The issues we are addressing—from clean water, to safe food, to sustainable and vibrant cities, to smarter work, to empowered communities—are not a choice between business strategy and citizenship strategy. They are both.

2008 Corporate Responsibility Report
IBM's corporate citizenship priorities—and some of our most notable initiatives that have been shaped by the global realities in 2008—are highlighted in this report.

This annual corporate responsibility report, published in June 2009, covers our performance in 2008 and some notable activities during the first half of 2009. To make this information available in a regular and timely manner, starting with this edition, we will be publishing our corporate responsibility report during the second quarter of each year.

To select the content for inclusion in this report, we have used the Global Reporting Initiative (GRI) Reporting Principles of materiality, sustainability context, stakeholder inclusiveness and completeness in developing the print report. IBM also provides on its corporate responsibility Web site (ibm.com/ibm/responsibility) a comprehensive GRI Report utilizing the GRI G3 Sustainability Guidelines at a self-declared GRI Application Level A.

Unless otherwise noted, the data in this report covers our global operations. More details about IBM's corporate responsibility activities and performance is available at ibm.com/ibm/responsibility. Information about our business and financial performance is provided in our 2008 Annual Report at ibm.com/annualreport/2008/.

IBM did not employ an external agency or organization to audit this report. The metrics contained herein were generated using IBM's corporate accounting systems audited by IBM's internal audit staff.

ON THE COVER: Members of the IBM Corporate Service Corps team at work in Chengdu, China.
In the first decade of the 21st century, we have been confronted with a series of crises, each of which has caused us to rethink major aspects of how our world works. The 9/11 terrorist attacks and their aftermath caused us to reexamine our frameworks for global security. Catastrophic hurricanes and tsunamis have raised questions about the preparedness of our coastlines and cities. Concerns about the safety of our food, our medicine, even our toys, have led to questioning of our increasingly global supply chains. The growing recognition of global warming has driven an intense focus on everything from how we move people and things, to how we build our houses and offices, to how we generate the energy to power it all. Most recently, we have seen how seemingly simple financial instruments such as mortgages can be packaged, leveraged and traded in ways that threaten the world’s financial system.
Appearances to the contrary, these are not, I believe, unrelated events. They constitute a series of wake-up calls on a single subject: the reality of global integration. We have become accustomed to referring to these jolts as system failures or breakdowns. Taken together, they tell us that our planet is becoming integrated into a system of systems.

That is wonderful news—if we are wise enough to take advantage of it.

Technology isn’t the issue. For the first time in history, almost anything can become digitally aware and interconnected. Enormous computational power can be delivered in forms so small, abundant and inexpensive that it is being put into things no one would recognize as computers: phones, cars, appliances, roadways, power lines, clothes—and even natural systems, such as livestock and rivers. All of these digital devices—soon to number in the trillions—are being connected through the Internet. And all of that data—the knowledge of the world, the flow of markets, the pulse of societies—can be turned into intelligence, because we now have the computing power and advanced analytics to make sense of it all.

The challenge we face is to figure out how to use this vast new capability to make the world work better, especially for those most in need.

Today, around the world, we see the infusion of intelligence into companies, entire industries and natural ecosystems, which is why you may have been hearing about “smart power grids,” “smart healthcare,” “smart supply chains,” “smart bays” and the like.

In these pages, you will read about IBM’s multifaceted response to this shift in the global arena for work, society and community. It is a shift we foresaw several years ago, causing us to re-examine and transform IBM in fundamental ways, in order to be in a position to seize upon its potential. We remade our portfolio of businesses, globally integrated our operations (and mindset) and changed the way we manage our company, pushing decision making out and down. Most importantly, we took a fresh look at our essential reason for being, and collectively renewed the core values of IBMers for a new era.

This report is a description of our progress. But it is also an invitation to you to join us in seizing this unique moment in history.

The time for action is now. From cabinet rooms, to board rooms, to kitchen tables around the world, people are ready and eager for new approaches. We are witnessing a global consensus in favor of major change. And such a mandate doesn’t come around very often—perhaps once in a generation, or once in a century. I and my fellow IBMers do not intend to waste it. We believe that if the world seizes this moment to address our most critical challenges, and does so in a truly systemic way, enormous and lasting progress can be achieved.

Certainly, this is no time to retreat into our shells. Quite the contrary, it’s time to go on the offense. Although some companies are reacting to the present crisis by hunkering down and hoping to ride out the storm, from both a business
and a societal standpoint, we are taking a different approach, across every aspect of our company’s existence and our relationships with all communities and constituencies. In the broadest of IBM’s roles, as a global citizen, we believe that the issues facing the world are too critical and far too urgent—and the opportunities to make meaningful progress on them too immediate—not to act now.

Indeed, the most interesting result of our smarter planet initiative, to me, is how it is causing our business strategy and citizenship strategy to merge. The issues we are addressing—from clean water, to safe food, to sustainable and vibrant cities, to green energy, to better schools, to smarter work, and an empowered workforce—are not a choice between one and the other. They are both. And because the complex systems that make up our world today are inherently multi-stakeholder—because they cross the old lines of “public sector,” “private sector” and “voluntary sector,” spanning all of civil society—the solutions we devise will require the most advanced intelligence from business, from science, from policy and from communities around the world.

Again, the barrier is no longer technology. What we make of this new reality will depend, rather, on how we pursue the timeless goals of all social and economic systems—reliability, trust, fairness, inclusion, sustainability, human rights, prosperity and individual empowerment. I believe we must do so in very new ways.

Building a smarter planet isn’t simply a recipe for economic growth; it’s also a recipe for radically expanded economic and societal opportunity. It’s not just a way to make the planet more efficient, but also to make it more sustainable. It’s not just a way to do well by doing good; it’s also a way to do good by helping all the world’s regions and people do well.

I believe that’s something for which it’s worth going on the offense.
The first decade of the 21st century has been a series of wake-up calls.
These are system crises—from security, to climate, to food and water, to energy, to financial markets and more. Together, they tell us that our economy and society are now globally integrated. They also tell us that the systems by which the world works must be transformed. In their current forms, they are unsustainable.

Over the past decade, we have seen, from multiple angles, that we are all connected: economically, socially, technically, biologically and environmentally. When a crisis occurs on one part of the planet—whether from microbes, malware or mortgages—it can bring problems to the entire planet within days… or even hours.

We can now see that being connected isn’t enough. The way the world literally works has to become smarter.
The challenges of our infrastructure and natural systems have profound implications for communities and individuals:

**Education**

115 million children still have no access to formal schooling, 60% of whom are girls.

**Employment**

By 2030 worldwide energy demand is projected to grow by 36%.

**Energy**

By the end of 2009, job losses from the current global recession could reach 50 million according to the International Labor Organization.

**Water**

The United Nations predicts that nearly half of the world’s population will experience critical water shortage by the year 2080.
Food

Global food reserves are at their lowest level in 30 years.

Healthcare

In many parts of the world, healthcare costs are rising two times faster than economic growth and 100 million people are pushed below the poverty line by personal healthcare expenditures each year.

Urbanization

In 1900, only 13% of the world’s population lived in cities. By 2050, that number will have risen to 70%. We are adding the equivalent of seven New Yorks to the planet every year.
We have an opportunity—and a responsibility—to make the world work better.

Happily, now we can. Intelligence is being infused into the way the world literally works—into the systems, processes and infrastructure that allow services to be delivered, that facilitate the movement of everything from money and oil to water and electrons, and that can help billions of people work and live.

And although it may be surprising for a company like IBM to say this, the primary challenges facing the world are not of technology, but of policy, culture, collaboration and purpose.

In the end, that’s what we mean when we talk about building a smarter planet. When a business takes a systemic view of the world—when you see the economy, society and physical environment as a complex, global system—it opens up new ways of working with all your constituencies—communities, clients and individuals—in ways that matter:

- **Assist victims of natural disasters**
  
  When disasters strike, speed and coordination of relief efforts can make the difference between life and death. Those involved need to understand quickly what is happening on the ground and how to make a maximum impact. Victims in China’s Sichuan Province, Indonesia, Peru, the Philippines and Sri Lanka, have benefited from Sahana, an open source, Web-based “disaster relief in a box” management system. The software, supported by IBM, provides essential tools for tracking missing persons, coordinating relief efforts and managing pledges for support.

- **Address food shortages**
  
  Food shortages are felt locally, but their causes—and solutions—are global and systemic. Escalating energy and grain costs, climate change and demand for biofuel caused some food prices to rise by almost 40 percent in 2008. One way to help is to improve the food itself. IBM’s World Community Grid is being used to compute genetic data to develop stronger strains of rice—aiming for larger, more nutritious yields, pest and disease resistance, and better water and nutrient use.

