# **Green Mountain Energy Company** 2003 ENVIRONMENTAL REPORT



Prepared in 2004 for Ceres

#### **About this Report**

Green Mountain Energy Company has chosen to use the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines pertaining to environmental performance for this environmental report. Green Mountain Energy Company is not a publicly held company. In some instances, specific economic information requested by the GRI Guidelines is confidential corporate information. Where possible, this report substitutes for such confidential data with related publicly available information. Information about our environmental performance is presented in the Global Reporting Initiative's Sustainability Reporting Guidelines framework for environmental reporting during the 2003-operating year. Where possible, we have provided information on prior years for the reader's comparison. Unless otherwise indicated, this information covers the activities of Green Mountain Energy Company's Corporate Headquarters, located in Located in Austin, Texas. Where noted, the information also incorporates activities of our smaller regional offices in Ohio, Oregon, Pennsylvania and Vermont.

## **Contact Details**

Contact Person:	Gillan Taddune
Title:	Senior Vice President and Chief Environmental Officer
Address:	3815 Capital of Texas Highway S, Suite 100 Austin, TX 78704
Phone:	512-691-6176
Fax:	512-691-6353
E-mail:	gillan.taddune@greenmountain.com
Parent Dun & Bradstreet Number	17-687-1481
Corporate Tax ID Number	03-0360441
Corporate Website	www.greenmountain.com

#### **About Units of Measure**

For the ease of our stakeholders, we have quantified our environmental information in English units. Factors for converting English units to metric units are provided below:

1 pound (lb)	=	0.454 kilograms (kg)
1 gallon	=	3.78 liters (L)
1 kilowatt-hour (kWh)	=	3,600 kilojoules (kJ)
1 short ton (US)	=	0.9072 metric tons

Text is printed on Badger Envirographic 100 paper Cover is printed on New Leaf Paper's Everest paper 100% recycled (100% post-consumer waste and 100% processed chlorine free) GREEN MOUNTAIN ENERGY COMPANY

# **2003 Environmental Report**

© Green Mountain Energy Company PO Box 42349 Austin, TX 78704 Phone 888.380.9410 • Fax 512.691.6151

# **Table of Contents**

About this Report	2
Contact Details	2
About Units of Measure	2
Welcome	6
Green Mountain Energy Company's Values	7
Vision and Strategy	8
Corporate Profile	9
Policies, organization, and management systems1	1
Corporate Environmental Policies1	1
Environmental Management and Organization1	3
Stakeholder Engagement and Community Involvement1	3
Environmental Performance1	5
Helping to Clean the Air1	6
Energy Efficiency Efforts1	9
Electricity Supply by Product and Region	9
Green Mountain Energy New Renewable Facilities2	0
New Renewable Development: Land Use and Biodiversity2	1
Operational Performance: Environmental, Health, and Safety2	2
Compliance2	2
Carbon Dioxide Emissions	3
Our Carbon Dioxide Mitigation Program2	4
Corporate Energy Use	5
Corporate Transportation2	6
Natural Resource Use	7
Paper Use	7
Office Waste2	8
Suppliers and Partners	9
Standards for Non-Energy Product Offerings	9
Water Use2	9
Summary3	0
Appendix: Environmental Performance of Products3	1

**Ceres** is the leading U.S. coalition of environmental, investor, and advocacy groups working together for a sustainable future. The network includes companies that have committed to continuous environmental improvement by endorsing the Ceres Principles, a ten-point code of environmental conduct. By our endorsement of the Ceres Principles, Green Mountain Energy Company made a commitment to conduct an annual self-evaluation of our progress in implementing the Ceres Principles. This report is a product of that self-evaluation.

#### The Ceres Principles

**Endorsing Company Statement** By adopting these Principles, we publicly affirm our belief that corporations have a responsibility for the environment, and must conduct all aspects of their business as responsible stewards of the environment by operating in a manner that protects the Earth. We believe that corporations must not compromise the ability of future generations to sustain themselves.

We will update our practices constantly in light of advances in technology and new understandings in health and environmental science. In collaboration with Ceres, we will promote a dynamic process to ensure that the Principles are interpreted in a way that accommodates changing technologies and environmental realities. We intend to make consistent, measurable progress in implementing these Principles and to apply them to all aspects of our operations throughout the world.

**Protection of the Biosphere** We will reduce and make continual progress toward eliminating the release of any substance that may cause environmental damage to the air, water, or the earth or its inhabitants. We will safeguard all habitats affected by our operations and will protect open spaces and wilderness, while preserving biodiversity.

Sustainable Use of Natural Resources We will make sustainable use of renewable natural resources, such as water, soils and forests. We will conserve non-renewable natural resources through efficient use and careful planning.

**Risk Reduction** We will strive to minimize the environmental, health and safety risks to our employees and the communities in which we operate through safe technologies, facilities and operating procedures, and by being prepared for emergencies.

Safe Products and Services We will reduce and where possible eliminate the use, manufacture or sale of products and services that cause environmental damage or health or safety hazards. We will inform our customers of the environmental impacts of our products or services and try to correct unsafe use.

**Environmental Restoration** We will promptly and responsibly correct conditions we have caused that endanger health, safety or the environment. To the extent feasible, we will redress injuries we have caused to persons or damage we have caused to the environment and will restore the environment.

Informing the Public We will inform in a timely manner everyone who may be affected by conditions caused by our company that might endanger health, safety or the environment. We will regularly seek advice and counsel through dialogue with persons in communities near our facilities. We will not take any action against employees for reporting dangerous incidents or conditions to management or to appropriate authorities.

**Management Commitment** We will implement these Principles and sustain a process that ensures that the Board of Directors and Chief Executive Officer are fully informed about pertinent environmental issues and are fully responsible for environmental policy. In selecting our Board of Directors, we will consider demonstrated environmental commitment as a factor.

Audits and Reports We will conduct an annual self-evaluation of our progress in implementing these Principles. We will support the timely creation of generally accepted environmental audit procedures. We will annually complete the Ceres Report, which will be made available to the public.

**Disclaimer** These Principles establish an environmental ethic with criteria by which investors and others can assess the environmental performance of companies. Companies that endorse these Principles pledge to go voluntarily beyond the requirements of the law. The terms "may" and "might" in Principles one and eight are not meant to encompass every imaginable consequence, no matter how remote. Rather, these Principles obligate endorsers to behave as prudent persons who are not governed by conflicting interests and who possess a strong commitment to environmental excellence and to human health and safety. These Principles are not intended to create new legal liabilities, expand existing rights or obligations, waive legal defenses, or otherwise affect the legal position of any endorsing company, and are not intended to be used against an endorser in any legal proceeding for any purpose.

# Welcome



Gillan Taddune

Living our values:

At Green Mountain, our values, *integrity, sustainability, and results* continue to guide us as we proudly maintain our position as the largest provider of cleaner electricity nationally. Additionally, we recognize that it is through the deliberate balancing of each of these guiding principles, that we will become a socially responsible enterprise and successfully achieve our mission, *to change the way power is made.* I am pleased that this year's Ceres report reflects commitments to these values in several key areas:

- Revision of our corporate values to reflect the importance of unifying short-term business results with longer-term sustainability initiatives that balance our commitment to our customers, the environment, our employees and investors;
- Expansion of our corporate carbon reduction program which reduced carbon dioxide from electricity use by an additional 3% compared to the prior year. On the basis of continual improvement, our goal is to become carbon-neutral by year-end 2005;
- Development of the 160MW Green Mountain Energy® Wind Farm at Brazos, TX our largest new facility to date; and
- Expansion into Florida, in conjunction with Florida Power and Light, which will help to create the demand for new renewables as customers in that state choose a cleaner electricity product.

