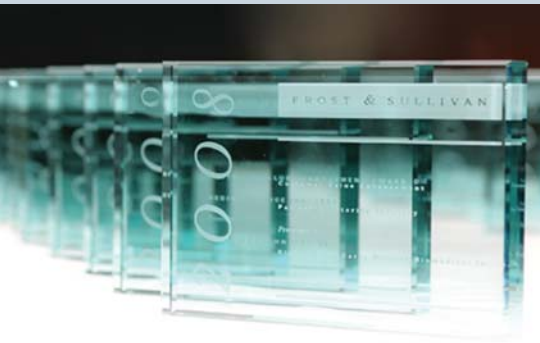




IBM Corporation: Recipient of the
2008 North American Business Software & Communications Applications
Green Excellence of the Year Award



“We accelerate growth.”

2008 North American Business Software & Communications Applications Green Excellence of the Year Award Award Recipient: IBM Corporation

Award Description

The Frost & Sullivan Green Excellence of the Year Award is presented to the company that has demonstrated unique product design and development initiatives, which is aligned with a sustainable and environmentally conscious objective within its industry sector. This Award signifies the company's identification of a unique and revolutionary solution with significant environmental benefits, while presenting tremendous market potential simultaneously. Moreover, the Award also signifies that the company's overall business strategy is sound and poised for success.

Research Methodology

Product innovation, focused on environmental priorities and long-term sustainability, is assessed regularly through continuous monitoring amongst market participants within specific industry sectors. Frost & Sullivan's analyst teams perform extensive interviews with companies within specific industries to evaluate their products, technologies and business strategies. In addition, research within that market space is performed to benchmark the Award recipient's product line against others. Also considered are elements such as strategic alliances, expected time to market, environmental soundness, long-term green strategies, and management advocacy behind the success of the product.

Measurement Criteria

Specific measurement criteria used to determine the final Award recipient are as follows:

Product Profile

- Product platform characterized by long-term sustainability
- Streamlined design that enhances product efficiency
- Adaptability and responsiveness of the product to address changing environmental needs and priorities

Business Commitment

- Entrepreneurial dexterity in incorporating conservation into the business concept
- Development of product solutions to address concerns regarding climate change
- Industry's acknowledgement of the green initiative in question, by way of financial support, strategic support, and recognition as a pioneering venture

Environmental Accountability

- Demonstration of obligatory responsibility in reducing environmental burden as part of the solution (e.g. cradle to grave solution)
- Inherent features that enhances adoption / participation rate
- Creation of collective accountability towards reducing the impact of climate change, dependency on finite resources and ecological footprint



Frost & Sullivan presents IBM Corporation (IBM) with the 2008 Business Software and Communications Applications Green Excellence of the Year Award for the company's accomplishments in developing a vision and a strategy for creating environment-friendly software products and solutions that help reduce carbon footprint and save energy.

Gaining a Competitive Advantage through Environmental Policies

At a time when an increasing number of individuals and organizations become more environment-conscious and actively pursue more eco-friendly lifestyles, it is imperative for large corporations to take action as well and ensure that both their products and solutions and their internal practices strive to preserve and improve the environment. In the information and communications technologies (ICT) industry, it is even more appropriate for vendors and other market participants to review their product portfolios and internal practices as those can not only have a direct impact on the environment but also a trickle-down effect by assisting customers in becoming better Earth citizens.

While it is difficult to measure each organization's contribution to saving the environment and comparisons across companies' portfolios reviewed in their entirety cannot produce meaningful results, it is important to recognize those organizations that have acknowledged problems of global nature and are restructuring their internal organization as well as product portfolio to address specific environmental challenges.

Frost & Sullivan believes that corporations that are thinking big and expanding their vision beyond their individual business challenges and profit goals will eventually gain a major competitive advantage as customers recognize the value of their commitment to the planet and the community as a whole. What may be perceived as an additional effort and a financial burden today, will one day produce tangible benefits in terms of customer loyalty and improved top and bottom lines.