- **Make energy grids more efficient**
  
  With businesses and societies facing often volatile energy supplies, a smart grid can save electricity and money and the planet, by linking smart meters in the home with instrumented power lines and plants. And it even paves the way to integrate renewable sources like wind and solar. IBM today is leading seven of the world’s top 10 automated meter projects.
**Aa**

**Improve educational opportunities**

Education around the world faces systemic challenges in curriculum, teacher training and retention. IBM’s multifaceted response includes creating the Reinventing Education program which brings the right groups together to identify barriers, develop solutions and implement them via the BlueSky open source portal. IBM’s Reading Companion voice-recognition technology is used by more than 700 schools and nonprofit organizations in 22 countries. And more than 10 million children have benefited from our early childhood interactive learning centers.

**Preserve at-risk waterways**

The United Nations predicts that nearly half the world’s people will experience critical water shortages by 2080—in large part because water isn’t managed as a global system. With today’s technology, we can create a reliable, up-to-the-minute view of water use. IBM and The Nature Conservancy are building advanced, Web-based tools for river basin management. Computer simulations in a geospatial 3-D environment help users visualize the possible impact on ecosystem services and biodiversity of different policy scenarios for land water use.

**Develop new models for community service**

In emerging markets, the most critical and challenging aspect of long-term economic stimulus is developing expertise—the skills to compete globally. In 2009 five hundred of IBM’s future leaders from nearly 40 countries will complete assignments in our Corporate Service Corps. Now in its second year, IBM’s “corporate Peace Corps” is sending teams of employees to nine emerging countries to work on projects that combine economic development and job creation—preparing them and their local partners alike to function as true global leaders.

**Plan the growth of our cities**

All the world’s systems—from transportation, to energy, to healthcare, to food, to education and more—come together in our cities. IBM is helping cities across the world get smarter—smart traffic systems in London, Brisbane and Singapore; smart crime fighting in New York; smart energy in Houston; smart water in São Paulo; smart buildings in Shanghai. The opportunities and the innovations keep growing. In cities across the world, we’re helping improve information sharing across agencies to provide more efficient municipal services.
IBM Basics

IBM is a values-based enterprise of individuals who create and apply technology to make the world work better. Today, about 400,000 IBMers around the world invent and integrate hardware, software and services to enable forward-thinking enterprises, institutions and people everywhere to succeed on a smarter planet.

Major Operations

- **Global Technology Services**: Primarily provides outsourced IT infrastructure services and business process services.
- **Global Business Services**: Primarily provides professional services and application outsourcing services.
- **Systems and Technology**: Provides clients with solutions that require advanced computing power and storage capabilities, as well as leading semiconductor technology and products.
- **Software**: Consists primarily of middleware that enables clients to integrate systems, processes and applications, and operating systems software that runs computers.
- **Other**: Our Sales organization and our Research, Development and Intellectual Property organization also deliver value to clients.

Our Values

Since its inception, IBM has been a company that defines itself by fundamental values—not by products, technologies or leaders. Today, shared values are more essential than ever before—for enterprises, for individuals and for the globally integrating society of the 21st century. In 2003, IBMers worldwide came together to renew and define our core values which now serve as the foundation of IBM’s culture and brand, and the guide for each IBMer’s work, decisions and relationships.

**IBMers Value**

Dedication to every client’s success. Innovation that matters—for our company and for the world. Trust and personal responsibility in all relationships.
IBM entered this economic period from a position of strength because of the changes we've made to our business. Today IBM operates in more than 170 countries, has approximately 400,000 employees, and recorded $103.6 billion in revenue in 2008. IBM is very different from what it was 10—or even five—years ago.

1. Among the most important drivers of IBM’s transformation has been an increasing clarity and focus in our business strategy and in our values-based culture to support that strategy.

2. Our mix of technologies and businesses is significantly different.
   - We remixed our portfolio toward services, software and solutions.
   - We invested more than $50 billion in R&D and acquired more than 100 companies from 2000–2008.

3. We have transformed our processes and the way we run the company.
   - A major part of this shift has been to build a 21st century workforce.
     - Hired more than 250,000 new employees in the past five years
     - Increased learning opportunities
     - And improved our ability to effectively deploy the expert skills of IBMers.

THE PROFESSIONAL MARKETPLACE: An application used to quickly deploy talent to clients, organizes the work history and skills of IBMers into 8,290 specialized skill sets that include 23 industries and areas of expertise from business intelligence and analytics to virtualization and green solutions. The application also contains languages spoken, visa, status and availability.

4. And our financial results demonstrate the impact of this transformation.
   - 2008 revenue was a record $103.6 billion, up five percent, and we delivered a pre-tax margin of 16.1 percent, four points above our results in 2000.
Section One: Employees
Global employees, global citizens

Even in the current economic downturn, IBM continues to invest in our workforce—providing our employees with skills training, health and wellness programs, and opportunities to gain global experience.

The speed at which our business is changing is unprecedented, and each year we move thousands of people into jobs that are very different from what they were hired to do.

IBM has a large knowledge-based business, so we must constantly evolve employee skills based on market demand. There are three fundamental ways that we adjust our skills as requirements change:

First, we retrain and evolve skills from within. In 2008 we spent over $600 million in training and development—$1,700 per employee—to enable the company to transition thousands of people into new skill areas.

Second, we hire externally and where there is significant opportunity we make acquisitions. Over the past decade, IBM has made 100 acquisitions.

Finally, where we need to—when we have people in a skill area or geography where client demand does not support it—we rebalance skills and make reductions.

As we continue to evolve as a global enterprise, certain challenges remain ongoing: How do we manage and facilitate employee transitions in an increasingly complex world? And how do we remain engaged with IBMers spread across disparate locations and time zones—to foster innovation and collaboration among our richly diverse workforce?

IBM has announced a number of commitments on an enterprise level for 2009:

› Investing in salary increases for employees—although not for executives.

› Continuing to offer performance-based bonus programs for all employees—not just executives and managers—at amounts comparable to the prior year.

› Continuing to hire in selected skill groups in all markets.

IBM is addressing the challenges of managing our human resources in many ways, some of which are profiled in this section. In 2008, we focused on several initiatives in the areas of employee learning and development, employee engagement, diversity, and health and wellness.
In 2008, we instituted cross-geography mentoring on a pilot basis with China, India and South Africa with plans to expand the program in 2009 to include Brazil, Dubai, Indonesia, Malaysia, the Philippines and Vietnam. The program’s objectives are to increase the flow of knowledge and develop talent company wide—overcoming geographic barriers by fostering collaboration and promoting cultural intelligence.

One of the program’s pairs is Danny Chen, a Taiwan-born engineer who now works in Austin, Texas, and David Lin, a software programmer at the Taipei Lab in Taiwan. Chen mentors Lin on the intricacies of the patent process and how to develop patentable ideas, and Lin shares important information with Chen about doing business in China.

The relationship has already paid off, personally and professionally. Last year, the Taipei lab was awarded five patents—up from one in 2005. And a team at the lab now publishes a newsletter featuring a wealth of useful tips for other inventors.
Employee Learning and Development: Transition to Teaching

“Building, energizing and maintaining a high-quality workforce is the key to success of any organization—in the public as well as the private sector.

IBM is leading the way through its close collaboration with the Partnership for Public Service, which resulted in the Fed Experience program. The goal is to identify, recruit and hire interested IBM employees and retirees and match them to key federal government jobs.

To meet the country’s most pressing challenges, government needs the right talent with the right skills in the right jobs, a mandate that provides businesses with the opportunity—and responsibility—to help revitalize government.”

Max Stier, President and CEO, Partnership for Public Service

On the Web
For more information on Partnership for Public Service and The Bridgespan Group, visit ourpublicservice.org and bridgestar.org respectively.

Health and Wellness: Cardiovascular and Diabetes Wellness programs in India

IBM has long understood that investing in prevention and well-being makes sense for our employees as well as our business. Healthy employees tend to experience better quality of life and higher personal productivity, and those who discover health problems early tend to get well faster and spend less on medical care. Our strategy for improving employee health, while keeping costs in check, has four core elements:

› Supporting health system reform
› Investing in prevention and primary care
› Developing programs for healthy lifestyles among our employees and community
› Scaling programs and services through Web-based healthcare tools

In the fall of 2008, more than 100 IBMers in the U.S. and the U.K. took steps to put their years of experience at IBM to work in K-12 education. Many are already working in the classroom, thanks to IBM’s Transition to Teaching. The program addresses the need to support our employees as they transition from IBM employment into fulfilling encore careers such as skilled science and math teachers.

According to the U.S. Department of Labor, more than 260,000 new high school math and science teachers were needed for the academic year 2008–2009. The shortage is also acute in the U.K. and other countries.

Acknowledging that a shift in vocation takes time and training, IBM helps underwrite the costs associated with earning a teaching certificate. Employees are eligible for a total of $15,000 for tuition reimbursement or stipends for up to a year of field experience.

IBM has also forged partnerships with many colleges and universities, state education departments and public school districts to help shape the program. More than 100 companies have expressed their interest in Transition to Teaching, with Intel Corporation launching an initiative modeled after our program.

