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Strategy for Success: Corporate Best Practices in Greenhouse Gas Management

This edition of *Carbon Copy* features best practices in greenhouse gas (GHG) management and highlights the benefits that leading companies are receiving. Partners use corporate GHG best practices to help answer some of these key questions:

- What is the process for addressing my company's climate risk, and what are the benefits to my company?
- What are the components of a good GHG management system?
- Once I have a process in place, should I report it publicly and if so, how?
- What are other Climate Leaders Partners doing to manage their GHGs?
- What other resources and programs are available for my company as we continue to develop and refine our climate strategy?

Climate Leaders has found that this information will be useful to companies at all stages of their GHG management process.

Managing Your Carbon Risk: Components of an Effective GHG Management Strategy

Vincent Camobreco, U.S. EPA

Cynthia Cummis, U.S. EPA

Bella Tonkonogy, U.S. EPA

Leading U.S. companies are increasingly recognizing that climate change is an important strategic issue. Many leading firms now believe that the opportunities and risks posed by climate change—including GHG mandates at the state and international level, shareholder resolutions, litigation against emitters, rising energy costs, and increased public awareness about climate change—warrant a strategic response.

Companies that are beginning to explore possible responses to climate change can benefit from several years of EPA experience on this issue. Through Partnership in EPA's Climate Leaders program, dozens of companies have developed effective GHG management strategies that include three critical

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components for addressing climate risk. The first component is to assess the risks associated with a company's operations through a corporate-wide GHG inventory. While creating this inventory, the company should also work to document the process through the development of a high-quality inventory management plan (IMP), which will ensure that an accurate and transparent base-year inventory is created and then consistently updated and maintained over time. Once a high-quality base-year inventory is completed, companies can begin to address their risks by setting a GHG reduction goal and formulating a reduction strategy. The implementation of each of these three steps is critical to those companies that strive to be leaders on the issue of climate change.

Components of an Effective GHG Management Strategy

1. Complete a Corporate-Wide GHG Inventory.

The first step of an effective strategy is to assess the risks associated with company operations by creating a high-quality, corporate-wide GHG inventory, which defines the quantity of GHGs emitted annually. A GHG inventory helps companies evaluate the risks of future carbon liabilities and can also be useful in responding to requests to disclose risk from shareholders, environmental groups, and the financial and insurance communities.



"One of the biggest values from joining Climate Leaders was to help us put together an inventory that is robust enough to stand up to scrutiny."

—Al Forte, Assistant Director, Energy
Pfizer Inc.

In contrast with focusing narrowly on individual facilities or single processes, a corporate-wide GHG inventory is critical. A corporate-wide inventory helps companies determine their entire carbon footprint and to then identify and target those facilities and emission sources that are the largest contributors to corporate emissions. A comprehensive GHG inventory might also challenge companies' preconceptions regarding their major emissions sources. For example, some Climate Leaders Partners were surprised to find that corporate jets and other business travel were a sizable percentage of their overall GHG footprint. Furthermore, companies are

discovering that inventory data has additional value beyond GHG management, as they may encounter facilities that pay higher-than-expected energy costs or find new consolidation or energy efficiency opportunities.

Once a company has a comprehensive picture of its climate impact, it is in a better position to address strategically and cost-effectively its risk, helping to focus reduction efforts where the greatest results can be achieved. As the inventory is updated annually, it then serves as the metric for tracking the success of GHG reduction efforts.

2. Develop an Inventory Management Plan (IMP).

While creating their GHG inventory, Climate Leaders companies work in parallel to institutionalize the process through the development of an IMP. The IMP ensures that an accurate and transparent base-year inventory is created and then consistently updated and maintained over time.

The IMP is uniquely designed by each company and defines the organizational and operational boundaries (company assets, facilities, and direct and indirect emissions sources for each GHG) to be included in the GHG inventory. The IMP also documents: the chosen methodologies used to quantify emissions; data sources and collection processes; the approach used to adjust the inventory over time; internal audit processes; and roles and responsibilities of individuals in the inventory development process. Such a rigorous management plan maximizes the accuracy, consistency, and transparency of the inventory, and is a critical step towards credible inventory tracking over time.

