The ReGeneration of Dell: New Rules in Leadership for Business and the Environment

by John Davies

Dell recently declared its intention to be the “greenest technology company on the planet.” In founder Michael Dell’s quest to achieve this distinction, he looks to reinvigorate his company with a larger sense of purpose as it addresses a wide range of environmental issues.
<table>
<thead>
<tr>
<th>Acronyms and Initialisms</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFR Brominated flame retardants</td>
</tr>
<tr>
<td>BPI Business process improvement</td>
</tr>
<tr>
<td>CDN Customer delivery notification</td>
</tr>
<tr>
<td>DfE Design for Environment</td>
</tr>
<tr>
<td>EICC Electronic Industry Code of Conduct</td>
</tr>
<tr>
<td>EPA Environmental Protection Agency</td>
</tr>
<tr>
<td>EPEAT Electronic Products Environmental Assessment Tool</td>
</tr>
<tr>
<td>FSC Forest Stewardship Council</td>
</tr>
<tr>
<td>GHG Greenhouse gas</td>
</tr>
<tr>
<td>kWh Kilowatt hours</td>
</tr>
<tr>
<td>LEED Leadership in Energy and Environmental Design</td>
</tr>
<tr>
<td>NGO Nongovernment organization</td>
</tr>
<tr>
<td>RoHS Reduction of Hazardous Substances</td>
</tr>
</tbody>
</table>
The ReGeneration of Dell: New Rules in Leadership for Business and the Environment

by John Davies

Dell is now using its direct model in new ways to showcase the company’s environmental commitment, which it has identified as a key strategy for future growth.

Executive Summary

Technology companies are taking the lead on environmental issues. Recently Dell declared its intention to be the “greenest technology company on the planet.” In founder Michael Dell’s quest to achieve this distinction, he looks to reinvigorate his company with a larger sense of purpose as it addresses a wide range of environmental issues.

To execute its strategy, the company is addressing product design and material use, manufacturing and logistics operations, and asset recovery and recycling. More importantly, however, the company has committed to a collaborative effort and partnerships with suppliers, customers, and even competitors to achieve its goals.

Many of the more innovative programs involve Dell’s approach to including customers and other stakeholders in a broader conversation about the environment, energy efficiency, and climate change. The company’s leadership in public engagement, much of it through interactive and collaborative tools on its website, sets a new standard for organizations within all sectors seeking to engage with an ever-expanding set of stakeholders.
Dell competes to be the greenest technology company on the planet

Dell is a $59.6B global technology systems and services company that develops, manufactures, sells, and supports computers, computer peripherals, televisions, and other technology products. Headquartered in Round Rock, Texas, Dell has been known for its direct-to-consumer and innovative supply chain strategies since its inception in 1984.

As one of many examples of the company’s business leadership, Dell has twice topped all other companies across all industries as the outright supply chain leader in the AMR Research Supply Chain Top 25. Published by AMR Research to raise awareness of the importance of supply chain to business, the economy, and society, we base this award on business analysis of how global organizations rank among their peers in supply chain performance.

While already supply chain leaders, in 2000 Dell embarked on an effort to redefine and more clearly articulate its corporate values, which resulted in five elements referred to as the Soul of Dell. These five elements are defined as follows:

- A focus on customers
- A meritocracy that serves to attract and retain the best talent
- Direct relationships with customers, partners, and suppliers in addition to those among coworkers
- Global citizenship
- Passion for winning

In its 2006 sustainability report, the company extends this passion to key sustainability issues. As the report states, “We believe in winning at Dell. And not just in terms of customer service and technology, but also in terms of social and environmental stewardship.” Sustainability and environmental issues have become a galvanizing force in providing a focus to Dell’s competitive spirit that goes beyond revenue growth and profitability. While the financial foundation of the company is the greatest measure of its success, Mr. Dell believes a focus on sustainable business provides a key driver to even greater growth.