Transition to Teaching has been so successful that IBM has broadened the Transition2 Program to serve the public sector in conjunction with Partnership for Public Service as well as higher education and nonprofit organizations via a strategic alliance with The Bridgespan Group. Over the past year, the Center for Teaching Quality (CTQ), in partnership with IBM, has begun documenting the effects of this initiative and its potential to serve as a model for corporations willing to invest in future workforce development.
One recent example of our preventative programs was a comprehensive employee screening effort we conducted in India during 2008, in response to what data from the World Health Organization (WHO) and the Indian Medical Association (IMA) have shown to be alarming rates of cardiac disease and diabetes in the country.

The program was organized at five major locations covering an IBM population of almost 45,000, with approximately 18,000 employees participating. Analysis of the participants’ health risks revealed the following group profile:

- 29 percent of participating employees below 30 years of age had high blood pressure recordings, which exceeds the average rate of hypertension in this age group.
- 88 percent of employees over 40 years of age have a body mass index (BMI) of 25, with 27 percent of them having BMI > 30. A recent WHO study indicates a 30 to 35 percent obesity rate (BMI > 30) in the similar age group of the general population.
- 48 percent of employees over 40 have high fasting blood sugar (FBS) values.

IBM plans to conduct a Health Risk Assessment targeting all IBM employees in India, and also to establish a diet and nutrition awareness program to help employees address some of the lifestyle issues related to cardiovascular disease and diabetes.

Given the speed and diversity of the global marketplace—geographically, culturally, ideologically—our success as a global enterprise depends on our ability to work effectively across those differences and using diversity to drive innovation.

In July 2008, senior leaders across IBM laid out a new charter for a company diversity strategy to help safeguard the continued viability and growth of IBM on a global scale. As part of the new charter, we are revalidating our diversity competencies, integrating them into every development and evaluation process, and restructuring programs. Importantly, those revamped competencies include ensuring employees have a deeper level of cultural intelligence and the ability to collaborate and lead across the globe.

For example, we noticed that typical IBM international assignments did not align with the new strategy. As a result, we are revising our approach—defining goals to increase global opportunities for high-potential technical and leadership talent from every demographic group. In addition we are providing specific transitional support for employees on assignment regardless of duration. We are also creating processes to maximize the application of their experience and knowledge after the international assignments end.
$12.2 million

Investment made by IBM in 2008 in China talent and skill development, supporting both our local and global missions. IBM has invested more than $23.5 million in China talent and skill development over the last three years.

1946

Is the year IBM entered the China market. The company reentered in 1970.

More than 18,000 employees in 26 offices.

$2.6 billion

In revenue in 2008.

Market Profile: The intersection of business and responsibility in China

To be competitive, any individual, community or enterprise has to adapt continuously—learning new skills in new areas. Today, IBM’s business is expanding most quickly in the hyper-growth economies spread across Asia Pacific, Latin America, Central and Eastern Europe, the Middle East and Africa—markets in varying stages of development.

This reality demands that we continually look at new approaches to how we grow in the communities in which we’re already working—and develop leaders prepared to function not just locally but also as global citizens and professionals. A program like our Corporate Service Corps, described in this section of the report, has a triple benefit. It benefits communities by solving problems on the ground. It benefits IBMers by providing them with an exemplary form of leadership training and development. And it benefits the company by developing a new generation of global leaders.
In April 2009, a team of nine IBMers from Europe, Asia and North America, with a broad range of skills, traveled to Chengdu, a city of 11 million in China’s Sichuan Province, for a month-long assignment, as part of the Corporate Service Corps initiative. Now in its second year, IBM’s “corporate Peace Corps” sends future leaders, from all over the globe, to developing countries to work in teams on projects where information technology is used to foster economic development.

The Chengdu team, for example, worked with local businesses, offering training in corporate governance, financial management and corporate communications, including how to promote cooperation with foreign investors. The team also implemented a plan for an integrated IT system and network for the Chengdu Chamber of Commerce to help it provide better services to all of its member businesses.

Assessing the impact of the Corporate Service Corps: The Harvard Business School recently studied the effects of the IBM Corporate Service Corps and found it has clearly had positive impacts on individual participants—personally and professionally—as well as on the communities served.

Harvard also surveyed 31 of the local “project hosts” to assess their satisfaction with the program. The vast majority cited improvements in their internal business processes and their ability to forge new and stronger partnerships with other private sector, NGO and governmental agencies in-country as a result of their work with the IBM Corporate Service Corps.
The city of Chengdu in the Sichuan Province is a major center of China’s software industry and the largest railway hub in southern China with four major railways converging there. However, the devastating 8.0 earthquake in May 2008 left the economic infrastructure of Chengdu in serious need of rebuilding. To help in this effort, IBM commissioned a Corporate Service Corps team of nine IBMers to Chengdu in April of 2009, the first of three teams working in the region.

100 employees were selected for Corporate Service Corps assignments in 2008, out of 5,500 applicants from 54 countries. Five hundred will receive Corporate Service Corps assignments in 2009.

1,500 IBMers will be deployed between 2008 and 2010. In 2009, teams will work in Brazil, China, Egypt, Ghana, India, Malaysia, Nigeria, the Philippines, Romania, Tanzania, Turkey, Vietnam and South Africa. Beginning in the second half of 2009, IBM will deploy the first Corporate Service Corps executive team.
IBM is working with the Ministry of Education to leverage the open source Blue Sky instructional portal, which we developed earlier in our Reinventing Education initiative. This will provide access to the latest Web 2.0 functionality and the highest quality educational content for teachers and students in the region. IBM is also supporting the China Research Lab in its efforts to develop new emergency and early earthquake warning systems and technologies. A Mandarin language version of the Small Business Toolkit, an online portal offering a variety of business resources, is being launched in 2009 to support young entrepreneurs in Sichuan Province.

On May 12, 2008, Sichuan Province was the epicenter of an 8.0 magnitude earthquake that killed more than 70,000 and left five million homeless. Within 24 hours various IBM teams, including IBM On Demand Community volunteers, were mobilized.

Sahana, an open-source disaster management system, and six IBM high-end enterprise servers were donated, configured and installed by IBM experts to support the Zhongmin Charity Information Center under the Ministry of Civil Affairs and the Blood Center of Beijing Red Cross Society. More than 50 IBM development lab and technical support experts worked around the clock to customize and translate the Sahana software, based on the request of the Emergency Command Center in Chengdu City and the National Disaster Reduction Center in Beijing.

Because a large number of schools were destroyed in the quake, IBM offered 100 KidSmart Early Childhood Learning Centers to the Ministry of Education, and these were deployed in the relief villages which had been set up by the Government immediately following the disaster.

“The social service sector is stressed by a significant increase in the number and types of needs that must be addressed and by a reduction in the resources available to respond to them. However, organizations around the world are reporting an enormous growth in the number of people who are volunteering their time and talents. There is a real opportunity to rethink how corporations can utilize their most valuable asset—employees—to create change, like IBM has done with its Corporate Service Corps and On Demand Community volunteer program.”

Michelle Nunn, CEO, Points of Light and HandsOn Network
Section Two: Communities
A systemic approach to problem solving

The challenges that communities face—educating the young, keeping citizens safe and healthy, attracting and facilitating commerce, and enabling the smooth flow of people and goods—are compounded by the serious global economic downturn.

IBM remains committed to helping solve societal problems through a range of programs that bring expertise and skills development where they are needed most. We approach these complex issues—from childhood cancer, to literacy, to entrepreneurial support—by looking at them systemically and engaging our global community of IBMers and our best technology and knowledge to reach scale.

This approach fosters innovative problem solving, whether it’s through such well-received programs as the Corporate Service Corps (featured on pages 17–19), mobilizing millions of users to donate unused computing power through World Community Grid, improving literacy skills, or developing new math and science curricula.

Looking ahead, we’ll continue to pursue progressive approaches to problem solving and making a positive contribution to improve education, increase economic development and alleviate humanitarian crises, as demonstrated by the key 2008 initiatives detailed in this section of the report.
“Service science will completely change the way people think about economic activities and producing economic value. We need these changes because industrial logic has reached its limits when it comes to dealing with the current ecological and economic crises.”

Bernd Bienzeisler, Fraunhofer Institute for Industrial Engineering, Stuttgart, Germany

In 2008, IBM signed agreements with the governments of Egypt, Malaysia, the Philippines and Vietnam to incorporate Service Science Management and Engineering (SSME) education into their national curricula.

SSME is an academic discipline designed to help teach students the combined business, social and technology skills needed to enter today’s workforce and be ready to contribute immediately to their countries’ economic and innovation agendas. For the past several years, IBM has been working with universities worldwide to develop and promote interest in SSME. As the world becomes more instrumented, interconnected and intelligent, it demands new problem solving and communication skills—and the ability to address complex systems and networks that can serve customers and communities more effectively.

SSME helps students better prepare for jobs in engineering, management, consulting, science, entrepreneurship, design and high-skill knowledge work across industry segments, from healthcare to retail to sustainable municipal infrastructure systems.

What started with seven universities launching SSME programs has turned into a global initiative with 250 universities in 50 countries now offering SSME courses and/or degrees. In March 2009, representatives from many of these academic institutions met in Helsinki at a global Service Science Summit conference. SSME is also promoted by the IBM-led nonprofit Service Research and Innovation Institute.
Recognizing that improved literacy is one of the strongest contributors to sustained economic growth, IBM has been committed to improving the literacy skills of children and adults around the world for more than a decade.