IBM's Software Portfolio Ranks High in IBM's Project Big Green

IBM is one of the companies in the ICT industry that has launched a number of "green" initiatives and has shared a vision for a "greener" world. In May 2007, IBM launched Project Big Green, which involved the re-allocation of \$1 billion in annual spending across its businesses in order to help improve energy efficiency in IT. This project envisioned the re-positioning of existing as well as the introduction of new products and services. One year later, IBM expanded Project Big Green with the launch of the "Software for a Greener World" program that helps customers address enterprise-wide green initiatives through software. With the addition of this program, IBM offers a comprehensive approach through Project Big Green to address green initiatives through hardware, software, and services solutions.

IBM takes a holistic approach to the issue of environment preservation and reviews the related challenges from several different perspectives. Its strategy revolves around three axes: infrastructure, workload and people. These are all business aspects that can be optimized in order to reduce carbon footprint and make businesses more efficient and productive at the same time.

On the infrastructure level, IBM is making concerted efforts to make its servers more power-efficient and help customers use less energy for both powering and cooling equipment. Its z series servers allow customers to significantly improve their power efficiency. Further, IBM's new Energy Modular Data Center, Portable Modular Data Center and High Density Zone can reduce energy consumption by as much as 50 percent and enable customers to not only realize cost savings but also help preserve the environment.

With IBM's software, further green benefits are provided to customers. through capabilities from its Lotus software, Information Management software, Tivoli software, WebSphere software and Rational software portfolio. IBM allows businesses to gain a green advantage along all three axes: infrastructure, workloads and people.

On the infrastructure side, IBM software enables users to consolidate and virtualize their IT

infrastructure, de-duplicate and compress information, and implement tiered storage, maintenance schedule and status tracking, and energy use measurement and reporting. For example, IBM's Tivoli Monitoring for Energy Management, IBM® Systems Director Active Energy Manager, Tivoli System Automation, Tivoli Dynamic Workload Broker WebSphere Virtual Enterprise, and IBM Cognos BI & PM products allow customers to monitor, report and manage resources to reduce energy consumption. Deep compression capabilities with IBM DB2 enable information to be compressed on storage to reduce both storage and energy costs. IBM has introduced the Tivoli Monitoring for Energy Management that provides greater visibility into power consumption, alerts operators and facility managers before servers reach critical energy and temperature thresholds, and also automates servers' energy usage to optimal levels. In addition to direct cost-savings and environmental benefits, such reporting tools also provide customers with information that can be used to receive power company or government incentives. IBM has announced partnerships with a number of vendors including Eaton, APC and VMWare that enable the Energy Management tool.

In terms of managing workloads to reduce energy costs, IBM software enables business process modeling and redefinition, human task automation, dynamic workload distribution, and application consolidation. For example, IBM enables business users to reduce paper consumption and costs associated with manual paper-based processes by replacing paper forms with eForms and incorporating active content in business processes with the IBM BPM Suite and IBM's No Paper Weight solution. The IBM Rational Transformation Workbench performs analysis on your application source code. For large applications it has been estimated that Rational Transformation Workbench can be used to eliminate 15% to 20% of code from the application that would never have been executed, translating into green by directly reducing the application in-memory execution time footprint. This also translates into a reduction in the physical storage required by the application. In addition, SOA can be leveraged for dynamic allocation and optimization of workloads across servers and applications.

Finally, in terms of people management, IBM software enables online collaboration, online learning and multi-site development coordination. IBM's collaboration and unified communications applications such as Lotus Sametime and Lotus Notes allow business users to be flexible and independent of location and reduce carbon footprint by telecommuting and avoiding frequent long-distance travel IBM Rational Team Concert allows multi-site software development teams to collaboratively work together to design, develop, and test software products without having to travel.

