# 2008 Sustainability Report





#### Contents

CEO Statement	1
Company Profile	2
Delivering Solutions to Meet Customer Sustainability Needs	4
EHS Management	10
A Focus on Employees	20
Giving to Our Communities	26
Governance, Commitments, and Stakeholder Engagement	32
Awards and Recognition	38
Ingersoll Rand Sustainability GRI Index	40

Welcome to the 2008 Sustainability Report for Ingersoll Rand. This is our second annual report covering a broad range of environmental, social, and economic performance topics. During the year, our company has grown, and we have made progress in how we manage sustainability across the organization. We work hard to provide customers with products and solutions that help them operate more efficiently and cleanly, while also "greening" our own direct footprint.

This report is one of the primary ways in which we invite dialogue with our stakeholders, including employees, investors, customers, suppliers, elected leaders and regulators, interested members of the communities where we operate, and industry peers. Feel free to browse through individual sections of interest directly on our website (www. ingersollrand.com/sustainabilityreport). Our 2006 and 2007 reports are also available for download.

## **CEO** Statement

It's no overstatement to say that 2008 was a remarkable year for Ingersoll Rand. Through the acquisition of Trane, we transformed ourselves into a cohesive company of approximately 60,000 talented people. These individuals, along with our expanded portfolio of services, systems, and solutions, make Ingersoll Rand uniquely qualified to help our customers meet sustainability challenges they face every day, such as energy efficiency, food preservation, safety, comfort, and security.

Sustainability is at the core of who we are and what we do. Energy efficiency – with its large social, economic, and environmental implications – is a benefit tied to many of our products, services, and our own operations. Each time we help customers reduce their energy demands, we are creating a positive ripple effect that results in reduced greenhouse gas emissions, a cleaner environment, and cost savings over the long term.

The global economic situation makes it more important than ever that we remain committed to improving the triple bottom line of our economic, environmental, and social performance. Meeting our own productivity goals means working safely, working efficiently, and using our skills to develop innovative solutions that address the challenges faced by ourselves and our customers. These challenges cover a broad range of issues, from investing in innovation to achieve future growth to managing the phase-out of ozone-depleting refrigerants.

We've made significant strides during the past year. We established a sustainability strategy council, which has responsibility for defining and leading our sustainability efforts and providing leadership in the areas of green buildings, energy efficiency, and refrigeration. We've set enterprisewide environmental, energy, and safety goals, and we continue to use the skills and solutions that we provide to our customers to help us meet these goals. We're joining the U.S. Environmental Protection Agency's Climate Leaders initiative, a voluntary program for tracking and reporting greenhouse gas emissions and setting reduction goals. Based on our performance, in 2008 we were pleased to be listed for the first time on the Dow Jones Sustainability Index for North America, as well as several socially responsible investment indices.

Looking forward, we will continue to apply our expertise and knowledge to remain a world leader in creating and sustaining safe, comfortable, and efficient environments where we all work, live, and play. We will continue to drive innovation in goods and services that will help us maintain this leadership position, improve our internal productivity and energy efficiency, and increase our global reach.

We value transparency, honesty, respect, and dignity in our relationships with others: our customers, investors, employees, and the local communities in which we operate. I encourage you to read this Sustainability Report and visit the sustainability section of our website at www. ingersollrand.com for more information on our goals, performance, challenges, and opportunities. Together, we will create solutions for a more sustainable world, now and in the future.

Skib Steulut

Herbert L. Henkel Chairman and Chief Executive Officer May 2009



## Company Profile

We're committed to creating progress for our customers and communities worldwide through our focus on safety, comfort, and efficiency.

#### Number of Employees (as of December 31, 2008)

Industrial	
Technologies	9,700
Security	
Technologies	11,500
Climate Control	
Technologies	10,600
Air Conditioning	
Systems and Services	27,800
Corporate and	
Enterprise Services	1,300
Total	60,900

#### Sales

billions of dollars



- <sup>7</sup> 2004-2006 amounts have been restated to reflect Compact Equipment and the Road Development business unit as discontinued operations.
- \*\* 2008 amounts include the results of Trane since the acquisition date (June 5, 2008, through December 31, 2008).

### Our Products and Services

Our people and our market-leading brands – including Club Car<sup>®</sup>, Hussmann<sup>®</sup>, Thermo King<sup>®</sup>, Ingersoll Rand<sup>®</sup>, Schlage<sup>®</sup>, and Trane<sup>®</sup> – deliver energy-efficient personal transportation, protect food and perishables, improve industrial productivity and efficiency, secure homes and commercial properties, and enhance the quality and comfort of air in homes and buildings.

#### **Air Conditioning Systems and Services**

Our heating, ventilation, and air conditioning (HVAC) systems enhance the quality and comfort of the air in homes and buildings around the world. Under our Trane and American Standard® Heating & Air Conditioning brands, we offer energy-efficient solutions, systems, services, parts, advanced building controls, and financing solutions.

#### **Climate Control Technologies**

Providing equipment and services to manage controlled-temperature environments for food and other perishables, our Climate Control Technologies segment encompasses both transport and stationary refrigeration solutions. Our product brands include Thermo King, a world leader in transport temperature control systems, and Hussmann, a leading manufacturer of refrigeration and food merchandising equipment.

#### **Industrial Technologies**

Ingersoll Rand Industrial Technologies delivers products, services, and solutions that enhance our customers' energy efficiency, productivity, and operations. Our diverse and innovative products in this sector include high-efficiency compressed air systems and pumps, ergonomic tools, material and fluid handling systems, and environmentally friendly microturbines. We also increase productivity through solutions created by Club Car, the global leader in golf and utility vehicles for businesses and individuals. Club Car is the world's largest manufacturer of zeroemission vehicles.

#### **Security Technologies**

We are a leading global provider of products and services that make environments safe, secure, and productive. The segment's market-leading products include electronic and biometric access-control systems, locks and locksets, door closers, exit devices, decorative hardware, cabinet hardware, and time attendance and personnel scheduling systems from well-known brands like Schlage.

## Our Global Reach

Ingersoll Rand conducts business at manufacturing facilities, warehouses, offices, and repair centers throughout the world. We carry out manufacturing and assembly operations in 47 plants in the United States, 28 plants in Europe, 18 plants in Asia, 10 plants in Latin America, and 1 plant in Canada. We also maintain various warehouses, offices, and repair centers throughout the world. Our products and services are sold to customers in more than 100 countries. Our executive offices are in Piscataway, New Jersey, and Davidson, North Carolina.

Our approximately 60,000 employees are driven by a 100-year-old tradition of technological innovation, to create a positive impact in the world.

## Material Sustainability Issues

As we look ahead, we recognize the significant challenges facing the global economy. We have identified five sustainability issues where we believe our business can make a significant contribution to developing global solutions.

#### **Climate Change**

Climate change is considered by many as the most pressing environmental issue of our time. Ingersoll Rand continues to provide products and services that help customers reduce their energy use and greenhouse gas emissions, and therefore help minimize the effects of climate change. Ingersoll Rand is also actively involved in climate change policy formulation.

#### **Energy Efficiency**

Energy efficiency helps reduce costs as well as greenhouse gas emissions, making this issue critically important. Ingersoll Rand develops and markets energy-efficient products and services that help customers reduce their energy requirements. At the same time, we are working to reduce the energy footprint of our own operations.

#### **Food Preservation**

Ingersoll Rand provides advanced technologies for keeping food from spoiling during transport and while at the store. Eliminating waste in the food supply is important for both public health and economic reasons.

#### **Building Security**

Security in homes, schools, health-care facilities, and the workplace provides a safe and productive environment for people to live, work, and play. In addition to bringing peace of mind, building security saves money by protecting people and their property.

#### **Refrigerant Use**

We consider all of the refrigerant selection factors listed below in the systems we sell to our customers and the systems we use in our own facilities:

- Low Ozone Depletion Potential (ODP)
- Low Global Warming Potential (GWP)
- High operating efficiency
- Short atmospheric life
- Low operating pressure (low leakage rate)

Our goal always is to choose the right refrigerant for the right application.

## About this Report

This is the second Ingersoll Rand public report on the sustainability-related issues of greatest significance to our company and key stakeholders. This report follows the reporting principles and framework of the Global Reporting Initiative (GRI) guidelines for sustainability reporting, Version 3.0 (2006). An interdepartmental and cross-sector team conducted an in-depth analysis of the GRI guidelines to determine which recommended indicators are the most relevant and feasible for our businesses to include in this report. With each year, we plan to broaden the scope of indicators to which we report as our programs and systems continue to mature.

Unless otherwise noted, the data presented in this report are for 2008. Financial, environmental, and safety data represent the company's global operations. Although Ingersoll Rand did not acquire Trane until June 2008, robust data collection systems were in place for the full year, so this report includes environmental, health, and safety data for Trane for the entire 2008 calendar year. Data from divested operations are only included for the years they were part of Ingersoll Rand the entire calendar year.

Ingersoll Rand has internal systems in place to review the data presented in this report for completeness, accuracy, and reliability.



**Geographic Sales Breakdown** 

## Delivering Solutions to Meet Customer Sustainability Needs

Ingersoll Rand provides technologies and services that support sustainability across a wide range of global markets. Our marketleading brands and the products, services, and solutions we offer are a growing part of everyday life. Our customers count on the reliability and efficiency of our products to reduce energy consumption and costs, operate more efficiently, and decrease harmful environmental emissions.

The following pages include just a few examples of how we have helped our customers make progress greener, by promoting green buildings and helping customers meet their sustainability objectives.