One of our key literacy initiatives, the Reading Companion grant program, is working to implement our innovative Reading Companion voice-recognition software in as many countries and schools as possible. The technology is currently in use in more than 700 schools and nonprofit organizations in 22 countries.

Since the program was first introduced in Mexico City in 2006, it has grown to include three Mexican states as well as the Federal District—helping about a thousand students gain essential English language skills and improving their interest in reading. In a recent evaluation of the program, Boston Consulting Group (BCG) found that Reading Companion sites are not only seeing tangible results in students’ reading and pronunciation but in other areas as well. For example, the evaluation found that students “improve computer literacy … and become more confident in their computer skills.”

“Reading Companion has opened new cultural horizons for our children. With such a wide choice of books to increase their vocabulary and improve their comprehension skills, they’re developing a true love for reading.”

Patricia Díaz Covarrubias, Executive Director, Christel House de México, A.C.

“Our research indicates that the U.S. nonprofit sector needed 43 percent more leaders in 2008 than we predicted in 2006. To fill this gap we need to connect talented and experienced people—including those from the private sector—with leadership and management opportunities in nonprofit organizations and in education.

We’re beginning to see how business can help address both this need and the needs of their own employees by assisting with transitions into new fields. Working with Bridgespan, IBM has expanded its Transition to Teaching program to help employees move into positions in the nonprofit and public sector.

Programs like these solve the serious need for highly skilled people in the nonprofit and public sectors as the wave of baby boomers begins to exit the workforce.”

Thomas J. Tierney, Chairman and Co-Founder, The Bridgespan Group
The Small Business or SME Toolkit:
This Web portal is designed to support small business growth worldwide, including young enterprises in emerging markets and women- and minority-owned businesses in the U.S.

Wealth of resources: More than 500 interactive tools, business forms and how-to articles

Global content: Best-of-breed small business content acquired from major providers worldwide

An online community: Features Web 2.0 collaborative tools and in-person and online training modules

One of the barriers to the growth of small businesses worldwide is limited access to the same tools and resources that are so readily available to larger companies. To address this challenge, IBM and the World Bank’s International Finance Corporation collaborated to create the Small Business Toolkit.

Now translated into 16 languages and deployed in 30 countries, this free Web portal offers a wealth of tools to help new enterprises learn and implement effective business management practices and improve their access to capital and new markets. In 2008, during the economic downturn, free resources like the Small Business Toolkit helped serve as a lifeline for small businesses, particularly those in emerging markets.

In 2004, IBM joined forces with leading science, education and philanthropic organizations worldwide to create the largest public humanitarian grid in existence. Since then, World Community Grid has been used for research to address such pressing global issues as clean energy, world hunger, cancer, dengue fever, and the H1N1 and HIV/AIDS viruses.

In March 2009, IBM and researchers from the Chiba Cancer Center Research Institute in Japan launched a new World Community Grid project to try to discover a treatment for neuroblastoma, the most common cause of death in children with solid tumors— with survival rates of less than 40 percent. The project will try to identify which of the three million potential drug candidates prohibit growth of three proteins believed to be key in the progression of the cancer. All results will be made available to the general scientific community to advance cancer biology and drug discovery. Dr. Akira Nakagawara, from the Chiba Cancer Center Research Institute, says, “It would take us about 100 years using our own computing resources to make progress, but with access to one of the world’s largest virtual supercomputers, we estimate to complete this project in two years.”
Section Three: Environment

Innovating to avoid or reduce environmental impacts

A dedication to creating solutions that help protect the world’s environment is not just part of IBM’s smarter planet agenda, it has been one of the guiding principles of our company for nearly four decades.

IBM’s longstanding commitment to environmental protection was first formalized as a corporate policy in 1971. From how we run our operations to the products and solutions we provide to our clients, we are committed to leadership across environmental areas ranging from energy efficiency and water conservation to pollution prevention and product stewardship.

Here we profile some of our most significant work in the areas of energy conservation, climate protection, environmental requirements in the supply chain, environmentally preferable materials and the management of end-of-life electronic equipment.

4.9 billion kWh of electricity was saved as a result of IBM’s annual energy conservation projects between 1990 and 2008.

3.3 million metric tons of CO₂ emissions were avoided as a result, an amount equal to:

48% of IBM’s 1990 global CO₂ emissions, which translates into:

$343 million in energy expense savings.
IBM’s climate protection programs as they relate to our operations focus on:

› Energy Conservation
› Reducing Perfluorocompound (PFC) Emissions
› Procuring and Fostering Renewable Energy
› Supporting Alternate Employee Commute Options
› Increasing the Efficiency of the Company’s Logistics

**ENERGY CONSERVATION:** IBM’s commitment to energy conservation dates back to 1974 and has continued, unabated, over the intervening years. In 2008, IBM’s energy conservation projects across the company delivered savings equal to 6.1 percent of its total annual energy use, exceeding the corporate goal of 3.5 percent. These projects avoided the consumption of 235 million kilowatt-hours (kWh) of electricity and 6.3 million gallons of fuel, representing the avoidance of 215,000 metric tons of CO₂ emissions. The conservation projects also saved $32.3 million in energy expense.

Two examples of initiatives in 2008 that enabled significant increases in IBM’s own data center energy efficiency include:

› **IBM’S MOBILE MEASUREMENT TECHNOLOGY (MMT):** Using this thermal mapping tool developed by IBM Research, surveys performed at nine strategic IBM data centers with over 30,000 kW of electricity demand identified opportunities for a 2,100 kW demand reduction (7 percent), of which approximately 110 kW have been captured. Work is underway to capture much of the remaining opportunity.

› **SERVER CONSOLIDATION:** This aspect of IBM’s data center program enables us to do more work with less energy. In 2008, 10 data centers consolidated various server operations, saving 10 million kWh of electricity use and $1 million in expense. IBM is also offering these services and capabilities to its clients globally, extending the energy and climate benefits well beyond the company’s operations.

**Mobile Measurement Technology:** “A CT scan for data centers,” Mobile Measurement Technology from IBM Research measures 3-D temperature distributions within these facilities. A position monitoring system with a network of up to 100 sensors gathers thermal data with unprecedented speed and accuracy. Shown here is a temperature mapping of an actual data center, with the red areas highlighting hot spots that require attention. Such intelligence can be used for improving spatial use and increasing energy efficiency by as much as 10%.
PROCURING AND FOSTERING RENEWABLE ENERGY: In 2008, IBM purchased 450 million kWh of renewable energy, which represented 8.6 percent of the company’s 2008 global electricity usage.

In addition to procuring renewable energy for its own use, IBM is working to further the availability and affordability of renewable energy by investing in IT-related research and development.

› ADVANCING SOLAR TECHNOLOGY: IBM is exploring four main areas of photovoltaic research: using current technologies to develop cheaper and more efficient silicon solar cells; developing new thin film photovoltaic devices; pioneering concentrator photovoltaic technology to harness the sun’s power more efficiently and cost effectively; and researching future generation photovoltaic architectures based upon structures such as semiconductor quantum dots and nanowires.

› DEVELOPING SMART GRIDS: IBM is developing and offering solutions to help utilities add a layer of digital intelligence to their grids and thus automate, monitor and control the two-way flow of energy across operations—from power plant to plug. Smart grids can also incorporate new sustainable energy sources such as wind and solar power and interact locally with distributed power sources or plug-in electric vehicles.

› REPURPOSING SCRAP SILICON WAFERS: Solar energy technology is affected by the availability of silicon. IBM has developed a polish process that enables the repurposing of scrap silicon “wafers”—the base material used for chips in everything from computers to consumer electronics—from its semiconductor manufacturing operations for use in solar panels. The new process is helping to reduce the estimated three million silicon wafers discarded each year across the computer industry, while also providing new supplies of raw materials to the solar energy industry.
REDUCING PFC EMISSIONS: IBM releases some perfluorocompounds (PFCs) from its semiconductor manufacturing operations. The company’s goal is to reduce PFC emissions from semiconductor manufacturing 25 percent by 2010 against a base year of 1995. As of year-end 2008, IBM’s emissions were 30.4 percent below the 1995 baseline amount of 381,000 metric tons of CO₂ equivalent.

CO₂ EMISSIONS REDUCTION GOAL: Between 1990 and 2005, IBM’s energy conservation actions reduced or avoided CO₂ emissions by an amount equal to 40 percent of its 1990 energy use. To further extend this achievement, IBM set itself an aggressive “second generation” goal: to reduce the CO₂ emissions associated with its energy use 12 percent by 2012 against a 2005 base year through energy conservation and the procurement of renewable energy.

In 2008, IBM’s significant conservation results delivered a 3.4 percent reduction in its energy-related CO₂ emissions over 2007. The company’s procurement of renewable energy equaled 8.6 percent of IBM’s total 2008 energy use. Together, these efforts resulted in a 1.6 percent reduction in IBM’s energy-related CO₂ emissions at year-end 2008 from the 2005 base year of this goal.

