

S U S T A I N A B I L I T Y



R E P O R T 2 0 1 0

## SUSTAINABILITY REPORT 2010



*Ornate handmade Haitian wall sculptures  
made from parts of salvaged steel drums.*

### Serious about Sustainability

#### THE GREIF WAY

We honor our history as we focus on our future.  
We use financial, natural and human resources  
wisely without compromising the ability of future  
generations to meet their needs.

We believe that truly sustainable practices require  
an equal balance of benefiting people and the  
environment, and bringing value to our shareholders.  
Doing good and doing well must go hand-in-hand  
if we are to thrive long term.

## Safety

Greif employees recorded 20 million work hours in 2010, achieving a medical case rate, one of our measurements of safety in the workplace, of 2.37. This is a 13 percent improvement over 2009, and the fifth year that we have improved our safety performance since measurement began in 2005.

Safety continues to be the priority for Greif. Safety is continuously communicated throughout the organization whether it's with customers or suppliers, at executive meetings or before shift meetings on the factory floor. We encourage involvement in the safety process and promote reporting to eliminate risk.

In 2010, 48 plants and our Soterra land management business earned the Chairman's Safety Excellence Award. To qualify for the Award, a facility must have a medical case rate less than 1.0 during the fiscal year, and pass an independent audit. To meet the medical case rate, all but a few large operations with more than 200,000 work hours must have zero medical cases.

Safety is part of The Greif Way and a key component in everything we do. Greif's safety principles are built upon three major areas of focus: physical work environment, management systems and people. These areas are interdependent; all require constant attention.

The physical work environment includes safety guarding of equipment, tools and facilities through engineering design, and control to eliminate hazards.

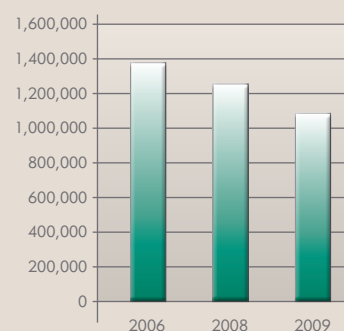
Management systems include policies and procedures to protect employees; internal and independent third party audits to identify risk and benchmark progress; and the use of our proprietary online safety management system (CMS) used for scheduling, monitoring, performance tracking and reporting. The CMS allows us to share information across the globe.

The most important aspect of our safety focus is people and their attitudes, beliefs, knowledge, skills and abilities to do their jobs in a safe manner. By providing regular training and feedback, we encourage leading by example, and try to instill safety as a personal value that has relevance to whatever the individual is doing at any time. We want our people to be safe at work, and to maintain safe behaviors off the job as well.

actions today to constrain the livelihood of others tomorrow.

We developed our sustainability agenda in partnership with the Conservation Fund, Battelle\* and other experts. In the past few years, we added a sustainability element to The Greif Way and laid the foundation for a corporate-wide employee engagement program. We set aside a designated investment pool for sustainability-related capital expenditures. We conducted energy audits in all our strategic business units, and we reduced our energy consumption company-wide by 10 percent between 2007 and 2010, meeting our first internal sustainability goal.

Greif's Total GHG Emissions (tonnes/y)



Our third carbon footprint report was completed by Battelle in 2010. We have reduced our greenhouse gas (GHG) emissions by 13 percent from our baseline year of fiscal 2006.

*\*Battelle is the world's largest independent research and development organization, working to advance scientific discovery and application.*

## Environmental

It is incumbent upon us to protect all natural resources so that succeeding generations can live well within the limits of the planet. We intend for our company to be operating far into the future, and do not want our

GHG EMISSIONS BY BUSINESS AREA (2009)

Business Area	Emissions by Source (tonnes CO <sub>2</sub> e/y)							Total CO <sub>2</sub> e Emissions (tonnes/y)
	Electricity & Steam	Fuel (non-renewable)	Fuel (biomass)	Plant Mobile Sources	Greif Delivery Trucks	Fugitive Sources	Outsourced Shipping	
Paper Packaging	191,405	181,144	301,769	1,256	3,852	48,863	33,692	761,982
Rigid Industrial Packaging	113,959	152,434		12,320	707	-	113,407	392,827
Packaging Accessories	7,490	2,943		132		-	3,545	14,110
Delta	4,948	5,530		512	2	-	867	11,859
Corporate	2,126	255		149		-	119	2,649
Land Management	-	-		-		-	3,505	3,505
<b>Grand Total</b>	<b>319,928</b>	<b>342,307</b>	<b>301,769</b>	<b>14,369</b>	<b>4,561</b>	<b>48,863</b>	<b>155,135</b>	<b>1,186,931</b>

With the success of our energy program, we issued our new goals: reduce energy consumption and GHG emissions per unit of production by 15 percent of our fiscal 2008 baseline by the end of fiscal 2015. Our longer-term aspiration, however, is to reduce consumption and emissions by 30 percent of our fiscal 2008 baseline and achieve zero landfill waste by the end of fiscal 2020.