For more information on our products and services, see the full sustainability section of our website (www.ingersollrand.com).

## Promoting Green Buildings

The U.S. Green Building Council (USGBC) has been working toward expanding sustainable business practices, including the creation of the Leadership in Energy and Environmental Design (LEED) certification program. Energy and atmosphere and indoor environmental quality represent half of the points needed to earn LEED (Version NC 2.2) certification for commercial buildings, and are factors influenced by heating, ventilation, and air conditioning systems and services. Ingersoll Rand actively participates in the green building dialogue, offering new ideas, solutions, and case examples that demonstrate progress.

#### LEED Certification

As of April 2009, Ingersoll Rand had more than 500 LEED-accredited professionals, the most of any industrial company in the world. We use that expertise to help our customers and, increasingly, to help our own facilities. Greener buildings can create better communities. In 2008, as a platinum sponsor of the 2008 Green Build International Conference and Exposition, Trane continued to educate the industry about this philosophy. During the conference, Trane representatives met with school designers, facility managers, and administrators to discuss the importance of green schools and the successful application of the LEED for Schools rating system. In addition, Trane leaders met with designers and consumers to discuss the LEED for Homes and REGREEN programs, the first U.S. guidelines for green home remodeling projects.

Here are just some of the ways Ingersoll Rand is helping buildings go green and attain LEED certification:

 TRACE™ 700 is a complete design tool for load, system, energy, and economic analysis, and is accepted by the USGBC to help achieve LEED points. TRACE allows users to seamlessly transition from load design to energy analysis. The software provides extensive LEED-specific energy analysis functionality, including automatic building rotation, daylighting, ASHRAE 62.1 calculation, and extensive air-to-air energy recovery. Additionally, TRACE offers extensive customer support including LEED-specific education and support documentation, software training, and features such as an ASHRAE 90.1 compliant equipment library.  EarthWise<sup>™</sup> Systems use state-of-the-art Trane products, systems, and controls to optimize performance. This includes the ability to balance installed cost and operating cost while improving comfort, indoor air quality, and acoustics.
 EarthWise Systems provide high efficiency/low emissions performance over the entire lifetime of the building with advanced documentation sustaining the performance. EarthWise chillers are rated by the U.S. Environmental Protection Agency (EPA) as best-in-class, energy-efficient design.

The Trane EarthWise CenTraVac centrifugal water chiller is used to cool large office buildings, airports, and hospitals as well as for industrial process applications. This chiller uses an environmentally balanced refrigerant and leads the industry with superior performance, boasting efficiencies of 0.48 kilowatts/ton or better at ARI-rated conditions and a "near-zero" refrigerant-emissions level. Performance exceeds all other product technologies currently in the marketplace, typically by 5 to 20 percent. Furthermore, it is 40 to 50 percent more efficient than chillers installed 15 to 20 years ago, creating a tremendous opportunity for both environmental and economic improvements.

– U.S. EPA Citation

- Tracer Summit<sup>™</sup> controls give advanced control of complex systems to achieve energy savings and measure performance. Performance Agreements for Comfort from Trane (PACT<sup>™</sup>) guarantee energy cost savings, enabling businesses to invest future savings today.
- Our Security Technologies sector offers products that help our customers obtain LEED certification by virtue of their recycled content, and for customers located near our facilities, potential local content. Many of our security products have large percentages of recycled content. A variety of products offered by Schlage, Von Duprin<sup>®</sup>, LCN<sup>®</sup>, Falcon<sup>™</sup>, Monarch<sup>™</sup>, and Dor-O-Matic<sup>®</sup> contribute to a project's LEED certification.
   In addition to LEED, Ingersoll Rand is an active member of the Green Building Initiative – Green

member of the Green Building Initiative – Green Globes program, which encompasses an online assessment protocol, rating system, and guidance for green building design, operation, and management. See our website at http://company.ingersollrand. com/aboutus/csr for more about LEED certification.

#### Sharing Expertise on Energy Innovation

We use the same tools to help our customers as we do to help our own facilities be more energy efficient. For more than 30 years, the Applications Engineering group at Trane has periodically published Engineers Newsletters to aid engineers in the design and application of heating, ventilation, and air conditioning (HVAC) systems. Subjects range



from acoustics to water piping to interpretation of ASHRAE standards to LEED and HVAC designs. These newsletters have become a trusted technical resource, with a current circulation of more than 40,000. Engineers Newsletter Live is a series of live events focused on the design and control of HVAC systems.

To reach a broad audience, Trane managers participate in a speakers' bureau, which provides speakers for various energy-related workshops, conferences, and meetings. Trane representatives presented at 18 energy-related events in the U.S. during 2008. Among the topics addressed were combating climate change; new energy technologies for high-performance buildings; low-flow, lowtemperature, high-efficiency HVAC systems; and cooling contingency planning. Several of these speaking engagements were at universities, where Trane representatives also met with students to share their expertise.

#### Clinton Climate Initiative

The Clinton Climate Initiative (CCI) was established by former U.S. President Bill Clinton to make a difference in the fight against climate change in practical, measurable, and significant ways. CCI is the exclusive implementing partner of the C40 Large Cities Climate Leadership Group, an association of large cities around the world that have pledged to accelerate their efforts to reduce greenhouse gas emissions. CCI is working with partner cities to develop and implement large-scale projects to improve energy efficiency and reduce greenhouse gas emissions in buildings, waste management, transportation, outdoor lighting, ports, and other areas.

As a strategic partner in the global energy efficiency building retrofit program under the CCI and one of the world's largest energy service companies, Trane provides innovative, "self-funded" energy upgrades that deliver significant energy and operating cost reductions. A Trane energy upgrade takes a comprehensive approach to building energy use, which can include HVAC systems and services, lighting, roofing materials, renewable energy, and other opportunities and can result in energy savings of 10 to 50 percent.

#### Developer in Thailand

One of Thailand's largest property and retail developers will reduce its greenhouse gas emissions by 40,000 tons per year by 2010 with the help of Trane Commercial Systems products and services. The customer has entered into a performance contract with Trane Thailand to install and service large-scale high-efficiency chillers in four of its shopping centers. In this arrangement, the customer will use the savings from future reduced energy costs to finance the purchase of the equipment. To ensure the new chillers and controls deliver the promised performance, Trane technicians will continue to maintain and service the systems.

#### Singapore Post Limited

Singapore Post Limited (SingPost) was recognized for its energy-efficient headquarters, Singapore Post Centre (SPC) by the ASEAN Centre for Energy in the Energy Efficiency and Conservation Best Practice Competition for Efficient Buildings, part of the ASEAN Energy Awards 2008. SingPost made enhancements to the SPC piping system and replaced conventional motors with high-efficiency ones. A new 24-hour web-based monitoring system was concurrently introduced, enabling better visibility and management of the entire system. With Trane CenTraVac<sup>™</sup> chillers, SingPost's new plant achieved an efficiency of 0.6 kilowatts per ton of cooling, better than the benchmark of 0.75 kilowatts set by the National Environment Agency for the Energy Smart Building scheme for office buildings. SingPost's Energy Saving Initiative resulted in an estimated annual reduction of over 2,500 tons of carbon dioxide emitted and an estimated savings of S\$1.2 million (US\$800,000) on its annual energy spending.

## Helping Customers Meet Their Sustainability Objectives

Whether we are creating solutions to make buildings and transportation more energy efficient, food safer, or homes and commercial properties more secure, we work with our customers to achieve their sustainability goals. We continue to engage with our customers to identify ways to improve the products and services we offer to better meet their needs in markets such as retail, industrial, transportation, education, and residential.

#### Retail

#### WHOLE FOODS MARKET

Hussmann was selected by Whole Foods Market to help improve performance at the company's new store in Lakewood, Texas. Using nearly 85 percent Hussmann refrigerated and frozen food display cases and Protocol refrigeration systems, our products helped the facility achieve GreenChill certification, a designation created by the U.S. Environmental Protection Agency to recognize individual stores for using environmentally friendlier commercial refrigeration systems.

The use of Hussmann green products and services throughout this new Whole Foods Market is expected to reduce annual energy usage by 30 percent and greatly reduces the possibility of major refrigerant leaks. By choosing Hussmann service, and maintenance, the supermarket provides environmental benefits at the time of startup and throughout the



life of the equipment. The store features a number of Hussmann energy-efficient products, including:

- Protocol refrigeration systems
- Krack microchannel condensers
- Always\*Bright LED lights on reach-in display cases
- Integrated night curtains on open multi-deck display cases
- Innovator glass doors on reach-in display cases
- Energy-efficient fan motors and E-plus coils in all refrigerated display cases

#### PIGGLY WIGGLY

Hussmann Always\*Bright LEDs contribute to energy savings and increased sales. In June 2008, Hussmann technicians retrofitted the frozen food cases at the Evansville, Wisconsin, Piggly Wiggly grocery store with Always\*Bright LEDs. Since installation, customers have commented on the improved product visibility within the cases. This improved visibility enables less door opening by the customer, which reduces the amount of run time on the refrigeration equipment. This has also allowed the store to increase the temperature within the case by 10 degrees Fahrenheit, resulting in energy savings. The Piggly Wiggly has also seen increases in frozen food sales by as much as \$2,500 a week. With energy savings and increased sales, the store believes the return on investment will be less than one year.