Development of an IMP can also serve as an effective preparatory tool for an independent third-party verification. In addition, the process of documenting how the inventory is developed affords the opportunity to discover areas for improvement in the system and to create a clear paper trail.

While developing a corporate GHG inventory and IMP for the first time can be a time- and cost-intensive process, the resources involved in creating an inventory depend largely on what data collection processes are already in place. Many companies find that they are already collecting most of the necessary information, such as utility bills, transport data, and emissions factors, but data collection systems might need to be

integrated. Completing a GHG inventory also might require additional coordination of numerous people at the facility and corporate level. Some sources of data might need to be tracked for the first time, necessitating the creation of a process to collect the additional data efficiently and to calculate emissions.

However, the up-front investment that companies make to produce a detailed IMP can help reduce the long-term costs associated with GHG management. IMPs have been shown to improve the efficiency of inventory development and adjustments. Current data collection systems such as an energy management system are employed in completing a GHG inventory; a renewed focus on the details of these data collection and management systems through the IMP can lead to the identification of areas for improvement and opportunities for efficiency gains, often leading to cost savings. In addition, a documented, institutionalized process minimizes disruptions from employee turnover and facilitates necessary modifications to the inventory that stem from changes in the company profile, availability of new or improved data, or acquisitions and divestitures.

A thorough IMP thus ensures consistency among different facilities, provides for accurate tracking over time, improves reliability of emissions and reductions estimates, and helps to ensure the credibility of data when disclosed to interested stakeholders.



"In 2004, we took the work we had been doing for the past five years relating to corporate

emissions reporting and brought it up to the next level. This year we developed, as part of our commitment to the EPA Climate Leaders program, an Inventory Management Plan (IMP) that brings greater transparency and standardization to our corporate emissions calculations...Perhaps the most rewarding effect of this process was the development of new procedural improvements that enable us to collect data more accurately and regularly for the future."

—Green Mountain Energy Company
2004 Environmental Report

3. Set a Corporate-Wide GHG Reduction Goal.

The cornerstone of an effective corporate GHG management strategy is an aggressive GHG reduction goal. Once a high-quality, base-year inventory and IMP are completed, companies can begin to address their

Noble: "A GHG Inventory Drives Energy Efficiency"

Noble Corporation, founded in 1921, is a leading provider of diversified services for the oil and gas industry worldwide. Noble performs contract-drilling services with a growing fleet of premium assets including semi-submersibles, drillships, jackups and submersible rigs. Noble joined Climate Leaders in 2004 and is currently working on setting a corporate-wide GHG reduction goal.

Noble first performed a pilot GHG inventory in 2002, employing a consulting company to quantify the annual GHG emissions aboard one of Noble's drilling rigs. These results showed that diesel-driven electrical generators and equipment were responsible for the majority of that rig's emissions and prompted Noble to complete a baseline inventory of all the rigs in its fleet. The baseline inventory confirmed the pilot inventory's findings and focused Noble's attention on reducing emissions from diesel engines. Consequently, Noble began employing new diesel injection technology that combines the use of commercially available low-sac injectors with engine injector timing retardation, reducing energy consumption without sacrificing engine response or power output. As a result of this new rig efficiency program, fuel consumption has decreased 2 percent, translating into dollar savings of \$5,000 a year per engine, or about \$270,000 total per year.

Performing an inventory thus proved invaluable in helping Noble identify where it could best focus its GHG reduction efforts. Noble continues to focus on identifying new technologies and methods for improving diesel engine efficiency, as one part of its overall corporate effort to reduce GHG emissions.

risks by setting such a GHG reduction goal and formulating a reduction strategy.



"Our company's involvement in the Climate Leaders program cajoled us to really stretch our goal."

—Doug Barndt, Principal Environmental Engineer, Ball Corporation

Goal setting is often what drives actions to reduce emissions, helping to ensure the overall success of a company's GHG management strategy. Climate Leaders Partners have seen the critical importance of setting a goal in engaging management and stakeholders and in selling the overall GHG management strategy. Many companies have been working on energy efficiency and other emissions reduction projects for several years.