As we look into the future, we acknowledge and accept that our aggressive targets will always challenge us and simultaneously be the basis for our company's success. By buying cleaner electricity and supporting new renewable generation, our customers have effectively avoided 1.4 million tons of carbon from entering the atmosphere since 1999. Through our three-pronged business strategy, which includes direct access markets, aggregations, and utility partnering, we remain committed to carbon reduction, as evident by our corporate goal to become carbon-neutral by year-end 2005.

# **Green Mountain Energy Company's Values**

The following corporate values guide us when undertaking business decisions:

- Integrity: Integrity is the foundation of our business. We will adhere, individually and collectively, to our commitments, our values, and the ethical conduct of our business.
- Sustainability: We are dedicated to the environment and maintaining lasting, mutually beneficial relationships in all aspects of our business.
  - To customers, we are committed to providing quality products and services that consistently represent an exceptional value and result in high customer satisfaction.
  - To society, we are committed to improving the environment through the products we sell and how we conduct our business.
  - To employees, we are committed to offering a rewarding workplace that encourages mutual respect, communication, openness to challenge, and the opportunity for both personal and professional growth.
  - To our investors, we are committed to creating value and consistently delivering outstanding financial returns.
- Results: Customers, society, employees, and investors will measure us by what we deliver. We will relentlessly pursue outstanding results that meet our company goals and objectives.

#### VISION AND STRATEGY



# **Vision and Strategy**

Our Mission is to change the way power is made.

Making electricity is the leading cause of industrial air pollution in the United States. Carbon dioxide, sulfur dioxide, and nitrogen oxides from coal-burning power plants are largely responsible for pressing environmental problems such as acid rain, smog, and global warming. Making electricity causes:

- 67% of US sulfur dioxide emissions—a cause of acid rain
- 23% of US nitrogen oxide emissions—a cause of acid rain and smog
- 41% of US carbon dioxide emissions—a cause of global warming
- 33% of US mercury emissions—poisonous heavy metal that harms ecosystems

**Global warming is occurring.** There is now consensus that rising greenhouse gas concentrations can be attributed to human activities, and that fossil fuel combustion is one of the primary culprits in the United States. Greenhouse gases are naturally present in the atmosphere. The issue is not their presence but the concentrations at which they occur. With increasing concentrations, the earth's surface temperature rises and global warming results. Global warming will likely have multiple effects on the planet, including a greater frequency of extreme weather conditions: droughts; heat waves; and floods caused by rising sea levels. These effects will have an impact on the environment and the quality of human life.

Many Americans think (incorrectly) that hydroelectric dams are the primary source of electricity in the U.S. In reality, coal is burned to generate more than half of the United State's electricity, 51% to be exact. Nuclear reactors produce approximately 18%. Renewable resources account for only 11% of our nation's electricity generation.

**There are cleaner ways to generate electricity.** We purchase supply from generators that tap into the natural occurring flows of energy—like wind, water, sunshine, organic material, and the heat of the earth itself. Unlike traditional forms of generation, they emit little to no air pollution and produce no nuclear waste. We also look to energy from cleaner burning non-renewable resources like natural gas for our supply needs Natural gas creates lower quantities of greenhouse gases and criteria pollutants per unit of energy than any other fossil fuel, including coal or oil.

**Our three-pronged business strategy enables us to sell electricity to customers nationally.** We are the nation's largest and fastest growing provider of less-polluting electricity.

**The results are clear.** Since 1999, Green Mountain Energy Company sales to customers have offset 1.4 million tons of carbon dioxide and have supported 266 MW of new renewable generation. Our corporate goal is to support 1,000 MW of new renewable generation by 2010.

We are a Ceres Endorsing Company. Green Mountain Energy Company has adopted the Ceres Principles and we publicly affirm our belief that corporations have a responsibility for the environment, and must conduct all aspects of their business as responsible stewards of the environment by operating in a manner that protects the Earth. We believe that corporations must not compromise the ability of future generations to sustain themselves.

# **Corporate Profile**

# Section

Customers who choose Green Mountain Energy<sup>®</sup> electricity are helping to change the way power is made.

Green Mountain Energy Company offers customers dramatically cleaner power derived from renewable resources like sun, wind, water, biomass, and geothermal heat, as well as the cleanest-burning fossil fuel, natural gas. We offer residential and commercial customers the ability to choose the type of generation that is put onto power grids on their behalf.

Our three-pronged business strategy for selling cleaner electricity includes:

- Direct-access markets: Green Mountain Energy Company markets its less-polluting *Green Mountain Energy* electricity directly to consumers in states with competitive markets, such as Texas, New Jersey, and Pennsylvania.
- Aggregation: Green Mountain Energy Company serves as the primary service provider to customer collectives. We currently serve hundreds of thousands of Ohio customers through the nation's largest municipal aggregation, NOPEC.
- Utility Partnering: In some states, Green Mountain Energy Company works with utilities to offer their customers a renewable electricity option. In these relationships, Green Mountain Energy Company assists in marketing, providing training and obtaining renewable supply.



Green Mountain Wind Farm at Garrett, Pennsylvania

**Cleaner Electricity.** *Green Mountain Energy* electricity products vary from region to region—as does the

availability of the cleaner and renewable resources that generate them. All of our electricity products are dramatically cleaner than system power offered in their respective regions.

#### CORPORATE PROFILE

An Easy and Powerful Way to Reduce a Household's Carbon Dioxide Footprint. Every Green Mountain Energy electricity product is generated in part by energy from new renewable facilities. When new renewable facilities are brought online, they help reduce our reliance on dirtier forms of generation. As a result, air pollution is avoided. Residential customers who purchase Green Mountain Energy electricity are able to reduce their household's share of carbon dioxide pollution. In 2003, customers buying Green Mountain Energy electricity could reduce their carbon footprint anywhere from 100 to 17,600 pounds depending on their electricity usage, the product they buy and the generating mix in their region.

Green M	lountain Energy Company At a Glance					
OR CA The CA CA CA CA CA CA CA CA CA CA CA CA CA C	TX CT	2003 Green Mountain Energy Electricity Service Regions California Connecticut New Jersey New York (NIMO <sup>1</sup> territory) Ohio Oregon Pennsylvania Texas <sup>1</sup> Niagara Mohawk				
Nature of Ownership	Privately-held corporation	·				
Major Products/ Services	Green Mountain Energy electricity					
Country of Operation United States						
Nature of Markets Served	<ul> <li>Direct Access: CA, CT, NJ, PA, TX</li> <li>Utility Partnerships: OR, NY</li> <li>Municipal Aggregations: OH</li> </ul>					
Consumers served with Green Mountain Energy electricity	Nearly 600,000					
2003 Strategic Partners	Niagara Mohawk (NIMO), Northeast Ohio Public (NOPEC), Pacific Power (PacPower), Portland (PGE)	c Energy Council Gas and Electric				
Number of Employees	2003 monthly average: 190 of which 2 personne to environmental management responsibilities ( corporate sustainability initiatives, stakeholder e	el exclusively assigned environmental policy, ngagement)				
Corporate Offices	<ul> <li>Austin, TX (Corporate Headquarters)</li> <li>Mt. Laurel, NJ</li> <li>Dublin, OH</li> <li>Wayne, PA</li> <li>Houston, TX</li> <li>Portland, OR</li> <li>South Burlington, VT</li> </ul>					
Revenue	Range of \$200 to \$500 million. More than 99% from the sale of our <i>Green Mountain Energy</i> ele revenue by region are proprietary and confident	of our revenues come ectricity. Sales and ial				
Prior Ceres Reports	Reports for our 2000, 2001 and 2002 operating online at www.greenmountain.com	years are available				

# Policies, organization, and management systems

Section

Environmental stewardship underpins Green Mountain Energy Company's corporate mission and operations. We have environmental policies to guide our work, an organizational structure and management systems to implement those policies, and a commitment to engage our stakeholders.