PRODUCT ENERGY EFFICIENCY: IBM continues to enhance the ability of its hardware products to deliver more computing power for each kWh of electricity used with each new generation or model of a product. The new server models released in 2008 for which comparable products existed delivered from 1.3 to 93 percent more computing capability for each kWh of electricity used than the previous model/product. Information on the efficiency of specific product sets may be found in the 2008 IBM and the Environment report.

EFFICIENCY OF LOGISTICS: IBM is reducing the CO₂ emissions associated with transporting its products through the efficient design of its packaging, working with suppliers on their packaging designs and optimizing logistics. In the area of logistics, IBM is a member of the U.S. EPA’s SmartWay™ Transport Partnership and, in 2008, 86 percent of IBM’s spending for shipping goods within the U.S. and from the U.S. to Canada and Mexico was spent with SmartWay carriers. IBM also voluntarily applies specific SmartWay requirements to its distribution operations globally.

IBM Global Logistics has also been analyzing its logistics transaction level data and utilizing an IBM developed tool, the Carbon Trade-Off Modeler, to model the interaction among various levers: transportation mode, fuel, packaging weight, load consolidation, alternate sourcing and service level agreement. This initiative has enabled IBM Global Logistics to make decisions that optimize the benefits identified from the Modeler across these levers.
ENERGY AND CLIMATE OBJECTIVES IN THE SUPPLY CHAIN: IBM has had environmental requirements for relevant subsets of its suppliers for decades. As part of IBM’s leadership in the Electronic Industry Citizenship Coalition (EICC) and the Carbon Disclosure Project (CDP) Supply Chain Project, IBM is increasing its focus on the energy and climate programs of its suppliers. Further described in the Supply Chain section of this report, the purpose of this focus is to encourage our suppliers to understand and reduce the greenhouse gas emissions from their operations.

ENERGY AND CLIMATE RESEARCH: IBM’s commitment to climate protection is integrated throughout the company and is also a focus of our corporate philanthropy. For example, climate change is the topic of two of the research projects selected for the IBM-sponsored World Community Grid:

› AFRICANCLIMATE@HOME: This project of the University of Cape Town is developing more accurate climate models of specific regions in Africa that will serve as a basis for understanding the impact of future climate change so that measures to alleviate its adverse effects can be developed and implemented.

› SOLAR CELL RESEARCH: The Clean Energy Project research being conducted by scientists in the Aspuru-Guzik research group at Harvard University is seeking to discover materials for the next generation of solar cells and later, energy storage devices.

CLIMATE AND WATER: Climate is also an aspect of the new computer-modeling framework being developed by IBM and The Nature Conservancy in their “Water for Tomorrow” partnership. The partnership is creating a decision support system that can analyze wide-ranging data on climate, rainfall, land use, vegetation and biodiversity across major watersheds.

Through computer modeling and scenario forecasting, users will be able to simulate the behavior of river basins around the world based on the varying factors and their potential impacts on the watersheds. Rich, three-dimensional visualizations of the scenarios will help planners and policy makers understand the possible outcomes of various land use and watershed management options. This knowledge can facilitate more sustainable management of the world’s great rivers to benefit both the environment and the people who rely on these freshwater resources.

The project will initially be implemented in the Paraguay-Paraná river system in Brazil with the goal of replicating the decision support system in the Yangtze River in China, the Mississippi River in the U.S. and eventually other river systems throughout the world. The tool developed in the first phase of this research will be released in 2009.
Among its objectives, IBM’s environmental policy calls for the company to use development and manufacturing processes and to provide products that are protective of the environment.

ENVIRONMENTALLY PREFERABLE SUBSTANCES AND MATERIALS: IBM routinely and consistently monitors and manages the substances it uses in its manufacturing and development processes and in its products.

IBM’s precautionary approach includes the careful scientific review and assessment of certain substances prior to their use in IBM’s processes and products. In specific instances, IBM has chosen to proactively prohibit, restrict or substitute substances used in IBM processes and products when the weight of scientific evidence determines an adverse effect upon human health or the environment, even when law permits their use.

In addition, IBM conducts scientific investigations of existing approved substances when new processes or major modifications to existing processes are being developed. The objective of these scientific investigations is to identify potential substitutes that may be environmentally preferable. IBM believes that the same scientific rigor is required when investigating the human health and environmental effects of potential substitutes as was given to the substance currently in use.

MATERIAL SUBSTITUTION—PFOS/PFOA: One current initiative is our work to eliminate PFOS (perfluorooctanesulfonic acid) and PFOA (perfluorooctanoic acid). PFOS is perhaps most commonly known for its use in stain repellents. In the semiconductor industry, these materials have been widely used for wafer patterning and etching processes.
IBM made a commitment to transition away from PFOS and PFOA based on growing evidence of their persistent bioaccumulative and toxic properties. The commitment began with a prohibition on the development of new photoresist materials with these chemicals in 2003, followed by a prohibition on new uses of PFOS and PFOA in the company’s manufacturing in 2007 and a goal to eliminate all existing uses of these chemicals by the end of 2009.

The identification of chemical substitutes that are preferable from an environmental and safety perspective, and yet provide the same necessary level of function as PFOS and PFOA, involves difficult technical challenges. In order to eliminate PFOS and PFOA from IBM processes, we have worked with our chemical suppliers to develop new formulations in accordance with our specifications.

At the end of 2008, IBM successfully completed an extensive, multi-year effort at both its New York and Vermont wafer development and production facilities to eliminate all PFOS and PFOA in the wet etch processes. IBM’s Vermont facility received the Vermont Governor’s Award for Environmental Excellence in Pollution Prevention for this accomplishment. As we drive toward completing the elimination of PFOS and PFOA from our other processes, IBM is actively engaged in the development of next generation, fluorine-free, photolithography chemicals.

**NANOTECHNOLOGY:** Nanotechnology is the application of scientific and engineering principles to make and utilize very small things (dimensions of roughly 1 to 100 nanometers). An important aspect of nanotechnology is creating materials in the nanoscale, where unique properties enable novel and useful application.

Nanotechnology is already part of a wide variety of products—from cosmetics and sunscreens to paints, clothing and golf equipment. It can make products lighter, stronger, cleaner, less expensive and more precise, and has been critical to the success of the IT industry.

A pioneer in the field, IBM has achieved numerous breakthroughs that are fundamental to the development of nanotechnology. One significant example is the scanning tunneling microscope. As is often the case with the introduction of new technologies, there are some environmental, health and safety questions related to nanoparticles because of the relatively limited information available about them.

IBM has taken proactive steps to respond to this uncertainty. IBM was one of the first companies to create safe work practices and health and safety training for its employees working with nanoparticles.

IBM is also partnering with governmental agencies and other organizations such as the National Institute of Occupational Safety and Health (NIOSH) to engage in and support the development of the necessary environmental, health and safety information that will lead to greater human health and environmental protection, and responsible and sustainable nanotechnology development.
PRODUCT END-OF-LIFE MANAGEMENT: As part of its product end-of-life management (PELM) activities, IBM began offering product take-back programs in Europe in 1989 and has extended and enhanced them over the years. Today, IBM’s Global Asset Recovery Services organization offers Asset Recovery Solutions to commercial customers in 57 countries.

In 2008, IBM’s PELM operations worldwide processed 42,302 metric tons of end-of-life products and product waste. These PELM operations reused or recycled 96.9 percent of the total amount processed and sent only 0.6 percent to landfills or to incineration facilities for treatment, versus IBM’s corporate goal of minimizing its combined landfill and incineration rate to no more than 3 percent.

IBM continues to conduct environmental evaluations of its product recycling and disposal suppliers, as it has done since 1991. In 2002, to address general concerns about electronic waste being exported to some non-OECD countries where it was then being improperly handled, IBM expanded its supplier evaluation requirements to include assessments of subcontractors the suppliers may use to handle recycling and/or disposal operations in non-OECD countries.

In addition, IBM has criteria to avoid the sale of technologically obsolete or nonfunctional equipment to brokers for resale. Moreover, brokers who procure used products or parts from IBM for resale are required to sign an agreement not to resell into non-OECD countries if the broker knows or has reason to believe that the equipment and/or parts will not be used for their originally intended purpose without the need for disassembly or disposal.

**Key Performance Indicator**

**Landfill and Incineration Minimization**

2008 Percentage by Weight

**Goal:** Reuse or recycle end-of-life products such that the amount of product waste sent by IBM to landfills or to incineration for treatment does not exceed a combined 3% of the total amount processed.

**Results:** In 2008, IBM’s product end-of-life management operations worldwide processed 42,302 metric tons of end-of-life products and product waste, and sent only 0.6% of the total to landfills or to incineration facilities for treatment, versus IBM’s goal to minimize its combined product landfill use and incineration for treatment rate to no more than 3%.
Section Four: Supply Chain Responsibility
A commitment to collaboration

IBM runs one of the world’s largest and most complex supply chains—with more than 30,000 supplier locations spread over more than 60 countries.