In June 2007, Dell committed to an aggressive, long-term goal to be the greenest technology company on the planet. Certainly the company’s competitors are also focused on environmental issues, as other high-tech companies engage in the battle to become the greenest in their industries. This makes for a new type of competitive landscape, one where competitors’ efforts create results that benefit the world.
Dell’s environmental business model

Mr. Dell announced his company’s goal of becoming the greenest technology company in the world in London in conjunction with World Environment Day. He identified a new generation—the “ReGeneration”—that includes people of all ages who share a common interest in renewable resources, recycling, and other ways of sustaining the earth’s natural environment. It is clear that ReGeneration also refers to reinventing his namesake company after a brief sabbatical from his CEO post. With this strategy, Mr. Dell has chosen environmental stewardship as one of the key platforms for that effort.

Dell’s green programs represent the integration of three key themes for the operation of the company: more environmentally-friendly materials, energy efficiency, and a commitment to recycling and end-of-life disposition of products. These three areas are integrated into every aspect of the company’s value chain, including product design, logistics, and procurement. Dell’s environmental policy consists of the following major points:

- Design products with the environment in mind.
- Prevent waste and pollution.
- Continually improve the company’s performance.
- Demonstrate responsibility to stakeholders.
- Comply with the law.

Sustainability initiatives require executive sponsorship

Becoming the greenest technology company on the planet requires a very strong commitment from company leadership. Dell’s board of directors plays an active role in guiding the conduct of Dell’s business, including sustainability. As such, the company established a sustainability council comprising Mr. Dell, as well as senior executives from legal, compliance, procurement, engineering, sales, and other functions within the company. The sustainability council meets quarterly to review sustainability-related risks, opportunities, and associated actions.

A benefit of being a relatively young company in the dynamic and fast-paced technology industry is that the organizational bureaucracy does not seem to have calcified. This leads to fewer structural barriers or functional silos that can make new initiatives like this difficult to implement.

In many organizations, sustainability initiatives reside within a small organization that has direct support from and regular interaction with the senior management of the company. While reporting structures vary by industry and company, this group strives to embed sustainability throughout the organization. At Dell, a lean team led by Tod Arbogast, director of sustainable business, takes responsibility for driving these initia-
tives across the company. To achieve this, the team utilizes an inclusive strategy, which consists of the following key elements:

- **Engage stakeholders**—Beyond traditional business interests, this includes soliciting input from a wide audience of shareholders, financial institutions, nongovernment organizations (NGOs), suppliers, employees, and customers.

- **Prioritize lessons learned**—This requires a highly structured approach to reviewing stakeholder feedback and understanding the effects of decisions on the company’s wide variety of stakeholders.

- **Assign ownership**—Establishing ownership embeds practices within the functional area of responsibility.

- **Align resources**—Internal alignment efficiently cross-fertilizes efforts across various departments and functions within the company.

- **Focus on governance and communication**—In addition to the sustainability council, Mr. Arbogast’s team meets quarterly with Mr. Dell and some of his key direct reports. The board of directors is also regularly updated.

The definition of stakeholder engagement is not limited to communication with employees and business partners of the company. The firm educates and informs its clients and others through its activities, providing direct examples of environmental stewardship in action.
A lifecycle framework

Dell takes a lifecycle approach to implementing its green strategies. Lifecycle models are commonly presented in a circular format to reinforce the iterative nature of a process, with all the elements interconnected.

