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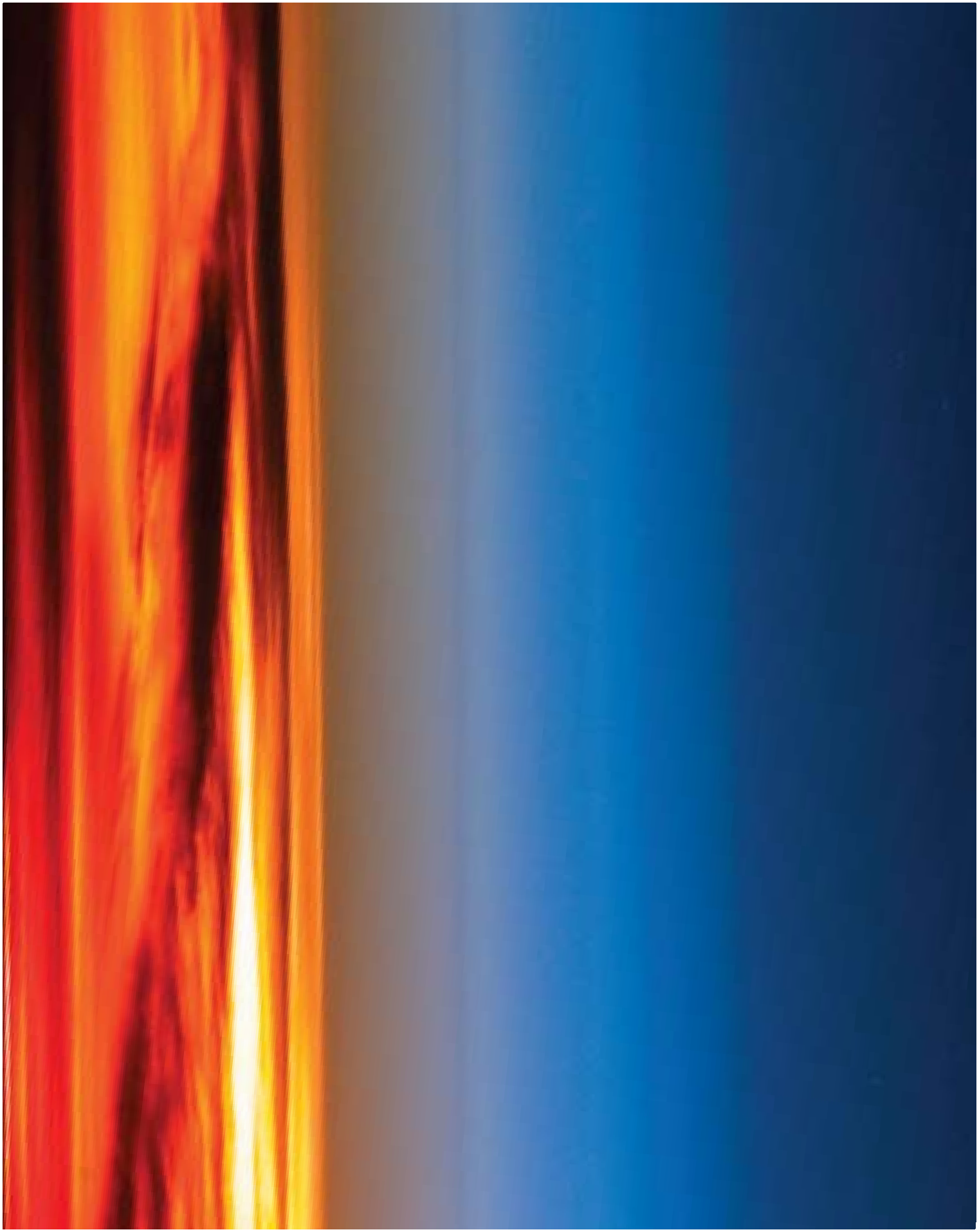
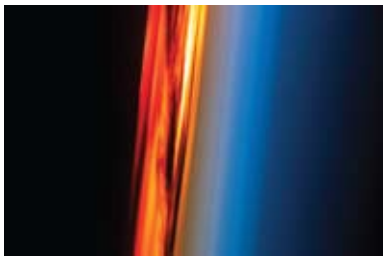
Partner Fact Sheets



New paths to corporate success.



This is what's at stake

This profile of the Earth was photographed from the International Space Station by a crew member. The Sun is out of view, leaving the Earth in darkness. The lower level of the atmosphere shows up in warm sunset colours. Higher up, the stratosphere turns a progressively darker blue. Our planet's ecosystem is entirely dependent on the condition of the atmosphere. And the atmosphere is thinner and more fragile than most of us think: by most definitions, space begins only 100 km from the Earth's surface.

WWF Climate Savers are cutting-edge partnerships between WWF and businesses, aimed at delivering ambitious reductions in CO_2 emissions by member companies and in their supply chains.

A Climate Savers agreement places the company as leader in terms of reducing emissions of greenhouse gases. The agreement involves negotiations between WWF, the company and independent technical experts, and is tailored to the circumstances and operating sector of the company. The target is demonstrably more ambitious than any previously planned or communicated by the company.

Climate Savers agreements provide attractive solutions to climate change. Attractive because they save money, drive profitability, enhance reputation and demonstrate corporate social responsibility to communities and staff. The company benefits and the planet benefits.

Climate legislation is getting ever tougher. Shareholders, customers and the media want to know whether companies are facing up to the realities of climate change risk. WWF's Climate Savers program positions enterprises strongly and securely to work proactively and constructively with these serious challenges.

The solutions that companies have developed as part of their Climate Savers engagement include:

- Energy efficiency of products
- Energy efficiency in processes or facilities
- Energy-saving products
- Transport efficiency
- Fuel switching
- Conversion to renewable energy
- Developing and implementing carbon risk analysis tools.

These are strong foundations for reducing emissions. The Climate Savers companies build on them in ways that are also innovative and dynamic.

The corporations whose commitments, creativity and achievements are highlighted by WWF's Climate Savers program have found that their efforts to reduce their climate impact have had positive impacts on their efficiencies, their reputations and their overall business environment.

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Catalyst

Catalyzing change for the better in the paper industry.

Catalyst is one of North America's leading newsprint and specialty mechanical papers companies.

How Catalyst has promised to fight climate change

Catalyst's Climate Savers commitment is to achieve, by 2010, a sustained 70% reduction in greenhouse gas emissions over 1990 levels.

The Catalyst achievement

Catalyst is well ahead of its promises, which were achieved by 2005 and are being maintained in an intense period of industry restructuring and transformation.

In 2008, Catalyst's absolute levels of CO_2 emissions were 72% below 1990 levels.

In 2006, CO_2 intensity per tonne of paper was 175 kg / tonne of paper compared to 574 kg / tonne in 1990, a reduction of 69%.

Determination to succeed in a challenging business environment

Between 2002 and 2005, Catalyst saved $5 million in electricity costs through efficiency, and cut the use of fossil fuels by 46%, resulting in savings of $13 million.

2008 was a year of financial challenge with depressed paper markets and limited capital expenditures. With constraints in the availability of carbon-neutral biomass fuel supply, the company absorbed added costs due to a carbon tax, while markets for carbon-neutral paper products remained limited.

2008 savings and energy costs are still being determined but the company's small energy footprint continues to distinguish its product suite in the fiercely competitive pulp and paper markets today.

Catalyst continues to focus on fuel switching and energy conservation initiatives. This approach maximizes use of the carbon neutral biomass and minimizes energy requirements in the manufacture of pulp and paper products.

A world-class virtuous circle of waste recycling

Catalyst is a leading producer of the mechanical printing papers that are used in directories, catalogues, magazines, ad inserts and daily newspapers throughout the US and worldwide.

Catalyst Paper set one of the most ambitious emissions reduction goals of any large corporation worldwide – a 70% reduction in its greenhouse gas emissions by 2010 relative to 1990 levels. Catalyst achieved this goal ahead of schedule in both 2005 and 2006, while also registering significant reductions on an intensity basis. This reduction is equal to eliminating more than 1 million tonnes of greenhouse gases annually. In 2007, the reduction level fell back slightly to 69%, due largely to a constrained supply of carbon-neutral biomass fuels.

“For a company focused on efficiency, combating climate change is natural – by making informed choices about fuel use we reduce greenhouse gas emissions, improve air quality and reduce operating costs.”

Catalyst Paper Corporation

Catalyst has developed a practical strategy to minimize its greenhouse gas emissions. It relies on wastes generated elsewhere within the industry (primarily sawmill leftovers such as bark and wood chips) to generate heat and electricity. In 2007, these and other renewable sources accounted for 87% of its total energy needs. This included expanded use of methane captured from a municipal landfill site near to Catalyst’s Paper Recycling Division.

The beauty of biomass

Biomass has natural appeal to a company using forest products, and the imaginative use of wood waste as a fuel has been a major ingredient in Catalyst’s remarkable emissions reduction success.

Catalyst uses biomass fuel in boilers equipped with emissions-control equipment to generate most of the steam and some of the electricity needed to manufacture its paper and pulp products. Doing so has helped the company:

- Reduce absolute greenhouse gas emissions by the equivalent of removing 250,000 cars from the road. To calculate this figure, Catalyst took the approach of using typical mid size North American passenger cars and their typical mileage: this is estimated to generate a carbon footprint of about 4 tonnes CO_2e (CO_2 equivalent) per car per annum. Catalyst eliminated about 1,000,000 tonnes CO_2e – which in turn relates to about 250,000 passenger cars
- Generate about 63% of the energy the company uses – in 2005, burning biomass produced 65 megawatts of power on average
- Gain eco-logo certification, from Environment Canada, of 51 megawatts of power boiler, biomass-generated steam electricity.

Cutting carbon – saving money

Cutting fossil fuel use by almost 50% over the past decade (equivalent of 700,000 barrels of oil) helps Catalyst reduce its exposure to fossil fuel costs.

Employees have identified dozens of simple ideas to save energy and stamp out waste. One mill calculated that fixing an air leak in a quarter-inch pipe would save $6,000 a year in wasted energy while a one-inch air hose left running would cost the mill $54,000 a year.

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World's biggest soft drinks manufacturer puts a lid on carbon.

The Coca-Cola Company is the world's largest beverage company.

"Solving society's largest challenges takes real leadership and partnership among business, government and civil organizations. We have seen through our own experiences – time and again – that our business in any market is only as healthy and sustainable as the community in which we operate. We've long recognized the responsibility to lead in this area but we're also wise enough to know that we can't do it alone."

Muhtar Kent President and CEO

How The Coca-Cola Company has promised to fight climate change

The Coca-Cola Company's Climate Savers commitment consists of two complementary emissions reduction targets applicable to its global system of manufacturing operations:

- Stabilize emissions, i.e. grow the business, not the carbon; and
- Reduce absolute emissions 5% in Annex 1 (developed) countries.

These targets apply to the period 2004 – 2015. The Coca-Cola Company and its bottlers anticipate substantial volume growth globally during this period, thus growing the business without growing the carbon is a significant commitment.

Without intervention, emissions would grow proportional to volume and reach 7.3 million tonnes in 2015. Thus, the global commitment will prevent the release of more than 2 million tonnes of CO_2 in 2015.

The Coca-Cola system's performance review

Emissions increased by 1% in 2007 compared to 2006 (4.86 million tonnes), while the system's unit case volume grew 6% from 2006 to 2007. The system expects to hold its 2015 emissions from manufacturing globally at or below the corresponding emissions from the base year of 2004 (4.7 million tonnes).

Similarly to a number of Climate Savers companies, The Coca-Cola Company recognizes that success in reaching its Climate Savers goals while still growing the business is a matter of first slowing, then stopping, then reversing the trajectory of its emissions.

Putting the fizz into energy efficiency

The Coca-Cola Company is the world's leading manufacturer, marketer, and distributor of non-alcoholic beverage concentrates and syrups, which are used to produce nearly 500 brands. The Company is based in Atlanta, employs 90,500 people worldwide, and has operations in over 200 countries.

The Company is undertaking a number of initiatives to reduce CO_2 emissions. Its Climate Savers effort is focused on manufacturing facilities and bottling plants, where the principal climate protection activity is energy efficiency.

