# Dell Sustainability Report

Dell Fiscal Year 2005 in Review

**DELL**™

To view this report online, visit:
**www.dell.com/environment**

For more information about our sustainability programs, visit:
**www.dell.com/commitment**

You may also contact team members who prepared this report via e-mail at:
Dell_Sustainability@dell.com

**Reporting Year**

• Financial data are for Dell's fiscal year 2005 (ending January 2005).

• Environmental data (and associated goals) are for Dell's fiscal year 2005.

• Other data, except where stated, are for calendar year 2004.

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* Dell has produced this report covering fiscal year 2005 based on a number of external references including, but not limited to, certain elements of the *Global Reporting Initiative Sustainability Guidelines*. The GRI Index on this Contents page cross-references portions of this report to the *GRI Sustainability Guidelines*. A "P" suffix in the number listed in the GRI Index indicates that only portions of the referenced section are covered in this report.

# From the Chairman and the CEO

Michael S. Dell, Chairman of the Board (on left), and
Kevin B. Rollins, President and Chief Executive Officer.

At Dell, we have a core set of values that define the kind of company we are and aspire to become. We are committed to translating these values into sustainable practices and continually improving those practices.

This belief captures our approach to leveraging the vast skills of the Dell team to manage the environmental and societal impacts and opportunities of our products, processes and practices. We are pleased to introduce our Fiscal Year 2005 Sustainability Report, which in many ways is a summary of our accomplishments this year in putting our values into action. This report continues our practice of utilizing the Global Reporting Initiative (GRI) sustainability guidelines, available at **www.globalreporting.org**, and expands on our Year in Review, available at **www.dell.com**.

We would like to highlight several key areas of progress, starting with our focus on environmental responsibility. Examples in this area include:

- **Product Recovery and Recycling**: Dell was the first company in our industry to set a public product recovery goal. We set and exceeded a goal of increasing the weight of returned and recycled electronic products by 50 percent over FY2004. See page 58 for details.

- **Forest Stewardship**: Working with several stakeholders, including the ForestEthics (**www.forestethics.org**) and Environmental Defense (**www.environmentaldefense.org**) environmental nonprofits, Dell developed a model that governs our sourcing of paper products and sets a goal of using 10 percent post-consumer waste recycled content paper in our catalogs by the end of 2005. See page 49 for details.

The incorporation of labor rights into our supply chain management practices was also an area of increased focus. Areas of success include:

- Publication of Dell's Supplier Principles at **www.dell.com/supplierprinciples**. See page 23 for details.

- Collaboration with other companies to develop an Electronics Industry Code of Conduct for our common supply base, streamlining the efforts of suppliers to comply with the quality workplace standards we require to be in effect. This document is also available at **www.dell.com/downloads/global/corporate/vision_national/Sup_codeofconduct.pdf**. See page 37 for details.

As a global leader, Dell is focused on areas and issues where our practices can bring positive impact, in particular in the developing world. Examples of such are:

- Joining the Global Business Coalition on HIV/AIDS. The HIV pandemic potentially will have a devastating effect in countries around the world where Dell's customers, suppliers and partners are located. Dell is committed to doing our part to fight the spread of HIV/AIDS. See page 15 for details.

- Continuing to focus on diversity and, in particular, women's rights globally by supporting the Calvert Women's Principles, a comprehensive code of corporate conduct focused on promoting gender equality and women's empowerment (see page 16 or **www.calvertwomensprinciples.com** for more details).

Dell's direct business model guides our commitment to direct engagement with employees, customers and suppliers. We also engage in direct dialogue with socially responsible investment groups, shareholder activists, and a wide variety of nongovernmental organizations that are seeking business engagement to find global solutions for many social and environmental concerns.

While we have learned much this year, we realize there is much more to learn about the challenges facing our society and the responsibility Dell has to help meet those challenges. This year's report lays out not only the more significant challenges Dell is addressing, but also a set of goals for the coming year. We believe that we have the right team, business model, values, partners and stakeholders to support Dell on this important journey.

Michael S. Dell
Chairman of the Board

Kevin B. Rollins
President and Chief Executive Officer

# How to Use This Report

The Global Reporting Initiative Sustainability Guidelines were used to determine content areas for this report. These reporting guidelines are available at **www.globalreporting.org**. Use Table 1 to help you navigate through this report.

**Table 1: Document Highlights**

| Page(s) | Topic | Use |
|---|---|---|
| 2 | Year | As noted in the Acknowledgements:<br><br>• Financial data are for Dell's fiscal year 2005 (ending January 2005).<br><br>• Environmental data (and associated goals) are for Dell's fiscal year 2005.<br><br>• Other data, except where stated, are for calendar year 2004. |
| 3 | Contents | Cross-reference for GRI reporting elements. |
| 9 | Goals | A summary of high-level goals is presented here. Specific and detailed goals are also provided throughout the report in relevant sections. |
| 13, 27, 61 | Color Codes | The three major sections and related graphics have been color coded for ease of reference:<br><br>• Accountability is maroon.<br><br>• Environmental is green.<br><br>• Community is blue. |
| 30 | Stages of Total Product Life Cycle | The Product Life Cycle is broken into stages as depicted in this graphic. The pages that follow indicate the individual stages to ensure the reader is aware of the phase under discussion. |
| 39 | Significant Aspects | A chart of significant environmental aspects (an element of ISO 14001) has been added to this year's report. |
| 69 | Acronyms & Abbreviations | A glossary is provided at the end of the report. |
| n/a | Awards | Awards appear in relevant sections, rather than in a separate summary. |

Please contact **Dell_Sustainability@dell.com** for additional questions, copies or other requests.

# About Dell

Dell Inc. is a premier provider of products and services world-wide that enables customers to build their information-technology and Internet infrastructures. Dell offers a broad range of enterprise systems (servers, storage, workstations, and networking products), client systems (notebook and desktop computer systems), printing and imaging systems, software and peripherals, and global services. During calendar year 2004, Dell was the number one supplier of personal computer systems worldwide as well as in the United States. Dell's global market leadership is the result of a persistent focus on delivering the best possible customer experience by selling products and services directly to customers.

Consolidated net revenue increased 19 percent to $49.2 billion during fiscal year 2005, compared to $41.4 billion in FY2004. The year-over-year increase was driven by strong unit growth across most regions and product lines. As of January 28, 2005, Dell had approximately 55,200 regular employees, compared to approximately 46,000 at the end of FY2004. Approximately 24,600 of these employees were located in the U.S., and approximately 30,600 were located in other countries. While Dell's workforce located both inside and outside the U.S. increased during FY2005, the proportion of Dell's workforce located outside the U.S. increased due to a number of factors, including Dell's rapid international growth.

## Company Facts

Dell, a Delaware corporation, was founded in 1984 by Michael Dell on a simple concept: by selling computer systems directly to customers, Dell could best understand their needs and efficiently provide the most effective computing solutions to meet those needs. This direct business model eliminates wholesale and retailer dealers that add unnecessary time and cost, or diminish our understanding of customer expectations. The inherent efficiencies of this direct model help dramatically reduce Dell's overall environmental impact. Dell is based in Round Rock, Texas, and conducts operations worldwide through its subsidiaries. Additional information on Dell and Dell products can be found at **www.dell.com**.

## Company Profile

**Figure 1: Net Revenue (In Billions)**



*Fiscal Year ended January 28, 2005*
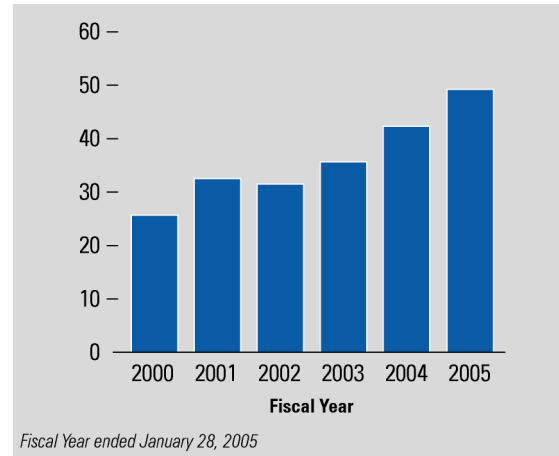
**Figure 2: Employees (In Thousands)**



*Fiscal Year ended January 28, 2005*
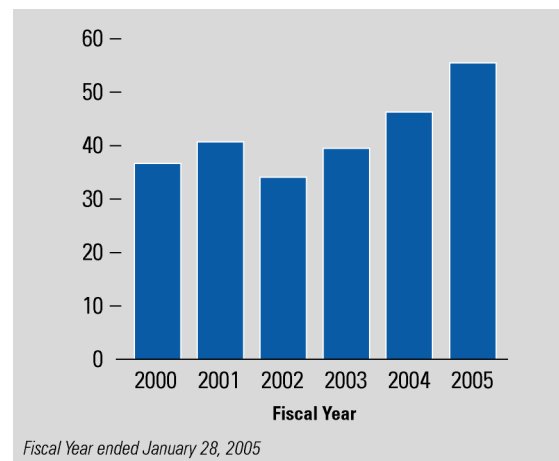
**Figure 3: Product Revenue Mix**



**Fiscal Year 2000**
- Enterprise 17%
- Notebooks 25%
- Desktops 58%

**Fiscal Year 2005**
- Enterprise 21%
- Notebooks 29%
- Desktops 50%
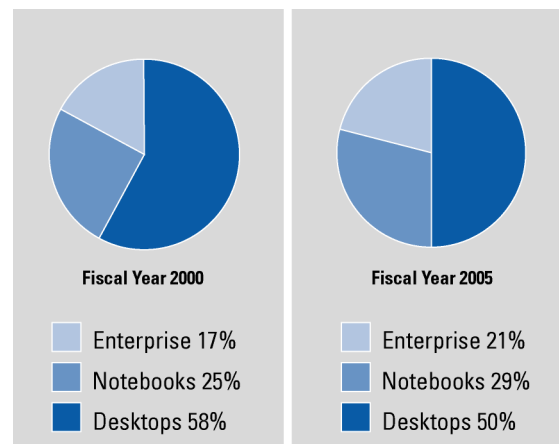
## Geographic Areas of Operations

### Americas

Dell Inc.
One Dell Way
Round Rock, TX 78682
512-338-4400
800-289-3355
Fax: 512-283-6161

### Europe, Middle East and Africa

Dell Europe
Milbanke House
Western Road
Bracknell, Berkshire
United Kingdom RG12 1RD
44-1344-860-456
Fax: 44-1344-372-767

### Asia-Pacific

Dell Asia Pte. Ltd.
180 Clemenceau Avenue
#06-01 Haw Par Center
Singapore 239922
65-6335-3388
Fax: 65-6335-3380

### Japan

Dell Japan, Inc.
Solid Square East Tower 20F
580 Horikawa-cho, Saiwai-ku
Kawasaki, Kanagawa 212-8589
Japan
81-44-556-4300
Fax: 81-44-556-3205

### Manufacturing Centers

Dell manufactures its computer systems in six locations:

Austin, Texas, United States
Lebanon, Tennessee, United States
Eldorado do Sul, Brazil
Limerick, Ireland
Penang, Malaysia
Xiamen, China

A seventh location in Winston-Salem, North Carolina, United States, is scheduled to open in Fall 2005.



Corporate headquarters in Round Rock, Texas.

# Values in Action

Dell is committed to operating in a responsible and sustainable manner around the globe. Over the last two years, we have built processes around how we put into action the values and beliefs communicated by *The Soul of Dell* (see page 16). The goal of our sustainability, accountability and community programs is to ensure that we operate in a manner that is consistent with our core values as we grow our business around the world.

The brand *Values in Action* has been adopted to capture the many ways the company and our employees act on our commitments. Values in Action captures activities as wide ranging as our diversity programs, our employee volunteerism programs, and our environmental responsibility efforts. Figure 4 illustrates the relationship between our core values, the sustainability, accountability and community programs, and the Values in Action concept.

**Dell** Values In Action

**Figure 4: Values in Action**

## Values in Action

**Accountability**
- To customers, shareholders, employees, and communities based on direct relationships.

**Soul of Dell**
Customers
Dell Team
Direct Relationships
Global Citizenship
Winning

**Community**
- Eliminating barriers to technology
- Addressing basic needs
- Improving access

**Sustainability**
- Maximizing the value of technology while minimizing its environmental impact

**Values in Action**

# Goals, Targets and Challenges

## FY2005 Goals Update

**Table 2: Update on FY2005 Goals**

| Area | Goal / Objective | FY2005 Target | Status on FY2005 Goals |
|---|---|---|---|
| Product End-of-Life Management | Provide product end-of-life management solutions that reduce environmental impact. | Increase product take-back by 50 percent. | Exceeded goal. See page 59 for details. |
| Design for Environment | Design products with the environment in mind.<br><br>Refer to page 31 for further information on DfE goals and status. | 1. Eliminate lead in external cable insulation by May 2004. Eliminate all other RoHS substances in 2006.<br><br>2. Reduce the amount of lead shipped per display by 20 percent over three years.<br><br>3. Eliminate halogenated flame retardants in desktop computer, notebook computer, and server chassis plastic parts by year-end 2004.<br><br>4. Set ENERGY STAR enabling features as the default setting on all OptiPlex desktop computers worldwide.<br><br>5. Reduce packaging and packaging waste. | 1. See page 34 for details of status on eliminating lead and other RoHS substances.<br><br>2. See page 34 for details on exceeding this target.<br><br>3. See page 34 for details on accomplishing this goal.<br><br>4. Worldwide implementation of ENERGY STAR standards on all OptiPlex desktop computers launched in 2003, as well as those planned for launch in 2004.<br><br>5. See page 48 for three packaging reduction programs. |
| Environmental and Health and Safety (EHS) Programs | Partner with suppliers to improve their EHS programs. | All Tier 1 suppliers certified to ISO 14001 (Environmental Management Systems) and to OHSAS 18001 or a similar standard (health and safety management systems). | See page 24 for metrics charts. |
| Sustainable Business | Incorporate sustainable practices into Dell's activities, products and services. | 1. Maintain global ISO 14001 certification for manufacturing and logistics;<br><br>2. Expand Environmental Management System into product development;<br><br>3. Others to be determined. | 1. See page 38, ISO 14001 in Manufacturing Business.<br><br>2. See page 31, ISO 14001 in Product Group.<br><br>3. See page 53, ISO 14001 in ARS. |
| Workplace Health and Safety | Continue to improve employee health and safety programs. | Continue to reduce recordable-injury and lost-workday case rates as compared to the previous year. | See page 42 for metrics charts. |
| Regulatory Compliance | Operate in full compliance with all laws and regulations. | Receive zero fines related to environmental, health and safety regulations. | Dell received a $4500 fine from the Tennessee Occupational Health & Safety Administration in March 2004 for a missing guard on a conveyor system. The condition was abated and closed in April 2004. |
| Pollution Prevention | Maintain high waste recycle and reuse rates at Dell manufacturing facilities. | Continue to recycle or reuse greater than 80 percent of all manufacturing wastes. | 85 percent recycle/reuse performance achieved. See page 40 for metrics charts and details. |
| Greenhouse Gas (GHG) Emissions | Reduce Dell's contribution to GHG emissions. | Achieve GHG emissions reductions through programs aimed at reducing power consumption of our products, conserving energy and purchasing "Green Energy" in our operations, and optimizing transportation. | See the climate change discussion on page 43 for three programs to reduce GHG emissions: (1) product; (2) green energy in facilities; and (3) continued improvements in Logistics programs. |

## FY2006 Goals and Targets

**Table 3: Summary of Goals for FY2006 and Beyond**

| Area | Goal / Objective | Target |
|------|------------------|--------|
| Supplier Citizenship | 1. Tier 1 Suppliers certified to ISO 14001.<br><br>2. Tier 1 Suppliers certified to OHSAS 18001.<br><br>3. Tier 1 Suppliers submit acceptable plans for Labor Practices. | 1. 100 percent of Tier 1.<br><br>2. 100 percent of Tier 1.<br><br>3. 50 percent of Tier 1. |
| Product Design for Environment | 1. Improve product energy efficiency.<br><br>2. Reduce hazardous materials content (for example, lead) to meet RoHS requirements.<br><br>3. Improve dematerialization and recyclability. | 1. Enable the avoidance of 10 million tons of equivalent $CO_2$ emissions between FY2004 and FY2008 by designing and configuring more energy-efficient products.<br><br>2. Avoid 52,000 tons of lead (Pb) and 33,000 tons of brominated flame retardants (Br FRs) between FY2004 and FY2008 by shipping RoHS-compliant products globally and shifting our display product mix from CRTs to LCDs.<br><br>3. Avoid 43,000 tons of product packaging and shipping materials between FY2004 and FY2008. |
| EHS Programs | Partner with suppliers to improve their EHS programs. | All Tier 1 suppliers certified to ISO 14001 and to OHSAS 18001 or similar H&S standard. |
| Sustainable Business | Incorporate sustainable practices into Dell's activities, products and services. | Maintain global ISO 14001 certifications for operations. Achieve ISO 14001 certification for product development. |
| Workplace Health and Safety | Continue to improve workplace health and safety programs at Dell facilities. | Continue to reduce recordable injury and lost-workday case rates as compared to the previous year. |
| Regulatory Compliance | Operate in full compliance with all EHS laws and regulations. | Zero fines related to EHS regulations. |
| Pollution Prevention | Maintain high waste recycle and reuse rates at Dell manufacturing facilities. | Continue to recycle or reuse greater than 80 percent of all manufacturing wastes. |
| Greenhouse Gas (GHG) Emissions | Reduce Dell's contribution to GHG emissions from Dell operations and products. | Reduce GHG emissions through energy conservation, purchase of green energy, improved energy efficiency of our products, and optimizing transportation. |
| Product End-of-Life | Provide product end-of-life management solutions that reduce environmental impact. | Increase units recovered in FY2006 by 50 percent.<br><br>(Baseline is units recovered in FY2005.) |

# Challenges and Opportunities

As the Dell team has increased our stakeholder dialogue, participated in industry groups, and engaged an ever-increasing number of Dell employees in the sustainability process, we find more challenges and opportunities. While this report covers many areas, Table 4 highlights a few areas where we recognize and embrace the need to do more.

**Table 4: Challenges and Opportunities for the Future**

| Area | Challenges/Opportunities |
|---|---|
| Reporting | 1. Increase our engagement in GRI working groups and evaluate Dell's reporting for "In Accordance With" the GRI guideline.<br>2. Develop the process infrastructure necessary to support third-party verification.<br>3. Create and communicate multiyear corporate goals. |
| Sustainability | 4. Develop an overarching Sustainability Policy and vision.<br>5. Set multiyear goals for social and community areas. |
| Product | 6. Expand reporting on the historical/cumulative environmental impact of the product.<br>7. Develop guidelines for responsible use of products and measure the impact of communicating these guidelines to our customers. |
| Climate Change | 8. Augment current policy to include specific language on Climate Change. |
| Supply Chain | 9. Develop a method for communicating the results of social assessments that is, at a minimum, consistent within our sector.<br>10. Set multiyear goals for supply-chain citizenship performance. |
| Diversity | 11. Increase stakeholder dialogue on reporting needs and ensure transparency where possible. |
| Asset Recovery | 12. Define a common method for calculating recovery to measure progress over time and to allow industry comparisons. |
| Employee Awareness | 13. Develop and implement a communications plan that measures employee knowledge of and engagement in sustainability. |

# Corporate Accountability

# Corporate Accountability

FY2004 marked the publication of our first Sustainability Report, which evolved from our environmental reports of previous years. In the FY2004 report, we introduced the structure of Accountability, Sustainability and Community for communicating our results. That same structure is utilized in this report and we encourage new readers to refer to the FY2004 Dell Sustainability Report (**www.dell.com/downloads/global/corporate/environ/2004Report.pdf**) for background and definitions surrounding these headings.

Dell believes in being direct in everything we do. Our ultimate success is based on maintaining direct relationships built on trust. To sustain this trust with our employees, customers, suppliers, and investors, we must hold ourselves to the highest standards when doing business.

## Corporate Governance

The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the company (including shareholders) and establishes the procedures for making decisions about a company's business. Dell's Board of Directors has an active role in guiding the conduct of Dell's business. The Board has adopted a set of core values, called the *Principles of Corporate Governance*, which provide the foundation for Dell's governance and management systems. In calendar year 2003, Dell enhanced its governance process, adding a bi-annual briefing for the Governance and Nominating committee on areas of emerging social and environmental risk. In July of 2004, the entire Board reviewed and provided input into Dell's Sustainability strategy.

For additional information on Dell's Board of Directors, including biographical details outlining the diversity of its members as well as the full text of the Principles of Corporate Governance, visit **www.dell.com/corporate**.

In FY2005, Dell's Sustainability Council membership was expanded to include Dell's Chief Compliance Officer as well as

**Figure 5: Dell's Sustainability Council**



the head of Global Human Resources. Figure 5 shows the membership of the Council that meets quarterly to review risks and action plans. Business owners who are working to address risks are invited to provide updates and to seek approval for resources and strategies. The results of this Council's work are provided to the Governance and Nominating Committee of the Board of Directors. Their counsel and feedback is then taken back to the broader Sustainability Council for use in strategy confirmation or adjustment. This direct engagement of Dell's executive leadership team has been a key factor in both making progress and spreading the knowledge of sustainable business practices within the company management structure globally.

## Globalization

### Globalization Principles Guide the Company

Dell's global citizenship principles guide the company as it globalizes its operations, enters new markets, and expands its global employment and supplier base. These principles ensure that Dell's growth is beneficial for current and prospective employees, as well as our new communities and neighbors.

Our globalization principles are based on our corporate values and policies regarding social and environmental stewardship, and draw from the *United Nations Universal Declaration of Human Rights* and the *Global Compact*.

### A Global Objective

Dell is committed to using its unique direct business model to make technology more affordable and accessible to people and institutions around the world so they can take advantage of the tremendous economic and social benefits of more pervasive technology. To do this, Dell is:

• Using its customer direct model to bring affordable technology to new and emerging markets.

### Engaging in the Fight against AIDS

In calendar year 2004, Dell joined the Global Business Coalition on HIV/AIDS (GBC). The HIV/AIDS epidemic has the potential to dramatically impact members of the Dell community—our employees, families, communities, suppliers and customers—and Dell has an important opportunity to contribute to global efforts to fight it. Michael Dell and Kevin Rollins used World AIDS day to send a communication to all employees announcing that Dell had joined the GBC (which underscored the risk of this pandemic) and explaining why Dell was taking a leadership role in addressing this challenge. For additional information on the GBC or HIV/AIDS pandemic, visit the GBC website at **www.businessfightsaids.org**.

Our first step has been to evaluate Dell's global policies and benefits to determine if changes are needed to protect and care for our team members worldwide. GBC's experience allows us to leverage best practices in the area of employee policies surrounding HIV/AIDS. Our goal is to ensure that the Dell environment is free from discrimination on the basis of real or perceived HIV/AIDS status, and to provide adequate access to medical care for employees and their families affected by HIV/AIDS.

The energy, enthusiasm and commitment of the Dell team worldwide will likely continue to be Dell's key contribution to the fight against HIV/AIDS:

#### U.S.
In Central Texas, Dell supported the AIDS Walk Austin 2004. Employee volunteers joined the walk and helped raise funds. Proceeds from this annual event support several local AIDS service organizations. Employee volunteers also supported Project Transition's annual Holiday Swing fundraiser. Project Transition provides services to those living with HIV in the Central Texas region.

Dell invited Central Texas AIDS service organizations to join a community breakfast with leaders from the GBC when they visited Austin. The forum discussed the global reach of the HIV crisis, the effects of this in Central Texas, and how Dell can engage with the community in the company's hometown region.

#### Europe
In the U.K., Dell participated in the "Your Finest Hour" campaign (run by the GBC and the Virgin Foundation), in which employees were encouraged to donate one hour's salary to help the fight against AIDS. Despite the timing of this event during the holiday season, approximately 5 percent of Dell's U.K. employees donated an hour of their pay to support the fight against AIDS.

#### India
In India, Dell employees volunteered in support of the Freedom Foundation, a nonprofit organization which cares for HIV-infected children. Over 1500 Dell India employees participated in the 2nd annual Dell Champion Road Run in June to buy medication and nutritious food for the children cared for by the Freedom Foundation. Employees also visited with HIV/AIDS-affected children, took them to parks for an evening of entertainment, played cricket and other games with the children, sang inspirational songs, and provided food and gifts.