We know that our sizeable purchasing power is a unique resource we must manage responsibly. We also know that our strong supplier relationships provide us with the opportunity to work with our providers to define standards—ethical, social and environmental—in the global IT supply chain. We believe that the work we do together can improve operational excellence, working conditions, and environmental standards—resulting in higher quality goods and services for our customers.

The graph reflects cumulative findings of assessments, including suppliers of both manufactured products, software and services in Argentina*, Brazil, China, Czech Republic, Hungary, India, Malaysia*, Mexico, the Philippines, Poland, Romania, Slovakia, Taiwan, Thailand and Vietnam*.

*New in 2008

Since 2004 we have conducted more than 550 audits with suppliers in 15 growth markets. Audits were conducted by third-party firms with local personnel.
During 2008, IBM continued to implement its Supply Chain Social Responsibility (SCSR) initiative across its global network of suppliers. By the end of 2008, we had completed a cumulative total of 553 initial audits; including expansion into three additional growth market countries (36 initial audits): Argentina, Malaysia and Vietnam. In 2008, we conducted 136 initial and re-audits, exceeding our target of 100. As described, our SCSR deployment is with firms IBM holds a direct commercial relationship with, called first-tier suppliers. In order to further the coverage of our initiative, in 2009 we are working to engage first-tier suppliers to enable them to expand SCSR activity into the second-tier of the IBM supply chain.

IBM’s SCSR initiative includes working with suppliers to develop improvement plans that are based on the findings of our audits. IBM works collaboratively with its suppliers on these improvement plans to offer commentary based on our extensive knowledge of best practices witnessed in the performance of over 500 assessments. Often there is a period of exchange until we reach agreement on an appropriate improvement plan. The timeframe for improvements can range from a matter of days (for easily rectified noncompliance such as installing exit signs or distributing of IBM’s code of conduct to workers) to several months or longer (for more complex non-compliances such as the establishment of proper management systems). In 2008, we reviewed 169 of these supplier improvement plans with suppliers that were audited in 2007 and 2008.

To test the effectiveness of these improvement plans, IBM performs re-audits on a planned frequency after plan establishment. The results of our re-audits generally show improvements by the supplier. On the other hand, we have also seen that some suppliers in growth markets have not always been able to sustain improvements in certain areas such as working hours and health and safety.

Often the root cause for unsustained improvements by those suppliers in growth markets can be attributed to the suppliers’ lack of strong management systems. This is a conclusion that has become clearer to firms participating in the industry group, the Electronic Industry Citizenship Coalition (EICC). The EICC, of which IBM is a key member, is working on means to help suppliers who continue to need improvement with health and safety and working hour compliance. The EICC is also working to deploy Web-based education for its members and suppliers and is encouraging suppliers to take advantage of third-party educational resources in their local countries.

In the fourth quarter of 2008, IBM took a significant step by moving the SCSR initiative forward into exploratory work in some new regions that IBM is considering for future sourcing. One such example is Sub-Saharan Africa (SSA). By including SCSR in the SSA analysis, we introduced potential suppliers to IBM’s supplier code of conduct.
As part of this effort, we conducted audits in SSA countries with certain potential future suppliers. The results of the audits are being shared with these suppliers in order to provide them with clarity about areas in which they need to improve. This marks the first region in which we have enacted this activity in the pre-sourcing stage. It gives Procurement visibility to the challenges relating to social responsibility — input that will be incorporated into the sourcing decision process as IBM looks to develop a supply chain in this growth region.

In 2008, IBM continued its strong involvement in the EICC. It currently holds the Chair of the Board position and it has participated in work groups such as Communications/Stakeholder engagement, Extractives, and the Validated Audit Process. In early 2009, the EICC released its first annual report, which describes the coalition, its history, current projects and recent accomplishments.

An example of the EICC deliverables IBM uses is the EICC Self-Assessment Questionnaire (SAQ). Not only is IBM a supplier to our customers but we also supply other companies in the electronics supply chain. During 2008, IBM completed the corporate portion of the EICC SAQ. In late 2008, we created a plan to have IBM manufacturing locations implement the SAQ in support of our endorsement of the EICC code of conduct.

IBM is not only extending SCSR to its suppliers but also including itself in this initiative; this will help us become a better customer in the supply chain and will help put us in a better position to consult our suppliers on how they too can improve in the mutual objective to drive sustained improvements.

In 2009, IBM is transitioning from its own code to using the EICC code of conduct and its associated audit questions and Validated Audit Process. We will use the EICC audit process for future assessments of manufacturing/production suppliers. The EICC Validated Audit Process is very rigorous and well suited for larger manufacturing suppliers. In addition, by converting to this format, we will further support the EICC’s objective of eliminating redundant audits in the supply chain and increasing the sharing of audit results across multiple customers (within the established procedures of the EICC).

On the Web
IBM Sustainable Procurement offering:
In first quarter 2009, IBM announced a new consulting service that helps clients look across a company’s procurement departments to determine how to make them more efficient. The service also looks at the company’s suppliers to assess their environmental and social responsibility programs and performance. For more information, visit ibm.com/press/us/en/pressrelease/27174.wss
IBM’s supply chain diversity program is grounded in a mission to ensure that those groups who have traditionally been left out of the economic mainstream are given access to IBM’s procurement process if they have a product/service which adds value to our supply chain. Our program is global, and we work with businesses owned by diverse groups all over the world. In the U.S. this includes women, blacks, Native Americans, GLBT and people with disabilities. In addition, we take local (country) context into account, and adapt our definition of “diverse” to be appropriate to the local cultural experience, such as including suppliers from the bottom of the caste system in India.

In 2008, IBM spent $1.5 billion inside the U.S. and $745 million internationally with first-tier diverse suppliers. First-tier is defined as suppliers with whom IBM spends directly (not through other companies).

IBM is a founding member of the National Minority Supplier Development Council (NMSDC) and we participate in their International Programs Advisory Committee. Through this and NMSDC sister organizations, we are working to expand supplier diversity practice in growth markets. Also we are a founding member of the Women’s Business Enterprise National Council and participate in their international programs. IBM is also actively engaged with the Minority Supplier Diversity China, an organization working with the Chinese government to open up economic opportunity to the country’s 55 ethnic minority groups. In 2008 formal recognition of the aboriginal population by the Australian government was granted and an organization called the Australian Indigenous Minority Supplier Council (AIMSC) was created—a direct result of a mission by the NMSDC, which included IBM. Our company has been working with diverse aboriginal suppliers since 2006.

Supplier diversity is just one aspect of IBM’s multipronged approach to facilitating access to the economic mainstream. We work with our internal employees, our marketing and community investment teams, and the Integrated Supply Chain so that the IBM approach to creating opportunity is always in sync with the industry.

### Key Performance Indicator

**Supplier Diversity**

| 2008 Total U.S. Spending     | $12.0
|------------------------------|-----
| 2008 Diverse U.S. Spending   | $1.3
| 2008 Diverse Non-U.S. Spending | $560
| Projected Actual             | $12.5 $1.5 $745

**Commentary:** Furthering our commitment to the communities in which we operate, we believe it is important to provide opportunities for in-country diverse owned businesses. It is also a priority for us to promote both certified U.S.-owned as well as non-U.S.-owned diverse businesses to participate in the supply chain process worldwide.
Section Five: Governance
Managing risk, maintaining trust

The economic news of the past several months has provided a compelling reminder of the importance of trust and personal responsibility for our company, our industry, business at large—and the health of the global economy.

When transparency, accountability and trust break down, a lot breaks down with them. The enormous promise of a smarter planet rests not most importantly on technology, but on increasingly open, collaborative and trust-based relationships spanning vast global systems—systems that, by definition, cannot be controlled by a single entity.

At a time when public confidence in business has been seriously diminished, IBM believes more than ever that maintaining the highest standards of ethics, transparency and accountability are essential to our continued growth worldwide. Fundamental to maintaining those high standards is effective enterprise risk management.

As IBM pursues major growth opportunities—as we open new offices, hire new employees, establish new relationships with customers and business partners—risks are inherent. To assure these risks are identified and handled appropriately throughout the enterprise, IBM has developed a consistent, systemic and fully integrated approach to Enterprise Risk Management (ERM). Using a clearly defined risk assessment methodology and risk management metrics, we identify, define and prioritize risks, analyze their causes, and assess their enterprise-level implications. This approach helps us determine how best to manage and mitigate risks to ensure consistent growth and economic return longterm.