We have several projects completed or underway to help us reach our goals.

Our Riverville Mill (Virginia), which consumes nearly 1.5 million megawatt hours (MWh) of energy in a 12-month period, is the largest energy user in the Greif global network. Our mill in Massillon, Ohio is second, consuming nearly 347,000 MWh. That energy helps turn out 700,000 tons of 100 percent recycled linerboard, 100 percent recycled medium and 30 percent recycled semi-chemical medium that is used to make corrugated sheets, boxes and fibre drums.

In the production process, the mills recycle 1,500 tons of paper a day, seven days a week, diverting 547,500 tons of waste paper from landfills each year.

In 2010, Riverville Mill employees initiated several projects to improve energy efficiency. A team investigated the compressor system at the plant and from their findings specified and designed system changes, including installing a 15,000-gallon surge tank, back-pressure controls and larger piping. The project resulted in a 42 percent reduction in operating hours for the 700-hp compressor motors on site. Using actual motor loads, this reduction in operating hours and the Mill's electrical rate amounts to an electricity cost savings of almost

\$220,000 a year. This does not include the savings from reduced air leakage, lower maintenance costs on the compressors or improved reliability of other components in the system.

Another project at Riverville involved controlling the flow rates of the large volumes of water and paper stock that must be pumped. By replacing inefficient control valves with variable frequency drives, the plant reduced total site energy use by 0.29 percent, with an annual carbon reduction of about 4,000 tons.

In all our factories, employees continue to find ways to make their operations more sustainable.

At the Omaha (Nebraska) multiwall bag plant, employees took up the challenge to reduce the amount of waste they send to the sewer and landfill systems. On the production line, they changed the gluing process to one that does not require pans or tanks that generate glue and cleaning chemical waste. Throughout the site, they stepped up their recycling efforts, installing blow dryers to eliminate paper towels and collecting paper cores, office paper, paper bag scrap, corrugated boxes, scrap paper rolls and scrap pallets for reprocessing. They recycled 1.55 million pounds of waste in 2010.

Delta Companies Group (various sites in the U.S. and Canada) employees took advantage of technology advancements in re-refining crude oil and ethylene glycol products used in antifreeze and lubricants for engine oils, hydraulic fluids and tractor fluids. The success of their initiative has reduced GHG emissions in the production of these base stocks by 64 percent, and reduction of energy consumption by 90

percent. It has also prevented two million gallons of waste from being burned or sent to a landfill.

Delta has also retrofitted all its sites with high-efficiency lighting, reducing their energy consumption from 2008 by 31 percent.

Fontana steel drum and LaPalma fibre drum plants (California) installed solar panels, which conservatively replace 48 percent and 19 percent of their electric power requirements, respectively.

American Flange, part of Tri-Sure® Closures (Tri-Sure) in Carol Stream (Illinois) installed solar panels that produce 32,000 kilowatt hours of electricity annually, reducing their electric consumption by 10 percent.



*American Flange reduced their electric consumption by 10 percent with solar panels.*

Cuernavaca (Mexico) eliminated an oven that applied phenolic compound to drum tops and bottoms, significantly reducing their consumption of liquid propane gas. They reconfigured their line to run the tops and bottoms through the paint-drying oven used for drum bodies. In doing so, they reduced the consumption of LPG by 30 percent, saving 51 tons of emissions a year.

At Tri-Sure in Amsterdam (The Netherlands), the plating plant is one of the largest of its kind in Europe in terms of throughput, plating nearly



200 million flanges and plugs each year. Their objective was to reduce the consumption of raw materials, energy and water in the process. At the same time, they wanted to reduce the waste generated. Through a series of actions, including optimizing a separator, installing new rectifiers, improving the cleanliness of wastewater and introducing innovative, safer production techniques, they reduced energy usage by 350,000 kWh, and reduced water used and waste generated. They also reduced chemical use by 30,000 kilograms, and each month recover 900 liters of oil.