Across the Company's bottling system, work continues to grow the business, but not the carbon. Since 2002, energy use efficiency has improved by 19%. In 2007 alone, The Coca-Cola Company estimates that energy efficiency improvements (from 0.48 MJ/liter to 0.46 MJ/liter) accounted for approximately $38 million in avoided costs.

Going forward, the Company's efforts will be led by an ambitious multiyear energy-efficiency investment program called Project esKO. Launched in 2007, Project esKO aims to improve energy efficiency and productivity, and reduce emissions in manufacturing.

Coca-Cola Hellenic Bottling Company S.A., one of The Coca-Cola Company's largest bottling partners, has already begun sourcing power from some of the 15 new on-site Combined Heat and Power (CHP) plants being constructed during 2009. Use of the technology in its facility in Dunaharaszti, Hungary cut CO_2 emissions by 43% in the first year of operation.

The perfect mixer – complementing Climate Savers

Across the Coca-Cola system, it is recognized that climate change may have long-term direct and indirect implications for the business and its supply chain. The Company believes that its business system has a role to play in ensuring it uses the best possible mix of energy sources while improving the energy efficiency of manufacturing and distribution processes.

The Coca-Cola Company's overall climate protection strategy is focused on the four key areas of refrigeration equipment, offices and bottling plants, fleet and transportation, and global awareness and action.

Keeping it cool – innovation in refrigeration

The Coca-Cola system owns more than nine million coolers and vending machines. These are the largest estimated contributors to greenhouse gas emissions related to the Coca-Cola system's operations. They produce three times the estimated emissions of the manufacturing facilities and more than five times the emissions from the fleet. As a result, the Coca-Cola system's sustainable refrigeration program is a central part of their energy management and climate protection efforts.

Coca-Cola has completed the transition to HFC-free insulation for new purchases of refrigeration equipment. This new equipment generates 75% fewer direct greenhouse gas emissions compared to traditional sales equipment.

They also have made significant research and development investments to identify technology that will help reduce direct greenhouse gas emissions from refrigerants. Ironically, the alternative is CO_2, a greenhouse gas that is 1,300 times less potent than the HFC-134a deployed in conventional equipment, and has less direct climate impact while improving energy efficiency under typical operating conditions. So here, at least, CO_2 can be harnessed by industry to help the planet's environment rather than threaten it.

The Coca-Cola Company has a proprietary Energy Management System called EMS-55, which can reduce the energy consumption of refrigeration equipment by up to 35%. By the end of 2008, over 1 million of these EMS-55 units were shipped into the Coca-Cola system around the world. These units are saving an estimated 1.1 billion kilowatt hours per year, with a corresponding greenhouse gas reduction of an estimated 575,000 tonnes.

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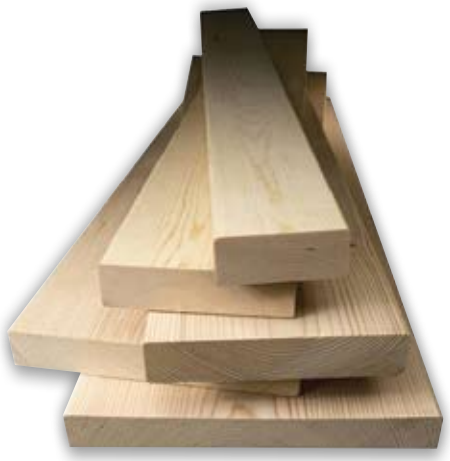
The Collins Companies

Cutting down carbon and making savings.

The Collins Companies manage forests, make wood products and sell building materials.



How The Collins Companies have promised to fight climate change

The Collins Companies' Climate Savers commitment is to reduce their CO_2 emissions 15% below 1999 emissions levels by 2009. This would be a reduction of over 16,000 metric tons.

The Collins Companies achievement

The Collins Companies reduced their CO_2 emissions from 110,108 metric tons in 1999 to 100,620 metric tons in 2006, in spite of buying a sawmill in Richwood, West Virginia, in 2005. Their emissions went down to 81,737 metric tons in 2007: this was due largely to reduced production in the western divisions because of the market.

Sustainable timber, biomass and wind power

In 2006, The Collins Companies – The first privately-owned timber company in the US to be environmentally certified by the Forest Stewardship Council (FSC) entered into an agreement to supply fuel in the form of wood residues from their Lakeview Sawmill to a new biomass energy plant being established in Lakeview, Oregon. Though this is not Collins' plant, it will enable them to contribute to the availability of more renewable energy.

They are also negotiating the possible establishment of wind turbines on some of their forest lands in Pennsylvania.

The Collins Companies manage 300,000 acres of forest, which are certified according to the standards of the Forest Stewardship Council. The amount of carbon that they remove from forest stands by harvesting is replaced from the atmosphere by new growth each year.

The wood products that are produced from the forests contain five to eight times more carbon than The Collins Companies emit to the atmosphere while producing them. This carbon, stored for decades in wood products, is replaced in the forest from atmospheric CO_2.

CollinsWood sustainable products around the world

FSC-certified CollinsWood products are featured in a number of green building projects worldwide, including Nike's (another Climate Savers partner) European HQ; the Gap Inc. HQ building and the United Airlines Terminal at San Francisco International Airport.

And CollinsWood also features in several Leadership in Environmental and Energy Design (LEED) projects such as the OHSU Center for Health & Healing, Jean Vollum Natural Capital Center and the Hillsdale Library.

Contributing to the California grid

The Collins Companies have improved the efficiency of their biomass energy plant in Chester, California, increasing exports of renewable energy to 27,654,300 kilowatt hours in 2007.

This energy, produced by burning wood wastes from the Chester Sawmill, displaced kilowatt hours in the California grid with an emission factor of 0.8787 pounds of CO_2, avoiding the accumulation of 11,020 metric tons of CO_2 in the atmosphere.

Collins built a fuel drying system for the biomass energy plant with conveyors to transport the fuel, increasing the use of electricity but reduced that of diesel in managing the fuel pile, thus replacing fossil fuel energy with renewable energy.

Energy efficient new buildings

Under the Climate Savers agreement, all new and existing buildings of The Collins Companies will utilize environmentally friendly and energy efficient materials.

With manufacturing facilities, the savings can be significant. In the expansion of the company's facility in Chester, California, paving and redesigning the log yard produced substantial fuel savings, as did fuel handling improvements at the power station. These improvements alone eliminated the burning of over 27,000 gallons of diesel a year, with comparable savings in emissions.

In addition, the new mill produces 50% more lumber than the old mill, but uses only the same amount of electricity. Elsewhere, other simple but imaginative and effective ideas include purchasing resins and paints in more concentrated formulae – this reduces the number of truck trips. And significant savings in fuel use and emissions have come from minimizing the transport of woodchips.

Since 2004, The Collins Companies have invested more than $1.34 million in energy upgrades at their particleboard and hardboard plants, resulting in combined annual electricity savings of nearly 3.5 million kilowatt hours. And in 2008, they spent $12 million at their Klamath Falls operation on two biofilters that reduce the emission of hazardous air pollutants: as well as cutting pollution, these biofilters also produce $1.2 million annually in energy savings over the use of conventional technology.

"Mahatma Gandhi said it best, 'If you want change, you must be the change'. No excuses or apologies, no blaming governments or bureaucracies. Change is manifested by one person at a time, one choice at a time. It happens because we are willing to embrace a vision that is larger than our own self-interests."

The Collins Commitment
www.collinswood.com

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Fresher products – and a fresher approach to sustainability.

Elopak is one of the world's leading companies in liquid food packaging, with customers in more than 100 countries.

How Elopak has promised to fight climate change

Elopak's Climate Savers commitment is to reduce the group's carbon emissions by 15% from 2008 levels by 2011. WWF will coach and verify Elopak's efforts to achieve this goal.

Elopak acknowledges that climate change is real and it is here. Elopak also understands that the changes are cumulative and the effects could be irreversible on a global scale; and that today's inactivity will be our children's problem. Hence, as a socially responsible industry group, Elopak has committed itself to reduce its impact on the environment.

Working to deliver Elopak's Climate Savers commitment

During 2008 Elopak established and documented its carbon footprint in detail from all relevant entities in the group. This means that detailed data was collected and evaluated from 80 sites around the world, from Mexico to Ukraine. Elopak involved all employees in this environmental effort.

The Climate Savers program gives Elopak the confidence to speak publicly about sustainability in its own production, to both internal and external audiences, in a trustworthy manner: the company is committed to genuine action on the environment.

In parallel with signing the partnership agreement, Elopak has embarked on several focused activities to work on what is needed to fulfill the commitment under the Climate Savers program.

The key areas for action are:

- Reducing energy consumption through efficiency measures (including energy for heat production, process heat systems, cooling systems, cooling and heat distribution systems, compressed air systems and electrical motor and drive systems)
- Reducing business travel
- Changing printing processes and installing VOC-captures (Volatile Organic Compounds) to reduce the impact from emissions of VOCs
- Improving the efficiency of the transportation of goods (load factors, distribution distances, evaluation of transport companies, transportation vehicles)
- Purchasing low impact energy.

World leader in fresh liquid packaging aims to lead on carbon cuts too

Elopak is a Norwegian company and one of the world's leading companies in liquid food packaging, with customers in more than 100 countries. Carton packaging comprises around 60% of the world market for liquid food packaging (liquid dairy and juice) and Elopak's products are widely recognized by the Pure Pak® trademark. Elopak's main market segment is fresh products.

In addition to having what is thought to be the most environmentally friendly primary packaging for liquid food, Elopak also aims to be an environmental leader with regard to its industrial operations.

"We have chosen WWF to be our partner and support us in taking the right measures in this journey to reducing emissions and increasing sustainability. The challenge will be very real at all our locations and involve all of our staff, and we will challenge everyone in the company to do their bit in achieving our CO_2 reduction goal."

Niels Petter Wright CEO

Elopak's motivation: the climate is changing

Elopak recognizes that the climate is changing – and not just the Earth's climate. The climate of consumer and customer opinion is changing too. Elopak will meet these demands by offering the most sustainable products as well as by striving for the most environmental operations in producing these products.

Sustainability is an important part of the group's business, both operationally and strategically, and Elopak recognizes the packaging industry's impact on the global climate, even though Elopak's main product – carton containers for liquid food – has a favorable CO_2 footprint.

Commitments and plans

Elopak has set targets for the continuous improvement of environmental performance in processing, transport and energy consumption. Elopak's main objective is to reduce the emission of greenhouse gases through decreasing the consumption of energy while at the same time maintaining profitable growth in the beverage carton business. This is the key element in the 15% CO_2 cut target. Elopak has also included environmental evaluations in its decision criteria for investment and R&D projects.

Elopak has initiated a 'Green Challenge' initiative that will involve all sites with more than 15 employees. A meeting schedule is agreed with all relevant units, and this will involve representatives from Corporate HQ and local environmental representatives.

Elopak has also started a technical audit of all production sites in the group to find and document potential projects for the reduction of CO_2 emissions. This audit is performed by external specialists together with local Elopak employees. Projects are prioritized according to this sequence: 1) lower CO_2 emissions – lower costs; 2) lower CO_2 emissions – same costs; 3) lower CO_2 emissions – 'green investments'; 4) evaluations of new sources of energy supply.

Elopak's activities are based on reducing consumption and improving operational efficiency. When all possible operational cuts are taken, Elopak will consider changing to low-impact energy supplies to further reduce CO_2. Offsetting CO_2 emissions is not a part of Elopak's approach. The focus for Elopak's carbon emission reduction goals will be energy efficiency at the company's 16 production sites around the world. The energy consumption arising from the processes of coating of raw materials and converting of cartons adds up to approximately 70% of the total carbon footprint.

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Leader in global hospitality commits to world-class greenhouse gas reduction targets.

Fairmont Hotels & Resorts is a leader in the Global Hospitality industry.

The Fairmont Chateau Lake Louise
Banff National Park, Alberta, Canada.