Rolling these efforts into an overall GHG reduction strategy with an aggressive goal as the centerpiece helps identify additional cost-effective opportunities for reductions, gain executive-level management attention, secure funding for these types of reduction projects, and galvanize stakeholder support for these efforts.

Roche Nutley implemented a hybrid vehicle pilot program for a number of marketing employees as part of its GHG reduction efforts and saw such a positive response among its staff and stakeholders that the company plans to equip an entire sales team with hybrid vehicles:



"The hybrid pilot program caught the attention of salespeople, customers, the media and regulatory authorities alike. It was featured in many

articles. U.S. Senator Dianne Feinstein wrote to Roche Nutley praising the company on the initiative and its aims as an excellent example to be followed by other companies."

—Roche 2004 Sustainability Report

Aggressive corporate GHG reduction goals also serve to rally staff around a common goal and encourage innovation. Climate Leaders companies are seeing that goals and implementation of reduction strategies result in positive employee morale and may help in employee recruiting and retention.



"[Our CEO] has been the driving force behind these [GHG] goals, and his feeling is that if the vision and targets are clear, he is always amazed at the ingenuity of Kodak people."

—Scott Summers, HSE Director
Kodak Manufacturing
as quoted on <www.theclimategroup.org>

Finally, and most importantly to the bottom line, implementation of GHG goals frequently leads to cost savings. For example, Climate Leader **IBM Corporation**, which avoided GHG emissions of 1.28 million tons from 1998 to 2005, saved \$115 million in reduced energy costs in the process. **SC Johnson** also estimates it has saved \$2.6 million a year, a projected overall return on its investment of 20 percent, by installing a turbine system to produce heat and power from landfill gas at one of its facilities. The project proved

Ball: "Benefits of A Bottom-Up Approach to Setting A Goal"

Ball Corporation is one of the world's largest suppliers of metal and plastic packaging to the beverage and food industries. Ball joined Climate Leaders in 2002 and has pledged to reduce U.S. GHG emissions by 16 percent per production index from 2002 to 2012.

After completing a baseline inventory and developing an IMP, Ball embarked on the task of setting a corporate-wide GHG reduction goal for its U.S. facilities. Desiring its goal to be achievable while still credible, Ball developed a goal-setting strategy that considered several factors:

- Cost to implement;
- Collateral benefits to the company, environment, and the community;
- Time to implement;
- Return on investment;
- Contribution to core business;
- Contribution to brand image; and
- Obstacles to implementation.

The company realized that much of the ideas and knowledge that were needed to explore reduction opportunities and set a goal could be found at the level of individual business units, motivating Ball to develop a "bottom-up" approach to setting its goal. The company surveyed facilities for potential opportunities, met with its engineering group regarding new technologies, and held discussions with business leaders internally to understand the direction of the business. The goal task force summarized GHG reduction opportunities by facility and then by operational group, including an uncertainty analysis.

This bottom-up approach resulted in a number of benefits for Ball above and beyond setting a GHG reduction goal: the approach served to promote program awareness and buy-in as well as management accountability for the success of the program. The goal-setting process elevated Ball's GHG reduction efforts to a top priority and garnered support along the way among employees across the company. Ball's approach has greatly increased the company's chances for success in its reduction efforts.

so successful financially and environmentally that the company began operation of a second turbine that will run on natural gas and landfill gas at the same facility this fall.

The adoption of high-quality GHG management practices is the prerequisite for corporate leadership on

the climate change issue. Companies that complete an inventory and an IMP are well positioned to accurately assess and report their climate risk. Setting an aggressive goal to reduce emissions will greatly increase the chances for success in addressing and minimizing the identified risk. Companies that are still contemplating the benefits of these actions should consider the growing evidence that businesses with proactive environmental and energy management policies generally outperform the market,¹ receive positive media attention for their efforts, and are identified as corporate leaders.

For more information about EPA's Climate Leaders program, including lists of Partner companies, program requirements, and other case studies, please visit <www.epa.gov/climateleaders>.