For instance, IBM continues to invest significantly in growth opportunities, including dozens of emerging countries, including Brazil, China, India and Russia, to drive revenue growth and market share gains. Client adoption rates and viable economic models are uncertain in these high-value and rapidly growing market segments. In addition, as our company expands to capture emerging growth opportunities, we need to rapidly secure the appropriate mix of trained, skilled and experienced personnel. The developing nature of emerging growth markets presents potential political, social and economic risks from inadequate infrastructure, creditworthiness of customers and business partners, labor disruption and corruption. This could impact our ability to meet our growth objectives and to deliver to our clients around the world.
The systematic approach to Enterprise Risk Management allows us to take advantage of the scale and scope of the company to improve performance through better identification and management of enterprise risk. It is designed to help IBM:

› ensure strategic decisions are informed with appropriate consideration of risk
› anticipate issues and prepare for them in the execution of strategy
› analyze ongoing operations and take action to improve performance and increase consistency
› monitor risks and feedback to the business more effectively

To further enhance our risk management capabilities, IBM recently established the role of vice president of financial management and chief financial risk officer whose purview includes Enterprise Risk Management.

In February 2009, IBM launched what we believe will serve as a valuable resource for IBM managers and their teams around the world. The new Corporate Trust and Compliance Web site, is designed to foster a culture of trust and personal responsibility throughout the company.

Among other things, the site highlights IBM’s online reporting system that allows IBM employees around the world to report concerns and possible violations of company policies and its longstanding Business Conduct Guidelines. The system is available on demand and in multiple languages. Employees can raise concerns related to everything from workplace conditions to concerns about pay and performance ratings to known or suspected employee misconduct.

Reported violations of IBM’s Business Conduct Guidelines are reviewed and, as appropriate, investigated. Where allegations of misconduct are substantiated, corrective actions, including appropriate disciplinary actions, are taken.

The IBM Business Conduct Guidelines, to which IBMers certify annually, spell out the ethical business practices that apply to employees worldwide. These Guidelines remain the foundation of our compliance management system—and IBM has controls in place to help ensure that we all adhere to them, at every level of the company.

However, no matter what processes are established, what values we instill or how open and transparent our management practices are, people will make mistakes and do things that aren’t right. When that happens, leadership becomes crucial.

These online resources can help strengthen the very bedrock of IBM, helping to ensure that our relationships—with clients, investors, colleagues and the communities in which we live and work, in every part of the world—are truly built on trust.
Section Six: Public Policy
Promoting policies to address societal challenges

Our smarter planet strategy is resonating powerfully, especially among government leaders—helping them to prepare their societies for a new century.

IBM works closely with governments, regulators and standard setters at global and local levels on key economic, governmental and societal issues, and prioritizes policy approaches that can foster innovation, contribute to a strong global economy and address key global challenges. Our public policy priorities for 2008 were:

› Global Economic Integration  (e.g. Market Access and Supply Chain Security)
› Global Workforce Flexibility
› Finance, Energy and Environmental Priorities
› Innovation Leadership Initiatives
› Policy-Driven Growth Opportunities
› Export Compliance
› Intellectual Property and Open Standards
› Government Relations and Market Support

Some important initiatives in 2008 are described on these three pages.

Privacy and Security: New Policies and Protections

PrimeLife—Bringing sustainable privacy and identity management to future Internet services: This three-year research project, begun in March 2008, is being undertaken by the PrimeLife Consortium and funded by the European Commission. Chaired by IBM, the Consortium includes several leading universities, companies and technology organizations in the U.S. and Europe. The goal is to address how to protect privacy and personal information in emerging applications, focusing on such areas as human computer interfaces, configurable policy languages, virtual communities and Web service federations. The Consortium will also work with Open Source Communities and standardization bodies to promote the widespread adoption of privacy technology.

With so much data being exchanged on a daily basis and cybersecurity an increasingly critical concern for governments across the globe, privacy and security issues remain an important public policy and governance focus for IBM. We continue to engage with the private, public and civil sectors to develop new thinking and practices to help meet society’s expectations of privacy, data protection and cybersecurity—and to set exemplary policies and practices within our enterprise.

Our 2008 priorities as they relate to privacy and security included:

› OPERATING AS AN EFFICIENT AND TRUSTED globally integrated enterprise—with a globally consistent approach to data protection and strategic engagement in public policy discussions underway on four continents.
› ENABLING THE PRIVACY AND SECURITY of emerging technologies such as cloud computing and social software.
› RESPONDING TO MARKET OPPORTUNITIES related to security and data protection for our clients and society at large.
For some time now, IBM has been calling for a “smart” healthcare system that would help healthcare research become more informed and intelligent, and providers to deliver safer, more efficient and individualized care.

In recognition of our company’s leadership in healthcare reform, the U.S. House of Representatives Committee on Ways and Means invited IBM Senior Vice President of Human Resources Randy MacDonald to participate in a panel discussion of healthcare reform on April 29, 2009. MacDonald also serves as chairman of the HR Policy Association, a group of chief human resource officers from more than 260 U.S. corporations.

IBM believes a “smart” healthcare system will vastly improve healthcare decisions and deliver greater efficiency by eliminating waste and needless administrative cost. MacDonald told the committee that IBM supports healthcare reform that focuses on mutual responsibility—among patients, providers, insurers, governments and employers.

IBM recommends a national healthcare agenda that meets seven key objectives:

› STRENGTHENS OUR VOLUNTARY EMPLOYER-BASED SYSTEM with reforms that contain skyrocketing costs and improve health outcomes and accountability.
› ADOPTS A COMPREHENSIVE NATIONAL REFORM AGENDA avoiding a potential patchwork of state-by-state solutions that would prove unwieldy for national employers.
› IMPROVES WELLNESS, PREVENTION AND PRIMARY CARE incenting providers to not simply treat the sick but to keep patients healthy.
› CREATES A COMPETITIVE AND ACCOUNTABLE MARKETPLACE by providing improved consumer information and meaningful choice.
› CONTROLS COSTS AND REDUCES COST-SHIFTING restructuring public programs away from traditional “fee-for-service” reimbursements.
› PROVIDES ALL AMERICANS WITH HEALTH INSURANCE using solutions that account for the different circumstances within that population.
› PROMOTES ADOPTION OF HEALTH INFORMATION TECHNOLOGY. Broader adoptions will result in safer and more convenient care for patients, at lower administrative costs.

The company also supports an initiative known as the “Patient-Centered Medical Home” (PCMH), a model based on the concept of “comprehensive primary care”, which focuses on strengthening the primary care/physician relationship to enhance communication and improve care across the healthcare delivery system. Giving patients a “medical home” is meant to fix some of the principal shortcomings of how healthcare is delivered and paid for in the U.S. Insurers now typically reimburse doctors based on how many tests or procedures they perform, instead of how effective their care is.
As prolific creators of intellectual property, we believe in strong global intellectual property systems that foster innovation. To be effective, such systems should strike the appropriate balance between protecting the economic rights of inventors and the sharing of information that advances the progress of science. The solutions we envision for a smarter planet demand an intelligent infrastructure based on open technology standards. Only when information can move seamlessly within and between these systems can these solutions actually work smarter.

An intelligent infrastructure requires balanced and versatile intellectual property and open standards policies that can make systems, processes and infrastructures more efficient, more productive and more responsive. To help achieve these goals and stimulate innovation and economic growth, IBM has extended its model for balancing proprietary invention with shared IP by dramatically increasing the number of inventions and technical contributions it publishes and makes freely available to others—rather than seeking patent protection for those ideas. IBM plans to increase by 50 percent, to more than 3,000 annually, its publications of inventions and technical contributions.

Publication of technological information protects inventors from allegations of infringement by placing the intellectual property into the body of prior art. It also improves patent quality, since the technical information can be cited by patent offices in limiting the scope of other patent applications.

The company is also contributing the advanced statistical and analytical capabilities of IBM Research to a collaborative project that is helping to develop an empirical measure of patent quality. This Patent Quality Index can address the issue of low-quality patents—those with uncertain scope or dubious claims to technological innovations—and provide additional transparency to the patent system. The number of patents being filed has increased substantially in recent years, adding to historic backlogs, creating uncertainty around intellectual property rights, and spawning increased speculation and litigation—issues that can impede inventors, entrepreneurs and companies of all sizes.