Dell employees in India also participated in an "on campus" education and awareness campaign in observance of World AIDS Day. Leveraging instructors from Freedom Foundation, the program focused on providing employees information and a sound understanding of facts on HIV/AIDS as well as clarifying myths. At the end of the program, champions of Dell India became knowledge ambassadors of HIV and AIDS. Prevention is the only known cure for this global epidemic, and the philosophy behind the program was that awareness and education pave the route to prevention and understanding.

#### Africa
In South Africa, in addition to normal sensitization workshops for Dell staff, the Dell Foundation embraced investing in HIV/AIDS interventions outside the company. Through Dell's investment of more than 300,000 rand in calendar year 2004, more than 300,000 children and adults in South Africa will participate in HIV/AIDS workshops and training via the I-CAN Foundation, an organization devoted to training excellence in HIV/AIDS awareness. Dell also sponsored a World AIDS Day event attended by 4000 people.

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- Growing its global employment to tap diverse ideas and skills, increase its understanding of global customer needs, and bring desirable technology jobs to developing economies.

- Developing a global supplier network to improve the performance and lower the cost of its systems.

- Treating all employees with dignity and respect, and providing opportunities for all employees to succeed.

- Striving to be a good neighbor, and a responsible community and environmental steward. For example, Dell joined the GBC on HIV/AIDS (see "Engaging in the Fight against AIDS" above).

- Acting ethically and requiring responsible employment and environmental practices from its suppliers.

Updates to our globalization principles may be found at **www.dell.com/globalcitizenship**. For more information on the *Universal Declaration of Human Rights* or the *Global Compact*, see **www.un.org/Overview/rights** and **www.unglobalcompact.org**.

## The Soul of Dell

The *Soul of Dell* is our corporate philosophy that defines who we are and who we aspire to be as a global company. At Dell, we value and are committed to: Customers, the Dell Team, Direct Relationships, Global Citizenship and Winning. Together, they form the foundation of our winning culture and underscore our commitment to being a respectful and responsible citizen in the global marketplace. We believe our winning culture and our direct business model are what have made us the world's leading technology company and what will sustain our success in the marketplace. For additional information on the Soul of Dell, visit **www.dell.com/soulofdell**.

## Business Ethics and Compliance

Dell is committed to operating our business with honesty and integrity. It's a part of what we believe—being direct in all we do. Creating long-standing relationships based on trust allows us to positively impact our bottom line, drive globalization efforts, attract the best talent, and build our reputation capital in the marketplace. We have a passion for winning, but we insist on winning with integrity. This means that we will only seek success while doing what's right and we hold ourselves accountable to higher ethical standards—above and beyond compliance with the law. Insisting on these higher standards—in both our workforce and dealings with our business partners—strengthens our relationships, demonstrates transparency, and creates an environment of dependability and trust.

### Ethics and Compliance Policy

Global ethics and compliance are championed by our CEO, owned by our business leaders, and integrated into all aspects of business operations through the guidance of our Chief Ethics & Compliance Officer and Global Ethics & Compliance team. We place a high level of importance on ethics education, disseminating interactive and team-oriented training materials to all employees globally via our Web site and through our managers. All training materials are tailored for global application to various business units and they include training on ethics policies, role-play scenarios and other valuable tools. Through our semi-annual employee survey, *Tell Dell*, we receive feedback on whether managers are leading in an ethical manner.

We encourage all employees to ask questions, seek advice, or get help interpreting Dell's Code of Conduct or a related policy. We supply managers with the resources they need to provide proper guidance to employees and to report unethical behavior. We also provide an ethics helpline—a toll-free telephone service available 24/7—as a resource for getting confidential guidance or reporting suspected violations of the Code or any law.

### Code of Conduct

Dell's *Code of Conduct* gives guidance to help us meet our higher standards of ethical behavior and win with integrity.

**Global Ethics Campaign Launched**

In 2004, we launched our global ethics campaign to employees worldwide, providing content in eight different languages. We believe in creating ethics communication that is relevant and adaptable to our global workforce.



Winning with integrity.
Gagner avec intégrité.
Vencer com integridade.
以诚信 取胜。
誠実さを伴う勝利。

## Calendar Year 2004 Recognition and Awards for Diversity

Dell has been recognized by some of America's leading multicultural groups for our diversity efforts:

- In 2004, Dell was honored with the 2004 Exemplary Voluntary Efforts (EVE) Award from the U.S. Department of Labor for its recruitment, mentoring, career development and community outreach initiatives. The EVE Award, established in 1983, is given to federal contractors that have demonstrated exemplary and innovative efforts in diversity.

- The Human Rights Campaign (HRC) annually assesses and rates corporations' policies and initiatives toward the equal treatment of Gays, Lesbians, Bisexuals and Transgender (GLBT) employees, consumers, and investors. Companies are rated on a scale of 0-100 percent. Companies that earned a score of 100 percent in the 2004 HRC Corporate Equality Index met each of seven factors used to evaluate company performance on GLBT issues. In 2004, HRC rated Dell's policies and initiatives 100 percent.

- Dell chairman Michael Dell received the 2004 Frederick D. Patterson Award for commitments to workplace diversity from the United Negro College Fund.

- The Advocate magazine recognized Dell as one of its Top 10 Employers for GLBT employees.

- Dell was named 2004 Corporation of the Year by the Minority Corporate Counsel Association.

- Dell was named 2004 Corporation of the Year by the Austin Area Urban League.

- Dell was one of fifty Irish companies to recently win an award in recognition of its policies and track record on the employment of people with disabilities. Our specific areas of best practice were cited as Environmental Accessibility and Leadership. The O2 Mobility Award was based on a written submission and validated by a detailed onsite visit to our operations in Limerick.



(Pictured left to right) Charles E. James, Director of OFCCP; Thurmond B. Woodard, Dell Vice President of Global Diversity and Chief Ethics Officer; Secretary of Labor Elaine L. Chao; Paul McKinnon, Dell Senior Vice President of Human Resources; and Assistant Secretary for Employment Standards Victoria A. Lipnic



Fiona McCarthy, Dell Human Resources Senior Manager, accepts the O2 Mobility Award on behalf of the company from Bertie Ahern, Irish Prime Minister, and Danuta Gray, Chief Executive of O2.

Our Code, found online at **www.dell.com/codeofconduct**, is based on seven characteristics: Trust, Integrity, Honesty, Judgment, Respect, Courage and Responsibility.

It is our goal that every member of our team, from our stakeholders to our customers and suppliers, adhere to the highest standard of conduct and know that they can expect it in return. At the beginning of every new relationship—whether it be an employee relationship or a partnership with an external vendor—we share and require compliance with our Code to ensure that our expectations for higher ethical standards are articulated and understood.

## Diversity

We believe that to be a successful company and a great place to work, our business must be driven by individuals with differences as well as similarities. At Dell, we define this as diversity—diversity of thinking, leadership, skill set and style—and it is integral to our overall business strategy. It is a business imperative that allows us to harness each individual's full potential in pursuit of common business goals.

Diversity is an essential element of our company's values and barrier-free business culture. It helps define The Soul of Dell

and the kind of company we are and aspire to be. By continuing to drive diversity initiatives throughout our business, we tap additional talent, improve our operating results, further our global citizenship efforts in the many cultures we call home, and become a better place to work.

We drive three critical business imperatives for diversity at Dell:

- To provide the greatest customer experience, which requires a workforce reflective of our customers

- To access the best and brightest talent the marketplace has to offer

- To focus on global expansion with employees who understand the various cultures, clearly giving us a competitive advantage

### Leadership and Accountability

Our commitment to diversity is driven throughout our company by our founder and chairman, Michael Dell, and our president and CEO, Kevin Rollins. Rollins is the chair of Dell's Global Diversity Council, which provides an executive team approach to managing diversity policies and initiatives. Our Global Diversity organization, lead by vice president Thurmond B. Woodard, sets high-level diversity strategy and ensures its

alignment to Dell's key business imperatives in the United States and globally. This organization also functions as the resource to our business leaders in providing expertise and support for their strategic efforts. Diversity partnerships, initiatives, strategic planning and outreach are drilled down through all facets of our business internally and externally through this executive office.

### In the Workplace

We are committed to developing our workforce and eliminating barriers that hinder our employees from achieving their personal and professional best. Our diversity initiatives help create an environment based on meritocracy, personal achievement and equal access to all available opportunities. We focus these internal efforts in the areas of policy development, training, recruitment, mentoring, professional development, advancement and culture change. Our workforce continues to grow in the following ways:

- Our workforce is made up of approximately 55,000 employees who live and work in more than 40 countries, delivering products and services in more than 190 countries.

- More than half of our U.S. employees are women and people of color.

### Partnerships with Academic Institutions

Dell actively recruits at colleges and universities that have high women, minority, and GLBT populations, including Florida A&M, University of Texas, University of Houston, Texas A&M, and the Atlanta University Center colleges (Atlanta University, Clark, Morehouse, Morris Brown and Spelman). Of the 252 interns Dell hired in FY2005, 71 percent were diverse.

Our company also sustains a strong relationship with the United Negro College Fund (UNCF). Since 2002, Dell has contributed $2.3 million in cash and computer equipment to the UNCF, offering undergraduate and graduate students financial assistance, paid internships, housing, travel and hands-on training to prepare them for potential careers at Dell. In calendar year 2004, 25 Dell/UNCF Corporate Scholars were chosen from 2000 applicants.

Dell recently extended financial support for supply-chain management programs at Howard University and Tennessee State University so students have the chance to work with Dell's manufacturing procurement operations in Austin and Middle Tennessee.

This year, Dell established a partnership with the University of Texas' GLBT community, conducting an on-site information session for undergraduate and MBA students.



Linda Alvarado shares her experiences as a businesswoman and the first Hispanic to own a major league franchise at an employee event sponsored by aDellante, Dell's Hispanic employee networking group.

Dell sponsors professional conferences, career fairs and community events with organizations such as: the Asian Diversity Career Fair, the National Society of Hispanic MBAs, the National Black MBA Association, the Society of Women Engineers, the Society of Hispanic Professional Engineers, and the National Council of Black Engineers and Scientists. We also build partnerships with academic institutions across the country to retain top women, minority and GLBT candidates, and to promote job opportunities. Dell launched the Global Management Development Program in calendar year 2004. This accelerated management development program targets select MBA graduates to assume critical roles in regions outside the United States.

Our company has also instituted a global strategy to address work/life effectiveness and assist all employees in meeting their personal and professional goals.

Dell is host to a number of employee networking groups that engage in community outreach, provide networking opportunities, foster dialogue on key issues important to employee development, and create a sense of belonging through informal mentoring. Our networking groups include: Hispanic, Asian, African-American, GLBT and Women.

Dell supports observances of holidays that recognize and celebrate diversity such as: Martin Luther King Day, Veteran's Day, Gay & Lesbian Pride Month, National Disability Employment Awareness Month, Black History and Women's History months, and Asian-Pacific American, Hispanic and American Indian Heritage months.

### In the Marketplace

Our relationships with our diverse partners are what help us reach multicultural consumer groups across the world and recruit the best and brightest talent to help us achieve success in the marketplace.

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#### Partnerships with CBCF and CHCI

Dell has announced significant partnerships both with the Congressional Hispanic Caucus Institute (CHCI) and the Congressional Black Caucus Foundation (CBCF).

• Dell opened the CHCI-Dell Technology Center for Latino Leadership in Washington D.C., designed to provide the latest in technology to area youth and leadership program participants.

• The CBCF's online Virtual Library is launching in FY2006, with support from Dell, to provide education on the history of African American members of Congress and how they shaped world politics.

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### Strategic Partnerships

We partner with multicultural organizations focused on professional, business, civic and community development. Through these relationships, we are able to positively impact customer experiences, our supplier diversity efforts and employee recruitment.

Dell has established strategic partnerships with multicultural organizations. In addition to those mentioned throughout this report, our partners include:

• National Urban League (both the national organization and local chapters)

• Executive Leadership Council

• Diversity Best Practices

• U.S. Hispanic, African American, Native American, Asian, GLBT and Women's Chambers of Commerce

• National Council of La Raza

• Out & Equal Workplace Advocates

• Catalyst

• United Negro College Fund

### Diversity in Suppliers

We are committed to supplier diversity and we challenge our executives and procurement managers to drive supplier diversity into all their procurement plans. This commitment helps us maintain long-term relationships with quality minority-owned, women-owned and small businesses. It also allows Dell to support continued economic growth in our diverse communities.

Dell works with a number of multicultural business organizations to actively identify new minority, women and disadvantaged business enterprises (M/W/DBE). Some of our marketplace partners are the National Minority Supplier Development Council, Women's Business Enterprise National Council, Small Business Administration, and the Central & South Texas Minority Business Council. We also provide mentoring and reward opportunities to M/W/DBEs that offer the best value and results.

Since 2001, Dell has steadily increased its spending with M/W/DBEs by more than 66 percent, breaking the billion dollar mark in 2003. Last year, we spent an estimated $1.5 billion with M/W/DBEs.

**M/W/DBE Highlights**

- In calendar year 2004, Dell won a contract with the state of Pennsylvania (Dell will provide 73,000 computers to the state). Dell partnered with eight Pennsylvania-based women and minority suppliers when bidding for the contract.

- Year-over-year spending with minority and women business entrepreneurs grew by 25 percent in Dell's FY2005.

- Dell ranked No. 7 in calendar year 2004 on DiversityBusiness.com's listing of America's leading Fortune 500 companies and government agencies that best promote multicultural business opportunities.

### Diversity in Community Investments

Many of Dell's community programs benefit diverse communities and promote digital inclusion.

Key initiatives launched or continued in calendar year 2004 include:

- The national Dell TechKnow Program, a technology initiative where underserved middle-school students receive materials, tools and basic skills to build computers they can use at home. See page 62 for more information on this program or visit **www.dell.com/k12/techknow**.

- Dell's diversity and digital inclusion efforts span globally:

  – Dell opened a computer room for orphans and disadvantaged children in Morocco. Dell Morocco employees participated by helping install and maintain the computers. They also provided additional tuition for the children.

  – Dell partnered with Weyerhaeuser to deliver computers, keyboards, monitors, printers, mice and mouse pads to more than 100 schools in Uruguay, where the technology is estimated to benefit more than 32,700 students.

  – Dell's Black Economic Empowerment strategy, coupled with the Dell South African Foundation, equips youth for success in the digital world and provides support aimed at education and technology.

  – Dell participated in a pledge to donate 240 computers to the Chinese Ministry of Civil Affairs in conjunction with a program sponsored by The Carter Center.

  – Employees in our Asia-Pacific Customer Center volunteered to create The Smart Village Project, a program to educate students in villages located near Penang. We are currently working with the Malaysian government to expand the program to more villages.

## Privacy: Protection of Customer Information

Dell's privacy policy, processes and practices demonstrate our respect for our customers' and employees' privacy. In addition to complying with legal and regulatory requirements, Dell's customer privacy practices are designed to deliver an optimum customer experience. To drive awareness and compliance with Dell's privacy practices, all Dell employees are required to successfully complete privacy compliance training. Dell's Privacy Governance Council, comprised of representatives from the many diverse activities and functions within Dell globally, oversees the company's privacy-related initiatives. Dell is proud of our privacy partnerships with organizations such as the National Consumers League and the Better Business Bureau (BBB), whose Online Privacy Seal on Dell's domestic websites underscores Dell's adherence to industry-standard privacy practices.

For additional information and to see Dell's comprehensive privacy policy, visit **www.dell.com/policy/privacy.htm**.

## Stakeholder Engagement

As outlined in our FY2004 report, a cross-functional global team is tasked with identifying and engaging stakeholders. Figure 6 illustrates the wide variety of stakeholder groups that exist in virtually every country in which Dell operates. The Dell team uses a variety of models to listen to, inform and involve key stakeholders in our business development plans.

A key challenge of a large global entity is ensuring that resources are focused on key relationships that enable us to effect sustainable improvements across the widest community. With the abundance of organizations focused on driving social

**Dialogue with Campus Environmental Groups**



Dell chairman and founder Michael Dell

On Monday, April 26, 2004, Dell invited students from 20 plus college campuses in the United States to a Live Event Webcast with Dell chairman and founder Michael Dell to discuss Dell's progress on environmental issues, and to take questions. Students interested in product recycling were able to discuss strategies and concerns in an open environment. This webcast was designed exclusively for college and university students and was their chance to hear from a leader of the technology industry. The link to the rebroadcast may be found at **www.ivtweb.com/dell**.

**Figure 6: Stakeholder Model**

### Our Approach

Dell values the diversity of perspectives that our global stakeholders hold. We encourage direct dialogue and disclosure of positions and motivations. Our multistakeholder engagement model provides us with the opportunity to enrich and balance our decision-making processes.

Government
Regulatory Agencies
Shareholders
Board of Directors
Authorizers
Government/Public
Customer Groups
Educational
Business
Consumer

Employees
Suppliers
Trade Associations
Business Partners
Service Providers
External Influences
Community Members
Media
Issues Advocates

**Dell**
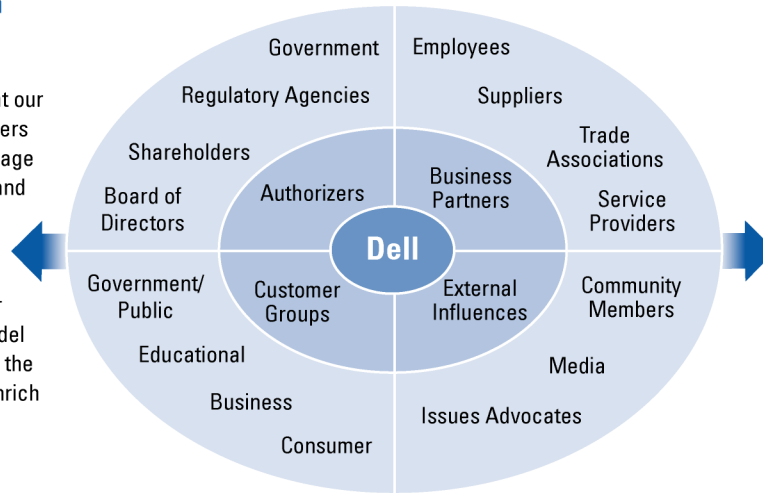
### Engagement Examples

• Newsletters
• Keynotes
• Conference sponsorship
• Personal meetings
• Annual SRI conference
• Global forums

and environmental improvements, we believe that it is critical to not be distracted or allow our team to get caught up in "joining" or "showing up," but rather identify a few high-return relationships and dedicate our efforts fully to these.

One of Dell's core values expressed in the Soul of Dell is "Direct Relationships." Our stakeholder engagement process is built on this foundation. Dell team members at all levels interact with stakeholders, ensuring efficient and transparent communications. In addition to structured engagement such as quarterly meetings with interested Socially Responsible Investment (SRI) groups, we had a number of focused interactions with groups in FY2005. One such interaction was a webcast with Dell's chairman, Michael Dell, and college students interested in the environment (see "Dialogue with Campus Environmental Groups" on page 20).

Table 5 on page 22 provides a sample of some of the many stakeholders that Dell has worked with during FY2005 regarding our company's sustainable business activities and priorities. Our decisions have been significantly influenced and enriched as a result of the engagement with these groups. We thank these organizations for their collaborative engagement and their contributions to our efforts. Interested stakeholders may contact Dell at **Dell_Sustainability@dell.com**.

## Supply-Chain Management

As a major multinational company, we recognize that sustainable business practices cannot stop in our own operations but must also be extended to our global supply chain. This business mandate is captured and communicated in Dell's global Supplier Principles.

We understand that our influence extends well beyond the walls of our offices, factories and other facilities—and that we have a broad impact on the environment, communities and people. As a company with an extensive global supply chain, we recognize that we have a responsibility to work with our suppliers to promote sustainable environmental practices, the health and safety of people, and fundamental human rights and dignity.

We also understand that we operate in a world with many different cultures, countries and levels of economic development. Yet even in this diverse world, we believe there are some standards that cross borders, levels of development, and cultures—and that meeting these standards is a condition of doing business with Dell. Dell's approach is drawn from a review of global best practices, management systems, and acknowledged standards. Included among these are the United Nations *Universal Declaration of Human Rights* (**www.un.org/Overview/rights**), the United Nations *Convention on the Rights of the Child* (**www.unhchr.ch/html/menu3/b/k2crc**), fundamental conventions of the International Labour Organization (ILO) (**www.ilo.org**), the International Organization for Standardization Environmental Management System standard (ISO14001), and the Occupational Health and Safety Assessment Series for health and safety management systems (OHSAS 18001), as well as the experience of other corporations across the globe.

**Table 5: Dell Stakeholders**

| Category | Examples of Stakeholders |
|---|---|
| Socially Responsible Investment Advocates | Calvert Group<br>Columbia University Endowment Fund<br>Domini Social Investments<br>Dreyfus Corp.<br>Evangelical Lutheran Church in America<br>F&C (ISIS) Asset Management<br>Green Century Capital Management<br>MMA Praxis Mutual Funds<br>Pax World Funds<br>Walden Asset Management |
| Socially Responsible Investment Influencers and Indices | As You Sow<br>Dow Jones Sustainability Index (DJSI)<br>Ethical Investment Research Service (EIRIS)<br>FTSE4Good<br>Interfaith Center on Corporate Responsibility (ICCR)<br>Investor Responsibility Research Center (IRRC)<br>KLD Research and Analytics, Inc.<br>SAM Research Sustainable Asset Management<br>Socially Responsible Investment Coalition (SRIC) |
| Customers | Global: Consumer, Business, Public |
| Trade Associations | Asia: JEITA 3R Committee<br>Canada: ITAC<br>Europe: AeA Europe, BITKom, EICTA, IBEC, ICT, Intellect<br>U.S.: CEA, EIA, ITI, JEDEC, NAM, NEMI |
| Coalitions | Asia: Japan Container and Recycling Association, USITO<br>Canada: EPS Canada Coalition<br>Europe: NMC<br>U.S.: GEMI, I-Safe, NRC, BSR<br>Global: World Business Council for Sustainable Development, Global Business Coalition for HIV/AIDS |
| Technical Associations | Global: HDPUG, IEC, NEMI, JEDEC<br>U.S.: IEEE |
| Governmental Organizations | EPA; E.U. Commission; U.K. DTI; Legislators; Ministry of Economy, Trade, and Industry (and many other country-level agencies) |
| Authorizing Organizations | Asia: ME<br>Europe: TCO, UBA<br>U.S.: EPA, OSHA |
| Donation Partners | National Cristina, RT Centre (Ireland), and Fundação Pensamento Digital (Brazil) |
| Nongovernmental Organizations (NGOs) | CAFOD, Computer Take Back Campaign, ForestEthics, Greenpeace, GreenBlue Institute |
| Suppliers | Global Direct Material, Recycling and Other Services |

## Three Elements of Citizenship

At the center of Dell's global-supplier management program is our supply-chain management system that includes a number of core components. As shown in Figure 7, the key components of citizenship can be broken into:

- Environment
- Health and Safety
- Labor Rights

**Figure 7:**
**Three Elements of Dell's Global Citizenship**
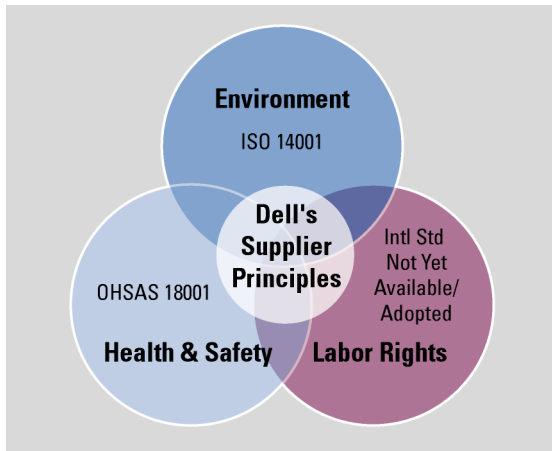


## Certification to Environmental and Occupational Health and Safety Standards

In last year's report, we outlined our goal that our direct material suppliers become compliant with ISO 14001, the most widely recognized standard for environmental management systems. Suppliers were asked to receive third-party certification by January 31, 2004, or submit a schedule for achieving certification and obtain Dell approval. OHSAS 18001, a prominent European standard for workplace health and safety management systems, was selected as the standard to which Dell asked our suppliers to once again achieve third-party certification during the same timeframe. See "ISO 14001/OHSAS 18001 Programs" on page 24 for our suppliers' progress towards achieving these certifications.