Publicly Reporting Your Climate Change Strategy

If your company has a comprehensive climate change strategy, you should get credit for it by communicating your leadership and results to the public. The most common way of doing this today is through a Sustainability Report, which is a useful tool for disclosing information and progress on a company's combined economic, environmental, and social performance. For this issue of Carbon Copy, Climate Leaders pulled together information on the benefits of reporting, tips for reporting, and reporting activities and trends among its Partners.²

Current Reporting Activities Among Climate Leaders Partners

A variety of stakeholders—from institutional investors and pension funds to SRI investors and the public—are increasingly requesting disclosure of GHG emissions and climate risk from corporations. Climate Leaders collected public data on its Partner companies to

¹ See, e.g. *Energy Management & Investor Returns: The Retail Merchandising Sector*, Innovest (February, 2003); *Energy Management & Investor Returns: The Real Estate Sector*, Innovest (October, 2002); *Energy Management & Investor Returns: The Retail Food Sector*, Innovest (October, 2002).

² For additional information on sustainability reporting, visit the Global Reporting Initiative (GRI) Web site at <www.globalreporting.org>. GRI is an independent institution whose mission is to develop and disseminate globally applicable sustainability reporting guidelines.

determine what information and through which media they were disclosing, and identified some trends in the process. The accompanying table summarizes these results.

Reporting Activity	Number of Partner Companies
Published 2004/2005 Sustainability Report ³	42
Published 2004/2005 Environmental Report ⁴	12
Referenced GRI Guidelines	26
Reported "in accordance" with GRI guidelines	8
Disclosed GHG emissions on company Web site (including in Sustainability Report)	41
Disclosed GHG targets on company Web site (including in Sustainability Report)	33
Sustainability/Environment Section in 2004 Annual Report	32
Climate change activities described in 2004 Annual Report	22
Climate change mentioned as risk or opportunity in 10-K filed with SEC Spring 2005	14
Provided Carbon Disclosure Project a (CDP3) report in 2005 ⁵	38
Disclosed GHG emissions in CDP3 Report	27

The Benefits of Reporting

Companies that choose to report on sustainability do so for a variety of reasons. Sustainability reporting can hold value as a vehicle for engaging stakeholders, reflect the long-term value of the company to its shareholders and attract "patient" shareholders, improve internal management systems, aid in managing risk over time, encourage improvement and learning internally, and demonstrate a company's transparency.⁶

³ Includes reports with varying names (i.e., "Corporate Responsibility"), as long as they contain information on social, environmental, and economic issues. All use 2003 or 2004 data.

⁴ All but four of these reports used 2003/2004 data; the four exceptions were published with 2001 or 2002 data.

⁵ The CDP is an annual request by institutional investors to the Financial Times (FT) 500 companies for information on climate change. In 2005, the 155 signatories to the request represented \$21 trillion in assets.

⁶ World Business Council for Sustainable Development (2003). *Striking the Balance*, available at <www.wbcsd.org>.

“Indeed, many companies report that cross-functional collaboration and learning is one of the single greatest rewards of non-financial reporting. In its best form, it triggers conversations that otherwise would not occur, insights that would not otherwise surface, and innovations that would not otherwise materialize.”

—Allen White, Vice President and Senior Fellow
Tellus Institute, from <www.bsr.org>

Tips for Publicly Reporting Your GHG Strategy

Climate Leaders has put together some tips to consider when publicly reporting your climate activities.

General Reporting Tips

1. Publish your climate change strategy as part of a comprehensive sustainability report.

- Reach more people. Environmental reports do not have the breadth of a sustainability report.
- Know your audience.
 - Understand who’s reading and why: employees, the general public, Corporate Social Responsibility professionals, other stakeholders.
 - Strike a balance between hard-copy and Internet-based reporting to meet your audience’s needs.
- Keep up with the latest trends. Integration of sustainability information into financial reports is gaining support.

“The platinum standard of reporting is for integration of financial and sustainability information. This also means integration of responsibilities between Investor Relations and EHS managers.”

—Lily Donge, Social Research Analyst
Calvert Asset Management Co.

2. Use the Global Reporting Initiative (GRI) Guidelines when designing and producing your sustainability report.

- GRI guidelines cover 80 percent of what most other surveys request. Use the guidelines to “avoid survey fatigue.”⁷

⁷ “Avoiding Survey Fatigue,” <www.greenbiz.com/enewsletter>, October 10, 2005.