**Figure 1:** Dell takes a lifecycle approach to green IT

![Lifecycle Framework Diagram]

The most important aspect of the lifecycle framework is that each step has been approached from an environmental and sustainability perspective. As shown by firms in other business sectors such as Wal-Mart, Caterpillar, Dow Chemical, Johnson & Johnson, and Coca-Cola, when a strong focus on sustainability and environmental stewardship is adopted within a company, it often results in the discovery of enormous cost savings as well as new revenue opportunities. As one of our clients noted, “When we looked at our business through a green lens, we found money lying on the table that we had never been able to see before.”
Inside the Dell environmental lifecycle framework

The Dell environmental lifecycle framework provides a means by which Dell can approach its products and operations from an environmental and social responsibility perspective. Companies taking this approach focus their sustainability efforts in accordance with the major areas of their activities and where they can have the most effect. The following are the largest areas of direct impact for Dell:

- Product concept and design
- Manufacturing and operations
- Asset recovery and recycling

Product concept and design

In an interview with the Associated Press, Mr. Dell says it was 1992 when he first asked his engineers to design and build a PC made completely out of recyclable materials. “They kind of looked at me funny, like ‘What do you mean?’” Mr. Dell said he’s been interested in ways to make his company more environmentally friendly ever since.

Dell’s product development efforts represent one of the major areas where the firm affects not only its own operations, but also its customers’ operations and how the products are used. Some major areas where this is seen both for Dell and its customers are energy efficiency and performance, Design for Environment (DfE), and packaging.

Darrell Ward, director of marketing for desktop products, said Dell’s environmental strategy “is a competitive advantage and we will wisely invest across product lines. For some customers, it is extremely important that a certain percentage of our portfolio is EPEAT Gold, which, among other requirements, means we provide an 80% efficient power supply. While it is required for some bids, it is still a minority, often limited to government bids and very large companies that want to be greener. However, in Europe, Nordic countries are requiring every PC to have an 80%-efficient power supply.”

Electronic Products Environmental Assessment Tool (EPEAT)

EPEAT is a procurement assessment tool designed to help public- and private-sector institutional purchasers evaluate, compare, and select desktop computers, notebooks, and monitors based on their environmental attributes. Established by the Green Electronics Council, EPEAT’s membership includes all major electronics manufacturers.
Energy efficiency and performance

According to the *EPA Report to Congress on Server and Data Center Energy Efficiency* (August 2007), data centers consumed about 60 billion kilowatt hours (kWh) in 2006, roughly 1.5% of total U.S. electricity consumption. The energy consumption of servers and data centers doubled in the past five years. It’s expected to nearly double again in the next five years to more than 100 billion kWh, costing about $7.4B annually.

During product development, criteria such as energy efficiency is established for Dell’s design team and drives the features and performance of the products to be manufactured. For example, the company recently shifted its strategy from focusing more on computing performance to one that considers metrics such as performance per watt.

**Figure 2:** Combining high-performance computing with energy efficiency

![Single System Power Versus Performance](chart)

*Source: Dell*
The results of its enhanced design strategy are more power-efficient computers without degraded performance. In addition to building systems that are now earning the Energy Star 4.0 rating, Jon Weisblatt, one of Dell’s energy-efficiency product evangelists, pointed out that Dell has been shipping PCs, laptops, and servers that can take advantage of the company’s Energy Smart power management settings. Managing hardware power settings can provide greater efficiency with minimal effect on the hardware’s performance, but configuring the settings is a task rarely undertaken by consumers and IT departments. By preconfiguring these systems for energy efficiency, Dell is making corporate users more efficient.

**Design for Environment**

DfE is a design philosophy that promotes reducing risks to people and the environment by preventing pollution when designing, manufacturing, and disposing products. DfE strategies evaluate human health and environmental considerations, performance, and the cost of traditional and alternative technologies, materials, and processes.

For Dell and other computer manufacturers, adopting a DfE strategy has been a requirement as they address European legislation, such as Reduction of Hazardous Substances (RoHS). RoHS mandates that companies must not manufacture products with more than a maximum concentration of hazardous substances, such as lead and mercury.

In response to increasing legislation on DfE issues, Dell has adopted the Precautionary Principle as the strategic approach to selecting materials used in its products. This principle suggests that if risks of a chemical appear great, action should be taken to eliminate its use, even if the risks lack full scientific certainty. For example, Dell is the first U.S. electronics manufacturer to accelerate plans to phase out brominated flame retardants (BFRs) in new product designs, changing the target date from 2015 to 2009.