## **Corporate Environmental Policies**

Green Mountain Energy Company's Environmental Charter sets out our objectives for environmental performance. It states:

Our charter is the basis for the policies that guide our product and operational performance.

- Green Mountain Energy Company will use the marketplace to promote the sale of cleaner electricity to individual consumers and corporations.
- Green Mountain Energy Company will engage in policy work on energy issues, concentrating on developing competitive markets for energy sales.
- 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 our partners to encourage them to adopt sustainable business practices.
- Green Mountain Energy Company will encourage individual consumers and corporations to use energy resources wisely and efficiently.
- Green Mountain Energy Company will be an educator; helping people to understand the environmental consequences of their energy choices and empowering people to choose cleaner electricity.



Our policies are guided by stakeholders and formed through a multi-step process.

- 1. Policy proposal: We are guided by the environmental community, corporate best practices, and internal stakeholders in advancing draft policies.
- 2. Pilot implementation: We test the draft policy on an interim basis. Often our pilots are limited in scope to specific departments or regions.
- 3. Comment and Refinement: Through comments and suggestions from employees, we have the opportunity to improve and refine the proposal, if needed.
- 4. Management Approval: After successful pilot testing, the policy is implemented across the organization by approval of senior management.

Environmental Policies and StandardsPolicyIssue DateLatest RevisionGeographic ScopePublicly AvailableEnvironmental CharterFall, 1997Summer 1999Company wideYes(1,2)Ceres PrinciplesSpring, 1999Company wideYes(1,2)Green Mountain ValuesFall, 1997Winter 2003Company wideYes(1)Commitment Regarding Old Growth FiberWinter, 2000Company wideYes(1)Recycling PolicyFall 1997Spring 1999Company wideYes(1)Paper StandardWinter 1999Summer 2000Company wideYes(1)Non-Energy Product StandardWinter 2001Company wideYes(1)Corporate CO2 Offset PolicyFall 2003Company wideYes(1)								
Policy	Issue Date         Latest Revision         Geographic Scope         Publicly Available							
Environmental Charter	Fall, 1997	Summer 1999	Company wide	Yes (1,2)				
Ceres Principles	Spring, 1999		Company wide	Yes (1,2)				
Green Mountain Values	Fall, 1997	Winter 2003	Company wide	Yes (1)				
Commitment Regarding Old Growth Fiber	Winter, 2000		Company wide	Yes (1)				
Recycling Policy	Fall 1997	Spring 1999	Company wide	Yes (1)				
Paper Standard	Winter 1999	Summer 2000	Company wide	Yes (1)				
Non-Energy Product Standard	Winter 2001		Company wide	Yes (1)				
Corporate CO2 Offset Policy	Fall 2003		Company wide	Yes (1)				
Employee CO2 Offset Policy	Spring 2004		Company wide	Yes (1)				
<ol> <li>Available by contacting Green Mountain Ene</li> <li>Available in this report.</li> </ol>	rgy Company's En	vironmental Affairs	Department.					

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

The Environmental Integrity Committee of our Board of Directors is responsible for reviewing our effect on the environment and our adherence to our environmental principles and making recommendations to the full board of directors aimed at improving environmental performance.

The company's Chief Environmental Officer assists the rest of the organization in following the company's environmental policies and practices. One full time staff person works under her leadership.

An informal network consists of regional and departmental representatives. This group meets as needed to coordinate environmental efforts and facilitate communication on environmental matters.



#### **Stakeholder Engagement and Community Involvement**

We sponsor and participate in community focused environmental events and programs as a way of informing the public about the environmental consequences of traditional generation and the benefits of renewable electricity. Through our Solar-Powered School's Program, for example, we've awarded a total of 10 solar systems to schools in CA, OH, and VT. These awards included a 1-2 kW solar system, a companion curriculum, and a "Solar Powered School Celebration" day to dedicate the system.

E	Business and Environmental Relati	ons
Ceres Green-e Renewable Electricity Branding Program National Wind Coordinating Committee	American Wind Energy Association Mid Atlantic Renewable Energy Coalition Green Energy Ohio	World Resources Institute Clean Texas Program Texas Renewable Energy Industries Association

Environmental Advisory Board Members					
Ralph Cavanagh         Natural Resources Defense Council, Co-Director Energy Program					
Elizabeth Cook World Resources Institute, Co-Director of Management Institute for Environment and Business					
Christopher Flavin Worldwatch Institute, President					
John Hanger         Citizens for Pennsylvania's Future (PennFuture), President and CEO					
Hunter Lovins         Natural Capitalism, Inc., Founder					
Rachel Shimshak	Renewable Northwest Project, Director				

Green Mountain Energy Company participates in Earthshare, a program that encourages employees to make individual financial contributions to leading environmental organizations. In 2003, we donated roughly \$14,000 including our corporate matching policy.

As a way to foster dialogue with the national environmental community, we assembled an Environmental Advisory Board—a forum assembled to receive expert advice on environmental policy and other issues. The Environmental Advisory Board also encourages dialogue between the Company and other members of the environmental community. Board members serve in their individual capacity.

# **Environmental Performance**



Green Mountain Energy Company uses the marketplace to promote the sale of cleaner electricity to individual consumers and corporations.



For additional information on all of Green Mountain Energy Company's 2003 products and their environmental performance, please see the Appendix.

## Helping to Clean the Air

Green Mountain Energy Company customers are helping to clean the air by supporting new renewable generation. The cutoff date for whether a facility is new varies from region to region. Typically, a facility is defined as "new" if it comes online after electricity choice is initiated in a region.

When electricity goes onto the grid to meet our customer demand, it decreases reliance on electricity generated from conventional sources. As a result, customers are able to reduce their household's share of pollution.



#### Carbon Dioxide Avoided Annually

Making electricity annually causes billions of tons of pollution in the United States.

By supporting new renewable facilities, customers choosing *Green Mountain Energy* electricity have together reduced their share of this pollution.

In 2003, customers purchasing *Green Mountain Energy* electricity avoided over 601,000 tons of carbon dioxide.

As a group, customers choosing *Green Mountain Energy* electricity prevented as much carbon dioxide as:

- not driving 1.3 billion miles
- taking 107,000 cars off the road for an entire year
- the annual carbon sequestration from 81 million trees



We have an internal standard to offer electricity products that: (1) are dramatically cleaner than the energy mix serving a region for combined emissions of carbon dioxide, sulfur dioxide, and nitrogen oxides; and (2) feature energy from new renewable facilities. New facilities are incremental renewable generation that has come online to serve customer choice (typically 1999 or later). In selecting generation sources for our products we examine several criteria, including the generation source (or fuel), vintage, and air emissions (if any) from the generation facility.





\* Emissions from landfill gas are considered to be CO<sub>2</sub> neutral. Emissions from geothermal and landfill gas generation are gross emissions. In accounting for emissions of undeveloped resources, (i.e. natural venting of geothermal gases and emissions from required flaring landfill gases) net emissions may be less.

Because we are committed to offering cleaner electricity blends that give customers a way to support incremental environmental improvement, our choice of power suppliers is important. We examine the generation source, vintage, and air emissions of generation facilities supplying our energy. We stipulate specific environmental criteria for generating facility performance in our contracts with wholesale energy providers.