- It is okay to include ideas outside of the guidelines if a new way of communicating some successes and challenges is more effective.
- Use the GRI sector supplement that applies to your business.
- GRI’s “in accordance” reporting is a fuller, more stringent adoption of GRI guidelines. This is the next level of reporting and might be considered by companies with sufficient resources and experience in sustainability reporting.
- Watch for the updated set of GRI Guidelines (“G3”) in 2006.

*“The decision to report **in accordance** with the Guidelines is an option, not a requirement. It is designed for reporters that are ready for a high level of reporting and who seek to distinguish themselves as leaders in the field.”*

—Global Reporting Initiative
<www.globalreporting.org>

3. Be transparent and report information proactively.

- Don’t wait for shareholder and stakeholder requests for reports or detailed information about your climate strategy. Build credibility by being an early mover in your industry.
- Be frank about your company’s challenges. Focus on difficult issues and how you’re going to tackle them.



“[Baxter] feels an obligation to our stakeholders and socially responsible investors to be truthful and transparent. They expect that from us.”

—Ron Meissen, Senior Director
Engineering/Worldwide EHS Resources
Baxter Healthcare Corporation
as quoted on <www.climatebiz.com>

4. Favor quality over quantity. Keep reports short and language concise and clear.

- Maintain accessibility to a broad audience.
- Focus on the most important aspects of your business.
- Supplement a briefer hard-copy report with more complete information on the company Web site.

“[Carpet-bombers] report in great detail on a multitude of performance aspects without giving the reader the tools to evaluate them or to evaluate how relevant they are.”

—in Standard & Poor’s, SustainAbility, and UNEP (2004). Risk and Opportunity: Best Practice in Non-Financial Reporting

Climate Change Reporting Tips

1. Provide the whole picture to your readers. This includes:

- **Company position** on climate change.
- **Relevance to the business.**
- **Management systems** in place.
- **Performance.**
 - Metrics matter: GHG emissions (multiple years), description of efforts to reduce, and reduction performance.
 - Put performance in context. Compare it to: company’s goals, industry and/or leaders average, and governmental or science-based goals.
- **Future targets and plans.** Future actions are just as important as past performance. As in financial reports, report on your future sustainability plans and climate strategy to give an idea of the direction in which your company is heading.

“A company’s value on the stock markets is not only determined by its current profits but by expectations about its future earning ability. In practical terms, companies should report on their future sustainability plans in addition to providing historical data on past activities.”

—in World Business Council for Sustainable Development (2003), Striking the Balance

2. Include discussion of related company activity such as involvement in:

- Public policy: Is your company sharing its experiences and accomplishments with policymakers?
- Industry initiatives: Is your company working with sector-specific initiatives or trade or manufacturing associations?
- Customer awareness/influence: What are you doing to get the word out to your customers?

3. Understand the accuracy and precision of the data, and focus on those things that matter most.

- Identify uncertainties, estimates, and changes in methodology.
- Don’t focus on perfect data—it consumes unnecessary resources and doesn’t capture the overall reporting purpose. Do the best you can with data currently available and work to improve data over time.

4. Use a standardized GHG inventory protocol.

The World Resources Institute/World Business Council on Sustainable Development (WRI/WBCSD) GHG Protocol is the corporate inventory standard used by Climate Leaders and GRI.



“Realizing that these GHG reductions represented a corporate asset that the company wanted to protect, Frito-Lay chose the highly transparent, rigorous, and credible reporting process offered by Climate Leaders.”

—Larry E. Perry, P.E.
Frito-Lay North America

5. Seek and publish an external perspective on the quality of your commitment, programs, results and/or data.

- External assurance of transparency and rigor adds credibility to your data and report.
- In addition to EPA’s Climate Leaders, consider partnering with an environmental nongovernmental organization (NGO) or investor representative on your reporting activities.
- Also consider additional independent third-party verification of data quality.

6. Engage the investment community by using language it understands.

- Make a case for business value. For example, describe how managing your climate risk has led to competitive advantage, or how GHG reductions have translated to operating gains. If you’ve opened or shown leadership in a market, report it.