#### Industrial

#### KENT PAPER MILL

The British Compressed Air Society (BCAS) was awarded funding from the Carbon Trust to evaluate flow/pressure control within compressed air systems. As a contributing member of BCAS, Ingersoll Rand provided expertise and a range of products to support this initiative. Kent Paper Mill, the world's leading manufacturer of technical and creative papers, provided the selected facility. Ingersoll Rand carried out a detailed pre-installation assessment in order to define the opportunity and anticipated savings. By installing two IntelliFlow pressure controllers downstream of the existing storage, they now operate within +/- 0.05-bar of the set target pressure. This created a barrier between the supply and demand side of the system allowing the volume in the receivers to support large demand events rather than switching on the second machine. Control of pressure allows proactive leak management as the pressure will not rise as the demand reduces. Annual electricity savings are 687,000 kWh, with energy costs savings of approximately \$57,000 and CO<sub>2</sub> emissions reductions of approximately 295 tons per year.



#### Aesica

Aesica is a leading supplier of active pharmaceutical ingredients, formulations and custom synthesis solutions to the global pharmaceutical and biotechnology industries. Ingersoll Rand carried out a detailed assessment and provided the company with a profile of its compressed air consumption, enabling it to understand exactly how the compressed system operated and allowed engineers to specify the most suitable and efficient supply side transformation for their factory. Aesica understood that the cost of energy consumed by air compressors over their lifetime far outweighs the initial capital cost and invested in a new energy-efficient Nirvana oil-free air compressor. They also increased the system storage by installing a 20 m air receiver. By installing an IntelliFlow pressure controller, they now operate within +/- 0.05-bar of the set target pressure. Estimated annual savings include approximately 240,000 kWh of electricity, \$25,000 in energy costs, and more than 100 tons of greenhouse gas emissions.

#### DANA TRANSEJES

Ingersoll Rand distributors are able to design flexible sales approaches to better meet our customers' needs. In Colombia, one distributor developed such an approach to place an air compressor installation into service at Dana Transejes, a major automobile component manufacturer. Under the terms of the 5-year agreement, Dana Transejes pays for the air it uses, while the unit remains the property of the Ingersoll Rand distributor. This sales approach is a first for the country. The Nirvana air compressor and its associated components have reduced the facility's power consumption by approximately 28 percent and met the customer's need to reduce compressed air costs while improving air quality and system reliability.

#### Transportation

#### TRIPAC AUXILIARY HEATING/COOLING TEMPERATURE MANAGEMENT SYSTEM

The TriPac auxiliary heating and cooling temperature management system eliminates the need to idle truck and tractor engines for heating, cooling, and powering accessories in the cab or sleeper compartment. The TriPac consumes up to 85 percent less fuel than diesel engine idling, reducing longhaul tractor-trailer idling emissions and reducing the trucking company's financial burden of high fuel costs. An increasing number of locations have anti-idling laws, and TriPac helps our customers comply fully. In addition to reducing fuel usage, cutting back on idling time produces fewer emissions, longer duration between required oil changes and filter replacements, and improved driver comfort and satisfaction.

There are more than 60,000 TriPac units on the road today, which has saved an estimated 341 million liters (90 million gallons) of diesel fuel since the product was launched in 2005.

#### THERMO KING SLX TRAILER REFRIGERATION SERIES

Thermo King recently celebrated a major milestone with the production in May 2008 of the first SLX trailer refrigeration unit at its plant in Galway, Ireland. The SLX brings increased reliability, low fuel consumption, low emissions, low noise, and high performance. Compared to its predecessors, the SLX provides up to 20 percent fuel savings depending on how it is used. This fuel savings translates into greenhouse gas emissions reductions for the customer. Additional benefits include a 50 percent reduction of particulate emissions and 35 percent reduction of NOx emissions compared to previous units. The amount of energy required for manufacture is 40 percent less, and 99 percent of the SLX unit is recyclable at the end of its useful life.

#### **CLUB CAR VEHICLES**

As the world's largest manufacturer of electric vehicles, Club Car is the world leader of zero emission vehicles. Our IQ<sup>™</sup> and IQ+<sup>™</sup> electric powertrains with programmable speed and acceleration offer optimal performance and efficiency. Golf cars and utility vehicles occupy a smaller footprint than automobiles and trucks, creating less wear on the environment. Our exclusive aluminum chassis lasts longer than steel. We produce the lightest vehicles in the industry, which reduces the negative impacts of turf compaction. Most raw materials used in the manufacturing of our vehicles are recyclable, including aluminum, plastic, and battery lead.

#### Education

#### AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS

The American Association of School Administrators (AASA) and Ingersoll Rand Security Technologies recently kicked off a strategic alliance by inviting AASA's members to complete a survey on school safety and security called the Risk Mitigation Assessment. The results of the assessment will be used to create the first-ever National School Safety Study, which is anticipated to have substantial implications for communities across the United States.

Results of the survey were presented in early October at the AASA Center for System Leadership's 2008 Safe and Secure Schools: Superintendents Lead the Way Conference for administrators, superintendents, and district security directors. In addition, each survey participant received immediate and actionable information corresponding to their specific responses. The assessment identified potential threats and suggested action items that will better ensure the security of the participants' school systems. Participants also received a "dashboard measurement" of their specific school or district's level of security by number of students, region of the country, and whether it is classified as rural, urban, or suburban.

#### Residential

In addition to warming or cooling the air in your home, Ingersoll Rand products help to make sure the air is as clean and comfortable as it can be. Our Trane CleanEffects air filtration system can remove up to 99.98 percent of airborne allergens from a home's filtered air, making it 8 times more effective than even the best HEPA room filters and up to 100 times more effective than a standard 1-inch filter.

The Trane CleanEffects air filtration system has the lowest pressure drop with the highest efficiency possible. Our unique patented technology is designed to let air flow freely through the most advanced filtration system available. As a result, more of a home's air is cleaned faster and more effectively than anything else on the market.

Trane CleanEffects has been performance-tested by LMS Technologies and Environmental Health & Engineering, Inc. (EH&E), with the results verified by professors from the Harvard School of Public Health. New research conducted by Harvard, in collaboration with scientists at EH&E, shows that Trane CleanEffects removes more than 99 percent of the common flu, or influenza A virus, from the filtered air.

## Customer Health and Safety

An integral part of our new product development process is to evaluate new and modified products for safety during customer use. By evaluating potential risks as products are developed, we work to protect customer health and safety through design changes, labeling requirements, and other mechanisms as appropriate.

#### **Repetitive Strain Injuries and QTA Series**

Carpal tunnel syndrome, tennis elbow, and tendonitis are just some of the common injuries associated with Repetitive Strain Injuries (RSI). As one of the leading causes of injury in the workplace, RSI is a serious concern for businesses worldwide. It accounts for two-thirds of lost-time injuries and costs U.S. companies more than \$20 billion annually, according to the Bureau of Labor Statistics.

Ingersoll Rand has been providing innovative products and solutions to improve ergonomic conditions for many years. In the manufacturing sector, some of these products include balancers, hoists, handling devices, and torque-reaction equipment. Industrial Technologies' Global Product Management team developed a new product line to help reduce operator injury and improve productivity. The QTA Series Torque Reaction Arms are designed to help improve working conditions for operators while maximizing production uptime.

#### Environment Management System Kills Pathogens and Protects Consumers

Long-established refrigeration technology and the global transportation industry enable many people to experience fresh and frozen products from around the world each day. Most consumers assume these products are safe to eat, but highly publicized incidents of food-borne illnesses are creating growing concerns over E. coli, Salmonella, molds, viruses, and other health- or life-threatening microorganisms within our food supply. The United States Centers for Disease Control and Prevention estimates that 76 million cases of food-borne illness, resulting in 325,000 hospitalizations and 5,000 deaths, occur nationwide each year. These concerns have generated calls for better food handling processes and technologies across the supply chain.

The Ingersoll Rand Environment Management System (EMS) includes a suite of solutions to help customers understand and address their food safety concerns, including environmental sampling, food safety consulting, and asset-based solutions. One of the core elements of the EMS suite is a patented breakthrough surface and air sanitation technology that uses oxygen ions to cleanse the ambient environment, killing bacteria, viruses, and molds that reduce the quality, safety, and shelf life of perishable products. EMS sanitizes the surfaces of food and food-handling or processing equipment, and the air itself.

### Customer Satisfaction

Ingersoll Rand successfully rolled out an enterprisewide program for measuring customer satisfaction. Our goal is to create a process to understand our customer satisfaction rating on a business, sector, and enterprise level. Our focus will be on action planning to identify and close service gaps and to determine where investments are needed. The company's emphasis is on translating results from the customer surveys into immediate actions, in addition to longterm strategic plans.

Our sales force receives customer feedback in areas such as quality, reliability, delivery, and energy efficiency. In addition to reliability, *energy efficiency* is an important factor in our customer's decision making process.

#### **Customer Insight**

In 2008, the Industrial Technologies Sector joined Climate Control Technologies Sector and the Air Conditioning Systems and Services Sector in using the process known as Outcome Driven Innovation™ (ODI) to gain a deeper understanding of what customers need in order to become more competitive and successful in a rapidly changing global economy. A Customer Insight Team was established in the first quarter of 2008 with the goal of understanding what jobs customers want to do and how they measure their success while doing the job. This customer insight allows Ingersoll Rand to develop optimal solutions that create exceptional value for customers by helping them do their jobs faster, with less variability, and with greater efficiency. In an ODI project, a Customer Insight Team interviews dozens of people who do the job of interest, for example, a task that uses a power fastening tool. The team then compiles a detailed list of all the things the users may be trying to accomplish during the job, such as applying torque to a fastener. This list of "desired outcomes" is then used to survey more people to learn which items on the list are important but not being well-served by current product offerings in the marketplace.

During 2008, Customer Insight Teams from the three sectors using ODI have been active in the United States, Germany, France, and China covering a significant number of Ingersoll Rand products and services.

