our landfill operator, Waste USA, to learn more about its operations. We inquired specifically about its efforts in:

- recyclable waste recovery programs
- landfill design and operations
- landfill monitoring
- compliance
- postclosure care

**Green Mountain Energy Company  
CO<sub>2</sub> Mitigation Strategy**

- 50% emissions will be offset through ecological restoration.
- Credits will be discounted by 10% to account for attenuation uncertainties that can accompany forest sequestration projects.

**Waste**

Given the nature of our business, the bulk of our waste is office waste. The only hazardous wastes generated in our facilities are expended batteries for electronic devices and spent fluorescent light bulbs. As a matter of policy, these wastes are segregated for disposal at the Chittenden County Solid Waste District Hazardous Waste Depot.

During our first eco-assessment in 1998, rough waste volumes were estimated for our operations. Midway through 1999, we began working with our maintenance staff to take direct measurements of our waste stream.

**1999 CO<sub>2</sub> Emissions**

	<i>Air Travel</i>	<i>Employee Commuting</i>	<i>Paper Manufacturing</i>	<i>Corporate Headquarters Energy Use</i>	<i>Total</i>
Corporate CO <sub>2</sub> emissions (short tons)	804	231	611	75	1,721
50% of corporate CO <sub>2</sub> emissions (metric tons)	365	105	277	34	781
<b>Weighted Emission Credits Required (metric tons of carbon dioxide)</b>					<b>859</b>

### Estimated Waste in 1998

Waste Description	Estimated Volume (Cubic Yards)	Estimated Weight (Pounds)	Cubic Yards per Employee per Year
Solid waste	156	23,400–46,800	2.8
Recyclable paper	123	46,740–92,865	2.8
Corrugated cardboard	156	7,800–23,400	2.8

### Estimated Waste in 1998

Waste Description	Estimated Weight (Pounds)	Pounds per Employee per Year
Landfilled waste	1,875	26
Recycled waste	10,753	150
Composted waste	246	4

A direct comparison between the two years is difficult, as the estimate from our initial eco-assessment was made in volume, the latter in weight. We've used standard volume-to-weight conversion factors provided by the U.S. Environmental Protection Agency to convert the 1998 volume estimations to weight estimations. As the tables indicate, there are vast discrepancies in the amount of waste estimated in 1998 and 1999. More than likely, these differences are attributable to our refining our estimation process in 1999 rather than any physical reduction in office waste.

## Waste Reduction Policies, Practices, and Programs

In 1999, we endorsed the CERES Principles and made the following commitment: "We will reduce and where possible eliminate waste through source reduction and recycling. All waste will be handled and disposed of through safe and responsible methods." We

also instituted the Green Mountain Environmental Management Policy, which articulated and expanded our recycling efforts to include tyvek mailbags and transparencies.

We have instituted several programs and practices designed to divert our office's waste from entering landfills.

In an effort to get employees to consider the amount of waste that our offices create and become more involved with waste reduction, we provided regular reports on our waste quantities in our corporatewide Common Sense meetings.

- We encourage our employees to use electronic communication in lieu of paper and encourage double-sided copying.
- We have established a re-use station at our corporate headquarters to encourage re-use of used corporate office equipment and supplies.
- We have well-organized waste and recycling collection areas.
- We have eliminated the use of disposable dishware at our on-site corporate functions.
- We have installed composting bins outside our corporate headquarters to reduce the amount of food waste that enters our municipal waste stream.

We have not yet set any specific targets for our material resource conservation program. However, by measuring and monitoring the individual components of our waste stream (recycled, composted, and landfilled waste) we are able to roughly gauge whether our policies are being successfully implemented.

# Compliance

CERES asks endorsing companies to complete the following chart, indicating if their operations in any way require compliance with environmental, health, or safety regulations at either the national, subnational or supranational level (see chart below).

As an office environment, we are subject to regulation in workplace health and safety. We are also subject to local regulations prohibiting introduction of the nickel cadmium batteries we use in some portable electronic devices into the waste stream. Green Mountain Energy Company has never had enforcement action in any environmental, health, and safety regulation.

## Areas Subject to Regulation

	Yes	No
Air quality		X
Water quality		X
Drinking water		X
Chemical certification		X
Hazardous waste (nickel cadmium batteries used in pagers)	X	
Emergency response		X
Workplace health and safety	X	
Radioactive materials		X
Habitat protection		X

# Priorities and Challenges

Our environmental charter articulates many of the challenges for our business and guides our efforts regarding environmental performance. Of the priorities it presents, two clearly address our corporate objectives relating to our environmental impacts. We must use the marketplace to promote the sale of clean electricity. At the same time, we must also endeavor to be an environmentally responsible business, engaging in daily practices that promote a healthier planet and sustainable economy.

In order to gauge our performance in these areas, we must pay particular attention to three indicators: (1) the amount of air pollution avoided through the purchase of our energy products; (2) the CO<sub>2</sub> attributable directly and indirectly to our operations; and (3) the amount of virgin forest fiber consumed by our operations.