**Packaging**

One of the areas of product design often overlooked is packaging, even though packaging waste makes up 30% of the solid waste in the United States. Redesigning the packaging at Dell is another example of how an environmental perspective can change a company’s approach and improve the customer experience. Reducing packaging starts by making the product more robust so that less packaging material is required to protect it.

For corporate customers, Dell has created multipacks that consolidate shipments into smaller packaging units. As a result of the new packaging design, the customer saves on shipping costs and on-site packaging waste and recycling costs are reduced. In 2007, the efforts Dell made in dematerialization reduced the amount of corrugated plastic foam and wood materials by 5,258 tons (against a corporate goal of 5,000 tons).
Manufacturing and operations

Dell has long been held in high regard for its supply chain operations, with an emphasis on lean inventory management and a mass customization approach to order fulfillment. One of the most important benefits of Dell’s direct supply chain model in regards to the environmental effect of its products is product configuration just prior to shipment. This allows Dell to offer a greater number of environmental options and configurations without necessarily having an effect on inventory if businesses are slow to adopt greener products.

Mass customization certainly provides one environmental advantage in Dell’s business model, but the overall operations strategy provides the company with numerous opportunities to reduce its environmental impact and work with direct supply chain partners to reduce their impact as well. Some of the most significant results come from Dell’s approach to suppliers, transportation, and facilities.

Suppliers

Dell first introduced Supplier Principles in March 2004. Going forward, however, the company will use the Electronic Industry Code of Conduct (EICC), which was developed by Dell and other electronics industry leaders to create a harmonized approach to implementing a standardized industry code of conduct. Rather than an effort that seeks to penalize noncompliance, the spirit of the EICC is to improve citizenship along with operational efficiencies at supplier facilities around the world.

In addition to implementing the EICC, Dell is rolling out its business process improvement (BPI) methodology to help suppliers improve their operations. Similar to a Six Sigma program, the BPI methodology utilizes a team approach, with members from Dell and the supplier working to address manufacturing issues such as quality, throughput, delivery, and cost. The company is currently creating best-practice and lessons-learned documents from the BPI pilot projects to share with its Tier 1 suppliers. The EICC and BPI initiatives are critical from an environmental perspective because they focus on programs to make suppliers more aware of their environmental impact and more educated about how to better manage operations.

Recently, Dell has requested that its primary suppliers begin reporting greenhouse gas (GHG) emissions data. Suppliers risk having their overall scores reduced during quarterly business reviews for not identifying and publicly reporting GHG emissions. A supplier’s volume of business can be affected by the scores earned on reviews. As with the BPI strategy, Dell will work with suppliers on emissions reduction strategies once data is collected.

In a letter to suppliers detailing the program, Martin Garvin, chief procurement officer and senior vice president of worldwide procurement, noted how important this effort is from Dell’s perspective: “As you know, the [quarterly business review] score will influence your ability to compete for Dell’s business. Thus, we are driving our suppliers
to become more energy efficient, and we believe this action will lower your operating expenses while reducing environmental impacts. Ultimately this makes sense for our industry and the environment.”

To support suppliers, Dell has joined the Carbon Disclosure Project’s Supply Chain Leadership Collaboration (SCLC), providing them with access to standard methodologies for reporting carbon emissions. Creation of a standardized system offers suppliers an efficient tool for reporting and helps avoid multiple reporting requirements. In a press announcement, Mr. Garvin stated, “Our global supply chain is integral to Dell’s long-term commitment to become the greenest technology company on earth. This means partnering with suppliers, customers, and stakeholders to drive meaningful and positive change.”