## EHS Management

In addition to our strong customer focus on environmentally responsible products and services, Ingersoll Rand is fully committed to reducing the impact of our operations and to using resources wisely. Our large and diverse facilities worldwide operate on a common foundation of responsible management of environmental, health, and safety (EHS) issues.

## **EHS** Policy

This statement of our fundamental EHS policy is posted in all Ingersoll Rand locations and applies to any location where we have at least a 50 percent controlling interest. It recognizes our responsibility to behave in a way that upholds our corporate reputation and standing. The EHS Policy requires, in part, that we establish performance targets and work toward achieving them, develop EHS standards to promote regulatory compliance and performance improvements, conduct periodic audits against those standards, and share best practices worldwide. We review the policy annually and update it as needed. The policy is available in 16 languages.

### EHS Goals

To help drive continued improvement in our EHS performance, we recently adopted five-year, company-wide goals. By measuring and publicly reporting our progress against goals, Ingersoll Rand will be demonstrating our commitment to world-class EHS performance. Our goals clearly communicate to our employees, customers, suppliers, regulators, and neighbors that EHS is an important part of our company culture and business strategy.

Our goals cover the EHS areas where we are committed to drive continuous improvement in our company. Specifically, by 2013 we plan to achieve the following global performance improvements:

- Reduce our recordable incident rate by 67 percent
- Reduce our lost time incident rate by 67 percent
- Reduce our rate of energy use by 15 percent\*
- Reduce our rate of greenhouse gas emissions by 15 percent\*
- Reduce our rate of non-hazardous waste generation by 15 percent\*
- Implement programs at all Ingersoll Rand sites to recycle/reuse aluminum cans, cardboard, glass, oils, paper, plastics, scrap metal, and wood
- Implement effective systems to manage EHS performance at all sites

\*Normalized by cost of goods sold at standard. Meeting these goals will help position Ingersoll Rand to attain our EHS vision: "Achieve sustainable business success through world-class environmental, health and safety performance for our employees, in our workplaces, through our products and services, and within our communities."

## EHS Responsibilities

Ingersoll Rand has an EHS policy, requirements, and programs that enable the company to conduct worldwide operations in a safe and environmentally responsible manner. These requirements and programs assist business managers and facilities in developing and implementing environmental solutions tailored to their needs.

#### **EHS Organization**

Through its Audit Committee, the Board of Directors oversees EHS policy and compliance as part of its corporate governance.

In cooperation with the company's business managers around the world, our vice president of EHS is primarily responsible for developing EHS programs and assuring that our operations meet and sustain compliance with all applicable local, national, and international laws. Guidance is provided by the EHS strategy council, which is comprised of Ingersoll Rand EHS professionals representing each sector and Ingersoll Rand operations worldwide.

A newly announced Sustainability Strategy Council, comprised of business leaders from all sectors, will provide oversight, vision, and leadership for the company's sustainability strategy.

At the corporate level, EHS staff establishes requirements and guidelines, and manages risks associated with transactions and site cleanups. Day-to-day responsibility for EHS management resides primarily with facility, business unit, and sector staffs.

#### **Management System**

Each of our facilities must develop and operate in compliance with an EHS management system. During 2008, we identified the best aspects of the Ingersoll Rand and Trane EHS management systems, programs, and requirements, and developed an enhanced approach to EHS management across the newly integrated company. We continued our focus on aligning EHS considerations more closely with strategic business decision-making and going beyond a compliance-driven management approach.

Ingersoll Rand global EHS requirements are a critical element of the overall management system and are designed to apply to all facilities worldwide. The requirements cover a broad range of topics, including:

- · Pollution prevention, environmental management, and integrated permitting
- Air emission management
- Water supply management
- Wastewater discharges management
- Waste management
- Hazardous substance management
- · General safety and health management
- · Personal protective equipment
- Dangerous substances
- Physical hazards
- Mechanical hazards
- Fire protection
- Accidents and incidents
- Emergency planning and response

#### Ingersoll Rand Environmental, Health and Safety Policy

Ingersoll Rand embraces its responsibility to operate in a manner that protects the environment and human health and safety in order to support the company's long-term growth and reputation as a responsible corporate citizen. We will meet this responsibility by the following actions:

- Comply with or exceed requirements of global, national, state, and local statutes, regulations, and standards protecting the environment and human health and safety. In the absence of laws and regulations, or where they are simply not adequate for our operations, we will apply sound environmental, health and safety (EHS) management practices.
- Establish global internal EHS standards that are robust, scientifically sound, and protective of the environment, and human health and safety.
- Conduct regular audits to verify compliance with regulatory requirements and company standards.
- Implement EHS management systems to identify and manage EHS risks, obligations, and opportunities.
- Establish specific EHS metrics to measure and report on our performance.
- Incorporate EHS considerations into our business decision-making processes.
- Work to prevent accidents, injuries, and unsafe work conditions; promote energy and water conservation; encourage the reuse and recycling of materials; and reduce waste, emissions and the use of hazardous substances in our operations.
- Share EHS best practices across the company.
- Monitor emerging issues and keep abreast of regulatory changes, technological innovations, and stakeholder interests.
- Strive to develop effective and sustainable solutions to EHS challenges arising from our business activities.
- Regularly communicate relevant and meaningful information about our EHS performance to our internal and external stakeholders.

It is the responsibility of corporate EHS staff to establish policy, govern compliance, and review the company's EHS performance with company and business unit management on a periodic basis, including compliance with this policy. In addition, corporate EHS will facilitate participation in training and conferences to foster sharing of best practices across the enterprise.

Each business unit is responsible for implementing this policy, allocating adequate resources, and developing EHS programs. Employees and on-site contractors are responsible for integrating sound EHS practices into their everyday activities, and acting in a manner that is protective of the environment, and human health and safety.

This policy will be reviewed annually and updated as needed.

In addition, each Ingersoll Rand business and facility is required to investigate, understand, and address any additional EHS issues that apply and that are not covered by the EHS requirements. Each Ingersoll Rand business and facility is required to comply with the local, regional, and national requirements that affect its operation.

The EHS management system is closely aligned with international standards for environmental management (ISO 14001) and health and safety management (OHSAS 18001) systems. By the end of 2008, 28 facilities had received third-party ISO 14001 certification, including six newly certified sites. Fifteen locations also held OHSAS 18001 certification, including four received in 2008.

Sector	Location	Year ISO 14001 certification was first achieved	Year OHSAS 18001 certification was first achieved
Climate Control Technologies	Barcelona, Spain	2005	
	Galway, Ireland	2000	2006
	Kolin, Czech Republic	2001	2005
	Louisville, Georgia	2008	
	Luoyang, China	2003	
	Monterrey, Mexico	2007	
	Pamplona, Spain	1999	2006
	Prague, Czech Republic	2001	
	Shenzhen, China	2003	
	Suzhou, China	2005	2005
Industrial Technologies	Guilin, China	2006	2007
	Jurong, Singapore	2008	2008
	Oberhausen, Germany	2005	
	Pavlovo, Russia	2005	
	Sahibabad, India	2006	
	Shanghai, China	2005	
	Unicov, Czech Republic	2003	2005
Security Technologies	El Sauzal, Mexico	2008	2008
	Ensenada, Mexico	2008	2008
	Leamington Spa, U.K.	2006	
	Security, Colorado	2007	2007
	Tecate, Mexico	2008	2008
	Walsall, U.K.	2002	2007
Air Conditioning Systems and	Bangna, Thailand	2008	2003
Services	Charmes, France	2004	
	Golbey, France	2004	
	Taicang, China	2004	2004
	Zhongshan, China	2007	2007

#### Enterprise-wide EHS Information Management System

Beginning in 2008, Ingersoll Rand facilities began using a new data collection and performance monitoring system, which we call "IREHS." This has improved the quality and efficiency of our metrics collection process.

As a result of IREHS, Ingersoll Rand is able to report on global EHS data for the first time in this sustainability report. Since mid-2008, the system has enabled EHS staff to provide monthly scorecards on the company-wide and sector progress on key EHS metrics to the Chairman and CEO and his direct reports. These scorecards help drive management support to achieve continuous improvement in our EHS performance. With the data management system in place, Ingersoll Rand now has the ability to measure and report progress toward achieving enterprise-wide EHS goals.

#### Audit Program

We regularly monitor our facilities' performance against the Ingersoll Rand global EHS requirements as well as applicable regulatory requirements. Our corporate EHS group arranges independent audits, using a combination of third-party consultants and EHS staff from corporate and business sectors, at least once every three years for each Ingersoll Rand location. Sector staff also conduct evaluations to help identify opportunities for improving EHS performance and reducing costs. The third-party audit program is supplemented by annual self-assessments that facilities conduct on their own, using a standard company-wide protocol.

#### **Training and Awareness**

Every Ingersoll Rand employee is ultimately responsible for conserving resources, reducing waste, and operating safely and efficiently. Our training activities raise EHS awareness and provide every worker with the tools that he or she needs to do their job safely and with respect for the environment.

#### **Global EHS Conference**

We held our third annual conference in 2008 for EHS professionals throughout our worldwide organization. These conferences provide valuable opportunities to share best practices between different sectors and locations, discuss common challenges, and update our staff on Ingersoll Rand EHS initiatives. For 2008, the conference theme focused on our "Progress is greener" efforts across the company and how our products and services are helping our customers improve their environmental performance.

The 2009 annual conference was conducted as a virtual conference, utilizing web-based tools. This new approach saved on travel expenses and reduced the greenhouse gas emissions associated with travel. It also enabled greater participation by EHS staff around the globe as well as personnel from other departments that have an impact on the company's EHS performance.