How Fairmont has promised to fight climate change

Fairmont Hotels & Resorts' Climate Savers commitment is to:

- Reduce operational CO_2 emissions from its existing portfolio of hotels by 20% below 2006 levels by 2013
- Ensure new properties participate in its Energy and Carbon Management Program and strive to reduce their CO_2 emissions. Update existing Design and Construction standards to incorporate and reflect LEED standards by the end of 2011
- Educate and encourage emissions reductions from its supply chain through the development of a Green Procurement Policy and Supplier Code of Conduct to be implemented by the end of 2009.

Fairmont: building on an existing environmental platform

Fairmont Hotels & Resorts is a global hospitality leader with an exceptional collection of luxury hotels, including numerous iconic landmarks. Fairmont's portfolio presently includes distinctive hotels in 16 countries with services delivered by over 30,000 employees.

The Climate Savers program builds on the foundation of Fairmont's commitment to responsible tourism. Fairmont is renowned for its industry-leading environmental initiatives, including the long established Green Partnership Program, a comprehensive commitment to minimizing the operational impacts of its hotels, focusing on improvements in the areas of waste management, energy and water conservation; and innovative community outreach programs involving local groups and partnerships.

Climate change impacts the bottom line

As a leading travel provider, Fairmont is reliant on destination health to be profitable and is committed to preserving the places where its guests and colleagues, work, live and play. Fairmont is resolutely aware of the business impacts associated with environmental damage, such as diminishing snowfall at ski resorts and other extreme weather events, and is taking proactive steps to reduce its CO_2 output and help mitigate the effects of climate change.

Fairmont has implemented an energy and carbon management program to provide a framework so that information associated with CO_2 producing activities can be tracked and monitored on a consistent and measurable basis by all Fairmont properties.

"We see our Climate Savers partnership with WWF as a sound strategic decision, one that will help ensure destination health and contribute to the financial stability of the industry. Fairmont is proud to be the first global hotel brand to partner with WWF to tackle climate change and we look forward to achieving significant CO_2 reductions at our operations worldwide."

Tom Storey President
Fairmont Hotels & Resorts

Fairmont has designed a comprehensive strategy for reducing operational emissions, having recently completed a number of energy demand reduction projects across its portfolio. Fairmont will use these best practices to guide the development of energy reduction strategies in the future and will focus on implementing greater conversion to renewable energy supply.

Examples of best practice by Fairmont include

- Three properties (The Fairmont Chateau Lake Louise, The Fairmont Washington D.C. and Fairmont Vier Jahreszeiten) currently reduce their carbon footprint by contracting part of their electricity consumption from renewable sources such as wind. Presently, half of the Chateau Lake Louise's electricity needs are met by a blend of wind and run-of-river electricity generation
- Nine of the 13 chalets at Fairmont Kenauk at Fairmont Le Chateau Montebello (Quebec, Canada), situated on a remote lake, are not connected to the electrical grid, using instead solar power systems to supply about half of their power demand
- At present three Fairmont properties (The Fairmont San Jose, The Fairmont Newport Beach, and Fairmont St Andrew's) use cogeneration in their facilities, which captures excess heat for hotel building use as well as producing electricity on site
- The Fairmont Orchid, Hawaii has completed a lighting retrofit replacing 8,035 incandescent bulbs with energy efficient fluorescents. This retrofit has resulted in an annual savings of 532,000 kWh of electricity representing a cost savings in excess of $130,000 US.

Commitments and plans

In addition to adopting best practice examples from renewable energy and retrofit strategies to reduce operational emissions, Fairmont will address sustainable design and construction. This will be achieved by updating existing design and construction standards to incorporate and reflect LEED (Leadership in Energy and Environmental Design) standards by 2011, and educating hotel development partners to site, design and construct hotels to follow internationally recognized green building standards including the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) and the International Tourism Partnership Sustainable Hotel Manual. Fairmont will also endeavor to include sustainable and LEED-certified hotels across the brand, and relocate its corporate offices in Toronto, Canada, to a building with a LEED NC Gold target by 2011.

Fairmont will endeavor to educate and engage its top suppliers (representing 25% of its supply chain) to provide products in accordance with its updated Green Procurement policy and Supplier Code of Conduct by 2010, and work with its suppliers to improve the energy efficiency of their manufacturing operations and product design, and to minimize shipping frequency and packaging waste. In addition to this, Fairmont will engage guests by offering carbon offsets meeting Gold Standard requirements, and share best practices with other organizations committed to the protection of the environment.

Fairmont will also strive to work with WWF to raise awareness of the need for business and industry to lower absolute emissions among policy makers, guests, employees and suppliers, to stimulate market transformation.

The Fairmont approach is holistic: addressing climate change by capturing emissions abatement opportunities from operational activities associated with existing and new properties, while enabling further CO_2 footprint reductions through the supply chain. Moreover, given Fairmont's portfolio is comprised exclusively of managed (not owned) luxury and heritage properties, this positions Fairmont as a global leader in emission reduction efforts in the hospitality sector.

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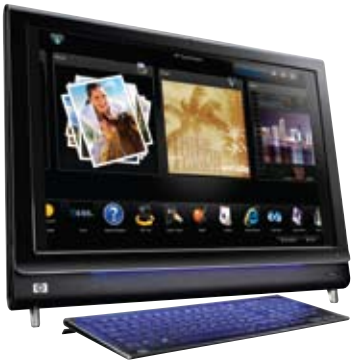
invent

The whole process: IT powerhouse cuts emissions from supply chain to employees to customers.

HP, the world's largest technology company, simplifies the technology experience for consumers and businesses with a portfolio that spans printing, personal computing, software, services and IT infrastructure.



How HP has promised to fight climate change

HP's Climate Savers commitment is to reduce greenhouse gas emissions by 6 million tonnes below 2005 levels by 2010, through environmental innovation and accomplishments in:

- Its own operations
- Product design and energy efficiency
- Logistics efficiencies
- Data center energy efficiency solutions.

HP has also commited to strive to enable additional customer-owned emissions reductions of 3 million tonnes below 2005 levels by 2010, through deployment of innovative carbon-reducing solutions including print management technology, reuse/recycling programs, and travel avoidance solutions.

The HP achievement

HP is over 2 years ahead of schedule in meeting the commitment to cut the combined energy consumption and associated greenhouse gas emissions of HP operations and products to 20% below 2005 levels by 2010 – so they have raised their goal to 25%.

By meeting their goals, HP estimate that they will prevent 6 million tonnes of carbon dioxide equivalent (CO_2e) a year from entering the atmosphere between 2005 and 2010.

An example of HP's ability to achieve ambitious targets is that they intended to optimize product transportation and reduce carbon emissions by over 200,000 tonnes of CO_2 between 2005 and 2010 – that goal has already been achieved.

IT – solutions outweigh problems

The carbon impact of the IT sector is relatively small compared to many other sectors combining manufacturing and service delivery. On the other hand, the use of IT products and services can increase efficiencies and provide less carbon intensive alternatives for other sectors of the economy. As a major IT enterprise straddling many IT fields from volume production for retail to providing high level solutions to business, HP is conscious of the wide scope of its influence and its potential in reducing emissions.

A strategic plan for success

Areas that Hewlett-Packard intends to focus on to achieve results include:

- Reducing greenhouse gas emissions of operations to 16% below 2005 emissions by 2010

"The transition to a low-carbon economy will require a fundamental change in the way we work, live and play. HP is investing billions of dollars in research and development to enable this shift, from low-power PCs, printers and cartridges made mostly of recycled material and green data centers, to rethinking how communities and businesses use HP technology to create a more sustainable world. HP low carbon IT solutions will enable customers to use less resource-intensive physical processes such as business travel, and more digital ones such as virtual meetings instead."

Bonnie Nixon
HP Director of Environmental Sustainability

- Reducing the combined energy consumption and associated greenhouse gas emissions of HP operations and products to 25% below 2005 levels
- PC energy efficiency: in 2007 HP added a new 2010 goal, committing to reduce the energy consumption of volume HP desktop and notebook PC families by 25%, compared with 2005
- HP has been working with its suppliers to measure CO_2 emissions in its supply chain, in order to promote transparency in environmental standards and drive reductions in the carbon footprint of its products. In September 2008, HP was the first major technology company to release emissions data associated with its largest suppliers. The announcement covered first tier suppliers representing more than 80% of the company's costs for the materials manufacturing and assembly of its products worldwide
- Implementing world-class practices in its own data centers: at the end of 2008, HP completed a three-year IT transformation, consolidating 85 data centers into 6 next-generation global data centers, reducing energy consumption in its data centers by 60%, and decreasing the number of servers by 40% while increasing processing power by 250%
- Avoiding the generation of CO_2 emissions by recovering 1 billion lbs of electronics by 2010
- Doubling the company's global purchases of renewable power from under 4% in 2008 to over 8% by 2012.

Focus on products

HP is ambitious about the potential for reducing the energy consumption and associated greenhouse gas emissions of HP products. Specific goals have been set up for representative product categories, including:

- Improving the overall energy efficiency of its ink and laser printing products by 40% by 2011, relative to 2005
- Improving energy efficiency for high-volume server families by 50%, by 2010 relative to 2005
- Reducing the energy consumption of high-volume desktop and notebook PC families by 25%, by 2010 relative to 2005.

HP employees – deserving a Halo?

HP encourages employees to use teleconferencing whenever possible to reduce greenhouse gas emissions from transport – and to lower travel costs. HP provides several solutions, including the HP Virtual Room and the HP Halo Telepresence Solutions. Halo takes video conferencing and collaboration to a new level, allowing colleagues and teams dispersed across the globe to meet virtually while still feeling as if they are in the same room.

In 2008 HP had 34 Halo studios in 14 countries and plans to nearly quadruple that by the end of 2009. This is expected to significantly reduce travel and save at least 32,000 tonnes of CO_2e a year. Based on an internal study, the average roundtrip business flight generates more than 0.91 tonnes of CO_2e emissions per person for the air travel portion only. HP estimates that each internal Halo studio at HP currently eliminates at least one roundtrip flight per business day, which amounts to a saving of more than 237 tonnes of CO_2e per studio per year.

Sites upgraded in HP's Workplace Transformation initiative are equipped with the latest energy-efficient HP technology. HP are replacing cathode ray tube monitors with flat panel displays and relying more on notebook PCs in temporary office spaces. Over time, they expect the more energy-efficient monitors and notebooks to reduce energy use by more than 4 million kilowatt hours (kWh) per year, saving approximately 2,000 tonnes of carbon dioxide equivalent (CO_2e) and about $320,000.

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クライメート・セイバーズ
Climate Savers

Innovating for emission reductions.

IBM is a global leader in technology manufacturing, integrated computer systems, software and I/T business services and solutions.

The System x3950 M2
Designed with high efficiency power supplies and the capability to virtualizate, consolidate and execute multiple applications.

How IBM has promised to fight climate change

IBM has a long history of commitment to promoting energy efficiency in its operations and addressing climate change issues through participation in meaningful voluntary NGO and governmental initiatives. These efforts have generated measurable, reported activities since before 1990. As part of this commitment, IBM was one of the charter members of the Climate Savers program.

IBM made a Climate Savers commitment in 2000 to achieve annual average reductions in greenhouse gas emissions between 1998 and 2004 equivalent to 4% of emissions associated with the company's annual fuel and electricity use. IBM aimed to achieve these reductions through energy conservation actions.

The IBM achievement – and ambitious new commitments

IBM met – and exceeded – its initial Climate Savers commitment, avoiding greenhouse gas emissions associated with the company's annual energy use by an average of 5.7% from 1998 to 2004, and generating energy cost savings of $115 million. This achievement was the result of energy conservation efforts and the use of renewable energy sources alone, and does not reflect additional CO_2 emissions savings from consolidations and restructuring.

Savings from IBM's efforts since 1998 equal taking 51,600 midsize cars (travelling 10,000 miles a year) off the road.

IBM's achievements in reducing greenhouse gas emissions resulted in the award of the US EPA Climate Protection Award in 1998 and 2006 – making the company the only two-time corporate winner – and a US EPA / DOE Green Power Leadership Award in 2006.