We have also been guided by the Green-e Renewable Electricity Program (Green-e) in developing our electricity products. In 2003, we offered Green-e certified products in several of our service regions, including NJ, NY, and PA. In order for an electricity product to be certified by Green-e, it must satisfy particular criteria, including:

- At least 50% of the product must come from specified renewable resources. Green-e excludes certain generation technologies from the Green-e definition of eligible renewable resources (e.g. municipal solid waste).
- Emissions of sulfur dioxide, nitrogen oxides, and carbon dioxide from any non-renewable component of the product must not exceed average emissions rates of fossil fuel in the region's system mix.
- Total fossil-fuel emissions of the product cannot exceed the average system power emissions rate.
- One year after deregulation, the product must contain at least 10% "new renewable" electricity. This requirement increases to 15% the next year.
- The product does not include nuclear power other than what is contained in any system power purchased for the product.
- The product must be offered by a company to following the Green-e Code of Conduct on ethical treatment of customers, including the use of simple contracts and disclosure labels.

#### About Green-e

Green-e was formed 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. More information is available at www.green-e.org

#### **Energy Efficiency Efforts**

In 2003, we continued our Power Perks<sup>tm</sup> Products program offering customers choices for energy efficiency products. Power Perks<sup>tm</sup> products help our customers save energy. Many of the offerings are certified by the EPA's ENERGY STAR program. We offer these products exclusively to our customers, often at a savings compared to national retailers' prices for the same or comparable items. We offer these products in partnership with Energy Federation Incorporated, one of the nation's largest distributors of energy efficient products.

#### **Electricity Supply by Product and Region**

The following table summarizes the CO2 environmental benefit of the products that *Green Mountain Energy* sold to its customers in California, Connecticut, New Jersey, New York, Ohio, Oregon, Pennsylvania, and Texas in 2003.

Customers who choose *Green Mountain Energy* electricity do not have electricity from a specific generation facility delivered directly to their house, but they are able to support generators of cleaner energy that provide electricity to regional power systems in an amount equal to their annual usage.

By purchasing and retiring renewable energy certificates or attributes from specific facilities we ensure that electricity from the promised resources equal to a customer's annual electricity usage is delivered to their region.

200	3 Carbon Dioxide Avoided by Green I Statewid	Mountain Er	hergy Company Custor / Usage	ner with Average						
		Carbon Dioxide	Preventing atmospheric CO2 as much as							
State	Product	(pounds per customer per year)	not driving this	this many trees,						
			many miles <sup>1</sup>	annually <sup>2</sup>						
CA	Breathe Easy	882	980	60						
СТ	Green Mountain Energy Electricity	842	936	57						
NJ	EcoSmart	423	470	29						
	EnviroBlend	845	939	57						
NY	Green Mountain Energy Electricity	3,135	3,483	213						
OH	Green Mountain Energy Electricity	397	441	27						
OR	Green Mountain Energy Electricity	3,360	3,733	229						
PA	EcoSmart	500	556	34						
	EnviroBlend	1,268	1,409	86						
	Nature's Choice	1,268	1,409	86						
	PECO CDS	Mountain Energy Company Customer with Average e Electricity Usage           Carbon Dioxide (pounds per customer per year)         Preventing atmospheric CO2 as much as          not driving this many miles <sup>1</sup> this many trees, annually <sup>2</sup> 882         980         60           842         936         57           423         470         29           845         939         57           3,135         3,483         213           397         441         27           3,360         3,733         229           500         556         34           1,268         1,409         86           100         111         7           17,620         19,580         1,199           11,807         13,119         803           1,410         1,566         96           6,680         7,343         450								
TX	100% Wind	17,620	19,580	1,199						
	Reliable Rate(And Month-to Month)	11,807	13,119	803						
	Multi Family Housing Product	1,410	1,566	96						
State Hole Lieuticity osageStateProductCarbon Dioxide (pounds per customer per year)Preventing atmospheric CO2 as much asCABreathe EasyCarbon per year)not driving this many miles1this many tree annually2CABreathe Easy88298060CTGreen Mountain Energy Electricity84293657NJEcoSmart42347029EnviroBlend84593957NYGreen Mountain Energy Electricity3,1353,483213OHGreen Mountain Energy Electricity3,3603,733229PAEcoSmart50055634EnviroBlend1,2681,40986Nature's Choice1,2681,40986PECO CDS1001117TX100% Wind17,62019,5801,119Reliable Rate(And Month-to Month)11,80713,119803Multi Family Housing Product1,4101,56696C81Luited States, making electricity causes billions of tons of carbon dioxide every year										
In the U	Inited States, making electricity causes billion	ns of tons of c	arbon dioxide every year							

1. United States Environmental Protection Agency. Average Annual Emissions and Fuel Consumption for Passenger Cars and Light Trucks http://www.epa.gov/otag/consumer/f00013.htm

2. Shilberg, Gayatri, M., Measurement and Valuing of Air Emissions in Preliminary ER-90 Resource Cases, prepared for the California Energy Commission, Feb. 1990. Quoting, Chernick, Paul and Emily Caverhill, The Valuation of Externalities From Energy Production, Delivery, and Use, Appendix C. A Report to the Boston Gas Company, December 22, 1989

### Green Mountain Energy New Renewable Facilities



The new renewable facilities that we purchase from include this special group of facilities that were developed specifically to meet Green Mountain Energy Company customer demand.

In 2003 we developed the largest *Green Mountain Energy* New Renewable Facility to date—the Green Mountain Energy<sup>®</sup> Wind Farm at Brazos. This 160 MW facility is one of the 10 largest wind farms nationwide and began operations in the beginning of 2004.

Green Mountain Energy Company New Renewable Facilities*Facility NameDateLocationSizeGreen Mountain Solar at BJ'sSpring 1999Conshohoken, PA50 kWGreen Mountain Wind at San GorgonioSummer 1999Palm Springs, CA2,100 kWGreen Mountain Solar 2000 MendocinoFall 1999Hopland, CA106 kWGreen Mountain® Wind FarmSpring 2000Garrett, PA10,400 kWGreen Mountain Solar – BerkeleyWinter 2000Berkeley, CA100 kWGreen Mountain Solar – PittsburghFall 2001Pittsburgh, PA30 kWGreen Mountain Solar – Upper Kirby District, Houston**Spring 2002Dallas, TX58 kWGreen Mountain Solar – Southern New JerseySpring 2002Kirtland, OH26 kWGreen Mountain Solar – Discovery Museum, CTSpring 2002Bridgeport, CT19 kWGreen Mountain Energy® Wind Farm at Bowling GreenFall 2003Bowling Green, OH3,600 kW			
Facility Name	Date	Location	Size
Green Mountain Solar at BJ's	Spring 1999	Conshohoken, PA	50 kW
Green Mountain Wind at San Gorgonio	Summer 1999	Palm Springs, CA	2,100 kW
Green Mountain Solar 2000 Mendocino	Fall 1999	Hopland, CA	106 kW
Green Mountain® Wind Farm	Spring 2000	Garrett, PA	10,400 kW
Green Mountain Solar – Berkeley	Winter 2000	Berkeley, CA	100 kW
Green Mountain Solar – Pittsburgh	Fall 2001	Pittsburgh, PA	30 kW
Green Mountain Solar – Winston School**	Spring 2002	Dallas, TX	58 kW
Green Mountain Solar – Upper Kirby District, Houston**	Spring 2002	Houston, TX	43 kW
Green Mountain Solar – Lake Metropark, OH	Spring 2002	Kirtland, OH	26 kW
Green Mountain Solar – Southern New Jersey	Spring 2002	Deptford, NJ	52 kW
Green Mountain Solar – Discovery Museum, CT	Spring 2002	Bridgeport, CT	19 kW
Green Mountain Energy® Wind Farm at Bowling Green	Fall 2003	Bowling Green, OH	3,600 kW
Green Mountain Energy® Wind Farm at Brazos	Groundbreaking, 2003 Operational, 2004	Brazos, TX	160,000 kW

\* Green Mountain Energy wind and solar facilities are owned and operated by various third parties and branded Green Mountain Energy facilities through licensing agreements with such owner and operators.