In the U.S., Greif joined the SmartWay® Transport Partnership, a program sponsored by the U.S. Environmental Protection Agency. As a partner, we have pledged to reduce vehicle emissions, increase fuel efficiency and implement policies such as those relating to no-idling practices. We employ SmartWay partner carriers for a minimum of 50 percent of total miles traveled. In 2010, through our partnership we eliminated nearly 7,684,000 pounds of CO<sub>2</sub>.

We continue to find alternate uses for the trimmed scrap material generated by our paper operations, replace non-recyclable materials with those that can be recycled, sequester carbon in our

forest holdings and offset carbon emissions by purchasing offsets for special events, maintain our SFI certification and harvest our timberlands using sustainable methods. We monitor meters daily, and are taking measures to remove volatile organic compound emissions from our production process.

We have developed proprietary information that will help us counsel our customers on selecting the right container for their needs while reducing their carbon footprints. We anticipate that we will put the tool to extensive use in 2011.

Our Container Life Cycle Management LLC joint venture in the U.S. will also help with the reuse of and end-of-life issues with our products as qualified used drums and IBCs are collected, reconditioned and distributed back into the market.

And our RainStation™ rain barrels hit the market in 2010, preventing about 1.5 million gallons of rainwater from flowing into overloaded water treatment systems. We also donated rain barrels to the Dawes Arboretum near Columbus, Ohio, a nationally recognized public garden covering nearly 1,800 acres.

Directly asking employees for their support and ideas for our formal sustainability efforts began in earnest in 2010. We formed the Greif Global Energy Team, comprising engineering representatives from all our business segments. The team will guide energy-related decisions made at factories around the world.



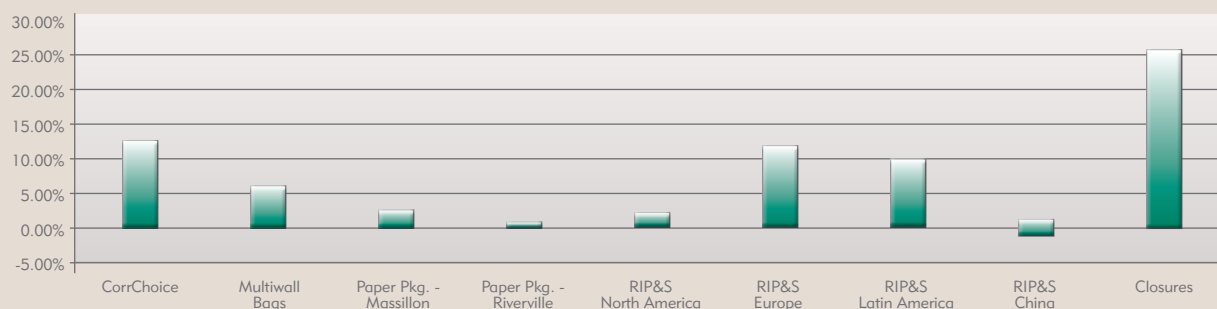
*Greif Global Energy Team.*

To be sure we would start off on the right track with all employees, we asked them for their input. More than 85 percent of the employees who responded said they would prefer to work for a company that has a good reputation for environmental responsibility. More than 95 percent said they would be likely to adopt tips for minimizing their environmental footprint in the workplace, and more than 90 percent said the same thing for their life away from work. More than 83 percent said they are ready to do more, and 250 individuals said they wanted to be a member of a Greif Green Team.

#### 15% Energy Goal (2010-2015)

##### 2010 Status Report

Energy per unit of production



We will launch the official Green Team program in 2011, mobilizing our teams to improve efficiency in all areas, innovate wherever and whenever possible and strengthen their community ties.

We also work outside our four walls to make a difference for the environment. We continue our membership in the World Business Council for Sustainable Development (WBCSD). This CEO-led organization of approximately 200 of the most environmentally responsible companies in the world is committed to providing business leadership as a catalyst for change toward sustainable development.



World Business Council for Sustainable Development

As a member of the WBCSD, we signed on to the organization's Manifesto for Energy Efficiency in Buildings (EEB). We are implementing our commitment with a number of activities completed in 2010 and planned still for 2011. We installed 48 solar panels at Marycrest Farms, our guesthouse, to offset some of the power consumed on the premises. We purchased efficient electric utility vehicles for the farm's use, and are in the process of upgrading the HVAC systems at our global and North America headquarters buildings on campus.