## Reducing our Energy and Environmental Footprint

Ingersoll Rand facilities have embraced the "Progress is greener" initiative with enthusiasm. In addition to our product improvements, we have many examples of programs and strategies that our sectors and facilities are pursuing to improve energy efficiency, create less waste, and reduce water use.

#### Galway, Ireland, Site Demonstrates Environmental Leadership

Our Thermo King facility in Galway, Ireland, has a strong reputation for quality, safety, and respect for the environment. The 2008 achievements for the Galway site include:

- Recertification to the ISO 14001 standard for environmental management
- 25 percent reduction in hazardous waste generation and 30 percent reduction in waste sent to landfill from the prior year

- Inclusion of third-party logistics vendors in the packaging reduction process
- Increased number of reusable product crates returned to the facility by our customers
- Reduced refrigerant loss by installing a mass balance system for the storage and distribution within the facility
- · Zero environmental incidents

## Employee "Green Teams" Help the Environment and the Bottom Line

Green initiatives are now under way at a number of facilities including Security Technologies' Customer Commitment Center in Olathe, Kansas, and Distribution Center in Otay Mesa, California. The facilities are focusing on green initiatives that build employee pride and provide significant cost savings. The two facilities established a joint Green Team that has been instrumental in identifying opportunities and driving these efforts. Examples of recent improvements include:

- Recycling materials such as toner cartridges, and facilitating employee recycling of metal, paper, cardboard, aluminum, and plastic
- Using 50 percent recycled copier/printer paper and creating scratch pads from used paper
- Removing disposable foam cups from the workplace and providing all employees with reusable mugs
- Promoting more environmentally friendly commuting alternatives like carpooling, public transportation, and biking
- Using green cleaning products
- Finding a waste handling contractor that will recycle universal wastes (e.g., fluorescent light bulbs) instead of disposing of them

At our Climate Control Technologies site in Monterrey, Mexico, the Green Team organized a facility-wide competition that involved many employees taking direct action to reduce waste. Twenty-one teams took part in the Green Challenge over a two-month period. At the conclusion of the Challenge, a group of judges – Ingersoll Rand EHS professionals from outside the facility – reviewed the ideas that each team implemented and the results that were achieved. The most beneficial outcome was getting employees motivated and interested in waste reduction and efficiency goals.

Ingersoll Rand has launched a Green Ambassador project with the goal of creating a global network of representatives from all our Green Teams. We are creating a toolkit to help facilitate the startup of Green Teams, and a web-based collaborative space where facilities around the world can share ideas, successes, and challenges.

#### Facility EHS Excellence in 2008

Our Security Technologies facility in El Sauzal, Mexico, had a remarkably successful year, thanks to a sustained, focused effort on key EHS metrics. The facility used intensive, short-term events ("kaizen events") to raise employees' EHS awareness, elicit ideas for improvements from a broad spectrum of individuals, and create a shared enthusiasm for taking action to improve EHS performance. The facility hosted an EHS boot camp as well as an Energy Treasure Hunt, where employees are encouraged to seek the hidden treasure of energy savings. During 2008, El Sauzal experienced no lost workday cases and an 83 percent reduction in its Total Recordable Incident Rate. Electricity use decreased by 9 percent, and water use by 55 percent. The facility achieved certification to both ISO 14001 and OHSAS 18001 during 2008.

### Environmental Performance

For the first time, Ingersoll Rand is able to report environmental performance metrics from its operations worldwide. This report includes performance metrics and other information for the following topics:

- · Material and water use
- Energy use
- Greenhouse gas emissions
- Waste and recycling
- Product stewardship and supplier management
- Compliance

#### Throughout this section of our sustainability report, you will see examples of programs at the facility and sector level that are showing positive environmental results.

Note that we include data from divested operations only for those years when they were part of Ingersoll Rand for the entire calendar year. However, data from Trane are included for the entire 2008 calendar year, although we acquired Trane in June 2008.

#### Material Use

We have established a simple-to-understand production target – increase output by 5 percent while using the same amount of input. Ingersoll Rand operations have a great deal of flexibility in deciding how to improve efficiency and productivity while reducing waste.

Information regarding the company's toxic chemical use and waste management at U.S. facilities is available through EPA's Toxic Release Inventory (TRI) database (www.epa.gov/tri/tridata/index.htm).

#### SAVING TREES THROUGH BETTER PAPER CHOICES

At our Print on Demand (POD) Center in La Crosse, Wisconsin, we produce Trane customer service literature as it is needed instead of stockpiling inventories of every different printed piece. This approach reduces the need to throw away unused literature when it becomes obsolete. During 2008, we saved about 1.5 million pieces of paper as a result of our POD initiative. Furthermore, the center switched to a more environmentally friendly paper stock in May

Units of Measure							
Million Liters	Million Gallons	Million BTUs	Gigajoules	Metric Tons	Million Pounds		
6,863	1,813						
		2,652,855	2,798,762				
		2,419,711	2,552,795				
		5,072,566	5,351,557				
				148,446	327		
				429,418	947		
				577,863	1,274		
				2,146	5		
				47,154	104		
				21,305	47		
	Liters 6,863          	Liters         Callons           6,863         1,813	Million Liters         Million Gallons         Million BTUs           6,863         1,813             2,652,855             2,419,711             5,072,566   -	Million Liters         Million Gallons         Million BTUs         Cigajoules           6,863         1,813               2,652,855         2,798,762             2,419,711         2,552,795             5,072,566         5,351,557	Million Liters         Million Gallons         Million BTUs         Cigajoules         Metric Tons           6,863         1,813               2,652,855         2,798,762             2,419,711         2,552,795              5,072,566         5,351,557               148,446              429,418              577,863              2,146              47,154		

#### Summary of 2008 Environmental Performance Metrics



that requires only about half the amount of trees to produce the same number of sheets of paper, through a production process that uses fewer chemicals and less bleach. A portion of the electricity needs during paper manufacture is supplied by hydroelectricity, which does not have any direct emissions of greenhouse gases. Finally, the paper costs less and is cheaper to ship because it is lighter weight.

#### Water Use

The amount of water used by Ingersoll Rand facilities includes the total amount of water used for processes, cooling, maintenance, landscaping, sanitary needs, and other activities. This does not include water in closed loop systems other than water added during the year. Ingersoll Rand facilities used 6,863 million liters (1,813 million gallons) of water during 2008.

#### WATER CONSERVATION PROJECTS DRIVE SAVINGS

Our Security Technologies facility in Princeton, Illinois, has reduced its water usage by nearly 40 percent from 2007 to 2008. This reduction is the result of several improvements to the facility's 5-stage washer, the completion of its conveyor project, and various improvements identified during an energy and environmental "treasure hunt" held in 2008.

#### **Energy Use**

Energy conservation has become an increasingly important sustainability issue, from the impact of energy use on greenhouse gas emissions to the high costs of energy in today's markets. Ingersoll Rand is working to reduce energy consumption at our operations. Energy efficiency is a top priority for our own facility operations, as well as in our product development strategy.

The energy-saving actions implemented around our global operations include: energy and compressed air audits involving facility staff and Trane professionals, installing timers on the power switches for building ventilation systems, promoting equipment maintenance procedures that improve efficiency, requiring staff to switch off all electrical equipment not in use, and delivering additional employee training and information on energy-saving procedures. By reducing energy and associated greenhouse gases, Ingersoll Rand is becoming a greener, and more sustainable, company.

Ingersoll Rand facilities report energy use internally using the IREHS system on a monthly basis. In 2008, Ingersoll Rand used 5,352 thousand gigajoules (1,486 million-kilowatt hours) of energy.

#### Focus on Energy Efficiency at Tyler, Texas

We are a leading provider of energy-efficient systems and solutions for buildings, and this same commitment to energy efficiency is vigorously pursued in our own facilities and processes. In 2007 and 2008, we instituted a comprehensive program to reduce energy consumption at Trane's largest production facility located in Tyler, Texas. Using detailed meter data and comprehensive analysis of facility infrastructure conditions and needs, the energy team developed a phased plan that is expected to yield \$1.1 million in annual savings upon full implementation this year.



Tyler instituted a management focus on energy that included discussion of power consumption at every monthly management staff meeting. Electricity use data was collected from meters to allow for detailed analysis of energy demand throughout the facility. Wherever possible, facility components were monitored in terms of their kilowatt requirements per unit of output, and the engineering team sought out opportunities to improve performance against that metric.

At the outset of the project, the Tyler team also conducted a thorough assessment of infrastructure. Major systems included two compressed air systems, four chillers running in parallel, a process cooling tower, and two gas-fired boilers. The team conducted a comprehensive evaluation of the facility demands on these systems and identified both operational adjustments and capital projects to better match capacity to demand. Some of the most significant cost savings will be realized by these conservation and efficiency measures that are now being implemented:

- Off-shift and weekend power management program, which turns off manufacturing equipment when not required
- Replacement of air compressor equipment to better match the load requirements
- Retrofits to install more high-efficiency fluorescent lighting
- Replacement of boiler with smaller, more efficient unit
- Revision of operating and maintenance practices associated with HVAC systems

#### **Greenhouse Gases**

The company is presently formulating a public position statement on climate change; however, we are not waiting to take action (key elements of our climate change position are discussed on page 36 of this report). We are actively working to reduce our energy use and to help our customers meet their own energy efficiency goals by improving the environmental performance of our products.