## Supplier Principles

Our Supplier Principles were first published in early calendar year 2004 and were developed with involvement from stakeholders. These principles are a key element of Dell's global *Supplier Citizenship* program. A number of environmental and occupational health and safety aspects are covered in these principles. However, the principles were developed with the intent of ensuring we captured all elements required for a sustainable supply chain and hence there is particular focus on labor rights. Introduction of these principles and communication of our expectations to meet them have been a primary focus of our work this year. Given their significance, the following section provides an in-depth review of the implementation process, and the full content may be found online at **www.dell.com/supplierprinciples**.

## Implementation Process

Calendar year 2004 was the first phase of implementation for the new principles and was primarily focused on communication and education. There were several steps taken to communicate the existence of the new principles and to solicit acknowledgement and feedback from the supply base.

### Communication

The first such opportunity to communicate these principles was during Dell's annual Global Supplier Conference in March 2004. Each delegate attending the meeting received a hardcopy of the principles, heard Dell's executive leaders touch on these principles during plenary sessions, and then was given an opportunity to participate in break-out sessions, designed to review and provide an understanding of the detailed content of the principles. This message was repeated during a series of global and regional conference calls and meetings. For example, the principles were translated into Mandarin and training was provided in Shenzhen and Shanghai in May 2004.

### Acknowledgements and Self-Assessments

A process was put in place mid-year to reach out to the heads of our direct material suppliers and ask them to confirm that (a) they have received the Supplier Principles and understood them, (b) they could personally attest that processes in each facility supplying Dell had been reviewed against these principles, and (c) these processes either met the requirements or an action plan was in place to ensure that any gaps would be addressed in a timely manner. By the end of the year, half of these suppliers had provided these acknowledgements.

### ISO 14001/OHSAS 18001 Programs

In January 2003, Dell conducted a survey to identify ISO 14001 and OHSAS 18001 certification status across its global supply chain. Since this survey was conducted, certification to both standards was added as a key requirement in the supplier's scorecard.

Dell requested Tier 1 suppliers achieve certification for ISO 14001 and OHSAS 18001 by the end of 2004. The results of this initiative, which included 140 manufacturing sites, are depicted in Figure 8 and Figure 9.

Dell is currently collaborating with those suppliers who have yet to achieve certification to ensure that the requirement is met in the near future. During calendar year 2004, a series of web-based sessions and summits in the Austin campus have taken place to discuss Environmental, Health and Safety best practices. Over 200 supplier participants attended these sessions representing over 80 strategic suppliers.

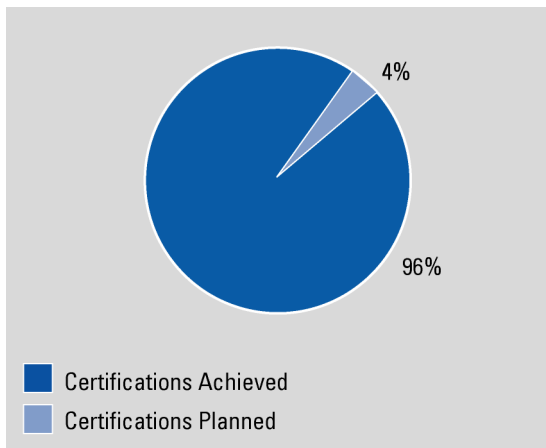**Figure 8: ISO 14001: Environmental Supplier Certifications**



4%
96%

Certifications Achieved
Certifications Planned

**Figure 9: OHSAS 18001: Health and Safety Supplier Certifications**



21%
79%

Certifications Achieved
Certifications Planned
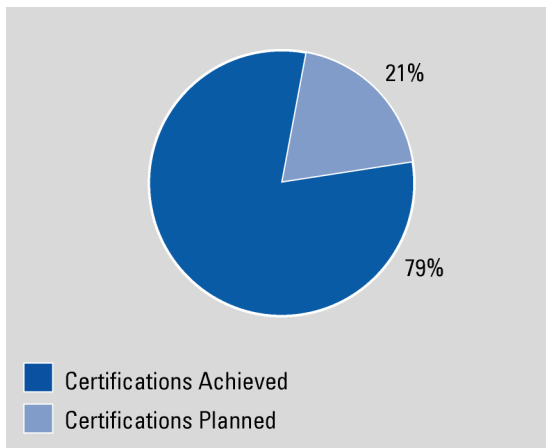
Suppliers were also asked to provide Dell with a written statement that outlines how they are measuring and monitoring their compliance to these principles. Key elements requested in this self-assessment were:

- Supplier has reviewed and signed a Global Citizenship Commitment Letter.
- Supplier has evidence of Company Policy or Principles stating commitment to Corporate Citizenship, aligned with Dell Supplier Principles.
- Supplier has a plan that includes initiative objectives, actions, targets and owners.
- Supplier has a responsible party leading the Corporate Responsibility program, reporting directly to the CEO.
- Supplier has evidence of a training plan/schedule to deploy company policy and commitment to Corporate Responsibility.
- Supplier has evidence of periodic internal audits and a corrective, preventive action plan.
- Supplier has evidence of a periodic monitoring and measuring system to ensure progress to goals.
- Supplier has evidence of management review that includes at a minimum: effectiveness of the Corporate Responsibility program, progress to goals, audit findings, policy, continuous improvement, and views of interested parties.

**Incorporation into Scoring and Quarterly Business Reviews**

Dell's Supply-Chain Management system has long utilized a scorecard system to allow comparison of suppliers' performance across key indicators. Global Citizenship was added to the criteria this year, conveying the importance to our suppliers and also ensuring it would be discussed during quarterly business reviews (QBRs). A total of six points on the 100-point scale is attributed to Citizenship. At the close of 2004, there had been 87 QBRs since the addition of Citizenship to the criteria. For 64 of these, the suppliers submitted Citizenship plans, and of those, 26 received at least partial credit. With a base of 141 Tier 1 suppliers in FY2005, this results in 18 percent with partial or all credit in the category of Supplier Principles. A goal has not been set for FY2006 as this process itself is under review.

**Third-Party Assessments**

Dell has over 100 supplier engineers globally, the majority of whom are located in the country of supplier manufacture. As the Supplier Principles were created, a process of determining how we could most effectively and efficiently look for compliance was undertaken. Again, we reached out to other companies who have had many years in assessing social aspects of codes. We also sought input from SRIs and NGOs, and we engaged our own engineering staff in this decision process.

## Supplier Principles: Supplier Commitment

Dell's suppliers are required to comply with all applicable laws and regulations where they conduct their business. In addition, we ask them to embrace high standards of ethical behavior and treat their employees fairly and with dignity and respect, consistent with local laws.

Specifically, we require that our suppliers adhere to the following standards:

### In the area of employee rights and safety...

• Every employee must be a voluntary employee. There may be no use of indentured, slave, convict or bonded labor.

• Every employee must be of working age. Employees must meet appropriate legal age requirements or be at least 15 years of age, whichever is greater.

• Every employee must be hired, promoted and rewarded based on ability and performance, not personal characteristics or beliefs. Discrimination based on race, color, age, gender, sexual orientation, ethnicity, religion, disability, or maternity or marital status is not acceptable.

• Every employee must be treated with dignity and be free from sexual harassment, corporal punishment, mental or physical coercion, or verbal abuse, and be able to associate freely.

• Every employee must be entitled to working hours that adhere to local laws and industry standards, and be provided with reasonable time off and overtime compensation.

• Every employee must be paid fairly for their work with wages paid for a standard work week that meet legal and industry standards. Dell discourages the practice of deducting from wages for disciplinary purposes and in no case should such deductions reduce pay below legal minimums.

• Every employee must be allowed to work in a safe and healthy work environment and, where company housing is provided, have clean, safe living facilities. Suppliers are expected to comply with all appropriate laws regarding working conditions, provide protection from fire, ensure regular access to bathrooms and potable water, and take steps to prevent injuries and exposure to health risks. Dell also expects suppliers to ensure appropriate health and safety training for employees, consistent with the requirements of achieving OHSAS 18001 certification.

### In the area of the environment...

• Share our commitment to Dell's vision of environmental leadership, with a focus on fully integrating environmental stewardship into the business of providing quality products, best-in-class services, and the best customer experience at the best value.

• Show industry leadership on environmental stewardship in areas such as energy conservation, air emissions, reduction and proper disposal of waste, use of recycled and nontoxic materials, and appropriate public disclosure.

• Support Dell's Restricted Materials program in order to restrict and/or eliminate certain environmentally sensitive materials in the components and products supplied to Dell. (See page 32 for more information on this program.)

• Comply with Dell's restrictions on export of environmentally sensitive electronic waste as set forth in recycling contracts.

Some preliminary informal assessments were done by the Dell engineering staff but it was decided that the skills needed to conduct sensitive, insightful social assessments varied from those required to perform technical assessments. While some team members would no doubt be able to develop these additional skills, we decided this would not be the most effective plan. A third party was sought and selected to help Dell sample our supply base and determine if gaps existed.

The third-party assessment process was initiated in Q4 of fiscal 2005 and completed in Q1 of fiscal 2006, using a sample from China. The goal is to identify any issues that do exist and to support changes in the supply base, in particular system-level changes that will have a widespread impact.

## An Industry-Wide Code

In our journey to determine how best to promote environmental stewardship and social responsibility, we heard a recurring message. NGOs, suppliers, SRIs, and other industry leaders repeatedly stated that there was excessive waste when every corporation develops their own unique code. Suppliers are suffering from the stresses of excessive auditing. Social auditing itself is slow to gain consistency and deliver repeatable results. Most importantly, the actual workers (and their working conditions) see little benefit from this highly fragmented approach. Therefore, when Dell was approached by a coalition of electronic manufacturers and asked to participate in the development of a joint industry code, we chose to participate. This code was developed with HP and IBM and may be downloaded on our Supplier Principles site (**www.dell.com/supplierprinciples**). Since release of the supplier code in October 2004, a number of other companies have expressed interest in supporting a common code, assessment and reporting process. We believe that this process—whereby a broad group of industry leaders works together to drive system-level changes and capacity building— holds significant promise as a new model.

# Environmental Responsibility

# Environmental Responsibility

Last year, Dell produced our first sustainability report. As we expand in scope, we grow in our ability to communicate (both externally and internally) on economic, social and environmental aspects. New laws, heightened public awareness, and growing expectations from our customers have required that we continue to improve the quality of environmental information about Dell's policies, programs, products and processes.

## Continuous Improvements in Environmental Performance

Dell has transitioned quickly, demonstrating a commitment to responsible environmental management. Changes made include:

- Our policy management activities have seen a dramatic increase in infrastructure and process controls.

- The Product Development Group has begun the process of implementing a formal environmental management system into our product design organization and our goal is to be ISO 14001 certified later this year.

- We have expanded our reporting scope for CO2 emissions (as part of our expanding Climate Change Strategy) by including a product emission profile of selected products sold during FY2005.

- A new database has been implemented to capture and archive Dell's key indicators for operations energy consumption, facility wastes and end-of-life product recovery, which improves traceability and regular reporting.

- Outstanding progress has been made in the service offerings through our Asset Recovery Services group for recovery of end-of-life product hardware (see page 51 for more details).

All the work above has occurred in the last year and is a testament to Dell's commitment to adhere to our corporate environmental policy and to provide leadership as we continue to learn from the constant changes we are challenged with in managing our environmental responsibilities.

Figure 10 provides a comprehensive account of the most significant achievements by Dell in the last 14 years.

**Figure 10: A Continuum of Environmental Improvements**
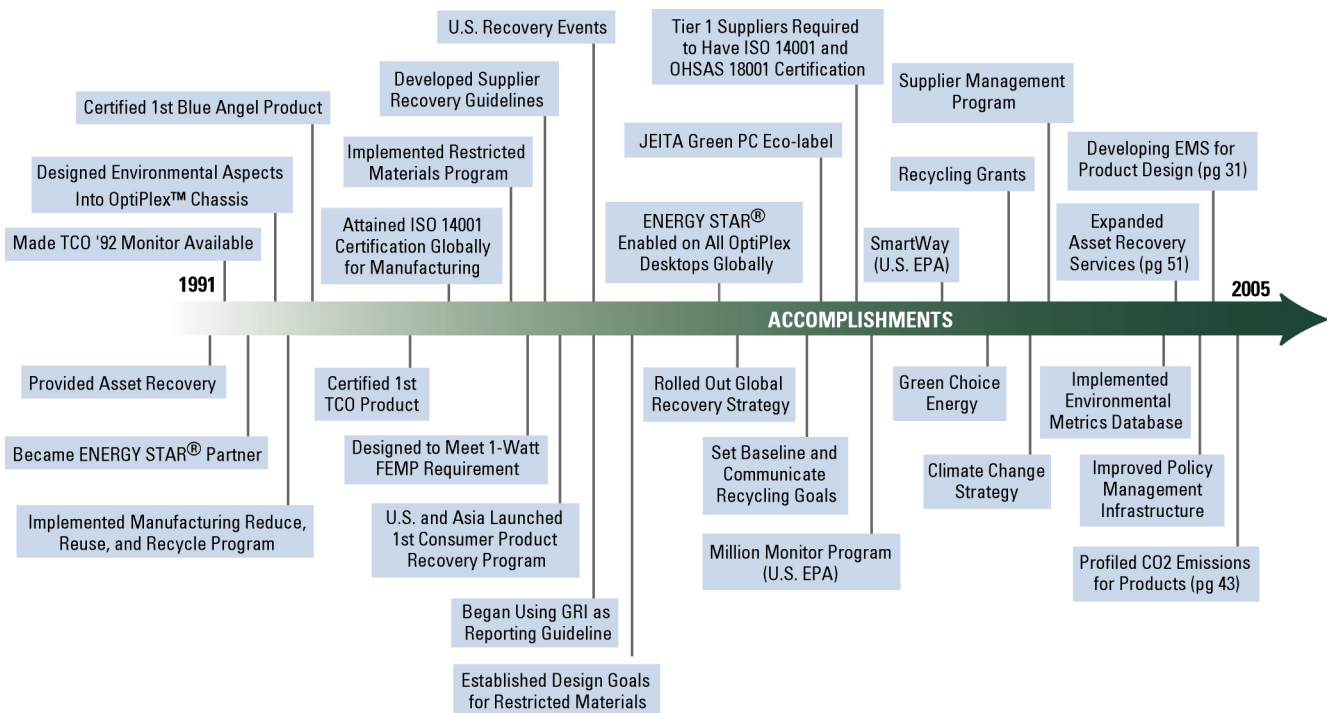
## Dell's Environmental Policy

**Achieve an Environmentally Focused Culture**

Dell's vision is to create a company culture where environmental excellence is second nature. Our mission is to fully integrate environmental stewardship into the business of providing quality products, best-in-class services, and the best customer experience at the best value. The following environmental policy objectives have been established to achieve our vision and mission.

**Design Products With the Environment in Mind**

- Design products with a focus on:

    – Safe operation throughout the entire product life cycle

    – Extending product life span

    – Reducing energy consumption

    – Avoiding environmentally sensitive materials

    – Promoting dematerialization

    – Using parts that are capable of being recycled at the highest level

- Set expectations of environmental excellence throughout Dell's supply chain.

**Prevent Waste and Pollution**

- Operate Dell's facilities to minimize harmful impacts on the environment.

- Place a high priority on waste minimization, recycling and reuse programs, and pollution prevention.

**Continually Improve Our Performance**

- Use an Environmental Management System approach to establish goals, implement programs, monitor technology and environmental management practices, evaluate progress, and continually improve environmental performance.

- Foster a culture of environmental responsibility among employees and management.

**Demonstrate Responsibility to Stakeholders**

- Act in an environmentally responsible manner through sustainable practices designed to ensure the health and safety of Dell's employees, neighbors, and the environment.

- Periodically communicate company progress to stakeholders.

- Engage stakeholders to improve products and processes.

**Comply With the Law**

- Conduct business with integrity and dedicated observance of environmental laws and regulations, and strive for leadership through programs that surpass compliance.

Michael S. Dell
Chairman of the Board

Kevin B. Rollins
President and Chief Executive Officer

## Targeting Improvements Throughout the Product Life Cycle

Dell's business continues to expand around the world and we recognize the growing responsibilities of managing our environmental impacts accordingly. Our environmental policy provides a comprehensive framework that is designed to ensure sustainable practices throughout the entire life cycle of the product. As Dell's business encompasses a wider circle of relationships, we are continually refining our process controls and further developing a culture focused on the basic elements of sustainable practices such as resource conservation and waste management. Evolving legislation, new customer preferences, technology transition, and increasing stakeholder interests are driving the need to manage from a "cradle to cradle" philosophy in today's business environment. Dell's approach to meeting these expectations is illustrated in Figure 11 and described in Stages 1 through 4 of this section of our report.

**Figure 11: Stages of the Total Product Life Cycle**



STAGE 1 : Product Concept & Design

STAGE 2: Manufacturing & Operations

STAGE 3: Customer Ownership Experience

STAGE 4: Equipment End-of-Life Strategies

**STAGE 1**
- The Total Product Life Cycle
- Product Energy Efficiency and Improvements
- Restricted Materials Program
- Compliance Verification Process
- Elimination of Halogenated FRs
- Engagement in Global Standards
- Supplier Management Programs

**STAGE 2**
- Environmental, H&S Management
- Environmental Program Highlights
- Climate Change

**STAGE 4**
- Global Institutional Recycling Programs
- Global Consumer Recycling Programs
- Global Donation Programs
- Dell's Consumer Education Program
- Product Recovery Metrics
- Legislative and Regulatory Compliance

**STAGE 3**
- Customer Relationships and Sustainability
- Packaging
- Reducing Paper Usage
- Media Reduction Initiative

# Stage 1: Product Concept and Design

## The Total Product Life Cycle

Within a number of industry sectors, including the electronics industry, a growing number of legislative and market drivers are focused on reducing the environmental impacts of how products are designed, manufactured, used, and managed at end-of-life. As evidenced through "green" procurement policies and emerging European legislation such as REACH (Registration, Evaluation and Authorisation of Chemicals) and IPP (Integrated Product Policy), the global marketplace is increasingly demanding product environmental improvements, as well as increased access to environmental information related to the product life cycle.

Due to globalization, managing the product life cycle has grown in complexity as a growing number of participants are involved throughout the product life cycle. This complexity makes it difficult for anyone at one stage in the product life cycle to have a clear idea of what potential environmental aspects may lie up- or downstream.

To meet this challenge, Dell has established a Design for the Environment (DfE) Program to integrate environmental attributes into each aspect of the product life cycle, from supplier management during component manufacturing to end-of-life solutions. This holistic, "life cycle" approach aims to prevent individual parts of the life cycle (for example, material selection) from being addressed in a way that may result in the environmental burden being shifted to another part of the life cycle (for example, to end-of-life). This methodology also encourages reduction of the most significant environmental aspects of the life cycle without unnecessarily burdening the supply chain.

### Design for the Environment (DfE) Scorecard

Dell constantly strives to improve its products, both technically and environmentally. To evaluate the environmental performance of our products, a DfE scorecard has been developed. The scorecard provides a summary of the packaging, energy and material impact of the product. That information is then provided to many different teams within Dell so that future products can be designed to improve on those impacts.

### Environmental Management System Implementation

ISO 14001 certification is a goal for Dell's Product Development Group this year. Evaluations were done last year (after a lot of hard work and preparation from all relevant functional areas) to determine the organization's capability to meet the requirements of a formalized environmental management system. We requested that a pre-assessment be performed by a third-party during December 2004 and the assessment results have given us the confidence to pursue certification for Dell's design activities. This will be part of our overall corporate ISO 14001 certification program, which now covers all manufacturing sites around the world and is planned to include additional organizations such as Services, Procurement and Logistics.

Establishing a formalized approach to our planning, goal setting, auditing and corrective actions will help ensure regulatory compliance and stakeholder confidence in our product design. A good example of where ISO 14001 will support adherence to new legislation is the EuP (the European Union's Energy-using Products). This law currently refers to ISO 14001 as a way to demonstrate compliance to a specific component of the requirement and Dell becoming certified will be a strategic move that positions us for success before the law goes into effect.

Aligning the Product Group with ISO 14001 will also help functional organizations "speak the same language" and communicate more efficiently by using standardized methods such as ISO 9000 for quality management and ISO 18000 for Health and Safety.

## Product Energy Efficiency and Improvements

### Million Monitor Drive

Dell recently received recognition for participation in the ENERGY STAR® Million Monitor Drive. Beginning in February 2001, Dell has installed or upgraded over 60,000 internal computer systems worldwide with the default 20-minute sleep-state for monitors enabled. It is also Dell's policy that all future desktop systems for internal use come with the 20-minute monitor sleep-state enabled. To date, Dell has implemented this monitor power-management feature on over 60,000 systems globally. Globally, the savings are estimated at 5,551,180 KWh/year or 3,969 CO2 tons/year. For more information about how Dell is striving to reduce greenhouse gas emissions, see page 43 for a broader discussion on our strategy to manage climate change challenges.

**ENERGY STAR Special Recognition**

The Environmental Protection Agency presented Dell with a special recognition certificate for its outstanding and continued leadership in reducing greenhouse gas emissions through a strong commitment to ENERGY STAR and energy efficiency.

Dell, an ENERGY STAR partner since 1993, was honored for its contributions towards the increased energy efficiency of computer systems, which includes the default enabling of ENERGY STAR features on Dell OptiPlex™ computers, the inclusion of the ENERGY STAR label on new OptiPlex computer splash screens, and enabling ENERGY STAR power management features on close to 60,000 computer monitors at Dell facilities worldwide. Also, in 2003, Dell launched an Energy Management Solutions Center on the Web to educate consumers on efficiency and environmental issues in PC usage (see **www.dell.com/environment**, and click "Design for Environment" and then "Energy Efficiency").



Robert White from Dell's Environmental Affairs team (on right) accepts the EPA's ENERGY STAR Award on behalf of the company from U.S. Energy Secretary Spencer Abraham.

**ENERGY STAR Partner**

"As an ENERGY STAR partner, Dell has significantly advanced the area of computer energy efficiency and heightened awareness of the importance of ENERGY STAR," said Kathleen Hogan, Director, Climate Protection Partnerships Division. "By participating in ENERGY STAR, Dell is showing businesses worldwide that protecting the environment is good for the bottom line."

**ENERGY STAR Products**

Dell has a long history of offering many desktop, workstation, notebook, and display models that meet the EPA requirements for ENERGY STAR qualification, and recently has added TVs and printers to this list of products. Our decision to design products to meet these requirements has reduced energy consumption, thereby reducing customers' electricity costs and reducing environmentally sensitive materials produced during power generation.

Most of the desktop, workstation and notebook products designed by Dell today consume less than 5 watts in low-power mode and exceed the current levels set by the EPA for energy efficiency. Dell chose to default the power management settings to meet the EPA requirements for ENERGY STAR compliance for OptiPlex platforms offered to the public starting in May 2003. Dell has also taken the extra step of reducing the amount of time before entering low-power mode to save even more energy, from the 30 minutes required by the EPA for ENERGY STAR compliance down to 15 minutes. This decision allows our customers the option to not only save money but reduce the effects of air pollution and global warming.

Dell has actively participated in the ENERGY STAR program for over a decade, demonstrating an on-going commitment to energy efficiency. Dell's unique build-to-order model increases efficiency and eliminates waste while allowing systems to be built to the customer's specifications that still maintain ENERGY STAR qualifications.

For goals on energy consumption, please see page 44.