In alignment with our EEB commitment, our IT Services group evaluated several technical solutions to reduce the floor space and power consumption required to support more than 70 physical servers at our data center. We moved the servers to

a new center, reducing the more than 70 in service at the former site to five virtual servers. The server migration, coupled with a more efficient air conditioning system using glycol, has reduced power consumption by more than 205,000 kWh a month, saving more than \$238,000 a year.



*Greif is a member of the Clinton Global Initiative. COO and President David Fischer and Scott Griffin, vice president, Sustainability, flank metal artists from Haiti.*

We have also made solid commitments to the Clinton Global Initiative (CGI). CGI convenes global leaders to devise and implement innovative solutions to some of the world's most pressing challenges through the development of specific and measurable commitments to action. As a member, we have made commitments in three areas.

Our Pollinator Habitat Improvement project is in the second of its three-year commitment. The project evaluates honey bee colonies on Greif-owned timberland in Mississippi. The colonies, set on mechanical platform scales placed at control and experimental wildlife study plots, are weighed at weekly intervals to monitor their health. With this project, we are using various silviculture activities that are intended to increase pollinator populations and ultimately improve wildlife habitat for game

and non-game species, songbirds and migratory birds.

A critical threat to the world's ability to support its population is the universal availability of fresh water - or lack thereof. Greif has committed to the CGI to develop products that will help people and communities struggling with access to water. The flexible products we acquired in 2010 can be used to store rainwater and provide an affordable alternative to expensive, rigid tanks. We have already developed low-cost prototypes; next steps include testing the products and identifying potential partners to assist us in the development and distribution of these containers.



*Tree of Life artwork from Haiti.*

From our work with the CGI, we were made aware of artisans in Haiti who create ornate wall sculptures from used steel drums and sell them to the public. We underwrote two of the artists to attend the Santa Fe International Folk Art Market in July. They used the money they earned at the festival to support the steel drum artisan community at home. Also, because the availability of steel drums decreased significantly after the earthquake that devastated the island nation, we have shipped about 1,000 steel drum parts to Haiti. Greif is continuing these shipments until the artisan community is able to return to pre-earthquake status in their procurement of

these raw materials. Their art, and ordering information from Haiti Metal Art, can be found at [www.haitimetalart.com](http://www.haitimetalart.com).

## Social

### Employee engagement

In 2010, we presented employees with several ways to participate in short-term programs tied to our obligations as a responsible corporate citizen.

In February, we invited employees to participate in Random Acts of Kindness Week and to report their experiences, just this once. Many did, with heart-warming stories and personal satisfaction shining through. Here are two of them:

**From Clyde:** *One morning at 6 a.m., on my way to work on I-45 North inbound to Houston, I noticed someone on the side of the busy freeway having trouble changing a tire. If you have ever driven in Houston traffic during rush hour, you will know what I mean by BUSY. I don't know what made me stop that morning, but I did. As I approached the disabled vehicle, I could see the reason for his difficulty. The man who was changing his tire had taken all the lug nuts off with a tee-handle lug wrench. He had the flat tire off and was having trouble holding the spare on the axle with his feet and trying to pick up the lug nuts off the ground with his arms, which had been amputated just below the elbow. He had no hands or prosthetic devices. For just three minutes of my time, I was able to help someone who really needed it. By the time I had the lug nuts on and tightened, this person had loaded the flat tire into the bed of his truck. He then took the lug wrench from me and closed*

*the tailgate. He spoke no English, but in universal terms thanked me for the help. We both got into our vehicles and continued on our separate ways. The effort was small, the time was short, but the fullness in my heart was everlasting and priceless.*

**From Roger:** *I took some time to talk with personnel at the plant. We have people who volunteer at shelters; one person buys a bag of groceries every week to feed the hungry, one individual coordinated a clothing drive for the homeless, we had an employee late for work because he stopped to help a lady (with two young children) change a tire. We do things not for recognition but because we are here to make a difference. Maybe many of the Greif plants have people making a difference every day and they just do not need or want individual recognition. I would imagine the number of hours (we give collectively) is astounding.*

Our Picture the World photography contest opened in May and garnered 96 entries from around the world. A photo of a discarded drum in the desert by Yana Ivanova in our Moscow, Russia office took top honors, reminding us to lighten our footprint on the earth.