Transportation

Transportation operations is an important business function where Dell is driving significant change. To reduce transportation costs, it focuses on geographic manufacturing to build products closer to customers. The company’s newest plant in North Carolina helped save $20M in logistics costs, which ultimately reduced GHG emissions related to transportation. While this initiative is not specifically dedicated to reducing the company’s environmental impact, its joint management by the operations and logistics teams focuses on reductions in emissions related to fuel savings during site selection for manufacturing and configuration centers elsewhere in the world.

While Dell’s direct model does help reduce transportation requirements, the company strives to reduce its environmental footprint in terms of transportation-related GHG emissions in other ways as well. Here are some of the strategies:

- **Encourage carriers to adopt the Environmental Protection Agency’s (EPA) SmartWay initiative**—In this program, shippers and transportation companies work together to implement best practices and advanced technologies for fuel conservation and emissions reductions.

- **Increase first-time deliveries to customers**—A new customer delivery notification (CDN) program lets customers select a delivery time that will best fit their schedules. Since implementing the CDN program, Dell has increased first-time deliveries to over 80%, resulting in reductions in fuel use and related emissions.

- **Use LTL Direct**—The LTL Direct program was designed to reduce total miles traveled and convert more product shipments from air to ground. To ensure direct shipments arrive damage free, shipping trailers were reconfigured with metal beams called logistics bars to double stack pallets inside a trailer, and airbags were used to cushion the loads. By reducing loss from damage, consolidating shipments, and reducing dependence on air freight, fuel use and related emissions are reduced.
Facilities

The largest aspect of Dell’s footprint is electricity consumption. The company is trying to optimize existing facilities while constructing new buildings to even higher standards. Dell’s U.S. electricity usage in 2007 accounted for about 97.8% of the carbon emissions from its facilities, while natural gas use and other miscellaneous fuel uses account for less than 3% of total emissions.

Dell aims to have all new facilities certified through the Leadership in Energy and Environmental Design (LEED) green building rating system. The company also plans to apply the same standards for all existing buildings as they are remodeled or refreshed. In recent years, it has launched a number of operational initiatives to increase energy efficiency and reduce electricity demands:

- A company-wide power management program that automatically powers off machines at night and during periods of inactivity has resulted in savings of about 13 million kWh of electricity, equivalent to avoidance of 8,500 tons of carbon dioxide and savings of $1.8M annually.
- Replacing office lighting in its central Texas facilities resulted in a 9% reduction in electricity demand at the campuses.
- Recycling and reuse in facilities has grown quickly over the past two years, from just over 85% of nonhazardous waste to almost 95%. Dell’s future five-year goal is to increase this to 99%.

Asset recovery and recycling

During the early days of Dell’s recycling program, the company’s strategy was to support voluntary efforts, reasoning that a market-based approach would be the most efficient mechanism to drive Dell and other companies to recycle equipment. However, as various legislative initiatives unfolded, Dell has taken a more assertive stance. Recycling is so integral to the company’s environmental footprint, it decided to take a strong advocacy position in favor of the producer responsibility approach, which requires all producers to take responsibility for proper end-of-life management of their electronic products.

Dell’s position is to require companies to take back their own branded product for free from individual consumers, but to allow flexibility in how companies do it as a means to drive innovation. Its individual producer responsibility framework is based on the belief that the competitive marketplace will drive more efficient collecting, recycling,
and redesigning of products.

This type of approach encourages companies to drive cost out of their systems. Dell’s asset recovery services provide three major ways in which equipment can be recycled:

- **Free consumer recycling**—Dell offers to recycle any Dell machine ever built for free anywhere in the world. The company also offers no-charge recycling for any brand of computer or printer when a customer purchases a new Dell computer or printer.

- **Partnerships to drive reuse and donation**—Dell partners with organizations like Goodwill Industries and the National Cristina Foundation to match consumer donations to local not-for-profit organizations.

- **Value-added services for corporate customers**—Dell helps institutional customers responsibly and securely manage the retirement of used and unwanted IT equipment through an extensive offering of product recovery services. This includes guaranteeing that all data will be erased from the system and disposition of the components can be traced and verified.