Building on its success in achieving its first Climate Savers commitment, IBM announced a second generation CO_2 reduction commitment: to reduce IBM's CO_2 emissions associated with its total operational energy use by 12% by 2012 against a 2005 base year. This will be achieved through energy conservation, the use of renewable energy and/or funding an equivalent CO_2 emissions reduction by the procurement of Renewable Energy Certificates (RECs) or comparable instruments.

Explaining the IBM achievement to the world

As befits the company known as 'The Innovator's Innovator', IBM is committed to communicating its approach to others who may benefit.

The company works with WWF on events providing education to other stakeholders. IBM publicly discloses its greenhouse gas emissions inventory through the Carbon Disclosure Project.

Conserving energy, saving money and sharing ideas

IBM takes great pride in its long record of energy conservation and greenhouse

gas emission reduction programs and its early results. These have transformed its own operations and enabled a suite of carbon management, IT, and data center energy efficiency offerings to assist its clients to implement strategies to manage and reduce their energy use and greenhouse gas emissions.

IBM constantly seeks new ways to conserve energy. Paths to energy conservation include installing motion detectors in bathrooms and copier rooms; changing temperature set points in office areas to rebalance heating and cooling systems; and rebuilding and resizing high purity water pumping systems in semiconductor manufacturing lines. Between 1990 and 2007, IBM avoided nearly 3.1 million metric tons of CO_2 emissions – equivalent to 45% of the company's 1990 global CO_2 emissions – and saved over $310 million through its annual energy conservation actions.

Data centers are estimated to use between 1.5 to 2% of global energy use. In May 2007, IBM announced Project Big Green, redirecting $1 billion per year to increase the IT energy efficiency. The project's new products and services for IBM and its clients are expected to sharply reduce data center energy consumption.

"Energy conservation is a major component of IBM's climate protection program because the release of CO_2 by utility companies that power our facilities represents the greatest potential climate impact from our operations ."

2006 IBM Corporate Responsibility Report

Using renewable energy is also part of the IBM suite of interventions. In 2007, IBM increased its total purchase of renewable energy to 455,000 megawatt hours (MWh), representing 8.5% of its worldwide electricity usage – up from 7.3% in 2006. This represents a CO_2 emissions avoidance of 232,000 metric tons which was achieved through increasing renewable energy purchases in the U.K. from 250,000 MWh to 311,000 MWh, adding purchases of 16,000 and 3,865 MWh in the Netherlands and Australia respectively and purchasing Renewable Energy Certificates in the U.S., where the scale of the purchase placed IBM among the top 25 renewable energy purchasers on the year-end 2007 U.S. EPA Green Power Partners list and the top 15 on the Fortune 500 list.

Sorting out logistics

IBM is reducing the CO_2 emissions associated with transporting parts and products through the efficient design of packaging, working with suppliers on their packaging designs and optimizing logistics.

In 2006, the company joined the U.S. EPA's SmartWay℠ Transport Partnership, a voluntary initiative to improve fuel efficiency and reduce greenhouse gas emissions associated with logistics operations.

In 2007, 85% 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. In recognition of its leadership, IBM received a 2007 SmartWay℠ Excellence Award. The company has also extended specific SmartWay℠ requirements to global distribution operations.

In 2008, IBM committed to ship 100% of its System z and Supercomputer product families to customers in North America (within the U.S. and from the U.S. to Canada and Mexico) exclusively using a SmartWay℠ carrier.

A leader in reducing commuting emissions

IBM pioneered programs to reduce employee commuting and related emissions. IBM runs one of the largest global corporate work-at-home and mobile employee programs, involving nearly one-third of the global workforce. Last year, in the U.S. alone, the company's work-at-home program conserved approximately 7.75 million gallons of fuel and avoided more than 64,000 tonnes of CO_2 emissions as a result of reduced commuting. In addition, more than 2,000 tonnes of CO_2 emissions were avoided by employees using other commute-choice programs such as carpooling, vanpooling, etc.

Globally, many IBM locations provide support, for the use of public transit systems, including shuttles from locations to mass transit stations, and alternate transportation or 'loaner' cars for business trips during the workday.

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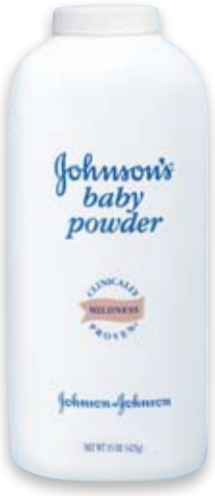
Investing in the health of the planet.

Johnson & Johnson is a healthcare company that develops and markets pharmaceuticals, medical devices and consumer products worldwide.



How Johnson & Johnson has promised to fight climate change

Johnson & Johnson's Climate Savers commitment is to reduce greenhouse gas emissions from all facilities worldwide to 7% below 1990 levels by 2010.

The process begins with the operating companies implementing engineering changes and equipment upgrades to reduce energy consumption. Next, Johnson & Johnson looks for opportunities to install cogeneration systems on its sites, whereby electricity is generated and heat recovered from the process to maximize the overall efficiency. Johnson & Johnson has also installed on-site systems that make use of solar, geothermal, biomass, landfill gas, and other forms of renewable energy.

Another way the company achieves its goals, and complements its Climate Savers commitments, is by purchasing green power and Renewable Energy Certificates as part of a strategy to meet its 7% emissions reduction goal for its facilities worldwide. This has been part of the company's strategy since 1999.

The Johnson & Johnson achievement

Though sales have increased by over 400% from 1990 to 2007, the company exceeded its goal 3 years early with emissions 12.7% below 1990 levels in 2007.

The biggest commercial hybrid fleet in the USA

In 2005, Johnson & Johnson estimated its vehicle fleet of around 35,000 vehicles produced about 250,000 tonnes of CO_2 emissions. The company has committed itself to a 30% reduction in fleet vehicle emissions per mile driven, from 2003 levels.

Lifting the number of hybrid vehicles is one element of the plan to tackle mobile emissions, along with training for employees on avoiding wasteful driving practices.

According to a study conducted by *Automotive Fleet* magazine in November, 2008, Johnson & Johnson has the largest commercial fleet of hybrids in the United States. As of January 2009, the U.S. fleet included 2,091 hybrids

Innovators in on-site power generation

At the Alza Pharmaceutical facility in Mountain View, California, methane gas collected from a local landfill is used to fire a 3-megawatt co-generation system, avoiding 7,000 tonnes of CO_2 annually. Other unique projects include the use of woodchips as a carbon-neutral fuel for a boiler at Cilag AG in Schaffhausen, Switzerland, and a geothermal heating and cooling system at the DePuy facility in France.

Last year, Johnson & Johnson completed the start-up of the company's new Centocor biotechnology manufacturing plant in Cork, Ireland, which was the recipient of the ISPE Facility of the Year Award for Sustainability and features a woodchip-fuelled boiler.

Since 2002, Johnson & Johnson has received six Green Power Leadership Awards from the U.S. Environmental Protection Agency and Department of Energy. At year-end 2007, Johnson & Johnson had installed more than 4.1 MW of Solar Photovoltaic generation at ten locations in the U.S., and as of May 2008, Johnson & Johnson was named the 2nd largest corporate user of on-site solar energy in the United States by the World Resources Institute.

Renewables investment makes business sense

Johnson & Johnson is the world's most comprehensive and broadly-based manufacturer of healthcare products, and as a health care provider, understands that climate change will negatively impact human health. Indeed, the corporation has observed that: "the environment is the ultimate human health issue".

So the company has taken sustained, long-term action to address the level of greenhouse gases emitted from its operating companies. Johnson & Johnson's management approach looks toward the long term, and one of the most important elements of the approach to energy management involves investment in renewables. According to the EPA Green Power Partnership, Johnson & Johnson is the 7th largest purchaser of renewable energy in the United States.

The company reports that: "The energy efficiency program has resulted in an estimated $50 million annualized savings over the last 10 years and our greenhouse gas reduction projects are achieving an average 17% internal rate of return. We believe that investing in renewable energy and energy efficiency is not only good for the environment, but is also good for the bottom line".

"While our emissions are a relatively small part of the total (world emissions), it will take the collective action of many to prevent the adverse consequences and costs of climate change. We believe we have a responsibility in this area... In addition to fulfilling our social responsibility, the investments we have made to reduce CO_2 emissions have returned good value to the company."

Dennis Canavan
Senior Director, Global Energy

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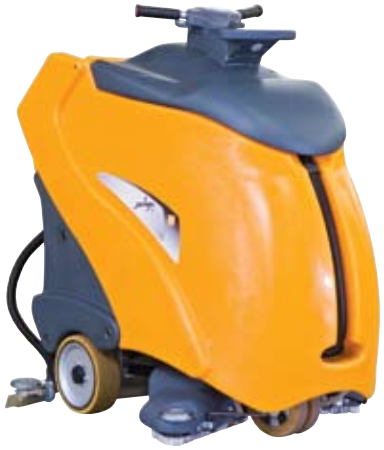
JohnsonDiversey
Clean is just the beginning

A cleaner, healthier future.

JohnsonDiversey is a leading global provider of commercial cleaning, sanitation and hygiene solutions.



TASKI® Swingo XP
Automatic scrubber-drier floor care system designed to minimize CO_2 impact, allows up to 30% reduction in energy consumption.

How JohnsonDiversey has promised to fight climate change

JohnsonDiversey's Climate Savers commitment is to reduce emissions from its global operations to 8% below 2003 emissions by December 31, 2013.

Working from a baseline of 150,329 tonnes CO_2 in 2003, this will result in an estimated cumulative reduction of 89,000 tonnes by 2013.

Sustainable cleaning

JohnsonDiversey is committed to a cleaner, healthier future. The company's products, systems and expertise focus on making food, drink and facilities safer and more hygienic for consumers and for building occupants. With sales into more than 170 countries, JohnsonDiversey is a leading global provider of commercial cleaning, sanitation and hygiene solutions. The company serves customers in the lodging, food service, retail, health care, and food and beverage sectors.

JohnsonDiversey is one of four separate companies controlled by the Johnson Family of Racine, Wisconsin, USA.

JohnsonDiversey's target to cut emissions and increase energy efficiency is core to its corporate purpose to Protect Lives, Preserve the Earth and Transform its Industry.

Planning for reductions within the company

JohnsonDiversey will reduce its greenhouse gas emissions through an ambitious suite of initiatives:

- Improving the fuel efficiency of the company fleet by switching to vehicles with the best fuel efficiency in their class and targeting vehicles that use alternative energy.

  Much of 2008 was spent analyzing the fuel consumption of the U.S. and Canadian fleet of sales/service vehicles. This effort has resulted in changes to the way the company selects vehicles and in how the company trains employees to operate them. This initiative will cut nearly 1,200 tonnes CO_2 annually and sets the stage for even greater reductions in the future

- Upgrading the energy efficiency of buildings and manufacturing facilities around the world by conducting independent, comprehensive energy audits, and implementing significant improvements. JohnsonDiversey is also developing and implementing a protocol to deliver 50% energy use reductions for all new construction, reconstruction, and newly leased commercial properties

- Developing a five-year cycle awareness program to educate all employees on climate protection and greenhouse gas reduction, with a view to reducing their carbon footprints both on and off the job.

"The Climate Savers commitment is consistent with the company's long heritage of protecting the planet for future generations. This is one of our core values, as it has been since my great, great grandfather founded the first of the Johnson companies 123 years ago. Our objectives have always extended beyond financial growth to include promoting the health and well being of our planet and the people who share it."

S. Curtis Johnson Chairman

- JohnsonDiversey has begun feasibility analyses for major green energy projects at several locations in the U.S. and Europe. If proven to be viable, these projects will generate required power onsite using a combination of solar photovoltaic, solar heat, wind, heat pumps, and combined heat and power
- Developing and implementing a policy to reduce employee emissions from business air travel, and providing alterative tools such as video conferencing.

Goals and aspirations for partners, suppliers and customers

JohnsonDiversey recognizes that its environmental impact is not limited to its own activities, but extends to the activities of its partners, suppliers and customers. The company's commitments and actions set appropriate standards for those with whom it does business, and serve as a model for other companies in the industry. "Our goal is not only to practice sustainability in all we do, but to also help our customers become more sustainable in their operations. Our customers all over the world are asking us to be their partner in developing solutions to reduce their environmental impact, protect human health and safety and improve the economic strength of their enterprises", says JohnsonDiversey President and CEO Ed Lonergan.