Ingersoll Rand has established 2008 as the baseline year for measuring our greenhouse gas (GHG) emissions worldwide. Our global 2008 GHG emissions were 577,863 metric tons (1.27 billion pounds) of  $CO_2$  equivalents.

We did not collect global data to calculate the GHG emissions from refrigerants or fuel used by our fleet vehicles in 2008. We intend to include this information in next year's sustainability report.

Besides reducing energy use and the carbon dioxide associated with it, Ingersoll Rand also carefully manages the refrigerants we use in our products, such as hydrofluorocarbons (HFCs), which are much more potent greenhouse gases than carbon dioxide on a per-pound basis (although they are emitted in much, much smaller quantities). Within our own operations, we take steps to eliminate or minimize leakage and quickly repair any breaches. We also provide leak detection and repair services to our customers.

The global warming impact of any refrigerant system is a function of two things. First, there is the direct global warming potential of the gas. This is applicable if a leak arises. The more important contributor to global warming is indirect global warming, caused by the consumption of fossil fuels used to produce the electricity that powers an air conditioning system. This indirect global warming contribution occurs continuously as the unit operates. More efficient systems use less electricity, so they result in less CO<sub>2</sub> produced and lower global warming.

#### Waste and Recycling

Ingersoll Rand is committed to managing our waste based on the following hierarchy:

- Reduce The primary focus is to prevent the generation of waste by reducing the amount and toxicity of materials used in packaging, manufacturing, and handling of products throughout their life cycle.
- Reuse Extending the life and reusing items saves energy and money.
- Recycle Recycling can save money and energy and reduce environmental impacts.
- Disposal Waste-to-energy, in which the heat from high temperature combustion of waste is used to help generate electricity, is generally more desirable than landfilling waste.

#### **Hazardous Waste Management**

Ingersoll Rand facilities report on a monthly basis the total sum of hazardous waste, as defined locally.

In 2008, Ingersoll Rand manufacturing generated 2,146 metric tons (5 million pounds) of hazardous waste.

#### Nonhazardous Waste Management

Ingersoll Rand facilities report the amount of waste not classified as "hazardous waste" that is shipped off-site for disposal, recycling or reuse, excluding scrap metal. This includes oils and coolants that are used for fuel blending, as long as they are not classified by local regulations as hazardous waste.

In 2008, we generated 47,154 metric tons (104 million pounds) of nonhazardous waste and recycled 21,305 metric tons (47 million pounds) of nonhazardous waste.

#### EXPANDED RECYCLING IN CARMEL, INDIANA

Security Technologies has initiated a campuswide recycling program at its Carmel, Indiana, facility. The program enables recycling of paper, glass, type 1 and 2 plastics, and aluminum cans by placing numerous bins and containers throughout the facility.

The recycling program will be cost neutral, as the increased expense for the recycling container collection will be offset by a decrease in bulk trash disposal cost. It is estimated that more than 50 percent of bulk trash disposal in corporate office parks is composed of recyclable material.

A Carmel Green Team also has been formed, which will work with campus personnel and the community to pursue additional green activities, such as riverbed and highway cleanups, carpooling, and other sustainable opportunities.

#### CLUB CAR DRIVES RECYCLING AT GEORGIA MANUFACTURING SITE

At the Club Car facility near Augusta, Georgia, employees carried out a five-day intensive recycling event designed to focus attention on management of several waste streams and keeping recyclables out of the landfill. The team's efforts included:

- Reconfiguring cardboard collection bins into recycling bins for cardboard and recyclable plastic items
- Painting plant recycling bins green to distinguish them from trash bins (previously, both were painted brown)
- Creating green floor markings for recycling bin locations
- Initiating plastic recycling for all clear plastic bags, shrink-wrap, bubble wrap, and all plastic bottles
- Improving cardboard recycling by educating employees on the items accepted
- Increasing employee awareness of recycling efforts by presenting information on the large "Club View" TV screens throughout the plant, and including information in quarterly plantwide meetings
- Identifying next items to pursue for recycling: foam, scrap wood, and scrap seat vinyl

The employee team leading the initiative estimates that the expanded recycling program will yield \$31,000 in cost savings in the first year.

## CLUB CAR'S CHANNEL-WIDE BATTERY RECYCLING PROGRAM

Within Club Car, cross-functional team members from EHS, Sourcing, Sales, Marketing, Warranty Administration, and Legal developed a robust battery recycling program with our channel partners that ensures the safe and lawful disposal of all spent batteries, regardless of their branding or source of design. The program meets all environmental laws, creates a new, perpetual revenue stream for Club Car, and gives our channel partners incentive to participate.

## RECYCLING AT HUSSMANN POWDER SPRINGS HELPS THE NEEDY

Recycling paper is standard practice at many Ingersoll Rand locations. However, Hussmann's facility in



Powder Springs, Georgia, looked at recycling as not only an opportunity to help the environment, but also as a way to help the community and benefit those less fortunate. Facility staff researched local recyclers to find the best partner for a recycling program that would generate revenue, which is then given to a local charitable organization to provide help for needy individuals.

The paper is picked up by Hussmann Powder Springs' recycling partner. The recycler chops the paper, "fiberizes" it, and mixes it with fire retardant. The result is sold as insulation for homes. The revenue Hussmann receives for the waste paper is then donated to MUST Ministries of Cobb County, which provides meals, clothing, and other support for those in need.

The Powder Springs recycling system is a zero-cost solution for the branch, and will keep an estimated 12 truckloads of recyclable waste out of the local landfill each year.

### Product Stewardship

We produce high quality, energy-efficient products and systems that minimize the use of natural resources.

Throughout a product's life cycle, we consider the energy, environmental, and safety impacts of the product and its use. The stage gates used in the company's product development processes have EHS considerations built into them. From the earliest stages of identifying a business opportunity, a high score is assigned to new product development that provides significant environmental improvement over current products.

Ingersoll Rand also provides services to customers to ensure that products are running efficiently and safely during their use.

At the end of the life cycle, many of our products are highly recyclable because of their metal content. In some cases, up to 90 percent of the product or more can be recycled at the end of its useful life.

## Refurbishing Water Coolers and Freezers in Mexico

For several years, our Hussmann operations in Mexico have responded to customer needs by recycling water coolers and horizontal freezers for two of our customers. We refurbish all brands of these machines in a company building previously used as a warehouse but no longer needed for that purpose. We refurbish 9,600 units per year. When a water cooler or horizontal freezer is sent to the site at the end of its useful life, we recycle materials such as glass and re-use the insulation foam in the refurbished unit. The customers save approximately 70 percent of the costs associated with the purchase of new equipment.

### Supplier Management

Ingersoll Rand Global Supply Chain has developed practices for managing the impacts of our suppliers.

This includes a formal assessment that addresses numerous areas, including safety and regulatory compliance. Global Supply Chain held a conference with suppliers to focus on reducing disposable packaging, optimizing cube allocation, and reducing fuel consumption during shipping. Lean events with suppliers focus on working waste out of the supply chain system. Increasingly, video conferencing is used to minimize travel to meetings, which reduces energy consumption and greenhouse gas emissions.

Ethics are an important component of the company's business relationship with suppliers. Distributors, agents, and suppliers are trained by Ingersoll Rand on the Foreign Corrupt Practices Act.

#### Ingersoll Rand Transportation Management System (TMS)

The TMS consolidates a variety of Ingersoll Rand shipments and then selects the optimal mode (parcel, truck, rail, air, etc.) to ensure highly efficient on-time delivery. This logistics efficiency translates into fewer shipments, fewer vehicles needed, reduced emission of greenhouse gases, and a smaller footprint on the transportation infrastructure. Appointment scheduling can be provided to carriers at congested facilities. This scheduling facilitates faster loading/unloading and reduces the subsequent fuel consumption from unnecessary truck idling. The system also enables real time shipment tracking, thus providing more confidence in shipment execution. This facilitates better shipment planning that translates into reduced emissions. These are just a few examples of how the Ingersoll Rand TMS supports a green logistics strategy. The Ingersoll Rand Transportation Management System is the foundation of Ingersoll Rand global transportation efficiency, driving a

significant reduction of greenhouse gases, and delivering a sustainable logistics strategy.

#### **SmartWay Initiative**

Ingersoll Rand recently joined the U.S. EPA SmartWay program. The SmartWay program represents a voluntary commitment between Ingersoll Rand and our inbound and outbound logistics carriers to improve air quality and reduce fuel consumption.

Throughout 2009, we will phase in new requirements for our carriers that signify our commitment to the SmartWay program and sustainability. Carriers will be required to report their SmartWay membership status and FLEET score (an EPA measure of logistics efficiency). Ingersoll Rand Logistics will use the carrier's SmartWay status as part of the overall performance metrics. These overall metrics are used to award or withdraw business. Other requirements may include a "no-idle" policy at all North American Ingersoll Rand plants, and requiring transport companies to provide Ingersoll Rand their action plans to improve FLEET scores. In many cases Ingersoll Rand may be able to help transport companies improve their FLEET scores by providing solutions such as the TriPac Auxiliary Power Unit (APU) or Thermo King transport refrigeration systems.

Ingersoll Rand will establish year-over-year improvement goals using EPA guidance while aligning with EHS as part of a comprehensive sustainability strategy. By participating in the EPA SmartWay program, Ingersoll Rand and our logistics carriers help to demonstrate their commitment to Progress is greener.



## A Focus on Employees

Ingersoll Rand is uniquely capable of providing products, services, and solutions to customers because of the talents, experience, and performance of our employees. The company values each employee as an individual and offers developmental opportunities that challenge, reward, and encourage our employees' professional and personal growth in a safe work environment.