- Many reports have a section devoted to the socially responsible investment (SRI) community. Consider this option.
- Discuss the issue in terms of relevance to the core business and business risks and opportunities of your company.

“For investors, information is the currency of the market, and it is increasingly clear that environmental and social performance can have deep financial consequences, especially for investors who are concerned about companies' ability to create value over the long term.”

—Lily Donge, Social Research Analyst
Calvert Asset Management Co.

Jeff Erikson of SustainAbility provided advice for this article. SustainAbility is a think tank and consultancy that advises businesses on corporate responsibility. Information on its biannual benchmarking of sustainability reports and “Engaging Stakeholders” program can be found at <www.sustainability.com>.



Climate Leaders Media Kit Released

Climate Leaders has just released a Media Kit to help Partners get the word out about their participation in the program. Climate Leaders Partners can use the Climate Leaders Media Kit to effectively communicate their goals and achievements to the media and other target audiences.

The media kit includes:

- **Partnership Fact Sheet** for your public relations department.
- Whether you have just joined or reached your goal, **Press Release Templates** can help you communicate your progress and achievements.
- **Press Release Building Blocks** that include sample leads, quotes from EPA officials, and text for your press releases.
- **Sample Partner Press Releases.**
- **Public Service Announcement.**
- **Climate Leaders Logo.**
- **Current Partner List.**

To obtain a Climate Leaders Media Kit, please visit our Web site at <www.epa.gov/climateleaders> or contact Jim Sullivan at <sullivan.jamest@epa.gov> or 202 343-9241 for a hard copy.

EPA Congratulates First Partners to Meet Goals

The following Climate Leaders became the first Partners to meet their greenhouse gas (GHG) reduction goals:



Baxter International Inc.
reduced U.S. GHG emissions by 16 percent per unit of production value from 2000 to 2005.⁸

Energy conservation and management has been at the forefront of Baxter’s GHG reduction efforts, along with facilities consolidations. For example, the company is moving away from more energy intensive sterilization methods that use ethylene oxide sterilization to methods that use e-beam sterilization. The company has also built energy efficient new plasma collection centers. In addition, Baxter has focused on reducing the space required for its clean rooms, in turn decreasing the requirements for heating, ventilation, and air conditioning (HVAC) systems, which can represent 60 to 70 percent of a manufacturing facility’s energy use.



General Motors Corporation (GM)
reduced total GHG emissions by 10 percent for all North American facilities from 2000 to 2005.

GM met its goal mainly through increasing energy efficiency; for example, paint shop operations—the company’s most energy intensive operations—are shut down on weekends and holidays. A utility bill tracking system was set up, which has resulted in cost savings and made energy management easier. In addition, GM has been a strong proponent of converting landfill gas to energy—in 2003, the company was the largest U.S. corporate user of landfill gas for thermal energy; by 2004, the company had five projects totaling 2,010 billion BTU per year.

⁸ Baxter’s production value equates to cost of goods sold, adjusted for changes in inventory, business acquisitions, divestitures, and inflation.



IBM Corporation achieved 1) average annual CO₂ emissions reductions equivalent to 4 percent of the emissions associated with the company's worldwide energy use and 2) an absolute 10 percent reduction in perfluorocompound (PFC) emissions from IBM's semiconductor manufacturing processes from 2000 to 2005.

IBM has focused its reduction efforts on energy-efficiency, renewable energy procurement, and the redesign of PFC-using processes. Energy efficiency projects range from simple activities such as the installation of motion detectors for lighting control to complex controls projects, which monitor and adjust the building environment to minimize energy usage. IBM has increased its commitment to renewable energy sources, utilizing wind, solar and biomass energy suppliers, supplying 4 percent of IBM electricity use globally in 2004. IBM engineers took a leadership role in redesigning PFC-using processes to either replace PFCs with nitrogen trifluoride (NF₃), which has a low GHG potential and is 90 to 95 percent utilized in the process or to convert processes to a low-flow PFC process, reducing emissions by 40 to 50 percent.



National Renewable Energy Laboratory (NREL) reduced U.S. GHG emissions by 10 percent per square foot from 2000 to 2005.