\*\* Facilities in Texas built thanks to Big Texas Sun Club members.

#### New Renewable Development: Land Use and Biodiversity

In our endorsement of the Ceres principles, we affirmed our commitment to safeguard all habitats affected by our operations and protect open spaces and wilderness, while preserving biodiversity. We recognize the potential for land-use consequences when new renewable facilities are developed. Working with our development partners we ensure that these facilities are sited to avoid significant negative affect on their surroundings. To learn more about the review that accompanied the Green Mountain Wind Farm at Garrett, reference our 1999 and 2000 Ceres reports.

# Operational Performance: Environmental, Health, and Safety



We do not own generation or energy distribution operations. Rather, we engage in retail electricity marketing. 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 electric utility.

#### Compliance

Ceres asks endorsing companies to complete the accompanying chart, indicating if their operations in any way require compliance with environmental, health, or safety regulations at either the national, sub-national or supranational level in key environmental categories.

At our offices, 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. No enforcement action in any environmental, health, and safety regulation has been raised against Green Mountain Energy Company.

Category	Compliance Required?
Air Quality	No
Water Quality	No
Drinking Water	No
Chemical Certification	No
Hazardous Waste*	Yes
Emergency Response	No
Workplace Health & Safety	Yes
Radioactive Materials	No
Habitat Protection	No
* Nickel cadmium batteries used in	n pagers

## **Carbon Dioxide Emissions**

Because of the threat of global warming from increased  $CO_2$  concentrations in the air, we are guided by the precautionary principle. Therefore, we estimate the  $CO_2$  emissions from our key business activities and act to reduce or offset them. We calculate our emissions from activities like: corporate air travel, manufacturing of the paper we purchase, employee commuting, and our office energy use.



In 1998, we set out to identify the major components of our company's  $CO_2$  footprint. Since then, we have developed a method to estimate the amount of carbon dioxide emitted to the atmosphere as a result of our business operations and increased the boundaries of our reporting to include regional offices.

The tables on the following page detail our carbon dioxide emissions by source for 2002 and 2003. Overall, we maintained our carbon dioxide footprint at our 2000 baseline level in 2003. In 2003, we continued a program that began in 2002 to support enough new wind generation to match the electricity use of our corporate offices. That reduced carbon dioxide from electricity use by an additional 3% compared to the prior year.

Our  $CO_2$  from paper use increased from 2002 to 2003 levels, from 22% to 39% -due to reductions in the amount of post-consumer waste fiber in our purchased paper.

#### OPERATIONAL PERFORMANCE



## **Our Carbon Dioxide Mitigation Program**

In past years, we had acted on our interim commitment simply to mitigate 50% of carbon dioxide emissions resulting from our business operations each year. In 2002, we began a mitigation strategy based on reductions to a baseline (50% of 2000 gross CO2 emissions = 1,162 short tons of CO2). This new approach is motivated by our desire to transition to an absolute emission reduction target—one that ensures over time, that our footprint will get no larger. We chose to use 50% for a number of reasons. First, we share the growing concern that if left unchecked, CO2 emissions will continue to alter the atmosphere disrupting human settlements around the globe and threatening human and natural ecosystems. Second, our Ceres endorsement provides that we will "reduce and make continual progress toward eliminating the release of any substance that may cause environmental damage to the air, water, or the earth or its inhabitants" - it is an incredibly high standard to achieve. Lastly, through our research, we found 50% to be an incredibly high standard, and we hold ourselves to higher standards at Green Mountain Energy Company. On the basis of continual improvement mentioned above, our goal is to become 100% carbon neutral by year-end 2005.

Actual reductions to our 2003 footprint are largely attributable to purchasing wind energy credits to match the electricity use in our Austin headquarters.

Starting in 2004, we will transition to the WRI/WBCSD GHG Accounting Protocol. Our current GHG accounting methods are consistent with and transferable to the GHG Accounting Protocol, but we will formally adopt the Protocol as our GHG Accounting method going forward.

### **Corporate Energy Use**

Green Mountain Energy Company's primary energy use is the electricity necessary to operate the company's offices. We have taken steps to decrease the environmental consequences of our energy use by purchasing renewable electricity and exercising energy efficiency in our offices. In 2003, we purchased enough wind energy credits to match the electricity use in our Austin headquarters, drastically reducing the environmental toll of our corporate energy use.

0	Office Electricity Use							
		1998 <sup>a</sup>	1999 <sup>a</sup>	2000 <sup>b</sup>	2001 <sup>b</sup>	2002 <sup>b</sup>	2003 <sup>c</sup>	
	Electricity (kWh)	214,560	240,800	605,016	751,989	736,704	759,068	
					I		I	

Note(s)

- a. Electricity use in 1998 1999 is based on actual meter readings for our VT corporate headquarters only.
- b. Electricity use in 2000 and subsequent years for our TX corporate headquarters is estimated based on percentage of space shared in multi-tenant building without sub-metering.
- c. Electricity use also includes consumption in regional offices in NJ, OH, OR, PA and VT.



We also operate a modest photovoltaic generation system atop our corporate headquarters in Austin, TX.

- The project consists of 60 individual BP Millennia series solar panels. Each panel uses "thin film" technology, a promising low-cost source of solar energy.
- The system's estimated annual energy output is about 3,500 kWh per year. The system displaces approximately 1% of our overall energy use in the office.



#### OPERATIONAL PERFORMANCE

#### **Corporate Transportation**

As a growing company that is expanding into several regions, we rely on commercial air transportation to meet with each other, with suppliers and counterparties and to attend key sessions with stakeholders. We recognize the consequences that our corporate transportation has on our environment.



From 2002 to 2003 our corporate air travel decreased by approximately 50% through concerted efforts to avoid non-essential travel. We estimate that  $CO_2$  emissions from air travel and employee commuting constituted 36% of our corporate  $CO_2$  footprint in 2003. Our annual  $CO_2$  mitigation program is designed to offset a portion of carbon dioxide emissions from our employee commuting and air travel.

We are challenged to find effective ways to reduce our employee commuting. In late 2002, we began developing an employee incentive carpool incentive program, which began in 2003. This program rewards employees who use environmentally preferable transportation for a meaningful part of their daily commute. Our environmental goal is to have 4.0% of employees use environmentally preferable transportation (carpooling, public transportation, and non-motorized transportation) as their most often used form of commuting weekly. In 2003 we fell short of this goal, on average realizing about 1% of our employees used environmentally preferable transportation for commuting. We have refined our employees. Participating employees in 2004 are included in a drawing for cash award monthly, based on the number of days they've used environmentally preferable transportation. The employee who has used environmentally preferable transportation the most throughout the year will also receives a cash prize at the end of the year.

We realize that Austin, Texas is not the most environmentally preferable transportation friendly city and are hopeful that our revamped environmentally preferable transportation program will increase participation in daily commuting. That being said, we fully intend to review 2004 commuting results and will continue to consider all alternatives to encourage employees to reduce their footprint through using environmentally preferable transportation.

#### Natural Resource Use

As a retailer, our use of materials and water is similar to that of any company operating in any office environment. Paper constitutes the most substantial portion of our materials footprint. We've taken steps to reduce the environmental harm from our paper use by setting clear environmental guidelines for the paper we buy.



## Paper Use

In our first few years of operation we relied heavily on direct-mail educational efforts to inform potential customers about electricity generation and the benefits of supporting renewable technologies. These undertakings required a considerable amount of forest fiber. Subsequently, we scaled back our direct-mail efforts.