Our approach for managing employment, labor relations, human rights, diversity, and equal opportunity is embodied by our Code of Conduct and company policies on equal employment opportunity, affirmative action, and harassment.

We focus on attracting and retaining employees who are collaborative, driven, genuine, and inventive. We offer employees opportunities to grow and develop professionally through training and education. We provide a range of benefits and policies to create a positive workplace experience.

### Employee Safety and Health

Ingersoll Rand is committed to business practices that uphold the highest safety and health standards both inside and outside of the workplace. Our employees truly are our most valuable asset, and we are working hard to promote a culture of individual ownership where safety and health are integrated into all business processes. We are utilizing Six Sigma analytical tools to understand the root causes of safety incidents, develop targeted solutions, track results against the appropriate metrics, and continuously evaluate our progress. Our current area of focus is to ensure this world-class safety culture is shared consistently across all Ingersoll Rand facilities globally. At our facilities, a robust safety management system has been developed, which has driven remarkable improvements in safety performance. We have safety standards in place that address training, employee awareness and responsibility, and leadership commitment, among other elements. Facilities are audited to ensure compliance with applicable regulations and with safety management standards. Safety incidents have declined significantly as a result of this rigorous approach.

## Safety Performance

Ingersoll Rand tracks safety performance through lost time incidence rate (LTIR) and total recordable incidence rate (TRIR). The metrics cover all research and development, manufacturing, warehouse and distribution, and service facilities owned or operated by Ingersoll Rand.

In 2008, the LTIR was 0.39 and the TRIR was 1.64 per 100 employees.

#### New Health and Safety Policies

On January 1, 2008, Ingersoll Rand adopted two policies to help improve our health and safety performance.



#### **AED POLICY**

Automated external defibrillators (AEDs) can be a remarkable life-saving tool. The presence of AEDs and people trained to use them increases the rate of survival for individuals that have sudden cardiac arrest in the workplace. Where it is consistent with local laws and standards of care, each Ingersoll Rand facility with more than 200 employees must have AEDs in place. Where AEDs are installed, the facility must train an emergency response team in cardiopulmonary resuscitation (CPR) and the use of AEDs.

#### TOBACCO-FREE WORKPLACE

We rolled out implementation of our policy to strictly prohibit tobacco use of any kind (e.g., smoking, chewing, snuff, etc.) within company buildings and vehicles. The World Health Organization (WHO) Framework Convention on Tobacco Control recommends such policies to reduce the global burden of tobacco-related diseases and death. In addition to eliminating secondhand smoke concerns, the policy encourages those employees who do use tobacco to cut back or quit their use. In most of our locations, tobacco use is now not permitted within 25 feet of any enclosed area or building, in company vehicles, or while on Ingersoll Rand business at another company's location. The policy applies to all employees, contractors, and visitors.

## Occupational Medicine and Employee Wellness

Nurses offer safety and wellness activities to our employees worldwide. For instance, employees have the opportunity to receive at no charge the seasonal influenza vaccine. Participation is voluntary, but all employees are encouraged to get vaccinated. Ingersoll Rand also has put in place a Pandemic Influenza Preparedness Plan, a set of preventive measures to reduce the risk of illness among employees and their families in the event of an influenza pandemic.

All facilities worldwide have access to the advice and services of an occupational medicine specialist, 24 hours a day, seven days a week. In addition, to help increase communication of health and wellness information, a Medical Services website was developed on the Ingersoll Rand intranet site. Website content includes monthly health topics, policies and programs, and information on training, travel, and vaccines.

#### **International Travel Health Program**

Business travel can pose increased risk to employees' health and safety, and Ingersoll Rand has implemented programs to address those risks so that our global workforce can focus on their productivity rather than health concerns. We offer a pre-travel program for business travelers based in the Americas and Europe through Traveler's Medical Service (TMS), which provides consultation with a specially trained nurse before travel occurs, to minimize the risk of health-related issues. Ingersoll Rand business travelers receive appropriate immunization recommendations, a standardized travel kit, and advice to help safeguard their health during travel. Employees can also obtain up-to-date information regarding travel advisories through the Ingersoll Rand intranet site. The company plans to expand TMS coverage to the Asia-Pacific region in the future.

All of our business travelers worldwide, when traveling outside their home country, can access emergency help through the International SOS Corporate Medical Services. SOS provides emergency medical and security assistance while on an international travel assignment. It is essential to consider the health and wellbeing of employees and any accompanying family members who accept a long-term placement outside of their home country. All outward-bound employees and accompanying family members from the U.S. are required to participate in the Expatriate Medical Program. The program, which will be expanded globally in the future, helps identify any existing medical conditions that the employee or other family members may have in order to ensure that adequate medical services are available in the host country and that the individual's health will not be compromised while on assignment.

#### **Health and Safety Milestones**

Below are selected health and safety milestones achieved by Ingersoll Rand facilities during 2008.

#### INDUSTRIAL TECHNOLOGIES

 Employees at the facility in Campbellsville, Kentucky, celebrated working 9 years and more than 4 million hours without a lost-time injury. In 2008, the facility also received the Kentucky Governor's Safety and Health Award.

#### **CLIMATE CONTROL TECHNOLOGIES**

 Within the Europe-Served Area (ESA), with a combined headcount of more than 2,000 employees, we have achieved a new ESA record of 2 million hours worked without a lost-time incident.

#### AIR CONDITIONING SYSTEMS AND SERVICES

- Trane Commercial Sales Offices in the Carolina
   District 3 years without a lost-time incident and
   1.4 million hours worked since the last incident.
- Clarksville Laboratory World Class Recognized in 2008 for more than 17 years without a lost-time incident and 12 years without a recordable injury.
- Trane Latin America 1 million hours without a recordable incident.
- Trane Commercial Systems in Lynn Haven, Florida - 2.8 million hours without a lost-time incident.
- Employees of the Trane Middle East, Africa and India region 1 year with no recordable incidents.
- Trane Commercial Systems' commercial sales office in Memphis, Tennessee – 1 year without a recordable incident.
- Residential Systems in Tyler, Texas 3 million hours without a lost-time incident.
- The first shift G Line Assembly Team of the Residential Systems plant in Vidalia, Georgia – 3 years without a recordable incident.
- Trane Commercial Systems' entire Virginia district
   1 million hours without a lost-time incident.

#### SECURITY TECHNOLOGIES

- Shanghai, China EHS Excellence Award. Most improved health and safety award for having the operation with the greatest improvement in overall safety and health performance including injury rate and lost workday rate.
- Nadia Rubiliani of Bricard, France EHS Excellence individual contributor award for demonstrated EHS ownership. This award goes to an individual who has made significant contributions to EHS management systems in sustainability, stewardship, innovation, leveraging, standardization, or leadership.
- John Schostek of Indianapolis, Indiana EHS Excellence individual contributor award for demonstrated EHS leadership.
- Carl Xu of Shanghai, China EHS Excellence individual contributor award for demonstrated EHS ownership.
- Security, Colorado EHS Excellence team contributor award for the EHS boot camp pilot program. This award is for the team which has made significant contributions to EHS management systems in sustainability, stewardship, innovation, leveraging, standardization, or leadership.
- Normbau, Germany EHS Excellence team contributor award for the PPE management program.
- Indianapolis, Indiana EHS Excellence team contributor award for the wastewater treatment renovation and upgrade team.
- El Sauzal, Mexico EHS Excellence Operation of the Year award for having an operation staff that has implemented significant improvements in their EHS Program Development.
- Victor Jaen EHS Excellence EHS Individual of the Year. This award is for the EHS individual that has contributed the most to overall improvements within their operation.

#### Hussmann and Thermo King Employees in China Enjoy First-ever Workplace Health Fairs

Medical professionals from the local hospital provided valuable advice and services at the Health Fair conducted at our Hussmann facility in Luoyang, China, and our Thermo King facility in Suzhou, China. At these events, the first such events at the Luoyang and Suzhou sites, employees received information about disease prevention and maintaining a healthy lifestyle. Blood pressure checks were done, and the nurse and doctors at the health fair were available to consult with employees one-on-one with advice about preventing heart disease, diabetes and other chronic diseases, and to answer any questions that the workers may have about health concerns.

#### Awards Program for Safe Construction at Customer Sites in Mexico

As part of an effort to promote the use of safe working practices by the installation companies it employs, Hussmann Mexico has begun recognizing those teams that safely install refrigeration units at customers' construction sites. The objective is to ensure the technicians' safety and well-being, as well as become the customers' partner in safety.

In early July 2008, staff from Hussmann Mexico met with the installation contractor teams to retrain them on the Environment, Health, and Safety (EHS) requirements for construction sites. At that time, they introduced the "Safest Construction Site of the Month" program and award.

To be eligible, teams must meet these criteria:

- Fully comply with Hussmann Mexico's EHS Manual for service and installation, which covers personal protective equipment, ladder inspections, fall prevention procedures, hot work permits, waste management, and weekly safety topics
- Fully comply with the Ingersoll Rand EHS policy, basic safety rules, and weekly safety topics published at the construction site
- Conduct a safety audit
- Implement corrective actions and close them on time, according to initial incident reports
- Hold a final safety audit to verify that corrective actions have been implemented

The installation team assigned to Wal-Mart ("Bodega Aurrerra") was the first team to receive the Safest Construction Site of the Month Award, for July 2008. The team received a Hussmann Mexico National Safety Champions flag, which will be placed at the store. All team members received a National Safety Champions T-shirt, and the team leader received a jacket. The awards program has made installation teams focus on safety to a much greater degree, and that awareness carries over to activities throughout their daily lives in addition to their work efforts.