JohnsonDiversey's focus is on optimizing third-party transportation, developing innovative products with low CO_2 impact, and partnering with customers and suppliers to reduce their own CO_2 footprints. JohnsonDiversey commits to:

- Develop a database tool to measure the environmental impact of product sourcing decisions, including manufacturing and warehouse locations. The tool will allow users to choose the location of the production site, production volume, and various parameters for transportation including transportation volume, distance and mode
- Integrate greenhouse gas considerations into new product development, and collaborate with customers and suppliers to reduce greenhouse gas footprints
- Share information and forge agreements with vendors to reduce their environmental footprint and to encourage their adoption of greener technologies
- Optimize third-party fleet logistics globally.

Already taking action – and generating buy-in

Although JohnsonDiversey is a relatively new Climate Savers partner, the company has already made significant progress toward its reduction aims.

An energy reporting tool was introduced in 2008 to simplify the process of reporting monthly energy consumption data, reduce data errors, and allow management to view energy consumption and emission data for each site, for each region and globally.

Staff buy-in is a notoriously vital aspect of environmental initiatives; without it, initiatives fail to reach their full potential. At JohnsonDiversey, the high visibility of the energy reporting tool has led to additional support from key management teams in delivering the Climate Savers commitments.

Auditing for success

In 2008, six independent Comprehensive Energy Audits were conducted at the facilities that contributed the largest sources of emissions. The audits identified significant opportunities for energy savings, cost savings and reduced CO_2 emissions. Due to the success of these audits, JohnsonDiversey is extending the program to the next five largest facilities the company operates. These audits are estimated to identify an additional 2,000 to 3,000 metric tonnes CO_2 of projects that can be implemented in late 2009/early 2010.

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World leader in building materials lightens its footprint.

Lafarge is the world leader in building materials.

"Through its partnership with WWF, Lafarge was able to deliver significant reductions of CO_2 emissions while improving its competitive position. As a global leader in the cement industry, we will increase our mitigation efforts with a focus on emerging economies, while defining a new set of reduction targets, once our current commitment expires in 2010."

Bruno Lafont CEO

Lafarge's Climate Savers commitment is to

- Cut absolute CO_2 gross emissions in the Lafarge cement business in industrialized countries by 10% as compared to 1990
- Cut worldwide net CO_2 emissions per tonne of cement by 20% as compared to 1990 (net emissions are the gross emissions less the emissions that come from burning waste).

The Lafarge achievement

By the end of 2007 Lafarge had achieved a reduction of absolute gross emissions in industrialized countries by 4.5%, and by 16.0% with regard to worldwide net CO_2 emissions per tonne of cement.

Lightening the cement footprint

Cement production is estimated to account for about 8% of CO_2 emissions[1] caused by human activities. About half the emissions from cement production come from the process of decarbonating limestone and 40% from associated fuel consumption.

Lafarge operates in one of the most energy- and emissions-intensive of all industrial sectors, where incremental efficiency gains can result in impressive emission reductions.

Lafarge's strategy to reduce its CO_2 emissions focuses today on three main levers:

- Improving energy efficiency by modernizing plants and processes
- Using alternative fuels, particularly biomass and waste
- Using decarbonated additives (slag, fly ash, limestone, pozzolans, etc.) in cement production

A quarter of Lafarge's research and development expenditure is invested in research into new ways of achieving reductions in CO_2 emissions.

Research, development and training

Each Lafarge plant is monitored on its performance on energy consumption, CO_2 emissions, SO_2 emissions, fuel usage (including biomass and waste) and a variety of other environmental variables. Each site is subject to a four yearly environmental audit.

Plant managers have access to the data from all plants, and best practices are gathered. Lafarge runs a variety of training programs and is introducing specific modules on sustainability.

Lafarge include environmental indicators in their R&D programs. The indicators relate to primary energy, resources, air emissions, water emissions and solid waste. Only research on products that have a better or equivalent ecological footprint are pursued.

R+D outcomes include

- Further optimizing processes to reduce heat consumption
- Designing low CO_2 clinker and cements
- Optimizing concrete formulae to improve their benefits to the customer while reducing their CO_2 content
- Studying the behavior and environmental performance of concrete in different modes of construction towards higher energy efficiency in buildings through the entire life cycle.

Photograph **Claude Cietutat** © Lafarge Photo Library

In China, Lafarge achieved a 32% reduction in specific heat consumption (amount of energy per ton of clinker) between 1990 and 2007 by using best available technology, leading to a 20% reduction of specific net CO_2 emissions.

In Brazil, in 2007, the kilns have achieved 26% substitution of fossil origin energy by the use of vegetable biomass – and a total of 42% substitution when waste recovery is included.

Use of more decarbonated additives such as fly ash, a by-product of electricity generation, and blast furnace slag, a by-product of steel manufacturing, in the cement is a way to offer customers a larger range of products satisfying different usage values; it also reduces the amount of clinker needed and hence the energy intensity of the product. In India, Lafarge achieved a 34% CO_2 reduction per tonne of cement in this way between 1990 and 2007.

Lafarge continues to successfully develop less carbon-intensive building materials. Bridge beams made of the new cement composite Ductal for instance have one quarter of the materials, just over a third of the weight and involve just half the carbon emissions of the manufacture of traditional reinforced concrete beams.

Leading the way on Clean Development Mechanism

Lafarge has developed Clean Development Mechanism (CDM) projects in line with the framework laid down by the Kyoto Protocol. Already three CDM projects have been registered in Malaysia, India and Morocco.

In 2006 they established a CDM project in Malaysia, the first of its kind to be registered by the cement industry. It works by substituting imported coal with palm kernel shells, a local biomass alternative. Palm kernel shells now account for over 5% of the energy used in the heating process of the plant's kilns during the production of cement. By substituting palm kernel shells for coal, Lafarge is able to reduce CO_2 emissions by more than 60,000 tonnes a year.

India also has one of Lafarge's Clean Development Mechanism projects. Registered in 2007, it involves the Arasmeta plant replacing clinker with fly ash, thus enabling a 70,000 tonnes per annum saving of CO_2.

[1] Netherlands Environmental Assessment Agency MNP, using BP energy data. (BP, 2007). Global CO_2 emissions retrieved from the MNP website at: http://www.mnp.nl/mnc/c-0533-001g-mnc-02-nl-xls.html and http://www.mnp.nl/en/dossiers/Climatechange/moreinfo/Chinanowno1inCO2emissionsUSAinsecondposition.html

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NOKIA

Leading the mobile phone industry into the next generation.

Nokia is the world leader in mobility.

"As the world's largest mobile company we have a responsibility to look at how we can play our part in tackling climate change. This is not about grand gestures but everyday things that when multiplied by the scale of our operations, or the one billion people using Nokia devices globally, can have a major impact. It also makes good business sense, helping us find new ways to be more efficient and innovative."

Kirsi Sormunen Vice-President of Environmental Affairs at Nokia

How Nokia has promised to fight climate change

In the context of products and solutions, Nokia's Climate Savers commitment is to:

- Reduce the average charger's no-load power consumption from 2006 level by 50% by the end of 2010
- Continue to investigate how renewable energy technologies, such as solar panels and kinetic energy, can be applied to mobile phones.

And in the context of offices, sites and green energy, Nokia has committed to:

- Create 6% of new energy savings in facility technical systems (cooling, heating, air conditioning, lighting...) between 2007 and 2012 compared to the baseline year 2006, in addition to the savings of 3.5% achieved already in 2003 – 2006.
- In 2009 – 2010, start spreading out green electricity purchases to those countries where Nokia operates and where buying green electricity makes the greatest impact on CO_2 savings. This will depend on how carbon intensive the local power generation industry is and where green electricity purchases are available.
- Reduce CO_2 emissions through these measures by a minimum of 10% in 2009 and by a minimum of 18% in 2010, compared to the base year 2006.

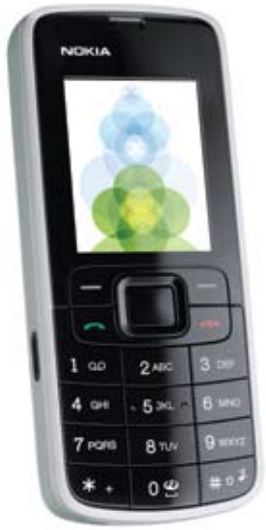
The Nokia achievement

Nokia is consistently achieving results on several aspects of energy efficiency and the reduction of greenhouse gas emissions. Between 2003 and 2006, energy saving projects in Nokia facilities in Europe, the Americas and China led globally to overall 3.5% energy savings.

In 2007, Nokia

- Introduced a charger which uses just 0.03W power if it is still mains-connected when the phone is fully charged
- Became the first mobile phone manufacturer to introduce alerts telling users when their phone batteries are fully charged so they should unplug the charger
- Piloted the use of bioplastics in phone covers instead of conventional plastics, saving energy and greenhouse gas emissions during manufacturing
- Bought about 24% of their electricity from renewable sources.

And between February 2006 and the end of 2008, Nokia made further progress in deploying more ecological packaging, reducing paper-based material use by 100 ktons, halving the number of truck journeys from 24,000 to 12,000, and generating savings of 474 Million Euros.



Planning for further reductions

There is no doubt that ICT can play a significant part in reducing people's and industries' environmental impact. Downloading music to a phone, for example, instead of buying CDs which need to be manufactured, packed, transported, stored etc., saves energy and materials – and teleconferencing instead of travelling clearly reduces emissions.

The world of mobile communication never stands still – and neither does Nokia. As well as playing a leading part in this ICT revolution, Nokia continues to evolve its commitments to addressing climate change. Plans for the immediate future include:

- Ensuring that all key suppliers set ambitious energy efficiency and CO_2 reduction targets
- Reducing work-related travel and commuting by increasing remote working, and reducing office space to gain savings in energy consumption and CO_2 emissions
- Offering to offset employees' air travel CO_2
- Utilising energy saving technologies in offices and in office equipment and hardware (PCs etc.)
- Providing solutions and influencing policy makers to take the possibilities of using ICT to reduce energy consumption into consideration when discussing climate change policies

  Nokia works to influence policy through such associations and initiatives as the World Business Council for Sustainable Development, the International Chamber of Commerce, the Global e-Sustainability Initiative and the Cellular Telecommunications Industry Association.

Unplugged!

The energy and emissions associated with the production of ICT equipment are usually dwarfed by the energy and emissions associated with their use.

Applying the tools of life cycle analysis to mobile phones, Nokia found that up to 60% of the lifetime energy consumption of a mobile phone came in the form of wasted energy from phone chargers being left plugged in when they were not in use – or when the phone was fully charged.

Tackling the largest single source of emissions associated with Nokia and its products therefore required a dual strategy of reducing the no-load consumption of mobile phone chargers and persuading consumers to unplug.

'Fully charged' alerts are helping tackle the consumer side of this picture, and serious progress is also being made on the technical front. The company is confident of meeting that target, not least because they have already produced and marketed chargers with a no-load demand of just 0.03W.

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Nokia Siemens Networks

Carbon cuts through enhanced technology.

Nokia Siemens Networks is one of the world's largest telecommunications infrastructure companies.

"We are 60,000 people who connect billions of others around the world. We know we can – and must – make a difference. Our partnership with WWF Climate Savers is a powerful and effective way to help us make that difference."

Simon Beresford-Wylie CEO

How Nokia Siemens Networks has promised to fight climate change

Nokia Siemens Networks' Climate Savers commitment is to:

- Improve the energy efficiency of their GSM/EDGE and WCDMA/HSPA base station products by up to 40% by 2012
- Decrease the energy consumption of their buildings by 6% by 2012
- Increase the use of renewable energy in company operations to 50% by the end of 2010.

The baseline for each of these commitments is 2007, and on completion, the actions will decrease the company's CO_2 footprint by approximately 2 million tons annually, compared to 2007.