We've taken several initiatives to reduce the environmental consequences of the paper use:

- Since 2000, we've had a policy to (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 do not contain old-growth fiber; (3) ask our suppliers to verify the companies and regions from which virgin fiber content is derived; and (4) measure and benchmark the amount of forest products we use, as well as their content of post-consumer waste. We achieve compliance with this policy by selecting paper made with recycled fiber content (preferably post-consumer recycled content).
- A formal standard addressing fiber content and chlorine processing has guided our paper purchases since 1999. Under our current standard, paper must contain at least 30% post-consumer waste recycled content. The paper must be processed using process chlorine-free or elemental chlorine-free technologies. Lastly, any virgin fiber within the paper should not be derived from old-growth forests. We also use soy-based inks for printing.

- In 2003, we saw an increase in our overall paper use attributable primarily to increased paper used for billing. We maintained our standard of using paper that contained at least 30% post-consumer waste recycled content in lieu of this increase in paper usage.
- Looking ahead, in 2004, we have instituted a mandatory double-sided printing requirement throughout our corporate headquarters. We expect this new policy to significantly reduce paper use.

Recycled Wa	ste Da	ita – Ai	ustin H	eadqua	arters								
	1999	2000	2001	2002	2003	12 -							
Annual Recycled Waste (tons)	5	6	5	11	9	- 10 8 - م							
Annual Recycled Waste per HQ employee (pounds)	147	124	120	180	129	<b>5</b> 6 - 4 - 2 -							
Note(s): Recycle measurement.	d waste i	s estimat	ted by sa	mpling ar	nd direct	0 -	19	99	2000	2001 Year	2002	2	2003

#### **Office Waste**

Our waste stream is typical of most office environments. Working with our recycling partners and maintenance staff, we are able to estimate the amount of material recycled in our corporate headquarters. The chart above summarizes the recycled waste from the operation of our corporate headquarters.

In keeping with our companywide recycling policy, we have taken actions to reduce the amount of waste attributable to our operation and mitigate its consequence on our environment:

- We have organized waste and recycling collection areas for paper, glass, and plastics. We educate our employees on the importance of proper recycling.
- We have instituted a program for the secured recycling of confidential business documents.
- The only hazardous waste generated in our facilities is expended batteries for electronic devices and spent fluorescent light bulbs. As a matter of policy, these wastes are segregated for disposal at local hazardous waste depots.



• We request that recipients of our customer communications recycle them after use.

Our total recycled waste decreased by about 20% from 2002 to 2003 attributable primarily to increased headcount that we experienced in 2003. Recycled waste per employee decreased by approximately 28% over the same time period.

#### OPERATIONAL PERFORMANCE

In 2004, we have instituted a computer recycling program and a cell phone recycling program. The hazardous chemicals in computers and cell phones are known pollutants that traditional landfills are not designed to receive. Through these new recycling programs we expect to avoid hazardous chemicals such as lead, brominated fire retardants (BFRs), polyvinyl chloride (PVC), and the heavy metals cadmium, chromium, and mercury from entering landfills.

## **Suppliers and Partners**

As an electricity retailer, most of our effort in supply chain management has focused on energy supply issues. For more information about our work with energy suppliers, refer to page 15.

In our business operations, we've begun to address supplier issues in marketing activities, focusing particularly on the paper that we use and the products that we offer customers.

## Standards for Non-Energy Product Offerings

Our standard promotes products that are environmentally superior to others in the same category.

To accomplish that, we work with the product's manufacturer or supplier to ensure that each product excels in at least one significant category: durability, reusability, recycled content, natural content, energy efficiency or water efficiency.

We also require that we only purchase those products that meet the following criteria: (1) do not contain old growth forest fiber, (2) do not contain substances that damage the ozone layer, (3) have emission-free operation, and (4) are made free of child labor.

#### Water Use

Our corporate water use is limited to that drawn by our 190 or so employees in our corporate offices. Green Mountain Energy Company operates in office environments and does not engage in water intensive or manufacturing processes. "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."

Green Mountain Energy Company, Environmental Charter

Early in our business operations, we tracked our water use in our corporate headquarters. After gathering a year's worth of data, we concluded that our water use was of relatively little significance compared to other aspects of our environmental footprint. That said, we make an effort to be efficient with our water use. Where possible, we have ensured that our offices are equipped with low-flow water fixtures to promote water conservation.

# Summary

Green Mountain Energy Company has endorsed the Ceres Principles and we publicly affirm our belief that corporations have a responsibility for the environment, and must conduct all aspects of their business as responsible stewards of the environment by operating in a manner that protects the Earth. We believe that corporations must not compromise the ability of future generations to sustain themselves.

We live up to these principles through our company policies, organization, and environmental and operational performance:

Our corporate organization puts a premium on environmental management. Our Chief Environmental Officer reports directly to the Chief Executive Officer and our environmental mission is apparent in the products we sell. We also maintain an Environmental Advisory Board as a way to foster dialogue with the national environmental community.

Our cleaner electricity products work to offset emissions associated with the use of traditional fossil fuel based generation. We maintain an aggressive internal goal of supporting the development of 1,000 MW of new renewable generation by 2010.

Our internal operations seek to reduce, reuse and recycle as much as is reasonable. Our corporate policies look to manage paper use, office waste, employee transportation and office energy use. Our standards for nonenergy product offerings strive to promote environmentally superior products, and our goal to neutralize our operational carbon footprint by year end 2005 will be a key driver of our operational performance.

We believe that the public must be informed about the relationship between electricity production and air pollution so that they can make informed decisions about the sources of their electricity.

We are committed to maintaining our aggressive targets as drivers of our continued growth and the company's success.

# Appendix: Environmental Performance of Products

All *Green Mountain Energy* electricity products are dramatically cleaner than regional system power because they feature energy from renewable resources and the cleanest burning fossil fuel- natural gas.



**Hydro** – Uses the energy of moving water to generate electricity. Even the best hydro plants may affect fish and wildlife habitats, but they are a non-polluting resource.



**Wind** – Turbines are mounted on tall towers to harness the wind. This pollution-free form of generation is now the fastest-growing energy source in the world. The wind farms of today are constructed after studies conclude that the turbines will have little or no effect on the surrounding ecosystem, including birds.



**Biomass** - Biomass generation harnesses energy stored in organic materials. Biomass includes materials like wood and mill wastes, and energy crops, as well as the gases naturally produced when waste decomposes.



**Solar** – The sun's energy can be used to generate electricity in two different ways. Photovoltaic (PV) cells can convert sunlight into electricity directly. Solar-thermal systems use the sun's heat to generate electricity, often by creating steam to power a generator's turbine.



**Geothermal** – Geothermal generation relies on heat trapped within the earth's crust, the same kind of heat that is evident in volcanic activities and geysers. Geothermal power plants tap steam and hot water trapped underground to convert that energy into electricity.



**Natural Gas** – Natural gas is not a renewable resource. It is, however, the cleanest burning fossil fuel. Compared to burning fuels like coal and oil for the same amount of energy, natural gas emits less of the pollution that causes global warming, acid rain, and smog.

### **California Supply**



California has abundant renewable energy resources. These include wind, solar, hydroelectric, biomass, and geothermal resources sufficient for electricity generation. Because of the exceptional renewable resource availability in California and surrounding regions, we were able to offer 100% renewable electricity. We were one of the first companies to enter the deregulated electricity market in California, but unfortunately due to regulatory changes during 2002, we are no longer able to serve new customers in California.