As one of the pioneers and leading vendors of unified communications solutions, IBM is well positioned to play a major role in making businesses and individuals more productive and efficient as well as more environment-friendly. Through presence and a common interface across multiple applications such as email, instant messaging, audio, video and Web conferencing, and telephony, unified communications promises to enable users to quickly and more economically exchange information. Economic benefits can be realized not only in terms of time, but also in terms of devices and media used to try and reach an individual, paper used to print and exchange information via mail or fax, and fuel and electricity used to transport individuals and light and heat or cool meeting premises. As a result of the anticipated growing adoption of unified communications, both IBM and its customers are likely to gain a competitive advantage and contribute to preserving the environment.

IBM Leads Through Example

It is important to note that IBM is leading through example with its internal corporate practices. For example, it has consolidated 3,900 distributed servers to 33 System z servers providing an 80 percent annual energy savings estimated at about 119,000 megawatt hours a year. Another example of IBM taking action to improve its own energy efficiency is its Southbury, CT, facility turning off 18 computer room air conditioning systems while maintaining current data center operation. This was accomplished by using the Mobile Measurement Tool and by making some airflow modifications. Further, IBM has contracted with the utility company in Boulder, CO, for the local IBM facility to be supplied with 1,000 megawatts of electricity generated by wind power. Finally, IBM claims that thanks to its Lotus software as well as its corporate policies, about 42 percent of its employees do not regularly come into an office

thus reducing commute time and, respectively, carbon footprint.

Long is the list of IBM's green initiatives so Frost & Sullivan will only mention a few more to provide evidence of its strong commitment to preserving the environment. IBM Global Financing (IGF) is contributing to Project Big Green with its own Go Green in My Data Center Program which offered a free data center server disposal for U.S. customers upgrading to new IBM energy-efficient servers through the end of the second quarter of 2007. IBM has also launched a program that enables mainframe customers to monitor their systems' energy consumption in real time. It plans to begin publishing typical energy consumption data for the IBM system z9 mainframe. With this program, IBM becomes the first company to follow recent EPA recommendations for server vendors to publish typical energy consumption figures. Further, IBM has pioneered a process for repurposing of scrap silicon wafers from its chip manufacturing operations to be used in energy-producing solar panels.

In addition to enhancing its product portfolio and making its own operations more eco-friendly, IBM is also creating a partner ecosystem for green initiatives. It is looking to establish partnerships with public utility companies to jointly address energy efficiency issues and set a new energy demand management program. Further, it is proactively marketing its products and its vision via press releases, white papers and industry events such as Pulse 2008. At the Edison Electric Institute Annual Convention held in Toronto on June 16, 2008, IBM provided an update to the community on the status of Project Big Green.

Conclusion

Frost & Sullivan believes that IBM demonstrates a strong commitment to developing and marketing a greener portfolio of products and services that will help its customers accomplish a number of goals including becoming more cost-efficient, more eco-friendly and even more competitive. It is also important to emphasize again that IBM not only "talks the talk" but also "walks the walk" by implementing a number of green initiatives in its internal operations. Overall, Frost & Sullivan is convinced that IBM deserves to be commended for its "green" efforts by granting it the 2008 Business Software and Communications Applications Green Excellence of the Year Award.

About Frost & Sullivan

Frost & Sullivan, the Global Growth Consulting Company, partners with clients to accelerate their growth. The company's Growth Partnership Services, Growth Consulting and Career Best Practices empower clients to create a growth focused culture that generates, evaluates and implements effective growth strategies. Frost & Sullivan employs over 45 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 30 offices on six continents. For more information about Frost & Sullivan's Growth Partnerships, visit <http://www.frost.com>.

Frost & Sullivan • Jake Wengroff
+1 210.247.3806 • jake.wengroff@frost.com
www.awards.frost.com

IBM Corporation • Cameron O'Connor
401.427.7052 • cameronc@us.ibm.com
www.ibm.com