Dell reported the recovery of more than 78 million pounds (nearly 40,000 tons) of unwanted IT equipment from customers in 2006, a 93% increase over 2005, and 12.4% of the equipment it sold seven years earlier. As an important part of its recovery and recycling efforts, Dell commissions third-party audits of all of its recycling partners. Another aspect of its trendsetting approach is a no-export policy. Dell will only process recovered equipment in countries where facilities and processes have been audited and that do not export waste to third-world nations. Earlier this year, the National Recycling Coalition chose Dell as the first technology company to receive its annual Recycling Works award for efforts to promote individual producer responsibility.
Beyond the lifecycle

Many of the world’s leading companies publish citizenship or corporate responsibility reports. In each of these, the companies promote their environmental and social responsibilities. For example, General Electric’s Ecomagination campaign is both about how the company will act, setting goals for reducing the company’s effect in terms of emissions and waste, and the new, greener products it will manufacture while continuing to profitably grow revenue.

In the case of Dell, the company has taken an approach that goes beyond its own social and environmental responsibility. It is working to engage with customers to increase their awareness and engage them to also take action. The approach Dell takes to interact with its customers as well as other stakeholders may be as beneficial to the company’s future as the direct model was for the attainment of supply chain leadership. The company has created new ways to interact with various stakeholders, which can be characterized as a mix of direct engagement, outreach, and education to promote environmental awareness and inspire change.

Talkin’ ‘bout ReGeneration

Michael Dell recently announced the company’s plans to go carbon neutral by noting, “Never before in the history of business have we seen such a critical need to build a worldwide community dedicated to improving the environment.” He went on to stress that “leadership starts at home, which is why we are going carbon neutral, but this should only be the beginning of building long-term partnerships with customers, stakeholders, and suppliers of all sizes to team up and make a difference for the Earth we all share.”

Setting standards with supplier outreach

Mark Newton, Dell’s environmental policy manager, notes that one of the more immediate effects computer manufacturers can have is through their policies and practices with direct partners. According to Mr. Newton, “If you can energize your supply chain on environmental issues, it will cascade through the entire business. This is integral to our approach of being supply chain drivers.”

The company’s progressive climate policy focuses on minimizing both direct and indirect emission effects by including supplier operations and customer product use. The company has helped set standards not only with suppliers through initiatives such as the EICC and emissions requirements, but also in areas such as forestry, recycling, and green computing, all of which require a significant investment for external engagement.
Reclaiming the urban forest

Since Dell conducts a majority of its business either online or by telephone, there aren’t many uses for paper in its global supply chain. But Dell’s forest stewardship initiative is a good example of the company getting ahead of the curve on an issue that at first may seem tangential. While the company has greatly reduced shipping paper manuals with its products (paper associated with legal and regulatory requirements as well as basic instructions to create a positive user experience are still included), it does print millions of catalogs and circulars. It also relies on corrugated cardboard and other materials for packaging.

Lowell Turner, a senior manager who leads marketing communications and print procurement globally, refers to Dell’s forestry program as “reclaiming the urban forest.” He continues, “Our approach to protecting forests has two main components: reduce the use of virgin tree fiber in packaging and office paper and increase sourcing of forest-friendly paper.”

Mr. Turner goes on to say that supporting environmentally sound forestry initiatives “doesn’t have to cost any more, if you look at it from a total supply chain perspective.” The company encourages innovation in its paper supply chain to improve environmental performance. In 2005, Dell developed a Forest Products Stewardship Model to optimize quality, cost, and environmental attributes in the paper selection process for catalogs, packaging, and office paper with a preference for wood and fiber certified by the Forest Stewardship Council (FSC). The FSC is an international organization that brings people together to promote responsible stewardship of the world’s forests. One of the organization’s primary activities is to provide certification of FSC standards for forest managers and forest product producers.