	Breathe Ea	California Generic System <sup>4</sup>		
Generation Resource	Promised Supply	Actual Supply	(For Comparison)	
Renewable	100%	100%	22.7%	
Biomass	-	-	2.6%	
Geothermal	-	85%	5.1%	
Low Impact Hydro <sup>2</sup>	-	-	12.10/	
Large Hydro <sup>2</sup>	-	-	13.1%	
Solar (PV)	-	-	<1%	
Wind	-	15%	1.5%	
Coal	-	-	11%	
Oil	-	-	-	
Natural Gas	-	-	50.3%	
Nuclear	-	-	15.6%	
Other	-	-	0.4%	
TOTAL	100%	100%	100%	
% New Renewable <sup>3</sup>	15%	15%		

Columns may not sum to 100% due to rounding.

(1) Promised Supply refers to power that we contracted to provide. Actual Supply refers to the actual resource mix of the electricity that a customer purchases during the year.

(2) Low Impact hydroelectric facilities are certified by the Low Impact Hydroelectric Institute (LIHI) and tend to be less than or equal to 30 MW in size. Large hydroelectric facilities tend to be greater than 30MW in size.

(3) In California, "new renewable resource" means that these facilities began commercial operation on or after January 1, 1997.

(4) Average CA system power mix is derived from 2002 California Energy Commission generation data. Based on average state-wide use.

### **Connecticut Supply**



According to EIA, wind and biomass have the best potential for development in New England. Connecticut has good wind sources, which if fully developed could provide/serve 22% of the state's electricity consumption. Thirteen percent of the state's electricity demand could be met with biomass power resources. The state has low potential for hydroelectric, mid-range solar resources, and no geothermal resources suitable for generating electricity.

As of year-end 2003, Green Mountain Energy Company made the decision to leave the Connecticut market. Regulatory hurdles in Connecticut made it impossible to continue offering our customers pollution-free electricity in an affordable manner.

	Green Mountain E	Connecticut Generic System <sup>4</sup>		
Generation Resource	Promised Supply	Actual Supply	(For Comparison)	
Renewable	100%	100%	15.1%	
Biomass	-	-	6.9%	
Geothermal	-	-	-	
Low Impact Hydro <sup>2</sup>	39%	39%	8.2%	
Large Hydro <sup>2</sup>	50%	50%		
Solar (PV)	-	-	-	
Wind	11%	11%	< 0.1%	
Coal	-	-	16.8%	
Natural Gas	-	-	20.9%	
Oil	-	-	16.0%	
Nuclear	-	-	29.7%	
Other	-	-	1.5%	
TOTAL	100%	100%	100%	
% New Renewable <sup>3</sup>	11%	11%		

Average CT system power mix is derived from EPA eGRID v2.01 emission rates for the New England ISO / PCA.

Columns may not sum to 100% due to rounding.

(1) Promised Supply refers to power that we contracted to provide. Actual Supply refers to the actual resource mix of the electricity that a customer purchases during the year.

(2) Low Impact hydroelectric facilities are certified by the Low Impact Hydroelectric Institute (LIHI) and tend to be less than or equal to 30 MW in size. Large hydroelectric facilities tend to be greater than 30MW in size.

(3) In Connecticut, "new renewable resource" means that these facilities began commercial operation on or after January 1, 1998.

(4) Based on average state-wide use.

#### **New Jersey Supply**



According to EIA, wind and biomass resources offer the best potential for renewable electricity generation in the Mid-Atlantic region. Portions of New Jersey are characterized as having "good" wind resources. Biomass also offers a promising form of renewable generation. The state has relatively few hydropower resources. Less than 1% of New Jersey's electricity needs could come from hydropower located within its borders. EIA characterizes New Jersey's solar resources as useful or marginally useful depending on the type of solar technology employed. The state has no geothermal resources capable of generating electricity.

	EcoSmart <sup>®</sup> electricity		EnviroBlend	d <sup>®</sup> electricity	New Jersey System Power <sup>4</sup>
	Promised Supply <sup>1</sup>	Actual Supply	Promised Supply <sup>1</sup>	Actual Supply	(for comparison)
Renewable	5%	5%	50%	50%	2.6%
Biomass	-	-	-	40%	1.4%
Geothermal	-	-			-
Low Impact Hydro <sup>2</sup>	-	-	-	-	<1%
Solar (PV)	-	-	-	-	-
Wind	-	5%	-	10%	<1%
Large Hydro <sup>2</sup>	95%	95%	50% 50%		1%
Natural Gas	-	-	-	-	8.8%
Coal	-	-	-	-	45.1%
Nuclear	-	-	-	-	40.0%
Oil	-	-	-	-	2.8%
Other	-	-	-	-	0.7%
TOTAL	100%	100%	100%	100%	100%
% New Renewable <sup>3</sup>	5%	5%	10%	10%	

Columns may not sum to 100% due to rounding.

Promised Supply refers to power that we contracted to provide and included an unspecified mix of eligible renewable resources dependant upon (1) resource availability. Actual Supply refers to the actual resource mix of the electricity that a customer purchases during the year.

(2) Low Impact hydroelectric facilities are certified by the Low Impact Hydroelectric Institute (LIHI) and tend to be less than or equal to 30 MW in size. Large hydroelectric facilities tend to be greater than 30MW in size.

(3)

In New Jersey, "new renewable resource" means that these facilities began commercial operation on our after January 1, 1998. Average NJ system power mix is derived from EPA eGRID v2.01 Generation Resource Mix data, Pennsylvania-Jersey-Maryland ISO power (4) control area. Based on average state-wide use.

### **New York Supply**



According to EIA, New York has excellent wind resources in portions of the state while useful solar resources are present throughout the state. New York has a good hydropower resource as a percentage of the state's electricity generation and a good biomass resource potential. The state has no geothermal resources capable of generating electricity.

	Green Mountain	New York Generic System <sup>4</sup>		
Generation Resource	Promised Supply <sup>1</sup>	Actual Supply <sup>1</sup>	(For Comparison)	
Renewable	100%	100%	19.0%	
Biomass	-	-	1.6%	
Geothermal	-	-	-	
Large Hydro <sup>2</sup>	50%	50%	17.20/	
Low Impact Hydro <sup>2</sup>	-	-	17.3%	
Solar (PV)	-	-	-	
Wind	50%	50%	<0.1%	
Coal	-	-	18.0%	
Natural Gas	-	-	29.0%	
Oil	-	-	10.8%	
Nuclear	-	-	22.7%	
Other	-	-	<1%	
TOTAL	100%	100%	100%	
% New Renewable <sup>3</sup>	50%	50%		

Average NY system power mix is derived from EPA EGRID v2.01 emission rates for the NYPOOL PCA region Columns may not sum to 100% due to rounding.

(1) Promised Supply refers to power that we contracted to provide. Actual Supply refers to the actual resource mix of the electricity that a customer purchases during the year.

(2) Low Impact hydroelectric facilities are certified by the Low Impact Hydroelectric Institute (LIHI) and tend to be less than or equal to 30 MW in size. Large hydroelectric facilities tend to be greater than 30MW in size.

(3) In New York, "new renewable resource" means that these facilities began commercial operation on or after January 1, 1998.

(4) Based on average state-wide use.

## **Ohio Supply**



Ohio has marginal wind resources according to EIA. Studies indicate that Ohio has good resources for generating electricity from biomass. If fully developed, they could supply 64% of the state's residential electricity demand.

Making electricity causes billions of tons of carbon dioxide to be released annually in the United States. As a group, our Ohio customers prevented over 100,000 tons of carbon dioxide in 2003—as much as would be prevented by taking 17,900 cars off the road for a year.