Energy efficiency: combining environmental and business benefits

Energy efficiency is the most important factor for Nokia Siemens Networks, as around 80-90% of a mobile operators' energy is used by the network. And even more crucially, energy-efficient base stations are important because base station sites account for 80-90% of the total energy consumption of mobile networks.

Nokia Siemens Networks' energy efficiency solution offers four main ways to reduce energy consumption of base station sites:

- The most energy efficient products: Nokia Siemens Networks Flexi Base Station provides up to 70% savings on energy. The superior energy efficiency is further improved by the recently launched (Feb 2009) Flexi Multiradio. This new base station has the lowest energy consumption in the whole market, consuming as little as 790W, while running both GSM/EDGE and WCDMA/HSPA BTS at same time. Nokia Siemens Networks Flexi Base Station was also recognized as the world's most progressive mobile network technology at the annual GSMA Global Mobile Awards 2009.

  Due to its small size, the Flexi Base Station is also the best-in-class in material consumption – and is easy to implement: modules can be hand-carried as opposed to being moved by heavy equipment. Over 90% of the materials the Nokia Siemens Networks base stations are made of can be recycled

- Minimizing the number of base station sites: building a network with a minimum number of sites is an effective way to be energy efficient. The use of innovative products such as the Flexi Base Station concept means new types of sites can be created in previously non-viable locations. Small equipment has less visual impact on the environment, and needs less transport for delivery and less machinery for installation

- Minimizing air-conditioning: in the traditional base station site concept, the equipment is located in an indoor site with air conditioning to control the typically allowed temperature of 25˚C. This increases significantly the total site energy consumption. By allowing the ambient temperature to reach 40˚C, Nokia Siemens Networks Flexi Base Station generates savings of up to 30%. This is achieved by replacing air-conditioning units by fresh air cooling – a natural feature when the unit is located outside
- Deploying software features to optimize the use of carriers: software can provide creative and effective ways to improve the energy efficiency of base stations. During low traffic periods, a major part of base station capacity is unused for many hours, so it can be set to power save mode, which shuts down part of the base station network to save energy. In extreme cases, a complete capacity base station may be shut down during low traffic.

  By reducing the overall energy consumption of base stations it becomes more viable to consider renewable energy solutions such as solar or wind power. Payback times for higher initial investment have already come down in the past few years and can be around three years today.

Compact Nokia Siemens Networks Flexi Base Station provides up to 70% savings on energy.

Positive action inside the company

The percentage of renewable energy used in Nokia Siemens Networks buildings doubled from 9% to 18% during 2008. During 2009, Nokia Siemens Networks plans to further increase the use of renewable energy from 18% to 25%. The target is to increase the use of renewable energy in company operations to 50% by the end of 2010.

Nokia Siemens Networks aims to improve the energy efficiency of its buildings by 2% in 2009. The company target is to decrease the energy consumption of its buildings by 6% by 2012 through the Global Energy saving program for offices, R&D and factory buildings, with the focus on technical systems (ventilation, cooling, heating, lighting etc.); the baseline is 2007.

Nokia Siemens Networks has what it calls ‘the greenest car policy in Finland’, which encourages employees to choose cars with lower emissions: the policy includes monetary incentives that encourage employees to choose more environmentally friendly vehicles. The maximum emission limit is 240g/km, and below emissions of 170g/km the company portion of the leasing fee starts increasing. For example, when an employee chooses a car with very low emissions (130g/km or below) the company share of the leasing fee doubles. The company service fleet is part of the green car policy: the target is to reduce the CO_2 emission level of new cars in the service fleet to 120g/km in 2010.

Nokia Siemens Networks is aware that most employee travel – and the emissions associated with it – relates to work, in terms of commuting or business travel. Thus the company is also focusing on reducing air miles, through encouraging virtual collaboration (teleconferencing, videoconferencing, etc).

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novo nordisk®

Changing diabetes, demonstrating green growth.

Novo Nordisk is a healthcare company and a world leader in diabetes care.

"Through Novo Nordisk's commitment to the Triple Bottom Line we are determined to minimize the impact of our activities on the global, regional and local environment. The partnership with WWF plays a significant part in helping us achieve this."

Lise Kingo
Executive vice president and chief of staffs

How Novo Nordisk has promised to fight climate change

The Climate Savers commitment of Novo Nordisk, world leader in diabetes care, is to an absolute reduction in CO_2 emissions of 10% by 2014 compared to 2004.

The company has also committed to a reduction of 50,000 tons per year in 2010 compared to the business as usual scenario for 2010.

The Novo Nordisk achievement

From 2007 to 2008 Novo Nordisk's CO_2 emissions fell for the first time, from 236,000 to 215,000 tons – a reduction of 9% in absolute figures. The decrease in CO_2 was primarily due to decreased emissions from the production site in Kalundborg in Denmark as a result of changes in production, process optimization and energy-saving projects. Novo Nordisk's annual CO_2 emissions are now only 2% above the baseline year (2004), and Novo Nordisk is confident that the ambitious 10% absolute reduction target will be met in 2014.

In 2007, 50 energy projects were implemented, and in 2008, 112. These projects reflect the positive business case for CO_2 reduction: more than half of them have a payback period of less than 1 year.

Ambition and transparency

Novo Nordisk's commitment to reducing CO_2 emissions by 10% below 2004 levels by 2014 is ambitious – in the absence of emission reduction programs, emissions would increase by approximately 65% during this period, driven by the increasing need for insulin driven by the diabetes pandemic.

The reductions are being achieved through a mix of energy efficiency and renewable energy projects carried out at Novo Nordisk operations globally.

Novo Nordisk are implementing specific energy efficiency measures – through application of best practice technologies in both new and existing plants – which will deliver cuts of at least 30,000 tons CO_2 annually (roughly 20% of the total amount of CO_2 emission reductions per year for the current base year data).

Transparency is important, and Novo Nordisk therefore includes the performance on reducing energy consumption and CO_2 emissions in Novo Nordisk's *Annual Report*.

Investing energy efficiency savings in green energy

In May 2007, Novo Nordisk entered into a pioneering partnership with Denmark's largest energy company, DONG Energy, with the objective of securing 100% delivery of green electricity for Novo Nordisk in Denmark by 2014.

Under the partnership, DONG Energy assists Novo Nordisk in identifying energy-saving options and in return Novo Nordisk commits to earmark the financial saving from these projects for purchasing green electricity.

With this agreement Novo Nordisk has devised a cost-neutral way to achieve significant reductions in CO_2 emissions – and at the same time help grow the market for renewable energy in Denmark.

The energy is supplied from a new offshore wind farm – Horns Rev II – which will be in operation in 2009. The partnership will deliver an expected reduction of 80 –100,000 tons CO_2. It is expected that the first green electricity will be delivered in 2009.

Energy management is now introduced at all Novo Nordisk production sites worldwide as part of the ISO 14001 environmental management system, and the energy saving program is paying off. Energy saving projects implemented since 2005 have resulted in reductions of an estimated 20,000 tons of CO_2. The target for 2014 is a reduction of 30,000 tons CO_2 through energy saving projects.

Novo Nordisk continues to investigate new opportunities for improved efficiency and renewable energy across its operations. For example, the Brazilian production facility in Montes Claros is now using biomass instead of fuel oil for steam production. Compared to the business as usual scenario from 2005, this will give 16,000 tons of CO_2 emission reductions in 2014.

Novo Nordisk has also built significant energy and water efficiencies into the new production facility currently under construction in Tianjin, China. This facility is expected to open in 2012 and as a result of eco-efficient design will need less energy than similar production facilities elsewhere.

Novo Nordisk produces pharmaceutical products and devices for the treatment of diabetes, hemophilia and growth and hormone disorders.

Innovation, cost savings – and speaking out

New Novo Nordisk facilities start considering their environmental impacts in the planning stage, which leads to substantially greater energy efficiency gains. For example, integration of environmental design at the purification plant for insulin production in Kalundborg, Denmark is estimated to have reduced electricity consumption by 8%, produced buildings that are nearly self-sufficient in area heating requirements, reduced steam consumption by 21% and reduced CO_2 emissions by 23%.

The total financial savings resulting from timely environmental interventions during the design phase of the purification plant is estimated to be 400,000 Danish Crowns annually. Due to these interventions, savings in investment costs associated with clean steam have totalled approximately 536,000 Danish Crowns (approx. 70,000 Euros).

Novo Nordisk's experience is that implementing energy savings up front generates wins – but does also require challenging new thinking in terms of both organization and consultants. It require a move away from "business as usual" and the narrow-minded focus on simple investment towards a holistic approach which also take operational and maintenance costs into consideration when analyzing the business case.

Novo Nordisk speaks out about and shares its success in emission reduction. Novo Nordisk is a member of the Copenhagen Climate Council (www.copenhagenclimatecouncil.com) and main sponsor of the May 2009 World Business Summit on Climate Change in Copenhagen. Novo Nordisk participated in the COP14 in Poznan and signed the Poznan Communiqué of the Corporate Leaders Group; the company also signed the Bali Communiqué in 2007.

In 2008, an internal climate action campaign was launched under Novo Nordisk's corporate volunteering program – TakeA**c**ti**o$_2$**n! The campaign communicates energy saving advice to employees and encourages employees in office departments and sales affiliates to engage in energy saving projects.

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TRANSPORT! COMMUNICATION SAGAWA

Major delivery company accelerates emission reductions.

Sagawa Express is involved in the transportation business, providing delivery-related services.

How Sagawa Express has promised to fight climate change

Sagawa's Climate Savers commitment is to reduce the company's gross CO_2 emissions by 6% by 2012, compared to fiscal year 2002.

The Sagawa Express achievement

Sagawa Express is making determined progress towards the target, though business growth makes this increasingly challenging.

In fiscal years 2006 and 2007, Sagawa merged with subcontractors in the transport and courier sectors in order to further improve the efficiency of its total distribution system. As a result, the total emissions increased by 8.9%.

However, this merger was not anticipated in 2002, and the emissions within the scope of the 2002 baseline have actually been reduced by 4.3%, due to a range of positive efforts by the company.

As a leader in the field, Sagawa Express has also been invited to advise the Japanese government on climate policy in the transportation sector.

Fuelling change in the vehicle fleet

Sagawa Express is a major delivery and logistics company based in Japan, with extensive and expanding operations throughout East Asia. In 2003, Sagawa became the first company to join Climate Savers from the transport sector, pledging to reduce CO_2 emissions by 6% below the fiscal 2002 levels by 2012.

A crucial part of Sagawa's strategy is the introduction of 7,000 natural gas fuelled trucks to its fleet. By January 2009, Sagawa had already introduced 4,211 natural gas fuelled vehicles. This represents about 24% of the operational natural gas fuelled trucks in Japan.

Sagawa are also setting up their own natural gas filling stations, and increased the number from 7 to 23 in 2008 alone.

Sagawa's thoughtful drivers

Sagawa's Eco-safe driving programs are reducing emissions, promoting safety and reducing company costs from fuel use, maintenance and road incidents. A list of the most important habits, including gently depressing the accelerator and early upshifting, refraining from idling when stopped, and avoiding sudden braking, is distributed to employees. They are trained and instructed to comply with it.

Getting drivers to stop idling and instead turn their vehicles off when delivering packages has resulted in the saving of 10 million liters of fuel every year, enough to fill 560 tanker lorries. This saves Sagawa approximately $8.2 million (about 1 billion yen) each year in reduced fuel costs at a time when oil prices have been on the rise.

Taking cargo off the road

Sagawa makes use of railways and marine transport as much as possible and promotes the reduction of truck transport. This reduces environmental load, as well as lowering the risk of traffic accidents and reducing the difficulty of long distance drives.

Super Rail Cargo is a creative initiative that originated in a demonstration experiment conducted by the Ministry of Land, Infrastructure, Transport and Tourism. Sagawa Express developed the freight car in cooperation with JR Freight and charters all the trains to transport courier parcels. The 16 car train, carrying 28 31-ft containers, runs between Tokyo and Osaka in 6 hours and make a round trip everyday. Its load capacity is equal to 56 10-tonne trucks in one round trip.