Greif Colombia initiated an energy-savings program that encouraged employees to save energy, gas and water in their homes. Employees who wanted to participate submitted their energy, water and gas bills for four consecutive months. For those who achieved the highest and second highest savings, Greif paid their bills for the four-month period. More than 100 employees from the Bogota and Cartagena plants took part. Due to its great

success, the energy-savings program was also implemented in Costa Rica and is being implemented in other locations in Latin America.



Our Picture the World winning photo by Yana Ivanova.

In August and September, we asked employees to select a day when they could travel to work (safely) using means other than a personal gas-powered vehicle. And we gave them a carbon calculator so that they could measure the emissions they saved. Many did just that – they left their cars and trucks at home, and used public transportation, bicycles and the power of their own feet for the day and prevented over one ton of greenhouse gas emissions from being released into the atmosphere.

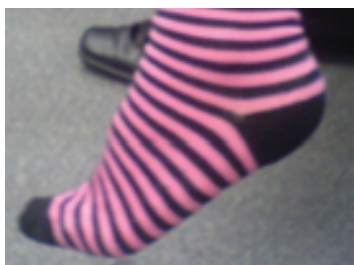


Rheine, Germany employees bike to work.

On Nov. 15, employees in the U.S. participated in America Recycles Day. Greif challenged sites to see which could recycle the most on that day. Our box plant in Decatur, Illinois won the challenge, sending 390 pounds of monitors, 20 pounds of flat panel monitors, 75 pounds of printers, 60 pounds of mega-printers and 20 pounds of small radios and walkie-talkies for recycling.



People came up with their own programs throughout the year as well. From raising funds for breast cancer research, to donating blood, to making sandwiches for a homeless shelter, to donating products, to volunteering time, and more, Greif employees showed their care for others time and again. No report can capture all the selfless acts of 13,000 people in a year. Suffice it to say that Greif employees do make a difference.



*Wearing pink for breast cancer research.*



*Making sandwiches for a homeless shelter.*



*A donated and decorated drum serves as a waste receptacle in a public park.*

## Corporate giving

Greif has a corporate giving policy with a focus on supporting family, health and human services, education and youth programs where our employees work and live.

We were privileged to present the National Conservation Training Center in West Virginia with an electric vehicle, and provide resources for them to conduct a study of their carbon footprint.

The greater part of the financial contributions we made in 2010 was directed to health providers who could develop projects with a global focus.

The first Nationwide Children's Hospital (NCH) Greif International Pediatric Fellow was selected this year.

Dr. Dennis Villanueva, a radiologist from the Philippines, will spend a year at NCH to further develop subspecialty skills and then return home to improve pediatric healthcare by sharing his knowledge and skills with his fellow practitioners throughout the country.

We became a partner with The Ohio State University Comprehensive Cancer Center and The James Cancer Hospital and Solove Research Institute (OSUCCC-James) to fund The Greif International Collaboration for the Advancement of Curative Therapies in Leukemia. Led by Dr. Michael A. Caligiuri, the OSUCCC-James has one of leading leukemia programs in the world. As part of the agreement under development with the Greif International Collaboration, it is proposed that the OSUCCC-James leukemia experts partner with the program at the 301 Military Hospital in Beijing.

The Beijing program is led by Professor Li Yu, M.D., Ph.D., an outstanding physician scientist who trained in leukemia biology at The Ohio State University in the laboratory of Dr. Caligiuri. Together, the institutions will work to learn the similarities and differences in the genetics of leukemia among diverse world populations; understand the range of approaches for the diagnosis and treatment of leukemia; have meaningful exchanges of trainees, diagnostics and curative therapies; learn how to more efficiently complete clinical trials; and move "personalized medicine" for leukemia patients into the forefront at the international level.



*Greif presents the electric vehicle to The National Conservation Training Center.*

Other projects of note include underwriting the renovation of an atrium and courtyard at Riverside Methodist Hospital in Columbus, Ohio, and funding once more a week of camp at Recreation Unlimited, for youth ages 8 to 22 with both physical and developmental disabilities. As we did in 2009, we augmented our financial support with a week of employee volunteers to help the camp counselors and maintenance crew.

We know we can't be all things to all people, nor solve the problems of the world on our own. But by doing what we can, and doing it to the best of our abilities, we are determined to make a difference for the generations who succeed us.