We are motivated by the successes we have achieved in 1999 on our mission to change the way power is made. We attach particular significance to the fact that our direct support of new renewable generation facilities led to the operation of three new facilities, with a fourth to become operational in 2000. While we have a substantial amount of work ahead of us, we are heartened by the favorable recognition we have received from the environmental community.

As we endeavor to change the way power is made, we rely on our Environmental Charter, highlighted below, to identify and guide our corporate priorities and challenges in terms of environmental performance:

**Green Mountain Energy  
Company Environmental Charter**

1. Green Mountain Energy Company will use the marketplace to promote the sale of clean electricity to individual consumers and corporations.
2. Green Mountain Energy Company will engage in policy work on energy issues, concentrating on developing competitive markets for energy sales.
3. Green Mountain Energy Company will be an environmentally responsible business, engaging in daily practices that promote a healthier planet and sustainable economy. These practices include working with partners to encourage them to adopt sustainable business practices.
4. Green Mountain Energy Company will encourage individual consumers and corporations to use energy resources wisely and efficiently.
5. Green Mountain Energy Company will be an educator, helping people to understand the environmental consequences of their energy choices and empowering people to choose clean electricity.

## Priorities and Challenges

**We Must Continue to Design Products Featuring Energy from New Renewable Generation Facilities.** Through our electricity blends, we offer consumers a way to take modest, yet crucial steps in combating air pollution resulting from conventional electricity generation. However, it is not enough for our products to be emission free or have lower emissions than typical system power because reselling en-

ergy from facilities that had been in operation prior to deregulation can only indirectly realize our company's goal—to change the way power is made. Rather, our progress also requires our support of new renewable generation facilities and our direct involvement in the development of new renewable facilities.

Carbon dioxide emissions avoided by our customers' energy use serves as an indicator of our progress in changing the way power is made. In 1998, although all our products were emission free, they featured energy from renewable facilities that predated deregulation. Accordingly, no CO<sub>2</sub> emissions were immediately avoided through the purchase of our products. In 1999, all our new energy blends contained a portion of energy from new renewable facilities—some of which were developed through our direct involvement. Consequently, 12,023 tons of CO<sub>2</sub> emissions were avoided through our customers' election to use Green Mountain Energy<sup>sm</sup> rather than generic system power. Our efforts in this area are summarized in Section 5: Product Stewardship.

**We Must Decrease Our Corporate Greenhouse Gas Footprint.** As discussed in Section 8, it is a priority for us to assess accurately our greenhouse gas impact and act to decrease it. Our assessment enables us to better understand just how significantly our business contributes to global warming. It also serves as a form of currency with which to assess our operation-related energy use. In 1999, we averaged approximately 4,225 pounds of CO<sub>2</sub> per employee per month, accounting for corporate air travel, estimated employee commuting, corporatewide paper use, and on-site energy use. While we've arranged to mitigate half these emissions by engaging in environmental restoration with Pacific Forest Trust, we also realize that we must find ways to improve our efficiencies at the source.

**We Must Reduce the Impacts of Our Business on Forest Fiber.** As discussed more fully in Section 7: Internal Use and Conservation of Natural Resources, we must continue to find new ways to moderate the impact of our forest fiber use. Due to the nature of our business and our use of direct mail to educate and solicit prospective customers, we use significant

amounts of paper. In order to lessen our impact on the environment in this area, we have endeavored to use paper that has high postconsumer waste content and minimal chlorine processing.

In 1999, we used approximately 321 tons of paper in our direct mail campaigns, customer communications, and corporate offices. Of that paper fiber, approximately 18 tons (5%) was virgin fiber, the remaining 303 tons being recycled postconsumer waste fiber. We have made it a priority to continue to monitor our paper consumption in terms of quantity, and environmental quality. It is also a priority for us to find ways to use paper more efficiently. In 2000, we will make a corporate commitment to identify and phase out our use of virgin forest fiber derived from old-growth forests.

## Environmental Successes and Recognition

Looking back at our 1999 operating year, we are proud of the many successes that we achieved in our second full year of operation. Most notably:

- Our direct support of new renewable generation facilities led to the opening of three new facilities, with a fourth to become operational in 2000.
- We served over 100,000 customers with cleaner electricity featuring renewable energy.

- The majority of products that we offered rose to the level of being certified by the Green-e Renewable Electricity Program.

- We expanded our service regions to include Pennsylvania.

Many of our efforts in 1999 received favorable public recognition:

- We were honored by New England's largest environmental coalition, the Environmental Federation of New England, with the receipt of their 1999 Environmental Friend of New England Award. The award recognized our efforts in New England to develop an environmental standard for marketing cleaner forms of energy in New England's deregulated markets.
- Together with BJ's Wholesale Club and Sun Power Electric, we received the Edison Electric Institute's Partnership Award for our role in supporting the development of Pennsylvania's largest solar array. This award recognizes the nation's most creative and innovative business partnership toward a common energy related goal.
- The *Financial Times* recognized our educational campaign to inform consumers about the environmental impact of their electricity choices in awarding Green Mountain Energy Company the Best Overall Marketing Campaign in their 1999 Energy Awards.