## Restricted Materials Program

Increased attention has been placed on the environmental impact of electronic products, particularly the use of materials that may have an adverse impact on the environment at product end-of-life. Materials such as heavy metals and plastics containing certain halogenated flame retardants can pose potential environmental hazards if not managed properly during the manufacturing process or on disposition at end-of-life. The emphasis of Dell's chemicals management program is not only compliance with existing and/or upcoming legal requirements—such as the European Union's Restrictions on Hazardous Substances (RoHS) directive—but also meeting customer requirements to eliminate or minimize the use of certain substances in its products and to design products that are easily recyclable.
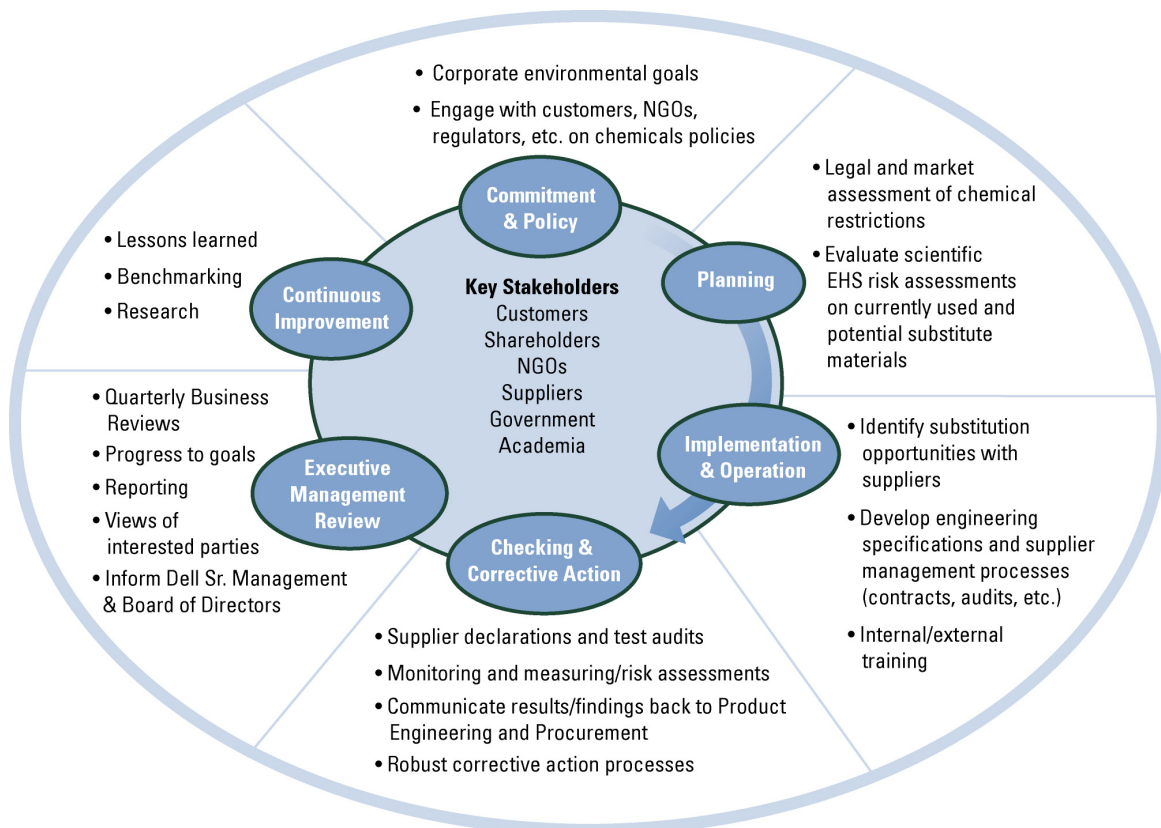
In 2002, Dell formalized a chemicals management process (see Figure 12) to minimize and/or eliminate the use of certain environmentally sensitive materials in its products. One of the first steps in this process was to develop a list of banned or restricted materials that were of importance to customers, NGOs and regulators. Once this list was developed and incorporated into an engineering specification, Dell surveyed its Tier 1 suppliers to identify where these materials were or were not being used in currently shipping products. This assessment also included an evaluation of potential substitute materials from a technology, cost, supply chain readiness, and environmental, health and safety perspective.

Based on the Tier 1 supply chain information, in 2003 Dell established corporate restricted materials goals with a particular focus on lead and bromine reduction (see Table 6 on page 34). These goals, as well as a continued focus on compliance with the growing number of legislative material restrictions such as RoHS, led to an increased focus on ensuring restricted materials were not selected in product design or being used by suppliers. Internal and external training was conducted not only to ensure that both Dell and supplier engineering and procurement representatives were informed of which substances were restricted for use in Dell products, but also to encourage development of alternative materials that could be selected in future product generations. Process controls such as piece-part supplier declarations, Dell factory and supplier material testing audits, and corrective action processes were implemented to ensure that Dell's restricted materials objectives were met throughout the organization and into the supply chain. Through this integrated chemicals management process, Dell has proactively established a working model that can be utilized to make more informed decisions when new scientific findings and/or regulations call for alternative material selections, as well as manage any future material restrictions through robust internal and external design controls.

Currently, more than 50 substances and compounds (see "Restricted Materials (in Certain Applications)" on page 34) are restricted for use in the manufacture of Dell products and in the finished products themselves.

**Figure 12: Dell Chemicals Management Process**



- Corporate environmental goals
- Engage with customers, NGOs, regulators, etc. on chemicals policies

**Commitment & Policy**

- Lessons learned
- Benchmarking
- Research

**Continuous Improvement**

**Key Stakeholders**
Customers
Shareholders
NGOs
Suppliers
Government
Academia

**Planning**

- Legal and market assessment of chemical restrictions
- Evaluate scientific EHS risk assessments on currently used and potential substitute materials

- Quarterly Business Reviews
- Progress to goals
- Reporting
- Views of interested parties
- Inform Dell Sr. Management & Board of Directors

**Executive Management Review**

**Implementation & Operation**

- Identify substitution opportunities with suppliers
- Develop engineering specifications and supplier management processes (contracts, audits, etc.)
- Internal/external training

**Checking & Corrective Action**

- Supplier declarations and test audits
- Monitoring and measuring/risk assessments
- Communicate results/findings back to Product Engineering and Procurement
- Robust corrective action processes

**Restricted Materials (in Certain Applications)**

- Asbestos and its compounds
- Azo dyes/colorants
- Cadmium and its compounds
- Chlorofluorocarbons (CFCs)
- Chloroparaffins, short-chained (10-13 carbon chain)
- Chromium VI and its compounds
- Halogenated flame retardants in plastics, including polybrominated biphenyls (PBBs) and their ethers/oxides (PBDEs and PBBEs)
- Hydrochlorofluorocarbons (HCFCs)
- Lead and its compounds
- Mercury and its compounds
- Nickel and its compounds
- Polychlorinated biphenyls (PCBs) and terphenyls (PCTs)
- Polyvinyl chloride (PVC)

## Compliance with RoHS Restrictions by 2006

The European Union's Restrictions on Hazardous Substances (RoHS) directive requires the elimination of certain environmentally sensitive materials from electronic products, including lead, cadmium, hexavalent chromium, mercury, polybrominated biphenyls (PBBs), and certain polybrominated diphenyl ethers (PBDEs). Similar legislation has also been developed in California and China.

Dell understands the environmental risks associated with the RoHS substances and is committed to reducing the use of these, and other environmentally sensitive substances, in our products. Dell's goal is to comply with the RoHS Directive requirements prior to the July 2006 E.U. implementation date and to continue to incorporate these changes in our global product lines. Through our integrated Restricted Materials Program, Dell has already banned hexavalent chromium, PBBs, PBDEs and cadmium, and has met aggressive public goals to restrict the use of lead, mercury and other nonregulated halogenated flame retardants in our products, well in advance of legal requirements.

**Table 6: Restricted Materials Program Goals**

| Goal | Status |
|------|--------|
| Eliminate lead in external cable insulation by May 2004. Eliminate all other RoHS substances in 2006. | Lead in external cable insulation material has been eliminated in controlled applications. RoHS-specified restrictions for cadmium, hexavalent chromium, mercury, PBBs and PBDEs have been met. RoHS-specified lead restrictions will be met before RoHS implementation in July 2006. |
| Reduce the amount of lead shipped per display by 20 percent over 3 years (2003-2006, based on 2002 levels). | Exceeded goal. Achieved 50 percent in calendar year 2004 when compared with 2002 levels of lead shipped per display. Between 2000 and 2004, approximately 50 million pounds of lead was avoided in Dell display shipments due to customer preference for flat-panel displays versus traditional cathode-ray-tube (CRT) monitors. |
| Eliminate halogenated flame retardants in desktop, notebook, and server chassis plastic parts by year-end 2004. | Restrictions began in 2002. Dell has eliminated halogenated flame retardants in desktop, notebook and server chassis plastic parts. |
| Launch first high-volume RoHS compliant/lead-free desktop motherboards, ramp production to 3 million RoHS compliant/lead-free desktop motherboards per quarter by Q4 2005. | New goal |
| By 2006, reduce the amount of bromine shipped in Dell displays by 30 percent (compared with calendar year 2004 levels). | New goal |

Almost all of Dell's products will be affected by the RoHS Directive, primarily through the substitution of lead-based solders and finishes. Delivering lead-free products as defined by the applicable regulations is a significant challenge for the electronics industry and involves a complex set of technical attributes that have yet to be standardized. Within this environment, Dell is actively working with suppliers and industry associations to develop and offer reliable, cost-efficient lead-free solutions. Dell is currently participating in a number of lead-free process development programs with the International Electronics Manufacturing Initiative (iNEMI), the Computer Aided Life Cycle Engineering (CALCE) Electronic Products and Systems Center, and the High-Density Packaging Users Group (HDPUG). With respect to defining RoHS requirements such as threshold values, exemptions and compliance verification methodologies, Dell is actively engaged in the European Information, Communications and Consumer Electronics Technology Industry Associations (EICTA), the American Electronics Association (AeA), and the United States Information Technology Office (USITO).

### Lead-Free Readiness: Supplier and Customer Surveys

An initial survey of Dell's supply-chain partners was conducted by Dell's Lead-Free Core Team to understand supplier readiness to provide the necessary commodities and process controls that will allow Dell to execute a lead-free solution in a timely manner. A second, more detailed survey was distributed to all Dell suppliers in February 2004. This survey was intended to help assess the compatibility of different supplier approaches to lead-free solutions, and to further formalize Dell's timeline for lead-free implementation. All suppliers must develop plans, logistics and controls to ensure that their yield and reliability equals present capabilities well before the deadline on July 1, 2006.

Several marketing segment surveys have also been conducted to help determine which customer segments are now (or soon will be) ready to transition to lead-free solutions, and which segments prefer to wait until the new technology has a more proven track record. Dell's lead-free product roadmap is closely aligned with customer expectations. These surveys assist Dell's product development teams to design systems that will use lead-free components.

### RoHS-Compliance: Supplier Qualification Update and Roadmap

In mid-2004, Dell began measuring suppliers on their RoHS readiness via quarterly business reviews. The critical elements of these reviews include optimization of lead-free processes, capacity to produce lead-free components and products, and cost optimization. In addition, through the implementation of engineering specifications, Dell has established a robust lead-free qualification process to ensure that components and assembly-level products meet stringent reliability and quality requirements. Data such as printed circuit board cross sections, solder composition and heat resistance, moisture sensitivity, and factory and field quality trend charts are all evaluated to ensure that lead-free solutions meet or exceed previous non-lead-free product requirements. Suppliers also provide Dell with ongoing sub-tier surveys and audit information, ensuring that their process management includes RoHS-readiness elements such as unique part numbering, labeling and testing to ensure that incoming materials are RoHS-compliant.

## Compliance Verification Process

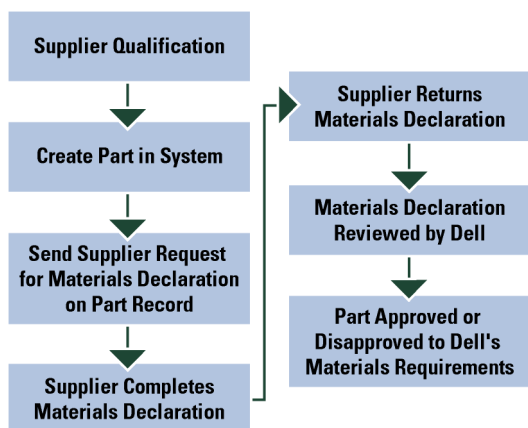### Automation of Materials Declaration Requests

Dell is actively pursuing a software solution that will automate the request for materials compliance declarations throughout the supply base. This new solution will integrate with Dell's product record system to enhance the availability of materials compliance data and allow compliance roll-up throughout each product's bill of materials. Dell has developed a robust program for supplier lead-free qualification; the new solution will allow for sustaining efforts to ensure products remain compliant throughout the entire product life cycle. Part of the deployment effort includes training, both at Dell and through the supply chain. This solution is targeted to be in place by the end of 2005.

### Interim Approach to Compliance Verification

Until this new solution is deployed, Dell is managing compliance verification of products via a Supplier's Declaration of Conformity (SDoC), modeled after ISO/IEC 17050-1. Dell is collecting SDoCs to verify compliance prior to marketing a product as lead-free or RoHS-compliant in 2005, as well as supporting compliance efforts after July 1, 2006. To sign the SDoC, the supplier must ensure that the product meets the *Dell Materials Restricted for Use* specification as well as the interim *General Specification for Allowable Levels of Lead in Dell Products*. At Dell's request, the supplier must also be able to provide technical documentation in the form of internal design controls, supplier declarations or analytical test data. Figure 13 on page 36 describes the compliance process.

**Figure 13: Compliance Verification Process**

Supplier Qualification

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Create Part in System

↓

Send Supplier Request for Materials Declaration on Part Record

↓

Supplier Completes Materials Declaration

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Supplier Returns Materials Declaration

↓

Materials Declaration Reviewed by Dell

↓

Part Approved or Disapproved to Dell's Materials Requirements

## Elimination of Halogenated Flame Retardants

Flame-retardant plastics are occasionally needed to meet strict fire safety codes. Dell is committed to reducing the use in our products of halogenated flame retardants (primarily bromine) and other environmentally sensitive materials.

Since 1998, Dell has offered TCO and Blue Angel-certified systems that do not contain halogenated flame retardants in plastic parts weighing more than 25 grams. In addition, we have already prohibited in all our products, worldwide, the use of brominated flame retardants (PBB and PBDE) listed in the European Restriction of Hazardous Substances (RoHS) Directive, well in advance of the July 2006 RoHS deadline.

While no consensus exists within the scientific or regulatory community that all halogenated flame retardants be eliminated from use in electronic products, Dell has also taken the initiative to eliminate halogenated flame retardants in desktop, notebook and server chassis plastic parts. We avoid halogenated flame retardants by using plastics that can be flame-rated with phosphorus-based flame retardants and by using design strategies that reduce the need to use flame-rated plastics at all.

Some plastic types cannot be flame-rated with anything other than bromine because reliable alternative technology does not currently exist. We try to avoid these types of plastics. **Dell does not permit the use of any flame retardant that is restricted by law**.

Dell is actively engaged with industry associations and suppliers on evaluating the technical and environmental aspects of halogen-free board materials such as organophosphorus and metal hydroxides. When assessing the feasibility of using halogen-free flame retardants in printed circuit boards, it is important to assess both the technical feasibility of using these compounds as flame retardants along with the potential toxicity and environmental risks.

## Engagement in Global Standards

In response to international product environmental regulations (RoHS, Waste Electronic and Electrical Equipment (WEEE), and so on), various environmental standard committees are being formed to develop industry standards. A summary of these activities follows.

### JEDEC

Since 2001, three major industry associations have been involved in developing a joint industry Material Composition Declaration Guide: the Electronics Industries Alliance (EIA), the European Information, Communications and Consumer Electronics Technology Industry Associations (EICTA), and the Japan Green Procurement Survey Standardization Initiative (JGPSSI). Dell has been engaged in this effort as a member of the EIA Material Declaration Steering Committee. In late 2004, the joint industry guide was submitted for standardization through the JEDEC Solid State Technology Association. This standard will be further developed through IEC. Dell's restricted materials compliance verification approach supports the recommendations in the Joint Industry Guide.

### iNEMI

Dell is participating in the International Electronics Manufacturing Initiative (iNEMI) project to contribute to a standard industry data exchange format for materials declarations. Dell is hopeful that a standard exchange format will lessen the burden of materials declarations throughout the supply chain while still allowing for business-to-business data exchange to support efforts to validate product compliance.

### IEC

Dell participates on both the U.S. and Irish Technical Committees of the International Electrotechnical Commission (IEC). In early 2005, a new environmental technical committee was formed in IEC to develop international environmental standards in the areas of supply chain material declaration, RoHS analytical test standards, and environmentally conscious design.

## HDPUG

Dell chairs the High-Density Packaging Users Group (HDPUG) Design for Environment workgroup, which has been focused on identifying suitable alternative technologies to reduce and/or eliminate the use of certain environmentally sensitive materials. Past projects have focused on identification of environmentally sensitive materials in electronic products and evaluation of the environmental attributes of halogenated and halogen-free printed circuit board materials. Past project reports are available free of charge on the HDPUG website at **www.hdpug.org**. HDPUG reports have also been presented at the 2003 and 2004 IEEE International Symposium on Electronics and the Environment.

In calendar year 2004, the HDPUG DfE team initiated a project to evaluate the performance, availability and environmental attributes of technologies such as mercury-free displays and non-PVC-based cables. The results of this study are expected in 2005.

## FEC and EPEAT

Dell continued to support the Federal Electronics Challenge (FEC) Initiative through engagement in the development of environmental purchasing criteria. Dell has been an active participant in the Electronic Products Environmental Assessment Tool (EPEAT) Project. EPEAT is an environmental procurement tool designed to help institutional purchasers in the public and private sectors evaluate, compare and select desktop computers, laptops and monitors based on their environmental attributes. These attributes are broken into eight major categories: Materials Selection, Energy, Packaging, Elimination of Environmentally Sensitive Materials, Corporate Performance, Design for End-of-Life, Life Cycle Extension, and End-of-Life Management. These requirements were developed through a year-long effort by a multistakeholder group that included representatives of the IT industry, the EPA, federal and state purchasers, recyclers, and nongovernmental environmental organizations.

In November 2004, representatives from 11 federal agencies and the White House signed a five-year agreement to advance electronics stewardship goals in the federal government. The FEC and EPEAT are at the core of this challenge.

## Supplier Management Programs

An inherent part of Dell's business model is to manufacture most of its components and many of its products through partnerships with global suppliers. An important piece of this relationship is not only ensuring that suppliers meet Dell's environmental requirements, but also encouraging suppliers to integrate environmental, health and safety management systems into their own operations.

In October 2004, Dell held our 2nd Annual Supplier Environmental Summit, which was attended by 114 supplier representatives from across 70 strategic Dell suppliers. During this summit, Dell's *Supplier Code of Conduct* was introduced, as well as detailed discussions on best practices in chemicals management and product recycling strategies. In addition to this summit, additional forums were held with key suppliers in calendar year 2004 to discuss issues such as the industry-wide lead-free transition and supply chain compliance verification practices. Dell held similar summits in 2003 and plans to hold additional summits in the future. For more information on our suppliers, see page 21.

# Stage 2: Manufacturing and Operations

## Environmental, Health and Safety Management

At Dell operations around the world—from manufacturing facilities to sales offices, from distribution centers to call centers—we are driving towards excellence in our own environmental, health and safety (EHS) performance.

Dell uses a formal management-systems approach to manage its EHS programs. Following international standards such as ISO 14001 and OHSAS 18001, as well as the rigorous requirements of the OSHA VPP (Occupational Safety and Health Administration Voluntary Protection Program) in the United States, Dell has established comprehensive procedures and practices designed to maintain a safe and healthy workplace as well as protect the environment.

All of Dell's manufacturing sites are now certified to the ISO 14001 Environmental Management System standard. The manufacturing sites in Ireland, China and Malaysia are also certified to the OHSAS 18001 Occupational Health and Safety management systems standard, while the U.S. manufacturing facilities are working toward VPP certification. Several of our large office complexes have already achieved VPP Star status.

The EHS management system at Dell involves several key components, including:

- Identification of health and safety risks at each site and the significant environmental aspects and impacts of manufacturing and other activities.

- Setting EHS goals, measuring performance and reviewing progress.

- Establishing procedures to reduce or control the risks and impacts, respond to emergencies, and take corrective actions.

- Communicating policies and requirements, and providing appropriate training to employees, contractors and others at Dell sites.

- Maintaining adequate records and other documentation.

- Auditing regulatory compliance and performance of the management system.

## Environmental Program Highlights

Dell operates a number of different types of facilities in the Americas, Europe/Middle East/Africa, and Asia regions. Operations in each of these facilities have been evaluated for environmental impacts, and programs have been created or enhanced to manage—and reduce—these impacts. Compared with other industries, Dell utilizes only minimal amounts of chemicals and water, resulting in very low air emissions and hazardous waste generation.

The significant environmental aspects of Dell's operations are shown in Table 7.
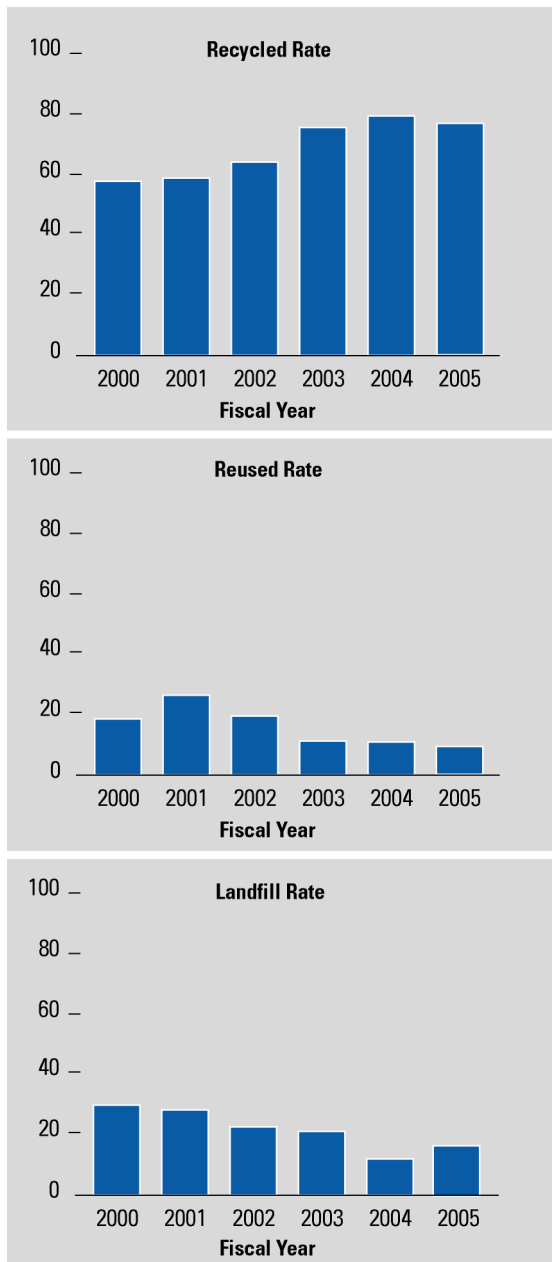
### Pollution Prevention Programs

The most significant environmental aspect of Dell's operations is the generation of nonhazardous wastes, such as cardboard, plastics and paper. Much of the waste is generated when parts and supplies used to assemble computers arrive at the manufacturing facilities. Each manufacturing site has extensive programs in place to identify materials that can be reused, reduced or recycled. Our overall recycle/reuse rate continues to be high and was approximately 85 percent during FY2005 (see Figure 14 on page 40).