	Green Mountain	Ohio Generic System <sup>4</sup>		
Generation Resource	Promised Supply <sup>1</sup>	Actual Supply <sup>1</sup>	(For Comparison)	
Renewable	2%	2%	1.0%	
Biomass	-	2%	0.5%	
Geothermal	-	-	-	
Low Impact Hydro <sup>2</sup>	-	-	0.49/	
Small Hydro <sup>2</sup>	-	-	0.4%	
Solar (PV)	-	-	-	
Wind	-	-	-	
Coal	-	-	87.3%	
Natural Gas	98%	98%	2.7%	
Oil	-	-	0.5%	
Nuclear	-	-	8.1%	
Other	-	-	0.4%	
TOTAL	100%	100%	100%	
% New Renewable <sup>3</sup>	2%	2%		

Columns may not sum to 100% due to rounding.

(1) Promised Supply refers to power that we contracted to provide. Actual Supply refers to the actual resource mix of the electricity that a customer purchases during the year.

(2) Low Impact hydroelectric facilities are certified by the Low Impact Hydroelectric Institute (LIHI) and tend to be less than or equal to 42 MW in size. Large hydroelectric facilities tend to be greater than 42MW in size.

(3) In Ohio, "new renewable resource" means that these facilities began commercial operation on or after January 1, 1997.

(4) Average OH system power mix is derived from EPA EGRID v2.01 emission rates for the ECAR NERC region

## **Oregon Supply**



According to EIA, Oregon has excellent wind resources in portions of the state. EIA estimates that About 1.5% of the state of Oregon has wind resources that could be developed, not including land that is subject to land-use conflicts, has urban development, or is environmentally sensitive. If all this potential was developed with utility-scale wind turbines, the power produced each year would equal 43,252,500 megawatt-hours - or 92% of the entire state's electricity consumption.

Oregon also has good biomass resources, useful solar resources in the eastern part of the state, very good hydropower resource (as a percentage of the state's electricity generation) and geothermal resources sufficient to generate electricity.

	Green Mountain	Oregon Generic System <sup>3</sup>		
Generation Resource	Promised Supply <sup>1</sup>	Actual Supply <sup>1</sup>	(For Comparison)	
Renewable	100%	100%	42.3%	
Biomass	-	-	1.1%	
Geothermal	80%	80%	1.2%	
Large Hydro <sup>2</sup>	-	-	400/	
Low Impact Hydro <sup>2</sup>	-	-	40%	
Solar (PV)	-	-	-	
Wind	20%	20%	-	
Coal	-	-	46.3%	
Natural Gas	-	-	6.1%	
Oil	-	-	1.3%	
Nuclear	-	-	4.0%	
Other	-	-	-	
TOTAL	100%	100%	100%	
% New Renewable <sup>3</sup>	20%	15%		

Columns may not sum to 100% due to rounding.

(1) Promised Supply refers to power that we contracted to provide. Actual Supply refers to the actual resource mix of the electricity that a customer purchases during the year.

(2) Low Impact hydroelectric facilities are certified by the Low Impact Hydroelectric Institute (LIHI) and tend to be less than or equal to 30 MW in size. Large hydroelectric facilities tend to be greater than 30MW in size.

(3) In Oregon, under Renew 2000 guidelines a facility, or portion thereof, is generally considered "new" if it is built, re-powered, or enhanced on or after May 1, 1999.

(4) Average Oregon system power mix is derived Northwest Power Pool, Oregon Office of Energy 2001

### Pennsylvania Supply







According to EIA, biomass and wind resources offer the best potential for electricity generation within Pennsylvania. The state also has some useful solar generation resources. Our renewable supply was generated with landfill gas, hydroelectric resources, wind and modest amounts of solar. The state has no geothermal resources capable of generating electricity.

	EcoSmart <sup>®</sup> electricity		Enviro elec	oBlend <sup>®</sup> ctricity	Nature' elec	Pennsylvania System Power⁴	
	Promised Supply <sup>1</sup>	Actual Supply	Promised Supply <sup>1</sup>	Actual Supply	Promised Supply <sup>1</sup>	Actual Supply	(for comparison)
Renewable	100%	100%	50%	57%	100%	100%	2.6%
Biomass	-	-	50%	52%	100%	95%	1.4%
Geothermal	-	-	-	-	-	-	-
Low Impact Hydro <sup>2</sup>	-	-	-	-	-	-	-
Solar (PV)	-	-	-	-	-	-	-
Wind	5%	5%	-	5%	-	5%	<1%
Large Hydro <sup>2</sup>	95%	95%	-	-	-	-	1.2%
Natural Gas	-	-	50%	43%	-	-	8.8%
Coal	-	-	-	-	-	-	45.1%
Nuclear	-	-	-	-	-	-	40.0%
Oil	-	-	-	-	-	-	2.8%
Other	-	-	-	-	-	-	<1%
TOTAL	100%	100%	100%	100%	100%	100%	100%
% New Renewable <sup>3</sup>	5%	5%	15%	15%	15%	15%	

Columns may not sum to 100% due to rounding.

 Promised Supply refers to power that we contracted to provide and included an unspecified mix of eligible renewable resources dependant upon resource availability. Actual Supply refers to the actual resource mix of the electricity that a customer purchases during the year.
 Low Impact hydroelectric facilities are certified by the Low Impact Hydroelectric Institute (LIHI) and tend to be less than or equal to 30 MW in

(2) Low Impact hydroelectric facilities are certified by the Low Impact Hydroelectric Institute (LIHI) and tend to be less than or equal to 30 MW in size. Large hydroelectric facilities tend to be greater than 30MW in size.

(3) In Pennsylvania, "new renewable resource" means that these facilities began commercial operation on our after January 1, 1998.
 (4) Average PA system power mix is based on EPA E-GRID v2.01 Generation Resource Mix data, Pennsylvania-Jersey-Maryland ISO power control area.

#### **Texas Supply**





Texas has tremendous wind resources and solar resources, as well as high temperature geothermal resources capable of electricity generation. If all of Texas' potential for wind was developed, excluding lands in urban development, accounting for land-use conflicts, and environmentally sensitive areas, the power produced could supply 421% of the state's annual electricity consumption.

	100% Wind		Reliable Rate, Month-to-Month		Multi-Family Housing <sup>sm</sup>		Texas System Power <sup>4</sup> (for
	Promised Supply <sup>1</sup>	Actual Supply	Promised Supply <sup>1</sup>	Actual Supply	Promised Supply <sup>1</sup>	Actual Supply	comparison)
Renewable	100%	100%	100%	100%	10%	10%	0.7%
Biomass	-	-	-	-	-	-	0.4%
Geothermal	-	-	-	-	-	-	-
Low Impact Hydro <sup>2</sup>	-	-	-	-	-	-	0.29/
Large Hydro <sup>2</sup>	-	-	33%	33%	-	-	0.2%
Solar (PV)	-	-	-	-	-	-	-
Wind	100%	100%	67%	67%	10%	10%	0.1%
Natural Gas	-	-	-	-	90%	90%	50.1%
Coal	-	-	-	-	-	-	37.1%
Nuclear	-	-	-	-	-	-	9.9%
Oil	-	-	-	-	-	-	0.7%
Other	-	-	-	-	-	-	1.4%
TOTAL	100%	100%	100%	100%	100%	100%	100%
% New Renewable <sup>3</sup>	100%	100%	67%	67%	10%	10%	

Columns may not add, due to rounding.

(1) Promised Supply refers to power that we contracted to provide. Actual Supply refers to the actual resource mix of the electricity that a customer purchases during the year.

Low Impact hydroelectric facilities are certified by the Low Impact Hydroelectric Institute (LIHI) and tend to be less than or equal to 30 MW in (2) size. Large hydroelectric facilities tend to be greater than 30MW in size.

In Texas, "new renewable resource" means that these facilities began commercial operation on or after September 1, 1999. Average TX system power mix is based on EPA EGRID v2.01 emission rates for the State of Texas. (3)

(4)