"The addressing of environmental concerns represents an issue that affects all of humankind. In order to prevent the air pollution attributed to exhaust gases – and global warming – we seek to promote greater transport efficiencies, the adoption of low-emission vehicles, and the practice of eco-safe driving. And we seek continuous improvement in our efforts to conserve the environment."

SG Holdings Group
Sustainability Report 2006

Service centers avoid the proliferation of vehicles and emissions

The hand cart has made a comeback at Sagawa service centers, which are located mainly in large urban areas where parking is at a premium. The company found that deliveries and collections carried out by this person-powered form of transport were more efficient than using delivery vehicles, which were often using fuel to no productive purpose while caught in traffic jams or searching for parking places.

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SOFIDEL

First Italian Climate Savers partner aims to make the tissue business sustainable.

Sofidel is a multinational paper company which provides a complete portfolio of tissue products.

How Sofidel has promised to fight climate change

The largest part – nearly 80% – of Sofidel's carbon footprint is generated by the company's emissions from their own plants and from purchased energy consumption (Scope 1 and Scope 2).

Sofidel's Climate Savers commitment to reduce its footprint is to cut CO_2 emissions by at least 11% by 2012, compared to 2007.

Sofidel has also committed to reduce its indirect emissions – those associated with the production of raw materials and the shipping of finished products and raw materials. The Sofidel Group has set a series of general targets, which should be reached by 2009:

- Improvement in indirect (Scope 3) emissions, according to the Greenhouse Gas Protocol
- Generation of a formal and explicit data collection process for suppliers
- Reaching an agreement with WWF on a significant reduction of indirect emissions.

From sourcing green fiber to saving the climate

With paper production and converting facilities in Italy, France, Spain, Germany, Poland, UK and Turkey, Sofidel Group is the most important Italian tissue company and one of the most significant in Europe, producing 683,000 tons annually for the European market and employing over 3,100 staff.

Although Sofidel is a new Climate Savers partner (as of December 2008), the relationship with WWF goes back further. In 2007, WWF Italy and Sofidel signed a partnership aimed at enhancing energy efficiency and improving the responsible sourcing of wood fiber. As the Sofidel website notes, Sofidel recognizes the critical role of forests in protecting global and local environments. Sofidel has attained Forest Stewardship Council certification for several of its operations.

Because of this work together, WWF Italy proposed Sofidel as the first Climate Savers partner in Italy.

Cutting the carbon in tissue production

A significant improvement in energy efficiency in the production of tissue paper can be achieved by reducing the heat demand of paper mills. This can be achieved through steps such as heat recovery, where the recovered steam is used to dry the paper; and increasing the heat extraction rate at heat exchangers.

The electricity demand can be also reduced through an overall improvement in the efficiency of the machinery, for example by using variable speed pumps, downsizing oversized equipment, using high quality lighting systems and introducing information technology control systems.

Investing in renewable energy

Sofidel is investigating the feasibility of photovoltaic, small hydro and wind power projects, and in the future the company plans also to look at waste biomass combustion and biogas from waste sludge.

To date 4 million Euros has been invested for the first two plants in Italy – both are at Lucca, in Tuscany: a 500 kWp photovoltaic plant which has been fully operational since the end of 2008, and a small hydropower plant which will be operative in late summer 2009 and which will produce 800,000 KWh per year.

Growing CHP plants across the enterprise

Sofidel installations that use CHP (combined heat and power) often generate relatively lower emissions, as they use less primary energy. Sofidel is considering the introduction of CHP plants in all countries where this would reduce greenhouse gas emissions: Germany, Italy and Poland.

A new CHP plant, has been operational since June 2007 in Italy, at Imbalpaper Spa, one of the Sofidel group companies. This natural gas fuelled plant is responsible for the reduction of 4,000 tonnes of CO_2 in 2008 compared with 2007.

Sofidel is also considering running some CHP plants on liquid biomass (sustainable vegetable oil); this results in a considerable extra decrease of emissions. The feasibility of this initiative is being evaluated considering – as well as the financial aspects – the environmental and social sustainability of biofuel supply. These include the need to avoid plantations replacing forests with high conservation value, the protection of local indigenous communities and respect for regulatory frameworks.

"This partnership between the Sofidel Group and WWF reflects the company's social responsibility and supports our long-term commitment to sustainable development. Concern for the environment is part of our business culture and we recognize the importance of applying good management policies to environmental issues."

Luigi Lazzareschi President, Sofidel Group

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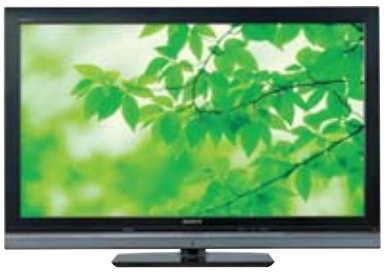
SONY

Leading the world in consumer electronics – and in cutting CO_2 emissions.

Sony Corporation is a leading manufacturer of audio, video, game, communications, key device and information technology products for the consumer and professional markets. With its music, pictures, computer entertainment and on-line businesses, Sony is uniquely positioned to be the leading electronics and entertainment company in the world.



BRAVIA™ V5
Employs the world's first micro-tubular HCFL backlight, which cuts power consumption by 40%. The BRAVIA™ V5's Presence Sensor switches off the set when it is not being watched.

How Sony has promised to fight climate change

Sony's Climate Savers commitment is to achieve a 7% reduction in the absolute amount of greenhouse gases emitted by all of Sony's sites – and all those of its subsidiaries worldwide – by the fiscal year 2010, compared to its fiscal 2000 emissions.

Sony will work to realize this goal through a variety of means, such as increasing energy efficiency at all relevant sites, changing from fossil fuels to renewable energy sources, and shifting over to the use of natural gas.

Sony will also reduce the energy consumption of its products. In fiscal 2005, emissions from product use were calculated to be about five times the total Sony Group emissions for the year.

And together with WWF, the company will also engage in a wide-ranging program of communication addressing issues of global warming.

The Sony achievement

Sony is making excellent progress towards the company's Climate Savers targets. In fiscal year 2007, Sony's greenhouse gas emissions totaled approximately 2,070,000 tons, which represented a 6.6% reduction compared to fiscal 2000.

Leading edge approaches to energy efficiency

Improving site energy efficiency is critical to achieving Sony's emission reduction targets. The Sony Group is constantly introducing and optimizing energy-saving systems and considering fuel shifts.

Sony Semiconductor Kyushu Corporation's Kumamoto Technology Center which, as a producer of semiconductors, consumes the highest level of energy of all Sony sites, has introduced a highly efficient heating and cooling system. This has contributed to an 83% reduction in CO_2 emissions compared with a conventional fuel-powered heating system.

Sony is rolling out innovative energy saving activities, implemented in Japan, to overseas sites on the environmental front. For example, Sony Electronics (Wuxi) Co., Ltd in China installed two cutting-edge energy-saving chillers from Japan. By introducing this new type of chiller, the manufacturing site expects to save approximately 5 million kilowatt hours of power annually. This equates to a reduction of approximately 3,750 tons of CO_2 and represents a 6% reduction in the site's total emissions.

New Tokyo HQ building cuts emissions by 48%

Sony's new headquarters building in Tokyo, designed with energy efficiency and reduced emissions in mind, is producing a 48% reduction in CO_2 emissions compared to conventional buildings through such initiatives as a lighting system that adjusts automatically in accordance with the amount of natural light available, an air conditioning system that automatically adjusts the intake quantity of fresh air, and high-efficiency heating and cooling. The building also uses exhaust heat from an adjacent water reclamation center as an energy source.

"We have always recognized that we have an obligation to act responsibly in all of our business activities to help minimize our environmental impact, and at the same time utilize our unique talents to help solve environmental problems together with our peers and our partners. Collaboration and innovation are two concepts Sony has championed throughout its history. Those same concepts are at the heart of the Climate Savers program."

Sir Howard Stringer
Chairman and CEO of the Sony Corporation

Promoting renewable energy sources – and involving Sony staff

Promotion of renewable energy sources plays a key role in Sony's efforts to reduce greenhouse gas emissions. Renewable energy can be traded via verified certification, and the Green Power Certification trading scheme has been developed by Sony and an electricity company to help promote the use of renewable energy in Japan. In October 2007, Sony signed Japan's largest Green Power Certification contract to purchase 16 million kilowatt hours of electricity generated by wood biomass (in Akita Prefecture), and in July 2008, 18 million kilowatt hours of electricity generated by the Biomass Energy Center (in Hokkaido).

As of July 2008, the Sony Group in Japan purchases a total of 55.45 million kilowatt hours of electricity annually under the Green Power Certification System. This accounts for about 2.5% of the total amount of electricity consumed by Sony in Japan.

Sony is introducing an employee education scheme to facilitate the energy conservation that people can achieve in their daily work. Together with a data collecting system that enables the company to monitor how much CO_2 emissions are reduced by these efforts, Sony is promoting energy efficiency and environmental communication within the workplace.

Leading developments in product efficiency

In January 2009, Sony launched a new line of the BRAVIA™, LCD TV, a highly energy-efficient HD television.

The new BRAVIA™ V5 for Japan achieves a reduction in power consumption of 40% compared to its predecessor. Key to its energy-saving performance is a new micro-tubular Hot Cathode Fluorescent Lamp (HCFL) backlight that boosts efficiency without compromising picture quality. It also has other new energy-saving features such as a 'Presence Sensor' which activates the energy saving mode when no movement is detected in the room, and an 'Energy Saving Switch' which enables the user to turn the TV off completely without unplugging the TV when it's not in use.

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A journey to sustainability in one of the toughest places on the planet.

Spitsbergen Travel is the largest and oldest travel and tour operator in Svalbard, Norway.

How Spitsbergen Travel has promised to fight climate change

Spitsbergen Travel's Climate Savers commitment is to reduce their Scope 1 (the company's direct emissions) and Scope 2 (energy that is purchased from off-site) CO_2 emissions 7% below their 2005 emissions by the year 2013.

Spitsbergen Travel have also committed to offset all remaining emissions in Scope 1, 2 and 3 by the end of 2010 with Gold Standard certified carbon credits. WWF will assist Spitsbergen Travel to secure a sufficient supply of these credits.

Spitsbergen Travel's Scope 3 emissions (indirect emissions from activities that are relevant to the company, but not within its direct control) include ship cruises with vessels that are not owned by Spitsbergen Travel, the transport of food and goods consumed in the hotels and restaurants, and the travel of tour guests from their homes to the airport in Longyearbyen.

The Spitsbergen achievement

The island of Svalbard is one of the most northerly settled locations on Earth, and it is here that Spitsbergen Travel, a major Arctic tourism operator, is based. To become carbon neutral in such an extreme and remote location is a challenge indeed, but Spitsbergen Travel are making progress.

Although CO_2 emissions have grown over recent years (as a result of increasing levels of tourism) the company has initiated a range of activities that are helping progress towards the target.

Ideas that work in the Far North

In cooperation with WWF, Spitsbergen Travel have already started to plan and implement measures to become carbon neutral:

- Snowmobiles are vital for travel in this cold landscape – Spitsbergen Travel are phasing out 2-stroke engined snowmobiles for more efficient 4-stroke models per year – they have already phased out 47 2-stroke engine snowmobiles. Despite the higher maintenance and service costs this will lead to a reduction in petrol usage of approximately 30%. By the end of 2013, 100% of all snowmobiles should be equipped with the best available environmentally friendly engine technology
- Two hotels are going through the process required to achieve the "Nordic Swan" brand (a Scandinavian eco-labeling benchmark). By the end of 2010, Spitsbergen Travel intends to implement Nordic Swan standards at the Radisson SAS Polar Hotel Spitsbergen and the Spitsbergen Hotel

"The Arctic is the planet's early warning system for climate change. As a tour operator in this environment we have a special responsibility to reduce our climate impact. The partnership with WWF's Climate Savers program has supported us to develop an ambitious CO_2 reduction strategy and to convince others to support us in our efforts."