With its supply chain perspective from other supplier initiatives such as the EICC, Dell first works with suppliers to encourage best practices in terms of forestry. If a supplier’s practices are inconsistent with Dell’s values and environmental goals and result in damage or destruction of endangered forests, the company seeks alternative suppliers. But this is not a one-sided arrangement. Dell understands it is also important to create demand for recycled paper so that more mills convert to sustainable production practices. The company establishes goals to provide clear demand signals to suppliers. Its goals with respect to virgin fiber used in catalogs are as follows:

- During 2004, source 2.5% from FSC-certified sources
- During 2005, source 5% from FSC-certified sources
- During 2006, source 10% from FSC-certified sources
- By the end of 2010, source at least 25% from FSC-certified sources

In addition to improving its own operations, Dell is committed to sharing best practices with other catalogers and will seek to positively influence customers and suppliers through its leadership role.
Educating customers one purchase at a time

One of the areas where Dell leads when compared with other companies in almost all sectors is the multiple channels it has developed to communicate with customers and stakeholders. These programs are founded on the company’s strategy to use its direct relationships with customers to educate them about energy efficiency as well as the broader issues associated with climate change and the environment. The education process starts at the online point of purchase.

Dell’s customers configure their computers and, with calculators, the company’s website helps them make wise decisions during the process. According to Mr. Weisblatt, if a customer is interested in an environmental configuration, Dell “can provide a better suggestion out of the box with power management already enabled on PCs. For servers, Energy Smart configurations pay for themselves in energy cost savings in six months.” Customers can also compare different models of systems to understand their energy impact.

The company has seen increased web traffic for its Environmental Data Sheets and online energy calculators. The data sheets help Dell reinforce its environmental message by highlighting the model’s EPEAT rating, energy consumption, and other disclosures regarding materials. At the end of each sheet, the company encourages users to consider upgrading to extend the life of their systems. The data sheets also provide information about recycling and Dell’s environmental program.

Buyers can also evaluate their configurations with an energy calculator to see how power management settings and various monitor choices will result in environmental impact, communicated in terms of carbon dioxide equivalence, as well as energy savings. Mr. Ward notes that “the majority of customers interested in energy and environmental configurations are in the small and midsize business segment. They are the people who are going to the online energy calculator on our website because the same guy who pays the electric bill buys the PCs. For corporate clients, they often have a hard time defining what a green PC really is.” Energy Smart configurations are available for servers, desktops, and notebooks. As an example of the benefits of Energy Smart configurations, the company notes that Energy Smart servers cost about $100 more than similarly configured servers, but that customers can save up to $200 annually in energy costs per server.

Planting trees for me

Dell has also established a program where customers can offset their carbon dioxide emissions by donating money toward reforestation projects. Under the heading “Plant a Tree for Me,” the program, a joint effort between Dell, The Conservation Fund, and Carbonfund.org, makes it easy for people to offset the carbon emissions associated with their use of Dell’s products by planting trees. The program lets consumers offset the electricity their computers use over a three-year period. They pay $2 per notebook and $6 per desktop, and 100% of those funds go toward planting trees in reforestation projects. For $99, they can even offset themselves.
In a discussion with Mr. Arbogast, he stressed that “more important than the offsets is the education. Over 2 million people visit dell.com every day. If we can encourage and empower those people and exchange ideas with them, then that’s the foundation for a new era of environmental leadership.”

As an extension of the program, the company recently announced Plant a Forest for Me, a corporate partnership program that will facilitate the planting of millions of trees in sustainably managed reforestation projects. Companies such as ABN AMRO, salesforce.com, Staples, and Wellpoint have committed to offsetting part of their carbon outputs by purchasing trees for Plant a Forest for Me. Ask.com was the first corporate customer to participate in the Plant a Forest for Me program, which was part of a partnership initiative for using more energy-efficient servers in its data centers.