**Table 7: Significant Environmental Aspects in Stage 2**

| Significant Aspect | Applicability in Dell Operations | Significant Environmental Impact | How Managed in Dell Operations |
|---|---|---|---|
| Nonhazardous waste | Waste packaging materials from incoming parts and supplies (dunnage) is generated in manufacturing and distribution.<br><br>Waste paper is generated in office, manufacturing and distribution.<br><br>Waste is generated from onsite food preparation, housekeeping, and other support operations. | Waste land filling can impact land use, flora and fauna.<br><br>Waste incineration can cause air pollution and generate hazardous residues. | Collection and recycling of waste materials.<br><br>Initiatives with suppliers to reduce or optimize packaging associated with incoming parts and materials.<br><br>Employee training and internal procedures to minimize and properly dispose of wastes. |
| Electricity use | Electricity is purchased from local utility providers, and is consumed in building heating/cooling and lighting, and in office and manufacturing equipment. | Electricity generated from fossil fuel sources consumes resources and generates air pollution. | Reduce overall energy use through energy-efficient designs and improvement projects in Dell facilities.<br><br>Purchase "green" power. |
| Use of forest products | Paper and cardboard is used to package Dell products and in customer instructions.<br><br>Paper is used in offices.<br><br>Paper is used in Dell marketing materials (catalogs). | Excessive use of products from poorly managed sources contributes to resource depletion. | Design initiatives to minimize or optimize packaging, and reduce paper use.<br><br>Use of recycled-content paper in offices and catalogs.<br><br>Identify "greener" paper sources. |
| Air emissions | Combustion by-products are generated from emergency generator operations and testing.<br><br>Combustion by-products are generated by Dell transportation partners (shipping materials to Dell, and from Dell to customers).<br><br>Air-conditioning units at Dell facilities may leak HCFCs. | Emissions from emergency generator testing can affect local air quality and may contribute to climate change.<br><br>Leaks from air-conditioning systems can contribute to ozone depletion. | Minimize testing of emergency generators.<br><br>Initiatives with transportation partners to reduce emissions.<br><br>Preventive maintenance programs for air-conditioning units. |
| Water use | Water is used in Dell cafeterias, break rooms, and bathrooms, for housekeeping, and in landscaping.<br><br>Some facilities utilize evaporative cooling.<br><br>No process water is used. | Excessive water usage contributes to resource depletion. | Inspection and preventive maintenance programs for equipment using water. |
| Hazardous materials release | Hydraulic fluid and other oils may leak from mechanical support equipment.<br><br>Diesel fuel may leak from outdoor emergency generator fuel tanks or trucks entering/leaving Dell property. | Spills of petroleum-based fuels and hydraulic fluid contribute to soil and water pollution. | Inspection and preventive maintenance programs for mechanical equipment.<br><br>Spill prevention and clean-up programs. |
| Hazardous wastes | Waste oils, cleaning solvents from maintenance activities, and labs.<br><br>Obsolete electronics (e-waste) from office and support activities. | Improper disposal can result in land and water contamination, and air pollution. | Employee training and internal procedures to minimize and properly collect and dispose of wastes. |

**Figure 14: Dell Worldwide Manufacturing**



Recycled Rate (Fiscal Year)

Reused Rate (Fiscal Year)

Landfill Rate (Fiscal Year)

**Figure 15: Texas Water**



Gallons of Water — Fiscal Year 2005

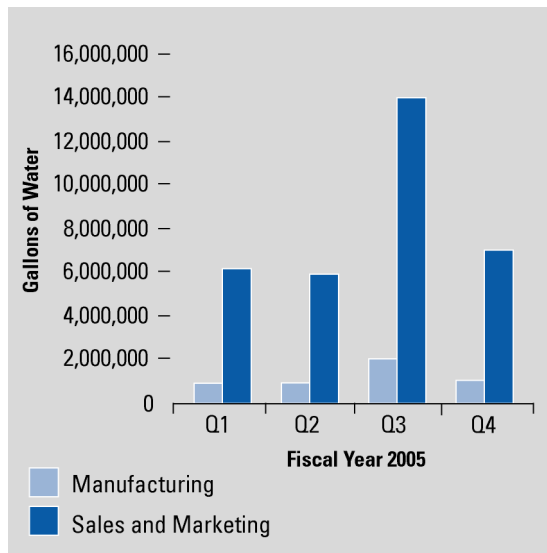Manufacturing
Sales and Marketing

## Resource Reduction Programs

Resource reduction activities include programs to address energy, paper and water use.

### Programs to Address Energy, Paper and Water Use

Another significant aspect of Dell's operations is the use of electricity in our facilities, for building heating, cooling and lighting, and for operating manufacturing process equipment.

Each site has programs in place to evaluate energy use for new and existing processes.

Some examples of recent resource-reduction programs include:

- Powered conveyors in the manufacturing and distribution centers have been redesigned to include automatic power shut-off when not in use.
- Paperwork accompanying materials as they progress through the manufacturing process has been eliminated in most factories.
- Facilities' water/landscaping improvements (see "Water Conservation Programs" below).

### Water Conservation Programs

Dell recognizes the importance of conserving our water resources. Water is not used in Dell's manufacturing processes, so our water usage is low. Nevertheless, we are committed to programs that reduce the amount of water we consume. Our efforts include:

- The installation of a ground-moisture monitoring system that utilizes an onsite weather station to calculate the evapotranspiration (ET) values of the soil in the Austin and Round Rock, Texas, campuses. Only the amount of water that has evaporated from the soil is replaced. This is expected to result in a 30 percent decrease in irrigation water consumption.
- We have eliminated all tree bubblers from irrigation systems, providing a 25 percent decrease in irrigation water consumption at our Austin and Round Rock, Texas, campuses.

As part of our storm water management systems at the Austin and Round Rock, Texas, campuses, Dell engineers have designed multipurpose ponds that not only control storm water runoff and improve water quality, but go one step further by providing a wetland and wildlife environment.

Figure 15 reflects water consumption in Texas manufacturing, sales, and marketing campuses, with irrigation being our largest use of water. Q3 represents the hottest summer months. Our goal is to report on global water consumption and conservation efforts in the year to come.

## Employee Health and Safety Program Highlights

Dell is committed to providing a safe workplace for its employees, contractors and visitors. Through our onsite health and safety management programs and focus on education to our employees, we strive to continually improve. Our ultimate objective is to have a healthy, productive workplace, with no on-the-job injuries.

### Workplace Safety and Ergonomics

Dell's EHS organization has continued its course to improve safety performance in all operations. Key safety initiatives include:

- Behavior-based safety, which focuses on injury prevention through peer-to-peer behavior observations, using positive reinforcement to change unsafe behavior and make improvement before incidents occur.

- Employee-led safety and emergency response teams, which are important elements of OHSAS 18001 and VPP-based safety programs.

- Manufacturing and office ergonomics programs, which identify and make improvements to activities involving motions that could cause injuries over time.

- Workplace health and safety training programs, providing instruction on topics ranging from the use of protective equipment, emergency response, and ergonomics.

- Employee stretching at the start of shifts in manufacturing areas, to help prevent muscle strains during the workday.

### Health and Wellness Programs

Dell maintains occupational health centers and clinics at each of the main manufacturing campuses and at the larger office complexes. The staff at these facilities provides onsite care and advice regarding medical conditions, while maintaining employee medical confidentiality. Several facilities have onsite fitness or wellness centers, where employees can exercise in a group setting or receive information on preventive health topics such as good nutrition and fitness.

Onsite medical staff and wellness teams collaborate to arrange for convenient employee access to health screenings, tests and vaccinations, and educational programs, including:

- Employee health screenings for blood pressure, cholesterol and other health indicators.

- Health and wellness educational seminars, with topics ranging from nutrition and exercise to cancer prevention.

- Employee and community support and education events, such as blood drives and home safety campaigns.

- Evaluation of office workstations to identify and improve ergonomic stresses.

### Workplace Health and Safety Results

Since 2002, Dell's workplace safety record has improved significantly. Overall, the OSHA recordable rate (measuring significant injuries, as defined by U.S. Occupational Safety and Health Administration) has improved by 63 percent since 2002, and 30 percent in 2004 (see Figure 16 on page 42). OSHA lost-workday case rates (measuring injuries resulting in missed workdays) also have improved significantly, improving by 55 percent since 2002 and 42 percent in 2004 (see Figure 17 on page 42).

Performance continues to improve in each region. In our manufacturing facilities in the Americas, the OSHA recordable rate improved by 44 percent last year, while the lost-workday case rate improved by 60 percent. Recordable injury rates in Asia and Europe, which are lower than the U.S. rates, improved by 15 percent and 53 percent, respectively. Lost-workday case rates in Asia and Europe improved by 14 percent and 21 percent, respectively.
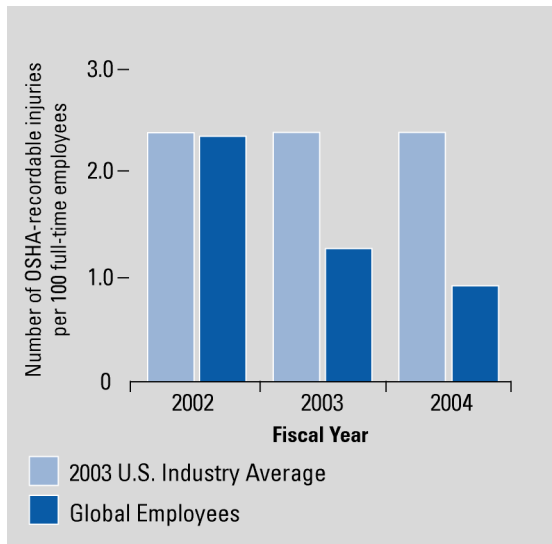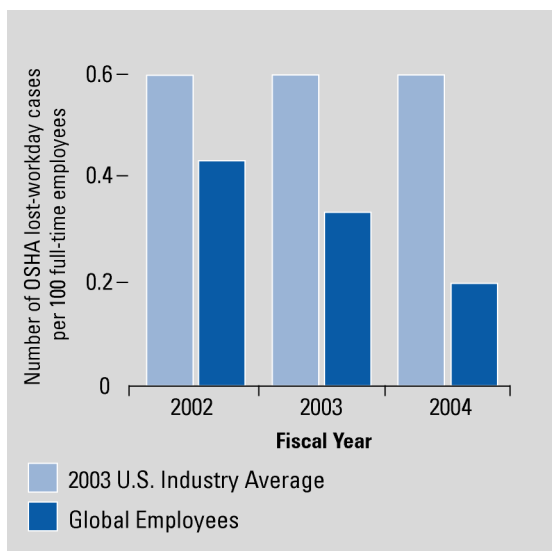
**Figure 16: Dell Total Case Rate**



**Figure 17: Dell Lost-Workday Case Rate**



## Calendar Year 2004 Highlights

Here are some of our other workplace and safety accomplishments for 2004:



- For the third consecutive year, Dell's China manufacturing facility has been recognized as an Advanced Work Safety Enterprise in Torch High-Tech Zone in Xiamen City. The site has accumulated 6.8 million working hours without significant injuries (those resulting in "lost workdays" when an employee is unable to work) as of the end of 2004.

- Two U.S. facilities achieved safety performance milestones in 2004. Through the end of the year, the Nashville fulfillment center had achieved three million working hours without a lost workday. The Austin warranty fulfillment center has not had a lost workday injury for more than two years.

- Four U.S. facilities achieved VPP Star certification, bringing the total Dell sites with this recognition to six. In addition, three of Dell's EHS staff have been trained as Special Government Employees, enabling them to participate in VPP audits of other companies.

- A new safety incident data tracking system is now in use at all sites, allowing injuries and near-misses to be better tracked.

- Dell's Ireland manufacturing facility was selected as one of eight facilities in the country chosen to participate in a VPP pilot project sponsored by OSHA and the Health and Safety Authority of Ireland.

- Safety awareness campaigns conducted at large campuses serve to reinforce Dell's programs and encourage employee involvement, through games and contests, informative presentations, health checks, and other activities.

- Enhanced contractor safety training and awareness programs, such as the Contractor Safety Passport System at the China and Malaysia manufacturing sites.

## Climate Change

In last year's report, we introduced the strategy for Dell's approach to managing our responsibilities for Climate Change. Since that time, we have further developed programs that complete a comprehensive method to help reduce the CO2 emissions associated with our business. Additionally, we have created an Executive Awareness Briefing for the Kyoto Protocol that helps educate our internal stakeholders with background information, positions of industry leaders, Dell's position, a public statement from Dell, and actions recommended going forward.

Each of the three priorities listed in the "Climate Change Strategy" section below has accompanying programs in place to help reduce the CO2 emissions that are most significant for Dell. In other words, we know what the issues are and we're doing something about it. In particular this year, we have added a new reporting aspect where we have estimated the global energy consumption of Dell's product usage for FY2005, and also reflected how Dell's effort to implement power management on our products reduces the impact to air emissions significantly.

### Climate Change Strategy

Greenhouse gas (GHG) emissions are a cause of concern around the globe, given their impact on our climate. As a technology company, the GHG emissions generated by Dell are primarily from energy consumption and are relatively small when compared to heavy manufacturing industries. Dell is committed to voluntarily reducing GHG emissions and contributing to the protection of our air and environment. Furthermore, we recognize and embrace the role that our product designs play in climate stewardship.

Dell's GHG emissions come from three primary areas:

- Product energy consumption

- Energy consumption in our manufacturing and support facilities

- Transportation of the following: materials to Dell, products between Dell facilities, products to customers, and employees to and from work

We are focused on achieving reductions in each of these three areas through programs that reduce power consumption of our products, conserve energy and use "green" energy in our own operations, and optimize transportation.

In addition, we recognize that both our suppliers and customers have an impact on GHG emissions. We are committed to working with our suppliers to understand the impact that their products or operations may have on the climate and to share best practices for the reduction of GHG across our global supply chain. For customers, we are focused on product features that reduce the energy required to operate our products, as well as educating our customers on the importance of using these features. The result is a lower total-cost-of-ownership, while supporting good environmental practices.

### Product Energy Programs to Reduce Emissions
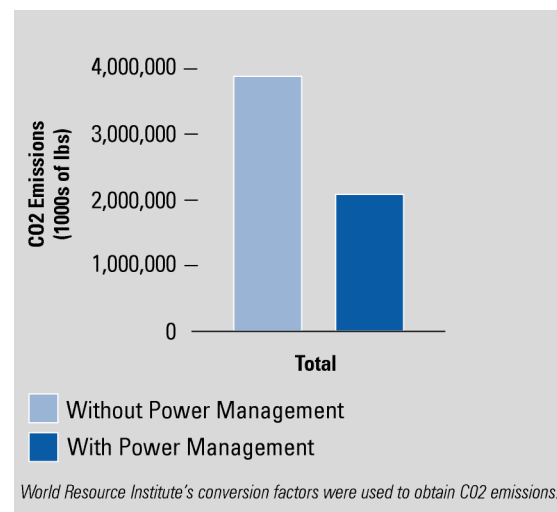
#### Product Power Management

Dell is driving significant reductions in CO2 emissions by enabling power-management features on many of our products.

By enabling the power-management features of all OptiPlex desktop products sold globally, Dell has reduced the CO2 emissions by an estimated 46.44 percent. Likewise, we have achieved an approximate 44.97 percent reduction in emissions by enabling the power-management features of all Dell notebook products sold with a Microsoft Windows operating system.

As shown in Figure 18, to achieve the OptiPlex emissions reduction:

- 156,029 cars would have to be taken off the road to achieve the same level of annual CO2 emissions reductions.

- 261,614 acres of trees would have to be planted to sequester the same quantity of CO2 that is being prevented through these measures.

**Figure 18: OptiPlex Yearly CO2 Emissions**



World Resource Institute's conversion factors were used to obtain CO2 emissions.

**Figure 19: Notebooks Yearly CO2 Emissions**



World Resource Institute's conversion factors were used to obtain CO2 emissions.

As shown in Figure 19, to achieve the notebook emissions reductions:

- 55,832 cars would have to be taken off the road to achieve the same level of annual CO2 emissions reductions.

- 94,363 acres of trees would have to be planted to sequester the same quantity of CO2 that is being prevented through these measures.
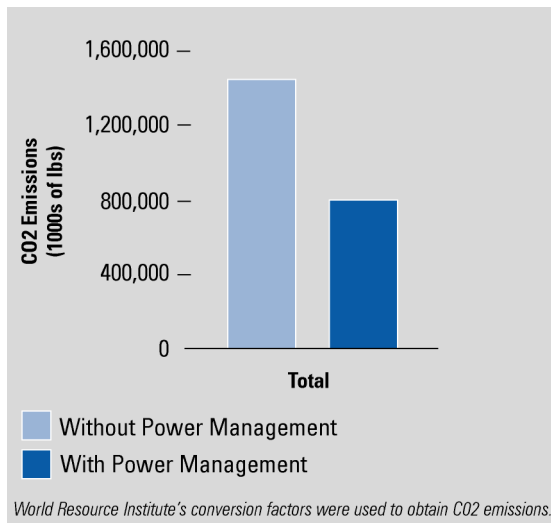
**Dimension Desktop Products**

Home desktop PCs are often turned on much more than when they are in actual use. By enabling power-management features on these PCs, up to 80 percent of the energy consumed during such idle-on times can be saved.

**Goal**: We expect to have at least 15 percent of our Dimension Desktop systems leave the factory with power-management enabled in 2005.

**PowerEdge Server Products**

- Demand-based switching (DBS) is a technology that helps enterprise systems reduce their power consumption, which can lead to reductions in utility cost from both a power and cooling standpoint. Traditional processors run at a single fixed speed, consuming the same amount of power, regardless of whether they are at full load or idle. Similar to Intel® SpeedStep® technology used in notebook computers, DBS monitors the load of the CPU and automatically lowers the speed and voltage to match lower application load. (SpeedStep technology lowers only the speed but Enhanced Intel SpeedStep technology lowers both speed and voltage.)

- DBS technology is built into the latest 64-bit Intel Xeon™ processors and chipsets that power Dell PowerEdge and PowerEdge SC servers.

**Emission and Power Consumption Calculation Methodology**

Reductions in CO2 emissions were calculated using the following methodology:

- Using actual sales data for the designated products sold in FY2005.

- Utilizing the power consumption information provided in Dell's Environmental Data Sheets for each product.

- Averaging all of the various models/types to obtain an averaged energy consumption for each operating mode (that is, Maximum load, Minimum load, Sleep and Off).

The averaging calculation method is described below.

- Power consumption average was based on a 9.5-hour workday (5.5 hours of inactive time/day over a business year (250 days)).

- 20% of units left on overnight (365 days); 80% turned on daily. (This assumes the product operates in the Off mode during nonbusiness days or nonbusiness hours.)

Power Consumption is computed using the formula:

[(Maximum_Watts) * (Hours at max. watts)] + [(Minimum_Watts) * (Hours at min. watts)] + [(Off_Watts) * (Hours at off watts)]

**Goal**: Reduce up to 25 percent the average amount of power consumed by most Dell PowerEdge and PowerEdge SC servers.

**Facilities Energy Programs to Reduce Emissions**

Protecting the environment through management and optimization of resources continues to be a priority for Dell. Dell-owned buildings are monitored, controlled and optimized by an automated building management system. With this system, Dell monitors energy usage and controls temperature and humidity to meet the needs of the business segments. By monitoring building occupancy, and aligning temperature and lighting with business hours, we reduce energy consumption and cost per unit. Dell Americas has a goal of reducing electric consumption by 10 percent for 2005. Dell Ireland will be setting up an energy task force to look at gaining maximum efficiencies from energy usage.

In Figure 20, we report energy consumption metrics in absolute data and in an Energy Consumption versus Revenue ratio. Metrics include energy consumed from a wide variety of uses such as manufacturing, development, sales and marketing. We believe this ratio is the most meaningful information in regards to Dell's environmental impact, due to the wide range of product types produced.
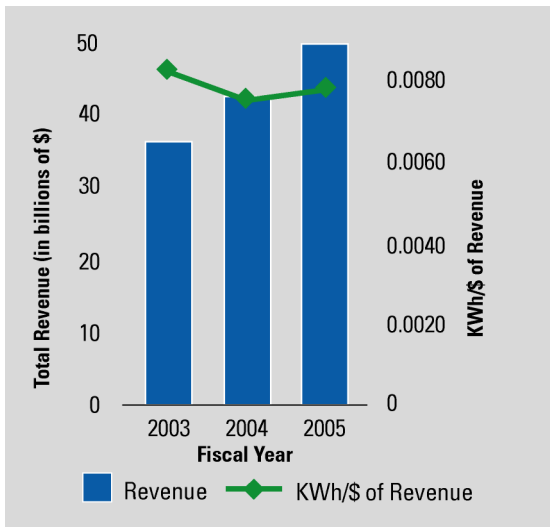
**Figure 20: Worldwide KWh/Revenue**



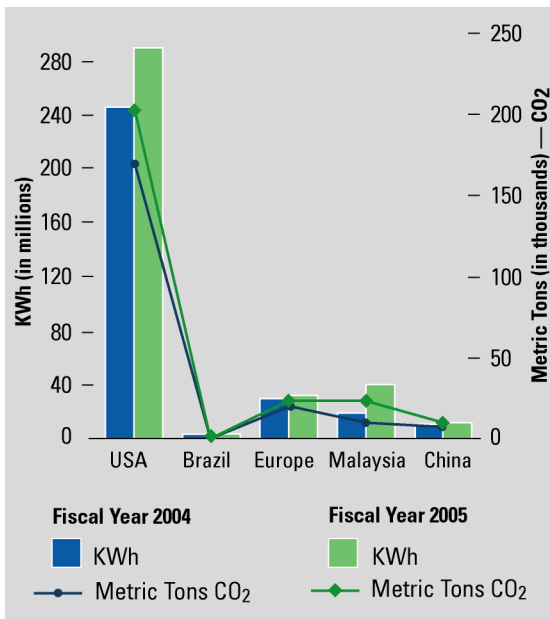**Figure 21: Worldwide KWh and Tons of CO2**



Figure 21 reflects the worldwide energy consumption and CO2 emissions at Dell over the last two years. The majority of Dell's square footage, production and associated energy consumption is located within the United States.

**Dell Americas**

This year in Austin, Texas, Dell purchased 6.2 million KWh of electricity, approximately 10 percent of the total power consumed, from clean sources of energy. This is primarily wind-generated power through the Green Choice Program offered by Austin Energy, the city-owned electric utility. Dell's decision to make use of clean sources of energy represents an avoidance of 94.2 million pounds of CO2 emissions per year.

**Dell Ireland**

In FY2005, Dell Ireland concentrated primarily on our waste and recycling business. However, as part of our 3-year plan in our European Manufacturing facility, we will be setting up an energy task force to look at gaining maximum efficiencies from energy usage as we double the production numbers. The electricity market in Ireland is now fully deregulated and there are opportunities for us to utilize the expertise of our electricity provider to reduce our kilowatt usage. Examples of this would be overhauling our air compression system to reduce electrical usage, and installing automatic power monitoring on all distribution boards to level load the fuse boards. The natural gas market in Ireland is also now in the process of deregulation and we see this as an opportunity going forward to gain efficiencies even though we only use this resource for heating.

## Logistics Programs to Reduce Emissions

Dell's commitment to an environmentally friendly world and its ability to integrate ecofriendly policies have greatly helped elevate our performance with regard to emissions reduction. 2004 saw new logistics programs and an increased commitment to emissions reduction programs, which helped us achieve greater success in our emissions reduction campaign. As in the past, transportation optimization and reduction of green house gases (GHG) are looked at as mutually beneficial strategies that not only help reduce emissions, but also bring in cost savings. This provides an added incentive for Dell to stay committed to its emissions reduction programs.

**U.S. EPA SmartWay Partner**

Dell joined the Environmental Protection Agency's (EPA) SmartWay Transport partnership in 2003. Since then, Dell has become one of the vital partners of this program by exceeding the EPA's requirements and expectations. In calendar year 2004, Dell shipped over 90 percent of its U.S. volume via SmartWay-certified carriers, a measure which greatly surpassed the EPA'a guideline of 50 percent. Dell is committed to increasing this score, and will ship more products via environmentally friendly SmartWay-certified carriers in 2005 by influencing and increasing awareness among other carriers. During 2004, Dell worked with the EPA to identify various GHG emissions reduction programs and is committed to implement these initiatives during 2005. As in the past, Dell is not satisfied with reflecting on its past successes but will continue to work with the EPA to further reduce GHG emissions and influence our shipping partners to become SmartWay-certified.

**Air Versus Ground Transportation**

Optimizing freight from planes to trucks continues to be one of Dell's key areas for emissions reduction. Since air transportation produces almost eight times more harmful emissions than ground transportation, air-to-ground conversion has tremendous potential for emissions reduction. As promised in last year's report, we have continued to move freight from planes to trucks at a higher rate than years before (see Figure 22). In FY2004, air transportation only accounted for 8 percent of our shipments, compared to 25 percent in 2000. In FY2004, the air shipments were reduced by 6 percent for a net emissions reduction. This is a significant accomplishment given that overall volumes increased during this time period. This success was achieved by implementing expedited ground transportation networks and moving manufacturing and fulfillment centers closer to the customer.

**Figure 22:**
**Freight Transportation: Air Versus Ground Optimization**
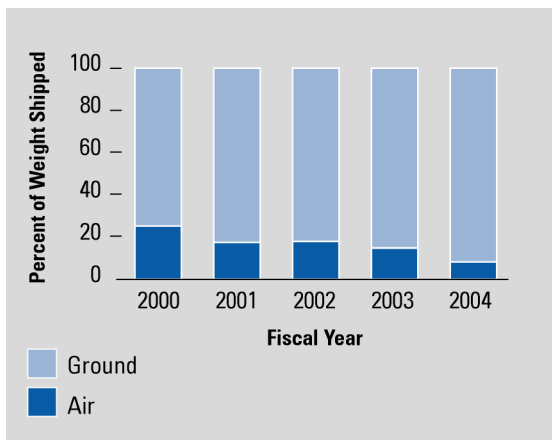


Air-to-ground conversion will be a vital factor to our success in the emissions reduction campaign. Figure 23 shows the positive impact of Dell's optimization efforts over time.