Trygve Steen MD

- An electrical heating system in bathrooms at the Radisson SAS Polar Hotel Spitsbergen has been replaced by a hot water system, using district heat
- The ventilation system at Radisson SAS Polar Hotel Spitsbergen has been transformed from a ventilation-only system to a more advanced control system, utilizing air both from inside and outside the building
- From 2007 to 2008 the company's 3 hotels have reduced their energy consumption by 14%, without any significant investments being made, through such practical initiatives as reducing the temperature and ventilation systems when there are few guests; generally reducing the ventilation speed; and using the ventilation systems more effectively (by using reduced power during the night and from 10am to 2pm). The goal is to continue to reduce energy consumption by making the necessary investments
- Since 2005/06 the doors of the snowmobile maintenance workshop have been opened only twice a day. This has cut heat losses significantly, leading to a fuel reduction of 10.000 liters (= 27 tonnes CO_2) per year
- In May 2008, the snowmobile maintenance workshop and tour production department was connected to the district heating grid and the existing oil-heating plant replaced. This reduced the consumption of oil by about 40.000-50.000 liters per year
- Less energy intensive travel products, such as dog sledding, trekking, skiing and kayaking, are being offered.

Going beyond the Climate Savers target – the need for offsets

An outstanding feature of Spitsbergen Travel's Climate Savers commitment, and an additional target to the principal one of '7% below 2005', is the company's willingness to take responsibility for offsetting emissions beyond its direct control – Scope 2 and 3 emissions.

Guests are to be offered the choice of offsetting their travel, and the company is to offset all remaining direct (Scope 1) and Scope 2 emissions by the end of 2009 – and all remaining emissions, including attributed air and other travel Scope 3 emissions – by the end of 2010. It is anticipated that efficiency improvements in other areas will begin significantly reducing the offset requirements post 2012. WWF is to assist Spitsbergen Travel to locate suitable offsets that meet Gold Standard certification.

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Tetra Pak
protects what's good™

Cutting the impact of food processing and packaging.

Tetra Pak is the world's leading food processing and packaging solutions company.

"Tetra Pak believes in responsible industry leadership. Setting ambitious CO_2 reduction targets, working with our suppliers to reduce climate impact and partnering with WWF Climate Savers are evidence of our leadership ambitions."

Dennis Jönsson CEO

How Tetra Pak has promised to fight climate change

Tetra Pak's Climate Savers commitment is to reduce its absolute CO_2 emissions to 10% below 2005 levels by 2010, through improved energy efficiency and an increase in the proportion of renewable energy.

The Tetra Pak achievement

- Since 2005, when the Climate Savers goal was set, Tetra Pak has made exceptional progress. In the first year (2006) as a Climate Savers partner, emissions fell 4%, while the production of packaging material grew by 5%.
- By 2008 Tetra Pak had achieved a 12% reduction compared to 2005 (from 397 Ktons CO_2e [CO_2 equivalent] in 2005 to 349 Ktons CO_2e in 2008). Tetra Pak took the opportunity of the green electricity market becoming more favorable, and expanded the use of renewable electricity earlier than anticipated.
- In 2009 Tetra Pak reported that: 'Energy use in 2008 was at a similar level as in 2002, despite an increase in packaging production of 32% over the same period'.
- The improved energy efficiency achieved per produced standard package (common indicator) was 25% in 2008, as compared to 2002.
- Even before setting its Climate Savers goal Tetra Pak had achieved a 10% energy efficiency improvement between 2002 and 2005.

Energy: producing more and using less

With the objective of highlighting the importance of energy efficiency, Tetra Pak has shifted focus from energy cost to energy efficiency by introducing a new Energy Measurement approach for its packaging material plants.

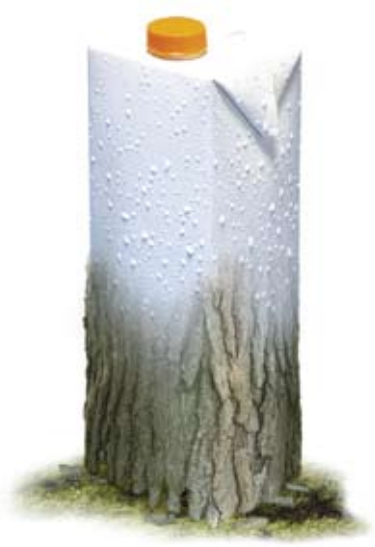
Energy audits are being performed to map the opportunities of reducing the energy use in Tetra Pak factories worldwide. By 2008 approximately 50% of all packaging material factories had been audited. A recent audit in Brazil (2008) indicated an 8% energy savings potential.

In planning a new factory the alternatives of electricity supply are assessed. For example, in preparation for the construction of a new factory near Lahore (Pakistan) Tetra Pak hired a specialist consultant to assess all potential sources of electricity that could either be generated or purchased based on carbon footprint. The options of wind and solar power were evaluated as well as the reliability of the grid and different forms of self generation of power. Based on the assessment a combination of sources will be utilized when the plant opens in 2010.

Extending good practice to the customer

Tetra Pak provides processing and packaging solutions for the food and beverage manufacturing industry. Energy efficiency is a key issue for Tetra Pak's customers, along with the management of raw materials and water.

These factors are of high priority in Tetra Pak's development and design of everything from single components to complete plants. For example, the company's new aseptic dairy solutions are setting new performance standards through decreasing steam, water and electricity consumption by 75% in stand-by mode. Such improvements will not only reduce the overall carbon and water footprint in the food supply chain, but also reduce operational costs and support long-term business sustainability.



Increasing the share of renewable energy

In 2009, Tetra Pak will open a new factory in Hohhot, China. The company has signed a letter of intent with the Development & Reform Committee (DRC) of the Inner Mongolia Autonomous Region to purchase 100% renewable electricity. This has been welcomed by the local authorities, who say: "We applaud Tetra Pak's commitment to the environment, and we hope that more companies will follow Tetra Pak's example so we can ultimately build a more environmentally sustainable society. The agreement marks an important milestone in both applying green energy and jointly promoting its many advantages in the region".

Since 2006 Tetra Pak factories in Moerdijk (the Netherlands), Limburg (Germany) and Aarhus (Denmark) have been using renewable power. As of 2007 the factories in Leeuwarden (the Netherlands) and Dijon (France) have been purchasing Renewable Energy Certificates (RECs), followed by the factories in Rubiera (Italy) and Arganda (Spain) in 2008. The factory in Berlin (Germany) also started buying renewable electricity in 2008.

In addition to Tetra Pak's factories, several other sites and offices around the world have initiated activities to reduce their own carbon footprint:

- Solar panels are used to heat water and to generate electricity in Modena (Italy), and at Monte Mor and Ponta Grossa (Brazil)
- Market company offices that are either buying renewable energy or RECs include Paris (France), Shanghai (China), Tokyo (Japan) and Stockholm (Sweden)
- In Wrexham (UK) some of the emissions related to the production of packaging material are offset from a wind farm project in Maharashtra (India).

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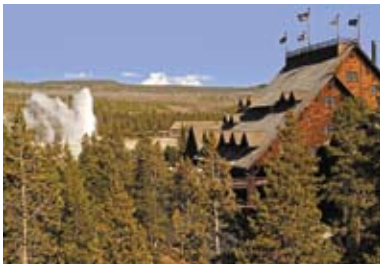
A new feature in US National and State Parks – CO_2 savings.

Xanterra is the largest park concessionaire in the United States, operating facilities such as hotels, restaurants, retail stores, marinas and transportation systems.



Old Faithful Inn
Yellowstone National Park, Wyoming, USA.

How Xanterra has promised to fight climate change

Xanterra's commitment with WWF is to reduce CO_2 emissions 10% below its 2000 emissions by the year 2015.

Xanterra's specific targets for reducing its emissions are calculated on a per property basis. Actions range from implementing sophisticated renewable energy generation systems and energy management controls to seasonally shutting down systems and educating employees on energy conservation. In addition, there are literally hundreds of minor measures being employed to save energy at varying locations across the country.

Other specific targets include:

- Increasing the amount of renewable energy purchases in Xanterra's power portfolio to at least 3% of its total purchases by the year 2015
- Retrofitting more than 25,000 inefficient incandescent lamps with efficient compact fluorescent or alternative lamps
- Installing energy management controls in appropriate areas.

The Xanterra achievement

Xanterra has made impressive progress on these commitments. Total company wide greenhouse gas emissions declined significantly from 2000 – 2007 while visitor numbers remained somewhat flat. Total CO_2 emissions have been reduced by 13.3% (16.6% normalized for revenue) over that period.

This reduction, possibly the company's most significant environmental achievement, can be attributed to a combination of on-site renewable energy generation systems (primarily solar PV), wind power purchases, fuel switching (from heating fuel oil to propane), extensive lighting retrofits (between 2000 and 2008 more than 57,000 lighting retrofits were carried out) and strategic conservation programs (especially targeted area shutdowns, more energy control systems in rooms and facilities, and efficiency upgrades).

Regarding renewables, Xanterra used 6,945,723 kWh per year in renewable wind, solar, or geothermal energy in 2007 (although Xanterra uses a large amount of hydroelectric power, which is not included in these figures). This represents 16.5% of all national park electricity usage and 11.5% of all Xanterra operations' electricity usage.

Xanterra has now exceeded its ten-year Climate Savers greenhouse gas emission-reduction goal of 10%, and is well on its way to reaching its 2015 Environmental Vision goal of a 30% reduction.

"Xanterra offers hospitality in the great National and State Parks of the US. The natural wilderness and beauty of these places makes them unique and precious environments – so it is wholly appropriate for Xanterra to be committed to the protection of our global environment. Our partnership with WWF, the world's leading conservation organisation, through the Climate Savers program, is a valuable and important part of our positive work for the world's climate and natural environment."

Chris R. Lane
Vice President, Environmental Affairs

Good news from Death Valley

A one-megawatt solar photovoltaic (PV) energy system was constructed at Xanterra's Death Valley operation in 2008. This system, the size of five football fields, consists of more than 5,700 solar panels. It will generate more than 2.2 million kWh per year for the next 30 years or more: this is enough electricity to power more than 500 homes.

It is reducing Xanterra's greenhouse gas emissions by 832 tons per year, making a total reduction of 20,790 tons of CO_2 over the system's 25 year warranty life, a company-wide reduction of more than 1% annually.

This system is not only one of the largest non-utility PV energy systems in the country; Xanterra believes it is also the largest in the entire U.S. tourism industry and among all national park concessioners.

Overall, Xanterra powers 16.5% of its national park operations with renewable energy. In addition to the Death Valley system, Xanterra has four other PV systems installed in its operations. The system at Rocky Mountain National Park's retail store atop Trail Ridge Road (a 2,400 watt roof-mounted PV system) is unique in that it is off-grid and uses a battery bank for storage of electricity.

Controlling the energy – and the cooking

Energy controls have been installed in several Xanterra locations. In 2006, Maumee Bay State Park began using a state-of-the-art computerized energy management system called Automated Logic. Through this system, the chief engineer remotely monitors cabins for energy usage, detects if there is a malfunction in any mechanical equipment, sets temperatures prior to guest arrival, and prevents pipes from freezing in winter, all with the touch of a finger at a computer at his desk. This saves money while improving the guests' experience.

At many other Xanterra locations, energy management controls, occupancy sensors, programmable thermostats and Energy Misers(tm) are reducing energy usage. At the South Rim of the Grand Canyon, for example, Xanterra installed 325 occupancy-sensing, digitally-programmable thermostats. At Yellowstone, Energy Miser(tm) controls shut down vending machines when they are not in use, saving up to 25% in refrigeration costs per machine.

At Mount Rushmore, Xanterra has implemented the latest in kitchen technology, a variable speed hood control system. This system senses heat and particulate matter (smoke), automatically modulating the fan motors up or down depending upon usage. If a grill is shut down during a slow period, the hood reacts accordingly and lowers its speed.

The resulting energy savings have been impressive. The hoods save approximately $19,000 per year, enough to pay for themselves in just over one year. This includes savings from the electricity that runs the motors as well as saving on heating and cooling by not sending conditioned air outside. Greenhouse gas emissions savings are estimated at 180 tons per year from this unit alone.

Emissions reductions for this company are based upon short tons (2000 lbs/ton).
Other companies' figures in this folder are based upon metric tons (2204.6 lbs/ton).