The laboratory has met its goal primarily through the use of multiple onsite renewable energy projects, including several photovoltaics installations, as well as the use of wind power to offset electric load at its National Wind Technology Center. In fiscal year 2005, NREL purchased renewable energy certificates (RECs) that offset 100 percent of its annual electric use in Department of Energy-owned buildings. Several solar thermal projects include solar hot water systems, trombe walls, and ventilation air preheat systems. The laboratory's belief in making a positive local impact on the environment led NREL to make Colorado-based green power purchases.



SC Johnson reduced U.S. GHG emissions

by 23 percent per pound of product from 2000 to 2005.

At its Waxdale facility, SC Johnson chose to install a landfill gas combustion turbine system, which was

calculated to reduce GHG emissions by 32,000 tons a year—50 percent of the facility's emissions—and thus deliver virtually all of the company's Climate Leaders commitment. The \$5 million, 3.2-megawatt system cut electricity roughly in half and natural gas consumption by approximately 25 percent, and is estimated to save more than \$2.6 million dollars a year in energy costs. SC Johnson projects that the overall return on investment from the system will be nearly 20 percent. The success of this project has prompted SC Johnson to install a second turbine, fueled by natural gas and waste methane, at the same facility—together, the two-turbine system will reduce the facility's GHG emissions by 52,000 tons per year.

Climate Leaders Partners Announce GHG Reduction Goals

The following Climate Leaders Partners have recently announced GHG reduction goals:

Baltimore Aircoil Company pledges to reduce U.S. GHG emissions by 15 percent per ton of steel processed from 2004 to 2009.

EMC Corp. pledges to reduce U.S. GHG emissions by 8 percent per square foot from 2005 to 2012.

General Electric Company pledges to reduce total global GHG emissions by 1 percent from 2004 to 2012.

Haworth, Inc. pledges to reduce U.S. GHG emissions by 20 percent per dollar sales from 2004 to 2009.

Lockheed Martin Corporation pledges to reduce U.S. GHG emissions by 30 percent per dollar revenue from 2001 to 2010.

Mack Trucks, Inc. pledges to reduce U.S. GHG emissions by 20 percent per unit produced from 2003 to 2010.

Marriott International pledges to reduce U.S. GHG emissions by 6 percent per available room from 2004 to 2010.

Oracle pledges to reduce U.S. GHG emissions by 6 percent per square foot from 2003 to 2010 for all non-data center space and to purchase 5 percent green power for data centers.

STMicroelectronics pledges to reduce U.S. GHG emissions by 50 percent per manufacturing unit from 2000 to 2010.

Sun Microsystems pledges to reduce total U.S. GHG emissions by 20 percent from 2002 to 2012.

Volvo Trucks North America, Inc. pledges to reduce U.S. GHG emissions by 20 percent per truck produced from 2003 to 2010.

Welcome New Climate Leaders Partners!



Agilent Technologies

Palo Alto, California

Agilent provides core analytical and electrical measurement tools to advance the electronics, semiconductor, pharmaceutical, environmental, and petrochemical industries. Agilent develops innovative technology that enables its customers to drive productivity and improve the way people live and work. As a global manufacturing and research and development company, Agilent has customers in more than 110 countries.



American Water

Voorhees, New Jersey

American Water provides high quality water, wastewater, and other related services to over 18 million people in 29 states and 3 Canadian provinces. Based in Voorhees, New Jersey, the company has revenues of over \$2 billion, and is one of the largest water resources companies in North America.



Boise Cascade

Boise, Idaho

Boise Cascade (Boise) manufactures engineered wood products, plywood, lumber, and particleboard and

distributes a broad line of building materials, including wood products manufactured by the company. Boise also manufactures a wide range of specialty and premium paper products, including imaging papers for the office and home and papers for pressure-sensitive applications, as well as printing and converting papers, containerboard and corrugated boxes, newsprint, and market pulp.

California Portland Cement Co.

Glendora, California

California Portland Cement is the oldest continually producing portland cement company west of the Rocky Mountains, producing not only cement and concrete, but also Precast Manholes, Redi-Rock, Truss Pipe, Corrugated Pipe & Fittings, Catch Basins, Aggregates, Building Materials, Sand, Gravel, Rock, Everdure Caltite, and Arxx - Insulated Concrete Forms. California Portland Cement has become a leader in its industry through the company's commitment to quality and customer service. For more than 50 years, California Portland Cement has been a major supplier of cement and concrete for the construction industry throughout the Southwestern United States.