**New Factory Planned Near End Customers**

The implementation of the geographic manufacturing initiative helped to substantially reduce air shipments. Aligning manufacturing centers around geography instead of product lines and moving closer to the end customers allows Dell to reduce the average distance traveled to reach our end customers, which in turn helps reduce GHG emissions. In calendar year 2005, Dell is planning to open a manufacturing facility in North Carolina. This location will primarily serve the East Coast, where the majority of Dell's customers are located. In addition, moving closer to the customer allows Dell to convert more products from planes to trucks, further reducing emissions.

**Climate Change Goals**

- **Goal:** Fulfill EPA's SmartWay requirements by the end of calendar year 2004.

  **Status:** Met all SmartWay requirements to become one of the flagship partners of the program. Shipped over 90 percent of U.S. volume via SmartWay-certified carriers, thereby exceeding the EPA's requirement of 50 percent. Dell will continue to increase shipping with SmartWay-certified carriers.

- **Goal:** Continue to move products from air shipments to ground shipments to reduce emissions.

  **Status:** Moved 6 percent of volume from air shipments to ground shipments to significantly reduce emissions in calendar year 2004. Geographic Manufacturing was a key factor that enabled air to ground shipment conversion. The new North Carolina factory planned near east coast customers will further help reduce air shipments.

**Figure 23: Trend in Transport-Related Emissions**
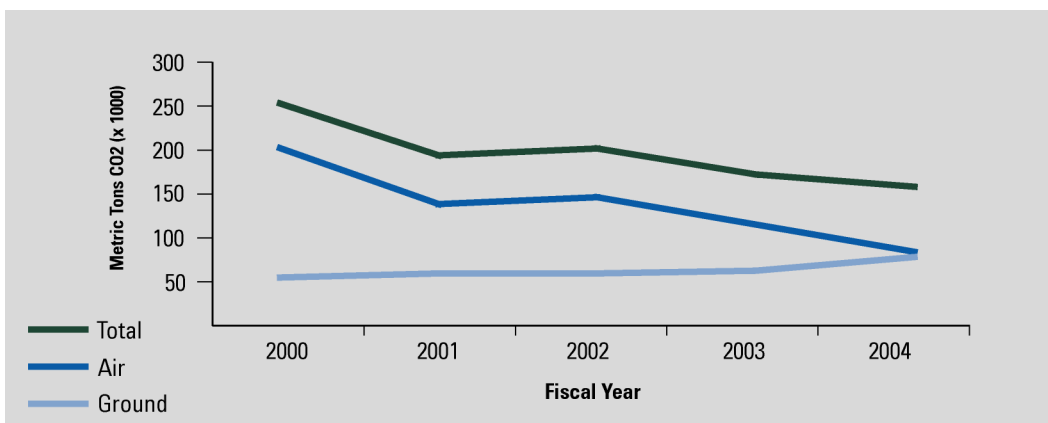
# Stage 3: Customer Ownership Experience

## Customer Relationships and Sustainability

The value of Dell's direct model becomes very apparent in our sustainable development work. Through contacts with our customers, we have opportunities to get direct feedback on our programs in relation to supply chain management, product design, and asset recovery services. Being able to directly communicate with our customers makes it possible for Dell to constantly develop and improve our products and processes with both Dell's and our customer's environmental and societal concerns in mind.

In line with our calendar year 2004 goals, Dell has continued to develop and formalize our customer feedback processes. Dell has focused on increasing the awareness level of sustainable development to a wider audience of our customers. In addition, the number of topics discussed has increased. Previously, the majority of topics were environmental. These have expanded to also include issues such as workers' conditions and human rights issues. The methods of communication have included surveys, presentations at customer councils, participation in audit procedures, and interactive sessions about environmental and societal opportunities on an executive level (examples follow).

### Surveys: Communication With Customers

Dell has worked with different types of surveys with specific focus on environmental aspects since 2001. These surveys have included a variety of product environmental performance requirements and expectations on end-of-life programs. During calendar year 2004, Dell surveyed customers in the U.K. and Ireland with specific focus on consumer and business customers' habits of recycling obsolete computers. Approximately 400 consumers and 400 business representatives were interviewed about their awareness of recycling alternatives. After the results were compiled, Dell decided to publish the findings in an effort to increase the awareness of the importance of utilizing recycling programs.

### Customer Advisory Councils Communication: Technical Roadmap Presentation

Twice a year, Dell organizes Customer Advisory Councils in several geographical regions. During some of these events, presentations of product environmental aspects are included on the agenda. In this setting, the technical challenges and opportunities of new product design are discussed with customers. During calendar year 2004, the focus has been on lead reduction programs in line with the emerging RoHS Directive.

### Executive-Level Communication: Platinum Customer Event Switzerland

Dell's Sustainability team included an interactive session in Europe about emerging WEEE legislation and new European chemical legislation, which have and will change both product design and service programs in the coming years. This session provided an opportunity for customers to review and validate Dell's strategic directions on an executive level. It also provided a forum for discussion about a wider range of environmental and social aspects. Plans are underway to include this topic at these customer meetings annually.
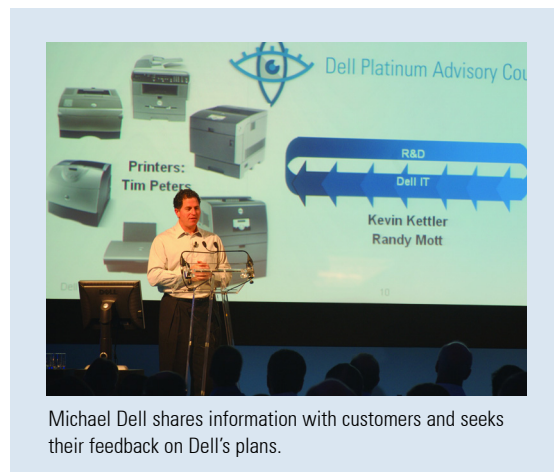


Michael Dell shares information with customers and seeks their feedback on Dell's plans.

### FY2006 Goals

Our plans for FY2006 are to further establish the education process and expose a wider customer audience to the concepts of sustainable development. Our goals in FY2006 will be to continue to integrate environmental and societal requirements in our dialogue with customers in different forums, including technical councils, customer briefing center presentations, consumer education programs and executive expert panels.

## Packaging

The primary goal of packaging is to ensure optimal protection from shock or vibration that can occur during product shipping and handling. Dell strives to design packaging so that consumers receive their product in pristine, undamaged condition.

Dell's packaging engineers work with optimization techniques to reduce the amount of packaging used. However, they are also looking "out of the box" to improve the way Dell receives materials into its facilities and for more efficient and eco-friendly methods to ship products to our customers.

## Packaging Optimization

To minimize packaging, Dell does extensive engineering tests on the product and the packaging to determine an optimized solution. Optimization is accomplished by designing packaging that minimizes excess materials while still providing the desired level of protection.

A fragility assessment of the product is performed to determine the strength of its six surfaces. A programmable shock table is used to conduct a series of tests whereby the shock level is increased until damage occurs to the equipment under test. The amount of G-force required to break the product is charted and defined as its fragility level.

The packaging is developed using an instrumented product model known as a *Surrogate Chassis*, which has the exact same shape, weight and center of gravity as the real product. The package containing the surrogate chassis is drop tested, and the data is used to achieve a desired performance that doesn't exceed established fragility levels of the product.

Lastly, a sample of real products are tested using the optimized packaging and these tests must produce passing results without any functional or mechanical damage.

Figure 24 illustrates how this procedure optimizes the packaging materials needed to properly protect a product through the shipping environment. The example shown resulted in a 9 percent reduction in the volume of the package and over 1000 tons of packaging materials removed from the environment in waste.

**Figure 24: Original Versus Optimized Packaging**
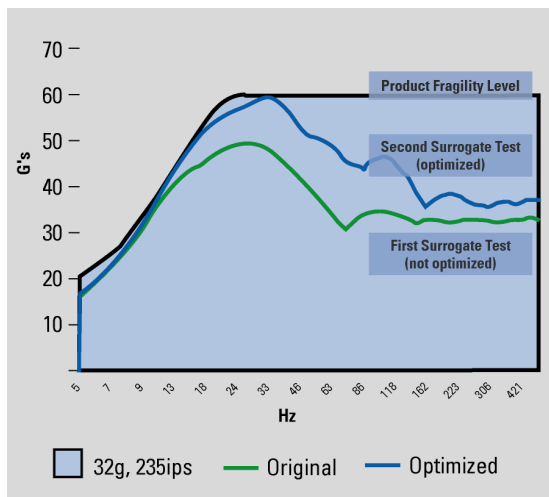


## Packaging Project: Slip Sheets

During FY2005, Dell implemented a new inbound packaging program by replacing wooden pallets used to ship computer chassis and monitors into Dell facilities with plastic slip sheets. These slip sheets allow Dell to ship more products in each shipping container so fewer shipping containers have to be sent to Dell via ship, truck and train (see Figure 25). By FY2007, this program will account for over 25,000 tons of wood reduced, and shipping reductions of over 6500 truck trips, over four Pacific ocean vessel trips, and over 30 full trains moving across the United States. In addition, when the slip sheets are no longer usable, they are collected and recycled into new slip sheets or other plastic products.

**Figure 25: Wood Reduction (Tons)**
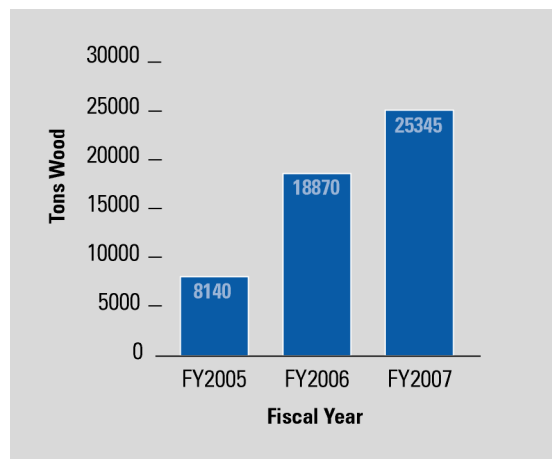


## Eco-Delivery Project

Eco-Delivery provides waste-free system and accessory deployment, allowing Dell to better serve customers by minimizing on-site packaging waste while helping preserve the environment. Additionally, Dell's Eco-Delivery crates facilitate large-volume purchases by reducing storage space required to receive and distribute systems at the customer's location. The solution entails a reusable container that loops between Dell and the customer, which contains multiple systems while maintaining the highest standards of durability and shock-impact protection. The offering enables dense packaging and a reduced set of system documentation. The volume with the Eco-Delivery is on average 50 percent less than when using conventional packaging.

By executing the project locally, Dell is able to consolidate packaging materials across every participating customer at a

These photos illustrate the packaging reduction when an equivalent number of computers from individual boxes are loaded into a 20-container version of the Eco-Delivery crate.

single location. This control ensures that all original packaging material will be reused or recycled and not end up in a landfill.

### FY2006 Packaging Goals

Dell's packaging goals for FY2006 are for over 24,000 tons of dematerialization through box eliminations, slip sheets, and alternative material projects on our server, notebook and desktop lines, as well as inbound packaging improvements.

## Reducing Paper Usage with the Forest Products Stewardship Model

In FY2005, Dell developed a Forest Products Stewardship Model that allowed us to review current practices, address topics within the paper industry that were important to Dell, and establish goals with respect to certain paper products that Dell uses, purchases and distributes.

The first steps in the process included researching and opening dialogue with other companies that distribute like products, for example, shipping cartons and catalogs. In addition, Dell communicated with the NGO community in order to educate ourselves about the various topics of interest within the paper industry. Finally, to further refine the model, we discussed it with members of the paper supply chain to gather their invaluable input.

Briefly, our model seeks to optimize quality, cost and environmental attributes in our paper selection process for catalogs, packaging and office paper. Within that model, we will review, seek to produce results, and further our understanding in three key areas: protecting endangered forests, improving forest practices, and reducing demand on forests. During our process, Dell developed several goals for FY2005. We have listed the goal and our attainment for FY2005 below.

- **Goal 1**: During calendar year 2004, source 2.5 percent of Dell's catalog fiber from FSC-certified sources.

  **Attainment**: 7.7 percent of catalog and inserts were sourced from FSC-certified sources.

- **Goal 2**: Achieve 10 percent post-consumer recycled content in its catalogs within 12 months (by October 2005).

  **Attainment**: Dell is on track to obtain approximately 15 percent average post-consumer content in our catalogs.

- **Goal 3**: Maintain Dell's current minimum average of 28 percent post-consumer recycled content for office supplies used in Dell's operations, and encourage suppliers and contractors to match this percentage on work produced on behalf of Dell.

  **Attainment**: Dell averaged approximately 29 percent in FY2005.

- **Goal 4**: Within 12 months (by October 2005), achieve 30 percent post-consumer recycled content in corrugated packaging materials.

  **Attainment**: Dell is on track to meet this goal of 30 percent post-consumer recycled content.

Dell will continue to review its goals and update our model periodically as Dell, its suppliers and the NGO community make progress in the area of forest products stewardship.

**Figure 26: Forest Products Stewardship Model**



**REDUCE**
- Buy lunch bags you can reuse
- Use mugs instead of disposable cups
- Set your printer to double sided printing
- Turn light switches off when leaving rooms
- Turn work area task lighting off when not needed

http://inside.dell.com/communications/sustainability/index.asp

REDUCE
REUSE
RECYCLE

**RECYCLE**
- Make use of paper bins in offices
- Exchange print toner / ink cartridges
- Take alkaline batteries to the front desk
- Utilize plastic recycling bins in break areas
- Recycle cellular phones through the front desk

**REUSE**
- Always refill water bottles
- Recharge and reuse batteries
- Reuse all paper and plastic bags
- Donate all used computer equipment
- Buy products made of recycled materials

**DELL**

Forest Stewardship efforts extend into the office areas as well. This graphic represents an awareness poster developed by a cross-functional team who set out to reduce paper consumption by 10% and increase recycling by 25%. A baseline usage rate was established in Q4 2004 with a plan to measure again within six months.

The entire Forest Products Stewardship Model can be found at: **www.dell.com/downloads/global/corporate/environ/Dell _Forest_Products_Stewardship_Model.pdf**.

## Media Reduction Initiative

In FY2005, Dell initiated a project to reduce the number of printed documents and CDs (drivers and utilities) that are shipped with systems. These materials are usually discarded at end-of-life, or before, and usually end up in landfills. This initiative sought to reduce costs—the savings passed on to the customer—and lessen the environmental footprint of our products by eliminating potential waste.

The project benefited our two primary customer groups in slightly different ways. For our large business and institutional customers who purchase multiple systems from Dell, this effort eliminated duplicate mailings and addressed their specific requests to reduce the amount of media sent to them. For our consumer and small-business customers, the effort replaced owner's manuals and CDs with electronic versions preinstalled on the hard drive, making it easier and faster for customers to find and use these resources.

In addition to the benefits listed above, a new application, Dell PC Restore, was developed during this project. This application saves customers significant time and simplifies the technical process of reinstalling an operating system (OS) when a problem occurs. The OS reinstall with Dell PC Restore is at least 18 times faster than the step-by-step process—less than 10 minutes versus up to 3 hours and multiple calls to technical support. The Driver Reset utility, also a part of the new system, makes it easier for customers to restore corrupted drivers for any hardware devices (for example, a printer, camera, keyboard, or mouse) installed on their system.

Since the program was launched, Dell has saved on shipping 1576 tons of material:

- Weight of CDs (not shipped): 134 tons
- Weight of manuals (not shipped): 1,442 tons

This material typically ends up in landfills with other municipal waste. By not shipping this material, Dell has significantly reduced the environmental footprint of its products. Transportation, collection, processing, and municipal waste costs have all been avoided through the Media Reduction Initiative.

# Stage 4: Equipment End-of-Life Strategies

At Dell, part of being a great global company is being environmentally responsible. Dell's approach to environmental stewardship incorporates every stage of the product life cycle, from product concept and design, to manufacturing and operations, to customer ownership experience, and finally, to disposal of end-of-life equipment. By offering recovery and donation options for businesses and consumers, Dell makes it easy and affordable for customers to responsibly dispose of their unwanted computer equipment. Dell and its financial arm, Dell Financial Services, have offered various forms of business recovery services since 1991.

As more systems reach retirement age, product end-of-life issues pose a concern for Dell and its customers. Dell is committed to providing solutions that are safe for the environment and maximize the longevity of computers and their parts. This commitment helped Dell earn in 2004 the honor of both the National Recycling Coalition's Fred Schmitt Award for Outstanding Corporate Leadership and *Business Ethics* magazine's Environmental Progress Award.

While Dell programs vary throughout the world to reflect customer, cultural, and regulatory requirements, Dell's broad strategies and programs for equipment reuse and recovery are among the industry's most proggressive and comprehensive in many of its regions. For example, *Dell's Recovery and Waste Disposition Environmental Guidelines* achieve consistent guidance for all of Dell's disposal channels globally. The intent of these guidelines is to provide an infrastructure to appropriately manage electronic waste, generated both from customers as well as through Dell service and manufacturing operations.

### Environmental Awards

Dell was awarded *Business Ethics* magazine's Environmental Progress Award for the company's commitment to the environment and industry-leading consumer education initiatives on computer recycling, as part of the magazine's 16th annual Business Ethics Awards.

Dell was honored with the Fred Schmitt Award for Outstanding Corporate Leadership at the 2004 National Recycling Coalition (NRC) Congress in recognition of the company's recycling programs.

For the full text of the Disposition Channels Guidelines, **www.dell.com/downloads/global/corporate/environ/Disposal_Guidelines.pdf**, or refer to Dell's FY2004 Sustainability Report at **www.dell.com/downloads/global/corporate/environ/2004Report.pdf**.

## Global Institutional Recycling Programs

### U.S. Asset Recovery Services

For institutional customers, Dell provides asset recovery programs to ensure safe disposition of nonfunctional or obsolete computer technology. Dell provides services that allow organizations to place as much care and emphasis on the proper management of decommissioning technology as they do on the acquisition and ongoing support of those assets.

Asset Recovery Services (ARS) is a suite of services that allows business customers to choose whether to recycle or resell their old or outdated computer equipment. Fast and easy to use, ARS provides customers with a safe and environmentally responsible method to recycle or dispose of their used computer equipment. This service includes desktop computers, notebook computers, servers, storage, networking, monitors, printers, projectors, batteries, and computer peripherals such as keyboards and mice.

To make business recycling and value recovery as fast, convenient, and cost-effective as possible, Dell offers two solutions for disposing of a business's used computer equipment:

- **Value Recovery:** Recover value from used equipment. Value gained from the sale of used equipment is returned to the customer.
- **Recycling:** Recycle used equipment that has no resale value.

These services offer a number of benefits:

- **Data security:** Removes tags and labels from equipment and overwrites hard drives.
- **Decreased costs:** Eliminates cost of storing excess, outdated or used computer equipment.
- **Increased savings:** The Value Recovery service may provide cash back for computer equipment.
- **Proper disposal:** Customers may not be aware of how to properly dispose of old computer equipment in accordance with EPA guidelines.
- **Logistics:** Logistics and disposition infrastructure to properly manage the recycling or resale of old computer equipment.
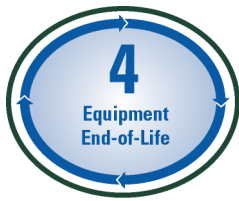
- **Accountability:** Provides a single point-of-contact, end-to-end visibility, and detailed data security and environmental reports.

- **Decreased hassle:** Frees customers to focus on their core business.

For more information on Dell's Asset Recovery Services, please visit **www.dell.com/assetrecovery**.

### U.S. Asset Recovery Services Customer Wins in 2004

In calendar year 2004, an increasing number of customers built asset recovery into their purchase agreements with Dell. During the year, Dell announced several new customer wins, including the Environmental Protection Agency, the New York City Department of Education, and Chicago Public Schools.

#### Environmental Protection Agency

In early 2004, the EPA announced that it would work with Dell to recycle or redeploy its computer systems at the end of their life cycles.

The EPA signed a blanket purchase agreement with Dell under which the agency can purchase or lease up to 10,000 desktops, notebooks and servers over the next three years. As the EPA replaces its old systems, Dell will provide the agency with an easy-to-use, affordable asset recovery service to either recycle or redeploy those systems, help protect the confidential data on them, and dispose of the hardware in a manner designed to safeguard the environment.

"It's important that our computer systems are disposed of in an environmentally sound manner at the end of their life cycles, and we urge other government agencies to look at similar asset recovery models for their systems," said Cliff Moore, director of technology for the EPA's Office of Research Development. "This is the right thing to do, and Dell has made it easy for us."

#### New York City Department of Education

The NYC DoE worked with Dell to recycle more than 50,000 outdated pieces of computer equipment. In the largest single recycling project since Dell first launched the service in July 2003, the company removed computer equipment from nearly 900 schools and administrative locations for recycling or reuse. Dell refurbished 1,000 of these systems so New York City schools could use them in its Dell TechKnow program (see page 62 for more information on the TechKnow program).

"We chose Dell for its end-to-end recycling capability, its asset management and (its) repair services, so we could focus on our



Dell workers pack and remove computer equipment from the High School of Art and Design in New York City. The NYC DoE recycled more than 50,000 pieces of computer equipment at schools around the city.

implementation of newer technology to serve our schools, teachers and students," said Charlie Niessner, chief information officer for the NYC DoE.

#### Chicago Public Schools

Dell partnered with Chicago Public Schools (CPS) to recycle more than 18,000 pieces of old computer equipment this year. CPS is the third-largest school system in the United States and the second-largest employer in Illinois, with 45,000 employees. It has 600 elementary and high schools, and more than 437,000 students.

Dell President and Chief Executive Officer Kevin Rollins and CPS Chief Information Officer Robert Runcie announced the asset recovery program at Stockton Elementary School in Chicago. Dell began the recycling process by removing 410 old computers from Kelly High School, the largest high school in the district.

Dell Services managed the entire recycling process for the district's 600 school buildings, including gathering, packaging, and transporting the systems. Dell also overwrote the hard disks to help protect the data, and the systems were recycled to specifications set forth by the Environmental Protection Agency. This project will free up classroom space for learning rather than storing old computers.

"Since 1995, Chicago Public Schools has invested heavily in computer infrastructure, equipment and professional development to ensure that our teachers and students have access to technology," Runcie said. "However, we did not have a good strategy for computer asset disposal, which resulted in a number of challenges, including obsolete equipment occupying

precious real estate in some schools; environmental risk if schools didn't dispose of equipment properly; and data security risk if hard drives containing student information weren't over-written in the disposal process. Dell stepped up to the plate and hit a home run for us by implementing an asset disposal program for the District," Runcie said.

### Global Asset Recovery Services

Dell's Australia and New Zealand operations relaunched recycling services for business and consumer customers in December of 2004. Any brand of used computer or equipment is accepted for recycling, and pick-up from the customer's site (home or office) is included.

Dell EMEA's Asset Recovery Services (ARS), launched in 2003, maintains consistency with Dell's global delivery of the program's services. Dell's goal is to provide a flexible, affordable asset recovery service to either recycle or redeploy obsolete IT equipment, and at the same time help protect the confidential data and dispose of the hardware in a manner designed to safeguard the environment.

In 2004, Dell EMEA elevated its profile as a quality provider of customized, environmentally ethical, auditable, and security-conscious end-of-life management solutions, resulting in excess of a 1000 percent year-on-year growth. The largest portion of this growth was within the U.K. market, driven by a highly visible business and consumer launch in September 2004, more prominent Web positioning, and market anticipation of the E.U. WEEE Directive currently being transposed into legislation. Continued focus on the U.K. market, and expected ARS launches in additional European markets, position the EMEA ARS program for significant growth in 2005.

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**U.S. Asset Recovery Services 14001 Certified**

In January 2005, Dell's Asset Recovery Services (ARS) organization was recommended for ISO 14001 Environmental Management System certification by the National Standards Authority of Ireland (NSAI), an ANSI-RAB accredited registrar and international standards and certification body. The certification covers the retrieval, recycling and end-of-life disposition of computers and other electronics managed by the ARS business, and verifies that ARS' programs are helping Dell achieve continuous environmental improvement.