Christopher A. Cotropia, Professor of Law, Intellectual Property Institute, University of Richmond School of Law
### Employees

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Learning Investments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worldwide ($M)</td>
<td>697</td>
<td>648</td>
<td>682</td>
<td>622</td>
<td>648</td>
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<tr>
<td><strong>Learning Hours</strong></td>
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<td></td>
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</tr>
<tr>
<td>Worldwide (M)</td>
<td>15.3</td>
<td>18.0</td>
<td>19.6</td>
<td>22.3</td>
<td>23.2</td>
</tr>
<tr>
<td>Per Employee</td>
<td>46</td>
<td>55</td>
<td>55</td>
<td>58</td>
<td>61</td>
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<tr>
<td><strong>Employee Satisfaction (%)</strong></td>
<td>65</td>
<td>65</td>
<td>67</td>
<td>69</td>
<td>67</td>
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<tr>
<td><strong>Women Global Executives (%)</strong></td>
<td>18.7</td>
<td>19.4</td>
<td>19.7</td>
<td>20.3</td>
<td>20.1</td>
</tr>
<tr>
<td><strong>Women in IBM Workforce (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>n/a</td>
<td>26.6</td>
<td>27.2</td>
<td>28.4</td>
<td>28.4</td>
</tr>
<tr>
<td>Europe/Middle East/Africa</td>
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<td>25.9</td>
<td>26.4</td>
<td>27.0</td>
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<tr>
<td>Americas</td>
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<td>30.9</td>
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<td><strong>Women Managers in IBM Workforce (%)</strong></td>
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<td></td>
<td></td>
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<td>Asia Pacific</td>
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<td>23.4</td>
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<td>21.0</td>
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<tr>
<td>Europe/Middle East/Africa</td>
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<td>20.4</td>
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<tr>
<td>Americas</td>
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<td>28.9</td>
<td>29.2</td>
<td>28.9</td>
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<td><strong>Global Illness/Injury Rate</strong></td>
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<tr>
<td>Total Number (per 100 employees)</td>
<td>0.39</td>
<td>0.35</td>
<td>0.32</td>
<td>0.30</td>
<td>0.27</td>
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<tr>
<td><strong>Retiree and Employee On Demand Community (ODC)</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Hours in thousands)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Asia Pacific</td>
<td>87.9</td>
<td>114.0</td>
<td>134.1</td>
<td>163.0</td>
<td>143.0</td>
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<tr>
<td>Europe, Middle East, Africa</td>
<td>192.2</td>
<td>274.0</td>
<td>283.5</td>
<td>210.2</td>
<td>175.2</td>
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<tr>
<td>Latin America</td>
<td>23.6</td>
<td>32.6</td>
<td>31.3</td>
<td>41.6</td>
<td>40.8</td>
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<tr>
<td>North America</td>
<td>865.3</td>
<td>1,244.8</td>
<td>1,263.3</td>
<td>1,303.0</td>
<td>1,170.1</td>
</tr>
</tbody>
</table>

Total ODC registrations inception through 2008 was 127,209. (Employees: 114,628, Retirees: 12,581)

### Giving

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
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<tbody>
<tr>
<td><strong>Global Corporate Contributions by Issue ($M)</strong></td>
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<td></td>
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<tr>
<td>K-12 Education</td>
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<td>55.6</td>
<td>49.4</td>
<td>41.7</td>
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<td>Higher/Other Education</td>
<td>54.7</td>
<td>44.7</td>
<td>51.5</td>
<td>49.2</td>
<td>82.6**</td>
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<tr>
<td>Culture</td>
<td>13.3</td>
<td>11.2</td>
<td>12.3</td>
<td>11.9</td>
<td>10.5</td>
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<tr>
<td>Human Services</td>
<td>15.2</td>
<td>18.9</td>
<td>19.8</td>
<td>16.7</td>
<td>15.3</td>
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<tr>
<td>Health</td>
<td>3.2</td>
<td>9.7</td>
<td>10.6</td>
<td>4.6</td>
<td>4.0</td>
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<tr>
<td>Other</td>
<td>8.9</td>
<td>7.8</td>
<td>7.9</td>
<td>40.7*</td>
<td>19.3*</td>
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<td>Environment</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
<td>1.8</td>
<td>2.2</td>
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<tr>
<td><strong>Total</strong></td>
<td>143.7</td>
<td>148.5</td>
<td>152.1</td>
<td>166.6</td>
<td>179.3</td>
</tr>
<tr>
<td><strong>Global Corporate Contributions by Geography ($M)</strong></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>United States</td>
<td>99.9</td>
<td>103.0</td>
<td>95.7</td>
<td>91.8</td>
<td>94.6</td>
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<tr>
<td>Europe, Middle East, Africa</td>
<td>23.1</td>
<td>23.9</td>
<td>26.1</td>
<td>40.8</td>
<td>44.4</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>12.9</td>
<td>13.5</td>
<td>19.9</td>
<td>22.3</td>
<td>24.4</td>
</tr>
<tr>
<td>Latin America</td>
<td>4.4</td>
<td>4.5</td>
<td>6.4</td>
<td>8.1</td>
<td>12.5</td>
</tr>
<tr>
<td>Canada</td>
<td>3.4</td>
<td>3.6</td>
<td>4.0</td>
<td>3.6</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>143.7</td>
<td>148.5</td>
<td>152.1</td>
<td>166.6</td>
<td>179.3</td>
</tr>
<tr>
<td><strong>Global Corporate Contributions by Type ($M)</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>28.2</td>
<td>38.8</td>
<td>48.8</td>
<td>43.8</td>
<td>42.9</td>
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<tr>
<td>Technology</td>
<td>70.5</td>
<td>64.4</td>
<td>59.2</td>
<td>55.8</td>
<td>93.8</td>
</tr>
<tr>
<td>Technical Services</td>
<td>45.0</td>
<td>45.3</td>
<td>44.1</td>
<td>67.0</td>
<td>42.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>143.7</td>
<td>148.5</td>
<td>152.1</td>
<td>166.6</td>
<td>179.3</td>
</tr>
</tbody>
</table>

### Employee Charitable Contribution Campaign (U.S.)

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Donated ($M)</td>
<td>33.1</td>
<td>34.6</td>
<td>34.7</td>
<td>35.1</td>
<td>36.1</td>
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<tr>
<td>Employee Participation Rate (%)</td>
<td>58</td>
<td>58</td>
<td>57</td>
<td>58</td>
<td>57</td>
</tr>
<tr>
<td>Recipient Agencies</td>
<td>11,300</td>
<td>12,104</td>
<td>12,315</td>
<td>14,035</td>
<td>17,430</td>
</tr>
</tbody>
</table>

### Employee Charitable Contribution Campaign (Canada)

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount Donated ($M)</td>
<td>2.3</td>
<td>3.6</td>
<td>3.4</td>
<td>3.3</td>
<td>3.0</td>
</tr>
<tr>
<td>Employee Participation Rate (%)</td>
<td>55</td>
<td>55</td>
<td>52</td>
<td>49</td>
<td>49</td>
</tr>
<tr>
<td>Recipient Agencies</td>
<td>1,199</td>
<td>1,246</td>
<td>1,275</td>
<td>1,323</td>
<td>1,150</td>
</tr>
</tbody>
</table>

*Include Community and Economic Development activity for Carson, SMB and Corporate Service Corps.

**Include Academic Initiatives software donations.
### Environment

<table>
<thead>
<tr>
<th>Energy conservation</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual savings as % of use – against annual goal of 3.5%</td>
<td>7.7</td>
<td>5.5</td>
<td>3.9</td>
<td>3.8</td>
<td>6.1</td>
</tr>
</tbody>
</table>

| Renewable Energy Procured | | | | | |
| % of total electricity use | 4.0  | 2.7  | 7.3  | 8.5  | 8.6  |

<table>
<thead>
<tr>
<th>CO2 Emissions Reduction</th>
<th>See page 27</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>PFC Emissions Reduction</th>
<th>See page 27</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Product Energy Efficiency</th>
<th>See IBM and the Environment Report***</th>
</tr>
</thead>
</table>

| Recycled Plastics | | | | | |
| % of total procured through IBM contracts for use in its products – against annual goal of 5% of total plastics procured | 3.8  | 8.1  | 11.7 | 10.6 | 10.3 |

| Product End-of-Life Management | (% of total processed) | | | | |
| Recycled | 51.8 | 47.8 | 51.4 | 52.0 | 54.4 |
| Resold for Reuse | 28.0 | 37.3 | 32.1 | 33.7 | 31.4 |
| Reused | 14.5 | 8.7 | 9.3 | 8.7 | 7.1 |
| Waste-to-Energy | 3.4 | 4.0 | 2.9 | 3.3 | 4.0 |
| In Process | 0.0 | 0.0 | 3.2 | 1.5 | 2.5 |
| Landfilled and incinerated* | 2.3 | 2.2 | 1.1 | 0.8 | 0.6 |

| Hazardous Waste Reduction | (Metric Tons x 1,000) | | | | |
| Indexed to output – against goal of continual reduction | -33.0 | -19.0 | -8.1 | -8.4 | -10.9 |

| Non-Hazardous Waste Recycling | | | | | |
| % recycled of total generated – against goal of 67% (2004–2006) and 75% (2007–2008), | 76 | 77 | 76 | 78 | 79 |

| Percentage of IBM Locations Meeting Annual Recycling Goal | 59 | 60 | 63 | 52 | 41 |

| Total Chemical Quantities Worldwide** | (Metric Tons x 1,000) | | | | |
| Against goal of continual reduction | 5.3 | 4.9 | 6.0 | 4.3 | 3.6 |

| Water Conservation—Microelectronics Manufacturing | | | | | |
| Savings as % of use – against goal of 2% average savings as measured over a rolling 5-year period | 7.4 | 7.2 | 7.0 | 6.0 | 4.6 |

---

*Reporting on these amounts did not start until 2005.

**Number for prior years have been revised.

***The 2008 IBM and the Environment Report may be found at ibm.com/environment/annual/ Additional information on all of the above topics also may be found in the 2008 IBM and the Environment Report.
SOURCES

Page 6

Page 7
› United Nations World Food Program.
› World Health Organization.

Page 29
› The Nature Conservancy Freshwater Conservation Initiative.