Citigroup Inc.

New York, New York

Citigroup, a leading global financial services company, has some 200 million customer accounts and does business in more than 100 countries, providing consumers, corporations, governments and institutions with a broad range of financial products and services, including consumer banking and credit, corporate and investment banking, insurance, securities brokerage, and asset management. Major brand names under Citigroup's trademark red umbrella include Citibank, CitiFinancial, Primerica, Smith Barney and Banamex.



Ecolab Inc.

Saint Paul, Minnesota

With 2004 sales of \$4.2 billion, Ecolab Inc. is a leading global developer and marketer of premium cleaning,

sanitizing, pest elimination, and maintenance and repair products and services for the hospitality, foodservice, institutional, and industrial markets. Ecolab shares are traded on the New York Stock Exchange under the symbol ECL.



Fairchild Semiconductor
South Portland, Maine

Fairchild Semiconductor is a global supplier of high-performance power products critical to today's leading electronic applications in the computing, communications, consumer, industrial, and automotive segments. As The Power Franchise®, Fairchild offers the industry's broadest portfolio of components that optimize system power through minimization, conversion, management, and distribution functions. Fairchild's 9,000 employees design, manufacture, and market power, analog and mixed signal, interface, logic, and optoelectronics products from headquarters and numerous locations around the world.



General Electric Company
Fairfield, Connecticut

General Electric is a diversified technology, media, and financial services company focused on solving some of the world's toughest problems. With products and services ranging from aircraft engines, power generation, water processing and security technology to medical imaging, business and consumer financing, media content, and advanced materials, GE serves customers in more than 100 countries and employs more than 300,000 people worldwide.



Haworth, Inc.
Holland, Michigan

Haworth, Inc. is a global manufacturer of adaptable workspaces and interior architectural systems, including

raised access flooring, movable walls, modular voice and data cabling systems, systems furniture, wood and metal case goods, files, and seating products. Haworth owns and operates nine manufacturing facilities in Michigan. Other North American manufacturing locations include North Carolina, Mississippi, Ontario, Quebec, and Alberta. Haworth also operates manufacturing facilities in multiple locations in Europe and Asia. Haworth, Inc. has a long-standing commitment to environmental excellence.



HSBC North America
Prospect Heights, Illinois

HSBC North America comprises all of HSBC's U.S. and Canadian businesses, including the former Household International businesses. The company's businesses serve nearly 60 million customers in five key areas: personal financial services, consumer finance, commercial banking, private banking, and corporate investment banking and markets. Financial products and services are offered under the HSBC, HFC and Beneficial brands.



Kimberly-Clark Corporation
Neenah, Wisconsin

Kimberly-Clark (K-C) and its well-known global brands are an indispensable part of life for people in more than 150 countries. Every day, 1.3 billion people—nearly a quarter of the world's population—trust K-C brands and the solutions they provide to enhance their health, hygiene, and well-being. Kimberly-Clark's brands, including Kleenex, Scott, Huggies, Pull-Ups, Kotex and Depend, hold leading market share positions in more than 80 countries.

Lucent Technologies Inc.
Murray Hill, New Jersey

Lucent Technologies designs and delivers the systems, services, and software that drive next-generation communications networks. Backed by Bell Labs research and development, Lucent uses its strengths in mobility, optical, software, data and voice networking technologies, as well as services, to create new

revenue-generating opportunities for its customers, while enabling them to quickly deploy and better manage their networks. Lucent's customer base includes communications service providers, governments, and enterprises worldwide.

Steelcase®

Steelcase Inc.

Grand Rapids, Michigan

Steelcase, a global leader in the office furniture industry, helps people have a better work experience by providing products, services and insights into the ways people work. The company designs and manufactures architecture, furniture and technology products. Founded in 1912 and headquartered in Grand Rapids, Michigan, Steelcase serves customers through a network of more than 800 independent dealers and approximately 14,000 employees worldwide.