## Global Consumer Recycling Programs

Dell offers a wide range of recycling and reuse services to consumers in several markets. When a system cannot be reused or refurbished to a useful state, Dell works with its technology partners to recycle as much of the materials and component parts as technically and economically feasible. These programs continue to grow in scope and evolve to meet consumer demands.

Visit **www.dell.com/recycling** to learn more about Dell's consumer recycling programs.

### Free Computer Recycling for U.S. Consumers Buying a New Dell Dimension or Inspiron

In July 2004, Dell began offering free computer recycling for U.S. consumers who purchase a new Dimension desktop or Inspiron notebook computer. While ordering a new computer online, consumers are offered free recycling of an old computer. For those who select this option, a preprinted return label is included in the box with the new computer. Consumers place their old computer in the box in which the new computer was shipped, apply the label, and schedule home pick-up at their convenience. With the addition of this offer, Dell now provides U.S. consumers a recycling option both at point-of-purchase and after point-of-purchase. Both offers accept any brand of computer equipment and include the convenience of home pick-up.

### Pilot Public-Private Partnership for Computer Recycling and Reuse in Austin, Texas

A survey conducted in September 2004 by the City of Austin found that more than one-third of respondents had a computer for disposal and 84 percent of respondents said that giving their computer to charity was their preferred disposal option. Slightly more than one third of the respondents indicated they have not disposed of their computers because of environmental concerns or that they are not sure how to dispose of them.

In October 2004, Goodwill Industries of Central Texas, Dell, and the City of Austin introduced the Austin Computer Recycling Project (ACRP), the first comprehensive computer recovery, reuse and recycling opportunity featuring curbside collection of unwanted computers for Austin residents. The pilot program offers both drop-off and curbside pick-up recycling options for unwanted computers, and is the only ongoing curbside computer pick-up in Texas and one of only a few in the United States.

The public-private partnership leverages the service infrastructure of a municipality, the refurbishment, reuse and recycling expertise of a nonprofit, and the experience and resources of a technology company to offer a proactive, community-based solution to environmentally responsible computer disposal.

The goals for the pilot project are to:

- Create a portable, scalable and repeatable model for a national program.

- Raise awareness of the need to recycle used electronics.

- Promote the concept of shared responsibility around product end-of-life issues.

- Educate consumers about responsible disposal and donation options for unwanted computers.

- Increase recycling and donation participation rates at Goodwill's Central Texas locations.

Goodwill receives the used systems, which are refurbished and resold in its Computer Works retail store. Systems and parts that cannot be refurbished are recycled in an environmentally responsible way. Funds raised from Goodwill's refurbishment operations help support job-related services for individuals with barriers to employment in Central Texas.

Additional ACRP details are available at **www.computerrecyclingproject.com**.

### Consumer Recycling in Australia, New Zealand and EMEA

Dell's Australia and New Zealand operations relaunched recycling services for business and consumer customers in December of 2004. For a nominal cost, consumers and businesses can recycle any brand of used computer, printer or computer equipment, and have the equipment picked up from their home or office. In addition, some customers' equipment may qualify for value recovery.

Dell's consumer recycling offer in EMEA is also showing steady growth, benefiting from increased public awareness, greater web visibility, and media attention. This service is currently offered free to our consumer customers. In the last half of 2004, consumer recycling increased by an average of 20 percent each month.

### Public-Private Partnership for Computer Recycling in Malaysia

Dell has a partnership with the Penang State Government (Penang State, Malaysia) that offers consumers in Penang State a free computer recycling service. Through the collective effort of both partners, the program was expanded in July 2004

to also offer five permanent drop-off locations for used computers and related peripherals throughout the state. Dell and the Penang State Government are making it easier to recycle used technology by providing these convenient collection points. Through the partnership, approximately 38,252.34 kilograms (38.3 metric tons) have been collected since the joint recycling program launched.

### Printer Recycling

In 2003, Dell launched its printer product line. Along with the printer launch, Dell established a program to recycle outdated printers at no additional charge for anyone who purchases a new Dell printer. This is the first offer of its kind among major electronics companies. Customers—without ever leaving their home or office—can easily ship their older printers, regardless of the manufacturer, to approved recycling centers. Dell provides a prepaid postage label and simple instructions to arrange for pick-up. Dell also offers easy-to-use and free recycling of Dell ink and toner cartridges. More information can be found online at **www.dell.com/recycling**.

## Global Donation Programs

Dell recognizes that a functioning computer has more value intact than disassembled and sorted into its component parts. While reuse of systems may not always be an option, Dell's reuse channels make it possible for many recovered systems that have not outlived their usefulness to arrive at a final destination with customers who may not otherwise have access to technology. Dell provides several reuse channels for both business and consumer customers.

### Dell Americas

Through Dell's partnership with the National Cristina Foundation (NCF), customers can donate excess computer equipment to charity and receive a possible tax deduction. NCF is a nonprofit organization that places used technology with local nonprofit organizations and public agencies that serve disabled and economically disadvantaged children and adults. Computers that may no longer be useful for a current owner may have several years of life left in them.

More information about Dell's Donation Program and the National Cristina Foundation can be found at **www.dell.com/recycling** and **www.cristina.org**.

### Dell Canada

In early 2004, Dell Canada launched a computer donation program for consumers and small businesses, in partnership with the National Cristina Foundation, Computers for Schools

(CFS) Canada, and reBOOT Canada. CFS specializes in placing refurbished computers in schools, and reBOOT specializes in placing refurbished computers with nonprofit organizations that serve the needs of disabled persons. Visitors to Dell Canada's consumer or small business website can donate any make or model (generations above Pentium 1) computer to either organization. The combined presence of both partners enables Dell Canada to offer this service in every Canadian province. Details of the program are available at **www.dell.ca/recycling**.

### Dell Brazil

In October 2004, Dell Brazil announced a donation program in Brazil. Through the program, Dell's corporate customers can donate used computers to nonprofit organizations for no charge. The program includes refurbishment of the equipment donated. Dell worked with the National Cristina Foundation and Fundação Pensamento Digital (FPD) to launch the program. The program is currently available in three cities/regions of Brazil: Porto Alegre, São Paulo and Brasília.

### Dell Ireland and the United Kingdom

Dell Ireland continues to work with RT Center—a partnership between Central Remedial Clinic and Centre for Independent Living—to give disabled and economically disadvantaged children and adults access to technology.

In the United Kingdom, Dell's donation partner is ReCOM, which links individuals and businesses who want to give a second useful life to used IT equipment with charities and voluntary groups working to improve the services and facilities for the disadvantaged groups they support. RT Center and ReCOM are both affiliated with the National Cristina Foundation.

## Dell's Consumer Education Program: "No Computer Should Go To Waste"

Raising consumer awareness of the need to responsibly recycle unwanted computer equipment is one of the key challenges faced by the industry, and Dell is committed to doing its part.



No computer should go to waste. **D∕ELL**™
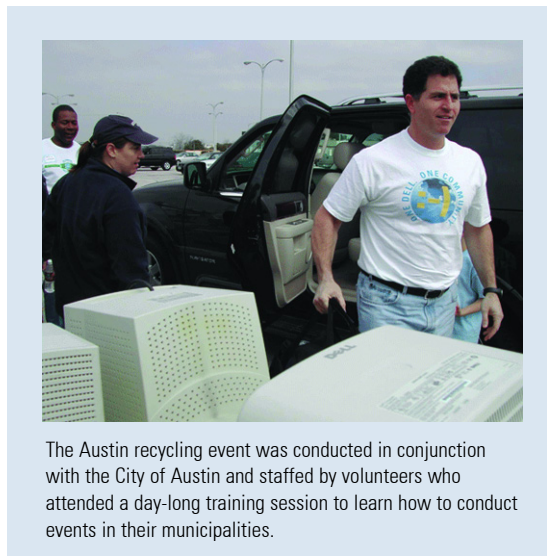


The Austin recycling event was conducted in conjunction with the City of Austin and staffed by volunteers who attended a day-long training session to learn how to conduct events in their municipalities.

To support this goal, Dell has developed and implemented a consumer education campaign to raise awareness of responsible end-of-life options for unwanted computer equipment and to empower communities with a model and means for reaching out to local residents.

Dell's 2004 commitment to educate consumers that "No Computer Should Go To Waste" included computer collection events in Austin, Texas, and Limerick, Ireland, grants to more than 30 U.S. communities for computer recycling events, training workshops on recycling events for municipal and nonprofit organizations, and public-private partnership programs in Malaysia and the U.S.

### Customer Communications

Dell's direct customer relationships have made it possible for Dell to constantly develop our new products, services and processes with our customers' environmental concerns in mind. Dell also reaches out to current and prospective customers to let them know about our consumer recycling offers through a variety of sales and marketing channels, including catalogs, e-mail marketing and sales confirmation materials.

### Computer Collection Events

Through the Dell Recycling National Tour in 2003, Dell learned that one-day computer collection events were very effective at raising awareness of computer recycling among consumers, environmental groups, elected officials, and the media. Although collection events are not a sustainable solution to the overall challenge, they have proven to be valuable to both the company's community relations and environmental responsibility goals.

Dell officials help Dick Roche, Ireland's Minister for the Environment, congratulate the volunteers on the Limerick recycling event.

In 2004, Dell conducted computer collection events in two of the places that Dell calls home—Austin, Texas, and Limerick, Ireland. In each of these communities, Dell partnered with local organizations committed to environmental stewardship to help promote the event and provide dedicated, friendly volunteers.

In addition, local elected officials in both Austin and Limerick provided their support and endorsement of the collection event.

The computer collection event in Austin, which collected more than 55 tons of unwanted computer equipment, was held in January 2004, in partnership with the City of Austin, Keep Austin Beautiful, and the University of Texas-Austin. The event in Limerick was held in November 2004 at Dell's European Manufacturing Facility, with the support of the Limerick City Council and the Limerick County Council, and the majority of volunteers were Dell employees. The event yielded 19.1 tons of computer equipment for recycling.

**Community Recycling Grants**

The Dell Recycling Grant Program is designed to provide financial support to communities interested in staging a one-day, no-charge computer collection event. The purpose of the program is to raise awareness of responsible end-of-life options for unwanted computer equipment, to keep computers and related equipment out of landfills, and to empower communities with a model and the experience for staging collection events.

In 2004, Dell launched this pilot program by offering $10,000 grants to select nonprofits, state and local governments, or higher education organizations that planned to host a computer recycling event for their community. In addition to the grant from Dell, grant recipients also received technical assistance

**Figure 27: U.S. Map of Communities Touched by Dell Events and Grants**
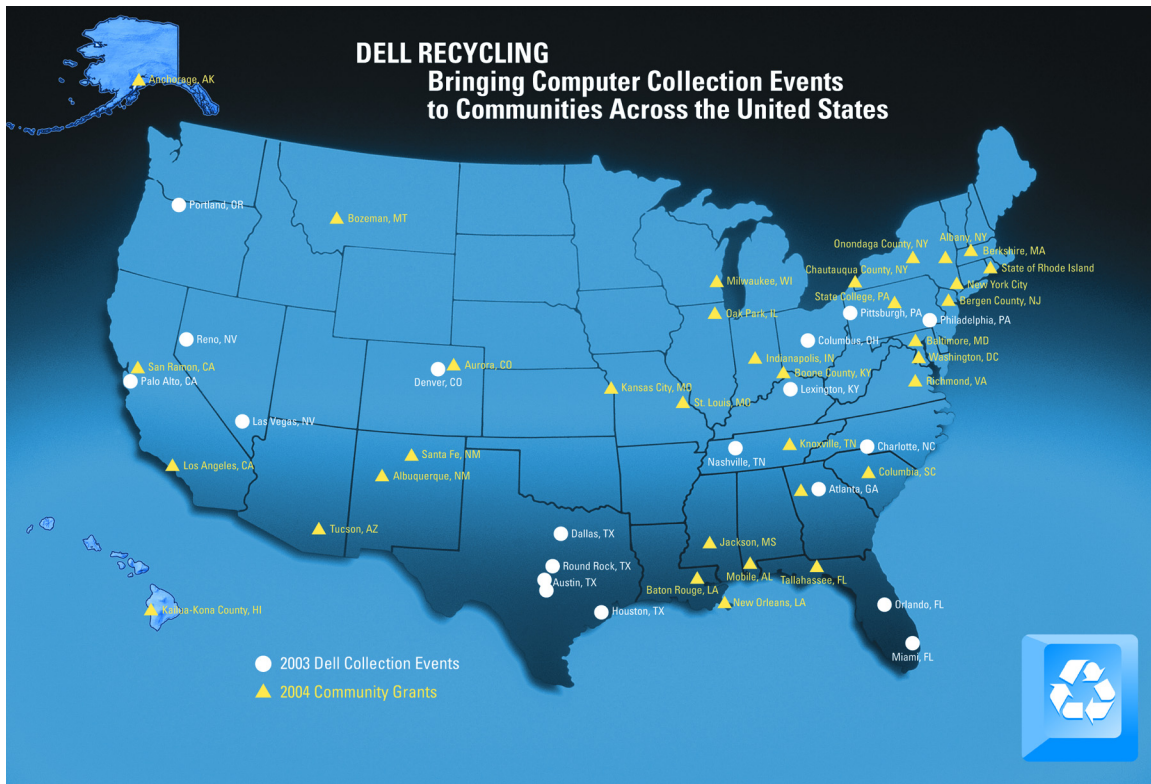
and guidance through a series of forums led by the National Recycling Coalition (NRC).

Dell has awarded a total of more than 30 grants to U.S. communities from Alaska to Florida (see Figure 27), enabling the collection of more than 1500 tons of unwanted computer equipment. Through the advertising, event visibility, and media coverage generated by these grant events, more than two million consumers in grant recipient communities were reached with the message that "No Computer Should Go To Waste". Several state and local governments that served as partners of the grant recipients helped raise awareness of the collection event and the issue by declaring the day "No Computer Should Go To Waste Day." In early 2005, the program was expanded to Canada, where two organizations were awarded grants for Canadian computer recycling events later in the year.

For more information on the communities that received recycling grants in 2004, please visit **www.dell.com/recyclinggrant.**

### Recycling Event Workshops

Dell continues to teach others about best practices in computer recycling and collection events, so that everyone can play a part in promoting responsible recycling options. Working in partnership with the National Recycling Coalition (NRC), Dell organized a training workshop in January 2004 in Austin, Texas, to train waste professionals, civic leaders and higher education recycling specialists on the coordination and promotion of computer collection events. Dell also conducted a recycling event workshop at the NRC Congress and Annual Expo in San Francisco in August 2004, where more than 50 attendees learned from industry experts about responsible vendor selection, onsite logistics, promotional tactics, and the basics of computer recycling.

### Public-Private Partnerships

Dell believes that the most effective solutions to building our nation's electronics recycling and reuse infrastructure will be those that incorporate shared responsibility and public-private partnerships. In 2004, Dell piloted several public-private partnerships to demonstrate the effectiveness of the shared responsibility premise. For example, Dell partnered with the government of Penang State in Malaysia to offer free recycling to the state's consumers and businesses with unwanted computer equipment (see page 54) and with Goodwill Industries of Central Texas and the City of Austin, Texas, to launch the Austin Computer Recycling Project (see page 53).

The public education objectives of the Austin program included: raise awareness in Central Texas of the need to

### ACRP Campaign

To achieve the public education objectives of the ACRP program, Dell and its partners deployed an aggressive media relations, marketing and advertising campaign around the launch of the program. A launch press event held on October 22, 2004 generated media interest on local, regional and national levels. These efforts resulted in more than four million media impressions on the ACRP, positive media coverage from local print publications, as well as national media coverage including CNN and the Associated Press. Additionally, Dell and its partners helped raise consumer awareness about computer recycling through distribution of program brochures via community and environmental organizations in Central Texas, a dedicated website, billboards strategically located around Austin, radio spots on leading local stations, program details in the City of Austin's newsletters and energy bills, banners posted at a Christmas tree recycling event, and print advertisements in local newspapers.

Initial findings of a post-launch survey of Austin residents, taken in December 2004, shows that over one third (38 percent) of residents surveyed had heard of the ACRP.

recycle used electronics, promote the concept of shared responsibility around product end-of-life issues, and educate consumers about responsible disposal and donation options for unwanted computers.

In addition, Dell partnered with the New York City Department of Sanitation on an informational mailer that was sent to more than three million households in New York City in Fall 2004. The mailer included data and statistics about electronics disposal and local resources, including manufacturer recycling programs, for consumers to recycle their unwanted equipment.

### Millions of Consumers Reached in 2004

Dell's consumer education campaign has empowered communities throughout the United States, and in several communities around the world, to establish their own computer collection events and recycling programs, and extend the message that "No Computer Should Go To Waste." For example, Dell's 2004 consumer education programs have delivered strong awareness-building results, including more than:

• Over 150 recycling coordinators trained

• 30 organizations awarded $10,000 grants
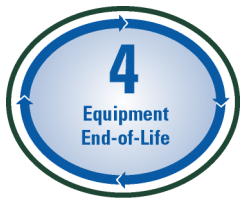
**Keep America Beautiful Waste Reduction Award**

In honor of Dell's work to educate the public about the need for responsible computer recycling and the affordable offers available to consumers, Keep America Beautiful in December 2004 presented Dell with a first-place award in the category of waste reduction. Dell's computer collection events, community grant program, recycling coordinator training, and other consumer education activities were cited as successful programs that educate the public and improve local community environments.
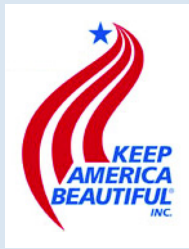
- 1500 tons of computers collected by Dell grant recipient events
- 50 million media impressions about Dell's consumer recycling message

## Product Recovery Metrics

Dell manages many recovery streams that include parts, customer returns, and donations, to name a few. Our reporting consolidates the results into a single value that provides consistency across Dell's regions and within the industry. To quantify the success of the recovery program, the results are reported as a total weight in kilograms. Reporting challenges exist in countries whose collection systems do not distinguish by product segment or brand. For these countries, charges are passed along to manufacturers based on total weights processed and the companies' market share. Therefore, we do not have an effective means of incorporating these weights into our reporting system.

FY2005 results show that the U.S. and other regions outside the U.S. recovered computers for recycling and reuse weighing approximately 24 million kilograms and 5.9 million kilograms, respectively (see Figure 28 and Figure 29). These numbers include:

- **Dell recycling**: Recycled consumer computer products.
- **Asset Recovery Services**: Computer products recovered from businesses, governments, schools and universities for reuse or recycling.
- **Donation**: Computer products donated to U.S. charities through Dell Recycling.

- **Recycling events**: Computer products dropped off at recycling events sponsored or supported by Dell.
- **Lease returns**: Computer products returned to Dell for reuse or recycling.
- **Retired Dell-owned equipment, customer returns and excess spare parts**: Dell-owned equipment that is retired, computer products returned within 30 days of purchase that can be refurbished and resold, and a small amount of excess spare parts (this excess is very small as Dell's build-to-order model allows for very low amounts of inventory).

**Figure 28: Worldwide Recovery— All Channels (Region View)**

*80% of WW weight recovered from US channels - 15% EMEA - 5% APJ Total recovery from all channels grew by 36% YoY*
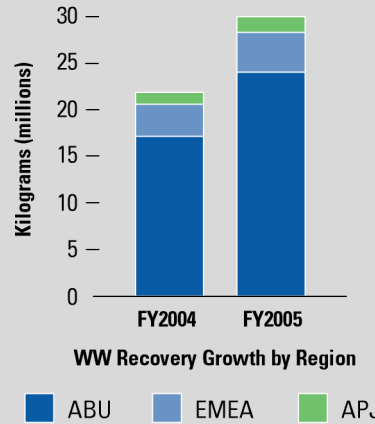
WW Recovery Growth by Region

ABU   EMEA   APJ

**Figure 29: Worldwide Recovery—By Channels**

*Growth came primarily from the growth in the Asset Recovery Services channel*

Grant/Event/Tour
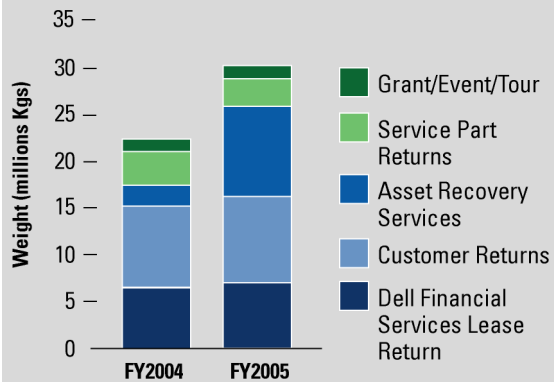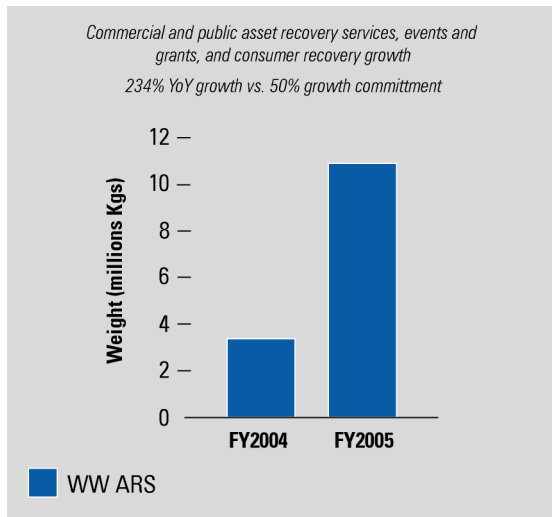Service Part Returns
Asset Recovery Services
Customer Returns
Dell Financial Services Lease Return

**Figure 30: Worldwide Recovery—Product Recovery Goals Results**



Commercial and public asset recovery services, events and grants, and consumer recovery growth

234% YoY growth vs. 50% growth committment

As part of our continuing effort to build awareness, Dell established a recycling goal for FY2005. Dell publicly announced a goal to increase material weight recovered in FY2005 by 50 percent. We used material weight recovered in FY2004 as our baseline. Calculations for this goal include only the first four recovery categories listed on page 58.

Dell exceeded the goal to increase material weight recovered by 50 percent in FY2005. FY2005 results show that Dell recovered computers and peripherals for recycling and reuse from the first four recovery categories listed previously, weighing approximately 11 million kilograms. These results represent a 234 percent increase over the FY2004 baseline of approximately 3.2 million kilograms (see Figure 30).

A key challenge has been to provide context for recovery volumes. Dell has proposed using International Data Corporation (IDC) reported volumes and assuming an average of seven years age at point of recovery. Dell's FY2005 results from the first four categories listed previously reflect slightly more than a 10 percent recovery rate utilizing this method. Many assumptions were made in determining this rate. Dell continues to engage with our stakeholders to synthesize the myriad of variables which can impact this rate with the objective of creating a common method of measuring product recovery rates across the industry.

"We've shown that Dell can continue to grow while being environmentally responsible," Chairman Michael Dell said. "We are determined to address the challenges of raising computer recycling rates globally, and being the first in our industry to set public recovery goals in this report is an important step in that direction."

As Dell's recovery metrics continue to grow, we expect to see more moderate year-over-year percentage increases in collection totals. The dramatic percentage increase in FY2005 is in part due to the introduction of institutional asset recovery services in regions outside the U.S., and in part due to pent-up demand within U.S. commercial and public customers for asset recovery services. While we are encouraged by the dramatic percentage increase in product recovery in FY2005, we expect to see a return to more moderate, steady growth in future years.

For FY2006, Dell has established a goal to increase units recovered from the first four recovery categories by 50 percent. Using units recovered in FY2005 as the baseline, this goal builds on the success of Dell's global recovery programs in the past year. Again, this year Dell's product recovery goal is aggressive and is expected to drive improvements in the company's global product recovery programs, compel efficiencies in the recovery process, and create a greater need to heighten awareness among both consumers and businesses.

## Legislative and Regulatory Compliance

Dell is dedicated to meeting the requirements of the European Union's WEEE (Waste from Electrical and Electronic Equipment) Directive and is engaged in the development of country-specific implementation schemes to comply with the national WEEE laws. The directive aims to reduce the waste arising from electrical and electronic equipment, and improve the environmental performance of everything involved in the life cycle of electrical and electronic equipment.

# Community Engagement & Citizenship

# Community Engagement and Citizenship

As the leading provider of technology to education, at Dell we have found that our customers are turning to us for more than products and services. They are looking to Dell to lead them through complex educational challenges, including making the right choices for their technology, understanding the importance of developing 21st century skills in our students and helping our customers address the digital divide.