Creating community

Outside of interacting with customers and stakeholders during the purchasing process, Dell is also focused on broadening the conversation by promoting interaction on its website. The site is populated with environmental newsfeeds, blogs, and a unique collaborative tool called IdeaStorm.

Under the heading of Environmental Conversations, the company highlights environmental news from NGOs such as Environmental Defense and environmental news sources such as Greener Media’s greenbiz.com. It also prominently features Direct2Dell blogs from its employees on various sustainability themes. In keeping with the strategy of transparency in its programs and communications, the comments appear to not be heavily edited, as some are sarcastic or mocking of the company’s efforts. Dell displays these comments without any defensive replies or clarifying comments and appears to be sincerely engaged in fostering a dialog with customers rather than creating a highly mediated marketing campaign.

One of the more interesting examples of this is the company’s online suggestion box. Dell’s mantra has always been encapsulated by the word “direct,” and one of the more interesting programs is the IdeaStorm website. IdeaStorm is used to solicit direct input from its customers to help Dell do things like build the greenest PC on the planet or a “zero-noise water cooling laptop.” After an idea is posted, other users vote to promote or demote the idea. A cursory glance through the website identified one suggestion—“Sell more desktops without monitors, keyboards, etc.”—as receiving over 15,000 votes.

In talking with David Lear of Dell’s Environmental Affairs group, “customers are doing the work” for the company, thanks to IdeaStorm and an internal website known as EmployeeStorm. External voting provides the top 25 initiatives for Dell to consider for implementation. The results of IdeaStorm show up in the Ideas in Action section of the website where you can see how the company is responding to the ideas posted. Mr. Arbogast noted that senior management pays close attention to the site as a way to keep close to customers.
Creating competition

In keeping with the firm’s competitive spirit, Dell has launched the ReGeneration: International Green Computing Technology Design Competition. In doing so, it is looking for ideas outside the company that could bring fresh approaches and responsible solutions for green computing technology.

The competition is open through April 2008. Jury-selected finalists will be announced in May 2008 and honored with a prize of $10,000 each. A popular vote will be held online to find the finalist submission that most resonates with the public. That winner will receive an additional $15,000 prize. If the popular vote winner is a student, his or her university is eligible for a matching $15,000 prize.

A perspective for the future

In a recent speech, Mr. Dell stressed that “it’s not enough that Dell just be an environmental leader—we must also partner with our customers through the technology we deliver to dramatically improve their environmental performance.” In the company’s most recent sustainability report, he asks readers to “judge us not by what we say, but by what you see us do.”

In internal operations, the company has found that it now has 85,000 environmental advocates. According to Mr. Arbogast, “In Dell, you find people who have a passion for something and you can leverage that passion. This has helped us develop employee-led peer teams for internal improvements as well as develop innovative products and environmental programs.” Although the company is highly competitive, in regards to its environmental initiatives, Mr. Dell sums it up best when he said that “we’ll continue to listen, engage, and create opportunities for our friends and competitors to join us along the way. In fact, when it comes to the environment, there are no competitors, only partners.”
Research and Advice That Matter

Founded in 1986, AMR Research provides subscription advisory services and peer networking opportunities to operations and IT executives in the consumer products, life sciences, manufacturing, and retail sectors. We are the No. 1 research firm focused on the intersection of business processes with value chain and enterprise technologies.

AMR Research has published more than 15,000 pieces of research. Grounded in industry and business process expertise, our analysts deliver independent, leading-edge research on established and emerging technologies. This analysis is supported by the best research data in the industry, expert-led Peer Forums, and daily interaction with our members, the most comprehensive community of practitioners in the industry.

More information is available at www.amrresearch.com. Your comments are welcome. Reprints are available. Send any comments or questions to:

AMR Research, Inc.
125 Summer Street
Boston, MA 02110
Tel: +1 (617) 542-6600
Fax: +1 (617) 542-5670