Global citizenship is a basic value of The Soul of Dell and helps define our identity as a corporation. The Dell team worldwide is committed to sharing its talents with the communities we call home and making a real difference in the lives of many.

## Removing Barriers to Technology for Children and Communities

Dell believes that everyone should have the ability to access, use and understand technology. However, Dell recognizes that technology is not evenly distributed among student populations and that's why we support easy and effective programs that help low-income and underserved children and communities gain access to digital tools and training.



Michael Dell watches as a TechKnow student learns to refurbish a computer circuit board.

### A Single Computer Can Change the World

Can a single computer change the world? Yes—when it's put in the right hands! Dell's signature program for getting technology into the right hands is the *Dell TechKnow* program. Dell TechKnow is one of the largest student computer donation programs in the United States. To date, more than 4,660 low-income or underserved middle-school students from almost 50 school districts across the United States have graduated from the program. And what do the students of Dell TechKnow think of the program? According to Trevonna, a middle-school student in Tennessee, "I like coming to (the Dell TechKnow) class because I get to learn about computers and, if I have problems with it, I can fix it. And the best part is that I get to take it home!"

The mission of the Dell TechKnow program is to partner with school districts, corporations, nonprofits and local community sponsors to provide low-income or underserved middle-school students the opportunity to earn a home computer and learn technology skills to better prepare them for opportunities in today's technology-driven world.

The Dell TechKnow program focuses on developing technology skills while building life skills that help middle-school students succeed, not only in school, but in life. Students attend an after-school 40-hour, self-paced, hands-on course where they work in teams to learn computer basics. On completion of the program, students are required to demonstrate the following competencies:

- Disassemble and assemble a computer
- Load and use software
- Identify and correct basic hardware problems
- Upgrade computer hardware

Classes are typically held after school, evenings or weekends. On completion of the course, students take home a Dell desktop computer and receive one-year of Internet access at no charge from America Online. Students can become coaches and mentors to other family members who may lack technology skills. This, in turn, helps promote the development of digital literacy in low-income households.

More information on the Dell TechKnow program can be found at **www.dell.com/k12/techknow/**.

### Every Child Needs 21st Century Skills

Dell has also taken a leadership position in transforming education to ensure that every student is equipped for success in learning and in life. As a founding member of the Partnership for 21st Century Skills, Dell is focused on creating a successful model of learning for this millennium because today's world is fundamentally different from that of previous generations; schools must produce dynamic young thinkers able to solve complex, real-world problems.

## Partnership for 21st Century Skills

What are 21st Century Skills? They are those essential elements that children need to succeed as citizens and workers in the 21st century. They include abilities such as information gathering, communicating, re-learning, and problem solving. Today's teachers and students know that it's not enough for students to be able to master how to use PowerPoint and Excel. What businesses are looking for are employees who not only know how to develop presentations or spreadsheets, but can think critically about how to translate data and information into effective recommendations and strategies for improvement.

Twenty-first century skills also combine elements of technology literacy, critical thinking, creativity and the mastery of core subject matter. These are critical to a productive work force in today's global and increasingly knowledge-based economy.

The Partnership understands this and is taking real action by issuing reports, publications, tools and resources in an effort to promote a powerful vision for 21st century education.

The following tools and resources are publicly available at **www.21stcenturyskills.org**:

- *Learning for the 21st Century*, which articulates a collective vision for learning in the 21st century.

- *Milestones for Improving Learning and Education (MILE) Guide for 21st Century Skills*, a self-assessment tool that assists schools, districts and states in determining their school or district's progress in defining, teaching and assessing 21st century skills.

- *Route 21: An Interactive Guide to 21st Century Learning*, a Web-based tool that assists education stake-holders in supporting and promoting achievement of Information and Communication Technology (ICT) literacy and 21st century skills.

- *The Road to 21st Century Learning: A Policymakers' Guide to 21st Century Skills*, which assists state education leaders in crafting visionary education policies and provides

**Dell Laptops Help Students Succeed**

One success story is Zion-Benton Township High School, located in an industrial area outside of Chicago, which serves students with varied socio-economic status. The Zion-Benton Technology Academy was created for and filled with students possessing only average test scores. This Technology Academy (school within a school) allowed students to function as a smaller unit within a large urban school, while providing them a target opportunity to achieve with technology. The key was real-world, 21st century skills. Once the school selected Dell, they began spending less money on administration and maintenance, and more on focused student learning. All students in the Technology Academy were issued a Dell notebook computer. The result? Those students from the Technology Academy scored 33 percent higher on their ACT tests than those of their college-bound counterparts at Zion-Benton, who had received traditional instruction without the Dell notebooks. Also, Technology Academy math scores were 28 percent higher and reading scores 17 percent higher.



Students use Dell notebooks to achieve with technology.

specific guidance to help create a 21st century learning environment.

- *ICT Literacy Maps*, a series of matrices that illustrate the intersection between ICT literacy and core academic subjects, including Geography, Math, English and Science.

- *Resource Database*, a comprehensive database of resources relating to 21st century skills, ICT literacy, and professional development, to assist in creating a 21st century education for students.

The goal is clear. We must improve student achievement through learning environments aligned to the 21st century. The partnership is focused on providing the necessary tools and resources. In order to accomplish this, K-12 education must infuse existing standards with learning skills and 21st century tools, context and content.

Dell and the Partnership encourage schools, districts and states to take the following actions:

- *Embrace a vision* of education that incorporates 21st century skills.

- *Gather the right stakeholders*, including key individuals from the education, business, government, after-school and parent communities.

- *Use the Partnership's MILE Guide*, a self-assessment tool that will help you determine your school or district's progress in defining, teaching and assessing 21st century skills.

- *Create a plan of action* using the Partnership's online interactive guide: *Route 21*.

- *Advocate* with policymakers using our *Policymakers' Guide* for 21st century skills.

More information about the Partnership for 21st Century Skills can be found at **www.21stcenturyskills.org/**.

## Using 21st Century Skills and Technology Outside the Classroom

Hands-on experiences in science and technology are important ways for students to understand the relevancy of technology in their lives. A leading program that pushes students to engage in real-world research, communication, and problem solving is the *Dell-Winston Solar Car Challenge*, named one of America's 10 Most Innovative Education Programs by *Technology & Learning* magazine.

The Dell-Winston Solar Challenge is an annual solar-car race that provides high-school students from across the country and Mexico with hands-on experience in science and technology, developing important skills for the future.

According to its founder, Dr. Lehman Marks, "Programs like the Dell-Winston Solar Car Challenge help teach high-school students the 21st century skills they need to be successful in the future—whether it's to become the scientists and engineers of tomorrow or wherever their paths may lead."

Solar car teams pose for a picture before the race starts.

The 2004 Dell-Winston Solar Car Challenge, held at the Texas Motor Speedway in Fort Worth, was won by the Houston (Mississippi) Solar Race Team and the Solar Car Team from The Winston School in Dallas.

Each year, the Dell-Winston Solar Car Challenge alternates between the Texas Motor Speedway and a cross-country route. 2003 participants took a nine-day trek from Round Rock, Texas, to Cocoa, Florida. During next year's cross-country race—currently planned to run from Round Rock, Texas, to Los Angeles, California—solar car teams will use Dell notebooks to gauge solar-car battery usage, monitor weather patterns, and track competitors via global positioning systems.

See **www.winstonsolar.org/race/** for more information on the race.

### Teaching the Teachers

At Dell we understand that the ultimate promise of technology is the impact it can have directly on the teaching and learning process. We believe real leadership in education begins with a commitment to lifelong learning.

To help develop students into lifelong learners, we have to begin by educating educators. Dell's Professional Development for educators program is committed to not only helping districts build strong, technology-driven, academic environments, but also fostering an environment for growth in student achievement through outstanding professional development for teaching staffs. For more details, see **www.dell4k12.com/solutions_detail.php?si=5**.

## The Dell Team in the Community

The Dell team worldwide is committed to supporting innovative and effective programs that address health and human services, education, and technology access for youth, through both financial support and volunteerism. Dell strives to demonstrate employee support to the community through a three-tiered approach that focuses on the principles of Learn, Engage and Commit.

### Read to Achieve

Dell teamed with the National Basketball Association (NBA) to open 10 new reading and learning centers in various communities throughout the United States. These centers, which are created as part of the NBA's national Read to Achieve program, feature Dell desktop computers and servers, printers, educational software, and more than 2,000 books and educational materials donated by the NBA and its partners. The NBA also will provide multimedia equipment and educational posters, as well as vintage and recent NBA images.

Dell has partnered with the NBA and its teams to open reading and learning centers at the following facilities:

- Adams Park Recreation Center (Atlanta, GA)
- Carver Academy (San Antonio, TX)
- Boys and Girls Club of Jersey City (Jersey City, NJ)
- Yonkers YMCA (Yonkers, NY)
- H.L. McCrory Family Branch YMCA (Charlotte, NC)
- Ithuteng Trust (Johannesburg, South Africa)
- Murray Boys and Girls Club (Salt Lake City, UT)
- St. Martin de Porres Family Center (Cleveland, OH)
- Paul Laurence Dunbar Elementary School (Miami, FL)
- Los Angeles Boys and Girls Club (Los Angeles, CA)

Read to Achieve is a year-round program to help young people develop a lifelong love for reading and to encourage adults to read regularly to children. The program reaches an estimated 50 million children a year. Efforts include the annual donation of more than 350,000 books through a variety of reading events and book fairs, as well as essay contests and online programs. In addition to being supported by all 29 NBA teams, 14 WNBA teams, the eight teams that make up the NBA's new minor league, and the National Basketball Development League (NBDL), Read to Achieve is supported by the NBA's officials, parents and wives of players organizations, as well as the NBA Players Association and Retired Players Association.

For more information on this program, see **www.nba.com/features/rta_index**.

## Learn

Dell strives to educate its workforce about the needs of the community. Community Involvement Fairs held on Dell campuses bring nonprofit organizations together with employees, enabling the Dell team to connect with organizations in their area. In calendar year 2004, fairs were held around the world, with thousands of employees connecting to more than 100 organizations. In addition, Dell maintains an ongoing education program for employees, reminding them about opportunities to get involved in the community throughout the year.

## Engage

Dell dedicates September as Global Community Involvement Month. During September 2004, more than 17,500 employees volunteered in their communities, donating more than 78,000 hours and making an economic impact of $1.3 million. 2004 participation increased 145 percent from 2003.

Dell also encourages volunteerism throughout the year by helping employees find opportunities in their communities. By partnering with VolunteerMatch, Dell offers employees a customized online tool to quickly find local opportunities. Working with nonprofit organizations, VolunteerMatch provided employees with hundreds of team-building volunteer opportunities (during Global Community Involvement Month and throughout the year) that support the needs and issues facing Dell communities. In addition, Dell's team-building matching grant program encourages volunteerism by providing a financial match that goes directly to the organization where the Dell team volunteered.

In addition, Dell sponsors the Juvenile Diabetes Research Foundation's Walk to Cure Diabetes, the March of Dimes' WalkAmerica, and the Austin SafePlace Walk. In calendar year 2004, employees across the United States gave their time and effort to raise more than $450,000 for these organizations.

This spirit of volunteerism is demonstrated every day by employees—from employees in China who traveled by boat every week to help install computer equipment to countless hours spent by employees mentoring, tutoring, serving as board members, building houses, and much more. The Dell team is committed to making a difference in the community.

**Irish Chambers of Commerce Corporate Social Responsibility (CSR) Awards**

At the first ever annual CSR awards, organized by the Chambers of Commerce of Ireland and held in Dublin in November 2004, Dell Ireland was commended for providing practical and worthwhile support to local community initiatives in Limerick, Bray and Cherrywood. This was based on Dell's work in schools and community groups including technology donations to Coláiste Chiaráin, Croom, St. Vincent de Paul, Dublin, and the University of Limerick Access Outreach Centre, our fundraising for the Special Olympics, and our annual Global Community Involvement activities.



Annette Condon, Dell Ireland Corporate Communications Manager, accepts the CSR award on behalf of the company.

## Commit

Through our annual Direct Giving campaign, Dell employees pledged more than $3.3 million to assist organizations around the world, with a 36 percent increase in participation for calendar year 2004. Although primarily a U.S. effort, Direct Giving has expanded this year to include Canada, Ireland, Panama, Brazil and India. In addition to this planned campaign, in the wake of the tsunami disaster in Asia, Dell organized a fundraising drive and employees around the globe joined the company to contribute more than $2 million to aid tsunami relief.

Dell demonstrates our commitment to the community through the annual *Can Hunger* food drive. In calendar year 2004, the Dell team across the United States donated 545,000 pounds of food, providing 716,000 meals to 179,000 families. This effort to fight

hunger earned us the Corporate Group Volunteer of the Year Award from America's Second Harvest—The Nation's Food Bank Network, the nation's largest hunger relief organization.

As a corporation, Dell's grant program strives to equip youth to learn and excel in a world driven by the digital economy. In the United States, Dell awards a variety of grants, including Healthy Communities Grants to address basic needs for children, such as food, shelter, safety and healthcare; Literate Communities Grants to empower communities to provide quality education, particularly in math, science and literacy; Connected Communities Grants that aim to address technology access needs through computer labs in communities with limited access to technology; and lastly Open Grants that benefit non-profit organizations that provide services to children in communities Dell calls home. Globally, Dell supports grants in Brazil, India, Malaysia and Spain, providing technology and funding for nonprofit organizations that benefit underserved children in these countries. See **www.dell.com/dellfoundation** for more information on Dell's grant programs.

## Example Global Community Programs

### India

In August 2004, the Dell Computer Center opened for the children of the Parikrma Learning Center in Sahakarnagar. The Parikrma Humanity Foundation is a nonprofit organization based in Bangalore operating two schools serving 360 children. Its mission is to unleash the potential of underserved children, providing them with equal opportunities to be valuable contributing members of society. At the Dell Computer Center, Dell team members share their time and knowledge, serve as role models for the children, and help bridge the digital divide. The computers for the center were donated as part of a grant from the Dell Foundation and reaffirm Dell's credo of making a positive contribution to the communities in which we work and live.



Three students at the Parikrma Learning Center learn basic computer skills.

### Brazil

Dell Brazil's Digital Citizen Program provides technical computing education to youth and teenagers from low-income communities through eight Information Technology Technical Schools. Dell team members financially sponsor students to attend the program and volunteer their time to teach Junior Achievement and job-transition courses at the schools. During 2004, students visited Dell, had a plant tour and had lunch with their sponsors. The ongoing volunteer support by the Dell team has enabled the Digital Citizen Program to grow and contribute to the future of the young students in the program.

## Morocco

During 2004, Dell donated equipment to open two new computer rooms in Casablanca, Morocco at the SOS Village d'enfants. The SOS Children's Villages give children who have lost their parents or who are no longer able to live with them a permanent home and a stable environment. Special emphasis is placed on giving the children a thorough preparation for life on their own afterwards and integrating into their local community. The Dell contribution enables access to educational resources for these children and provides technology that might not otherwise be available, helping prepare them for life in a digital world. Dell team members in Morocco have been enthusiastically involved in this partnership, installing and maintaining the computers and providing tuition for the children. Dell's commitment to communities like this around the world helps equip youth to learn and excel in a world driven by the digital economy.



Paul Bell, Senior Vice President for Europe, Middle East and Africa, learns from the children at SOS Village center in Casablanca. Volunteers from Dell set up and maintain the computer laboratory for the children.

## Ireland

Dell partners with Coláiste Chiaráin school in Limerick, Ireland to enrich children's learning experience through the Intelligent Classroom, placing technology at the center of all aspects of school life.

During the last three years, Dell has donated 75 notebook computers to Coláiste Chiaráin for use by the students. Dell has also equipped the school with extensive wireless capability and has provided Dell server technology for the development of the school's unique management software. The majority of the children have their own dedicated notebooks, which they use in the classroom and also bring home, helping to bridge the digital divide. This is the only project of its kind at a second-level school in Ireland. Dell is also providing notebook computers to all teachers on staff and is piloting the use of handheld PDAs, which will be used to help improve the overall management mobility in the school.

"We always had the view that it is not sufficient to have computers simply sitting in computer labs in schools. There has to be a goal to apply the technology to all aspects of the learning process and to integrate it fully in the curriculum. We would not have been able to achieve this goal without the support of Dell and we are extremely grateful to them for supporting our vision at all stages of the partnership," Noel Malone, principal, Coláiste Chiaráin, said.

## Spain and Singapore

As part of its commitment to equipping youth for success in the digital world, Dell recently awarded grants to schools in Singapore and Spain. The Margaret Special School in Singapore, which caters to children with moderate or severe mental retardation, received funding from the Dell Foundation to provide computer-assisted learning for handicapped children. The funds will be used to build a learning lab for children. The Villapaz Shelter in Spain also will receive new computers for a lab as well as furniture, books, electrical connections and more from the Dell Foundation. The shelter is dedicated to serving homeless, abused and neglected children by providing housing, food and education. These are two examples of Dell's commitment to contributing significantly to the quality of life in communities where Dell employees live and work.

## United States

The Dell Americas Center of Competence Team in Round Rock, Texas, worked with the Williamson County Crisis Center to furnish "safe home" apartments for the center. The Crisis Center is dedicated to empowering victims of family violence, sexual assault and other violent crimes through support and advocacy, while promoting community awareness, compassion and responsibility for creating a safer community.

The housing that the Dell team helped furnish provides emergency housing for victims of abuse in the local community. The Dell team collected items by having two teams compete to see which team could fill an empty cubicle with the most donated items and 100 percent of the employees participated. The teams collected furniture, dishes, pots and pans, silverware, bedding, soaps, toys, towels, shower curtains, decorative items and more. The group rented trucks, loaded the items, delivered them, and set up nine apartments. The CEO of the crisis center expressed her gratitude to the Dell team, saying, "Thank you, thank you! You will never know how much this is appreciated!" This type of grass roots effort is one example of many of the Dell team making an impact in the local community.

# Acronyms and Abbreviations

| | |
|---|---|
| **ABU** | Americas Business Unit |
| **ACRP** | Austin Computer Recycling Project |
| **AeA** | American Electronics Association |
| **AIDS** | Acquired Immunodeficiency Syndrome |
| **ANSI-RAB** | American National Standards Institute Registrar Accreditation Board |
| **APJ** | Dell Asia-Pacific/Japan |
| **ARS** | Asset Recovery Services |
| **BITKom** | German Association for Information Technology Telecommunications and New Media E.V. |
| **BBB** | Better Business Bureau |
| **BSR** | Business for Social Responsibility |
| **CAFOD** | Catholic Agency for Overseas Development |
| **CALCE** | Computer Aided Life Cycle Engineering Electronic Products and Systems Center |
| **CBCF** | Congressional Black Caucus Foundation |
| **CD** | compact disc |
| **CEA** | Consumer Electronics Association |
| **CEO** | Chief Executive Officer |
| **CFCs** | chlorofluorocarbons |
| **CFS** | Computers for Schools |
| **CHCI** | Congressional Hispanic Caucus Institute |
| **CNN** | Cable News Network |
| **CO2** | carbon dioxide |
| **CPS** | Chicago Public Schools |
| **CPU** | central processing unit |
| **CRT** | cathode-ray tube |
| **CSR** | Corporate Social Responsibility |
| **DBS** | demand-based switching |
| **DfE** | Design for Environment |
| **DFS** | Dell Financial Services |
| **DJSI** | Dow Jones Sustainability Index |
| **DTI** | U.K. Department of Trade and Industry |
| **EHS** | Environmental and Health and Safety |
| **EIA** | Electronic Industries Alliance |
| **EICTA** | European Information & Communications Technology Industry Association |
| **EMC** | Environmental Management Committee |
| **EMEA** | Dell Europe, Middle East, and Africa |
| **EMS** | environmental management system |
| **EPA** | U.S. Environmental Protection Agency |

| | |
|---|---|
| **EPS** | Expanded Polystyrene Packaging Group |
| **EPEAT** | Electronic Products Environmental Assessment Tool |
| **ET** | evapotranspiration |
| **ETIs** | Information Technology Technical Schools |
| **E.U.** | European Union |
| **e-waste** | electronics waste |
| **FPD** | Fundação Pensamento Digital |
| **FEC** | Federal Electronics Challenge |
| **FEMP** | Federal Energy Management Program |
| **FRs** | flame retardants |
| **FSC** | Forest Stewardship Council |
| **FY** | fiscal year (for Dell, FY2005 is Feb 2004 through Jan 2005) |
| **G** | G-force |
| **GBC** | Global Business Coalition on HIV/AIDS |
| **GEMI** | Global Environmental Management Initiative |
| **GHG** | greenhouse gas |
| **GLBT** | gay, lesbian, bisexual and transgender |
| **GRI** | Global Reporting Initiative |
| **H&S** | health and safety |
| **HCFCs** | hydrochlorofluorocarbons |
| **HDPUG** | High-Density Packaging User Group |
| **HIV** | Human Immunodeficiency Virus |
| **Hz** | Hertz |
| **HRC** | Human Rights Campaign |
| **ICT** | information and communications technology |
| **IDC** | International Data Corporation |
| **IEC** | International Electrotechnical Commission |
| **IEEE** | Institute of Electrical and Electronics Engineers |
| **iNEMI** | International Electronics Manufacturing Initiative |
| **ILO** | International Labour Organization |
| **IPP** | Integrated Product Policy |
| **ips** | inches per second |
| **ISO** | International Organization for Standardization |
| **IT** | information technology |
| **ITAC** | Information Technology Association of Canada |
| **ITI** | Information Technology Industry Council |
| **JEDEC** | JEDEC Solid State Technology Association (once known as the Joint Electron Device Engineering Council) |

| | |
|---|---|
| **JEITA** | Japan Electronics and Information Technology Industries Association |
| **JGPSSI** | Japan Green Procurement Survey Standardization Initiative |
| **K–12** | kindergarten through grade 12 |
| **Kgs** | kilograms |
| **KWh** | kilowatt hours |
| **lbs** | pounds |
| **LCD** | liquid-crystal display |
| **M/W/DBE** | Minority, Women and Disadvantaged Business Enterprises |
| **MBA** | Masters of Business Administration |
| **ME** | Ministry of the Environment |
| **MILE** | Milestones for Improving Learning and Education |
| **NAM** | National Association of Manufacturers |
| **NBA** | National Basketball Association |
| **NBDL** | National Basketball Development League |
| **NCF** | National Cristina Foundation |
| **NEMI** | National Electronics Manufacturing Initiative |
| **NGO** | non-governmental organization |
| **NMC** | Swedish Association of Environmental Managers |
| **NRC** | National Recycling Coalition |
| **NSAI** | National Standards Authority of Ireland |
| **NYC DoE** | New York City Department of Education |
| **OSHA** | Occupational Safety and Health Administration |
| **OHSAS** | Occupational Health and Safety Assessment Series |
| **OS** | operating system |
| **PBBEs** | polybrominated biphenyl ethers |
| **PBBs** | polybrominated biphenyls |
| **PBDEs** | polybrominated diphenyl ethers |

| | |
|---|---|
| **PC** | personal computer |
| **PCBs** | polychlorinated biphenyls |
| **PCTs** | polychlorinated terphenyls |
| **PDA** | Personal Digital Assistant |
| **PVC** | polyvinyl chloride |
| **Q** | Quarter of the year |
| **QBR** | quarterly business review |
| **REACH** | Registration, Evaluation and Authorisation of Chemicals |
| **RoHS** | European Union's Restrictions on Hazardous Substances directive |
| **RT Centre** | Reuse Technology Centre Ireland |
| **SAM** | Sustainable Asset Management |
| **SDoC** | Supplier's Declaration of Conformity |
| **SOS** | Societas Socialis |
| **SRI** | socially responsible investor |
| **TCO** | The Swedish Confederation of Professional Employees |
| **U.K.** | United Kingdom |
| **U.S.** | United States |
| **U.S.A.** | United States of America |
| **UBA** | Germany's Federal Environment Agency |
| **UNCF** | United Negro College Fund |
| **USITO** | United States Information Technology Office |
| **VPP** | OSHA's Voluntary Protection Plan Program |
| **WEEE** | European Union's Waste from Electrical and Electronic Equipment directive |
| **WNBA** | Women's National Basketball Association |
| **WW** | worldwide |
| **YMCA** | Young Men's Christian Association |
| **YoY** | year over year |

No computer should go to waste.

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