## Training and Education

Ingersoll Rand significantly increased its investment in training during 2008. More than 100,000 training courses were completed during the year by employees and distributors. Approximately 70 programs were made available to employees. We established an Enterprise Learning Council during 2008 to address training issues.

Our target is for salaried employees to have approximately 60 hours of training annually, including compliance, professional development, and a review of the Business Operating System (BOS). Those who manage people receive about 80 hours of additional annual training. All employees receive training on the Code of Conduct.

The corporate university budget is approximately \$10 million.

Ingersoll Rand requires all salaried employees to complete an online Foreign Corrupt Practices Act training course. By the end of 2008, approximately 30,000 employees (about 90 percent of salaried workers) had completed the training. Salaried employees have access to more than 900 titles of offthe-shelf training in 18 different languages.

A specific session on ethics was included in the November 2008 Leadership Conference, when approximately 300 of the company's top leaders gathered for alignment and education.

The company's orientation module for new employees now includes a *Progress is greener* section. This is a self-paced, on-line course for all levels. Plans are in place to develop a workbook form for employees without access to computers.

#### Ingersoll Rand University

Ingersoll Rand University provides strategic education to develop business leaders, enhance strategic competencies, and drive the Ingersoll Rand culture. Ingersoll Rand University also acts as a broker to provide training programs and manage training events in our emerging markets. In addition, Ingersoll Rand University provides the learning management system infrastructure (LMS) to track and deploy on-line learning for our employees, customers, and dealers. Ingersoll Rand University has education centers in Davidson, North Carolina; Prague, Czech Republic; and Shanghai, China. We offer learning programs in Bangalore, India, as well. Since its inception in 2003, 35,000 people have participated in more than 420 sessions, and more than 9,800 employees, customers, and dealers have used training available via Ingersoll Rand University On-Line. Ingersoll Rand University develops and manages the Ingersoll Rand Leadership Conference and biannual Leadership Forums. A part of the company's Human Resources group, Ingersoll Rand University works closely with Human Resources colleagues to drive business-relevant and high-quality learning for Ingersoll Rand.

#### MBA Program

The Ingersoll Rand MBA program was launched in 2004 as a strategic initiative to develop a pipeline of future company leaders through investment in graduate level business education. Ingersoll Rand, in partnership with Indiana University, developed a cohort-based program that integrates real Ingersoll Rand business issues into the curriculum, provides members visibility with the highest levels of the company's leadership, and creates a strong network

of future company leaders. The program has three graduated cohorts and three more in process. The program promotes:

- A world-class business education
- Development of top talent into exceptional leaders
- A global network promoting dual citizenship

#### Accelerated Development Program

The company's Accelerated Development Program (ADP) is focused on recent college graduates who rotate around the company in various positions to develop future leaders of the company. The program currently exists in Europe, Asia, and the United States, and the company is piloting it in Mexico in 2009.

In an effort to promote diversity, the ADP has a significant number of women in the first two cohorts:

ADP Cohort:	2007	2008	2009
Asia hired	10	10	
% Female	50%	60%	recruiting
Europe hired	16	6	now
% Female	31%	83%	
U.S. hired	30	23	23
% Female	33%	39%	52%

About 30 percent of the current group of ADPs volunteered to focus on three sustainability-related projects for the 2007/2008 period:

- Researching the food processing, transportation, and pharmaceutical markets to understand their sustainability goals, unmet needs, and trends in order to identify opportunities for innovation by Ingersoll Rand.
- Studying LEED and identifying how Ingersoll Rand can help customers achieve LEED certification, including designating a LEED point person at each business unit.



 Developing a GHG baseline inventory for the company and recommendations for improving the company's sustainability strategy.

The three ADP projects together won an Ingersoll Rand President's Award and were also a finalist for the Chairman's Award.

#### Training our Sales Force and Distributors

Residential Services uses training of its sales force and distributors as a differentiator between itself and its competitors. Our Dealer Sales Offices and independent distributors get training they need via a cascade model. There are about 40,000 to 50,000 people in this process, 2,000 of whom serve at some point as trainers. Many of the courses offered are e-courses for either the American Standard Heating and Air Conditioning or the Trane brand. Energy efficiency is woven throughout these courses. There have been over 35,000 e-courses completed over the last few years.

Dealers are most often small businesses that need this type of training. Our company takes a strong stand to help these people better serve the end customer. We get participant feedback in every class and capture the knowledge increase.

## Performance and Career Development

Our goal is for all salaried employees to receive a performance review each year. In order to receive an annual salary increase, a performance review must be in our system. Currently, 82 percent of our salaried employees received a review during the past 12 months.

Ingersoll Rand invests significant effort into talent review for succession planning. The team looks at cross-sector and cross-functional moves and actively engages in talent movement. Our objective is to fill jobs internally whenever feasible. In 2008, we met our goal of filling 65 percent of our executive positions internally.

Every business and region has a talent council, focusing on the talent in the sector or region to identify potential leaders across functional areas. We focus on identifying and mentoring local leaders to ensure the leadership of the company represents the company's global presence.

## Benefits

For U.S.-based core Ingersoll Rand non-bargaining employees, full-time employees are offered the Health Savings Account, Limited Health Care Flexible Spending Account, Supplemental Life Insurance, Long-term Disability, and the Health Care Flexible Spending Account.

Core Ingersoll Rand non-bargaining part-time employees are not offered these benefits. A full-time employee is defined as someone who works 35 or more hours per week. A part-time employee is defined as someone who works between 20 and 35 hours per week.

## Diversity and Equal Opportunity

Ingersoll Rand is an Equal Opportunity Employer. We respect the worth of all people, cultures, viewpoints, and backgrounds, and value our diverse workforce around the globe. We recognize the importance of diversity and inclusion to the company's future.

We collect and report data on diversity in our workforce for the United States only. The data below represent information for the one-year period ending July 15, 2008. Among our company officers, 16 percent are women. The Board of Directors currently has three women and one African-American among its 13 members. All of the members of the Board are over 50 years of age.

## Human Rights

#### **Child or Forced Labor**

There are no operations within Ingersoll Rand that have been identified at which the employees' right to exercise freedom of association or collective bargaining may be at risk. There are no operations within Ingersoll Rand that have significant risk of incidents of child labor.

#### **Organized Labor**

In the United States, 23 percent of Ingersoll Rand employees are covered by collective bargaining agreements. Globally, 32 percent of employees are covered by collective bargaining agreements.

	Hispanic	or Latino					٨	lot Hispaı	nic or Latin	0					
					M	ale					Fen	nale			
Job Categories	Male	Female	White	Black or African American	Native Hawaiian or Pacific Islander	Asian	American Indian or Alaskan Native	Two or more races	White	Black or African American	Native Hawaiian or Pacific Islander	Asian	American Indian or Alaskan Native	Two or more races	Overall Totals
Executive/Sr. Officials & Mgrs	9	5	260	6	1	1	1	0	54	5	0	1	0	0	343
First/Mid Officials & Mgrs	135	31	2,515	97	1	71	9	4	640	38	3	20	2	0	3,566
Professionals	176	78	3,684	157	18	227	16	9	1,339	110	12	81	3	1	5,911
Technicians	155	16	1,568	88	3	43	6	3	177	9	0	6	0	0	2,074
Sales Workers	110	24	2,088	28	0	24	2	4	234	5	0	2	0	0	2,521
Administrative Support	44	136	565	48	2	29	2	2	1,751	239	6	46	9	7	2,886
Craft Workers	650	36	5,800	630	15	180	35	5	315	82	0	10	2	0	7,760
Operatives	946	325	3,667	1,911	10	179	23	3	1,454	1,355	0	117	23	2	10,015
Laborers & Helpers	100	36	951	418	1	38	11	0	377	353	2	24	7	0	2,318
Service Workers	2	0	12	2	0	0	0	0	3	0	0	0	0	0	19
Total	2,327	687	21,110	3,385	51	792	105	30	6,344	2,196	23	307	46	10	37,413
Previous Report Total	917	251	11,592	1,388	44	386	49	2	3,290	681	15	192	13	3	18,823

## Giving to Our Communities

### Ingersoll Rand leverages our expertise to help make the world a better place.

By applying our expertise and knowledge, we partner with organizations that solve problems impacting people everywhere. We will continue to align our philanthropy and community outreach efforts with our core business strengths in efficiency, comfort, and safety. We will focus in areas such as food preservation, safe environments, high performance buildings that provide optimum comfort and indoor air guality, research into ideal home and learning environments, improving energy efficiency in the built community, and more. In addition, we will continue to support long established partnerships such as the National Merit scholarship program for college-bound high school students and our company's commitment to United Way and other community service agencies. Through these efforts, we are creating a meaningful difference in people's lives and help to improve communities around the world.

### Food Preservation

According to the U.N. Environment Programme (UNEP), environmentally friendly ways of producing, handling, and disposing of food would help the world keep up with growing demand and boost food production. Recently, UNEP reported that more than half the food produced today is lost, wasted, or discarded because of inefficiency. Tremendous quantities of food are discarded during processing and transport as well as in supermarkets.

A cold chain is a temperature-controlled supply chain – the sum of all the assets, people, and processes necessary to deliver safe, quality perishables to consumers. Cold chains are essential to the infrastructure of getting food from farms to consumers. They improve the quality of life, drive economic growth, ensure the integrity of perishables, reduce waste, and help meet increasing demand for food.

The need for sustainable cold chains is especially acute in emerging markets, such as China and India, where food demand is rapidly growing.

Ingersoll Rand products and services help improve the cold chain at all stages: post-harvest processing; food processing; long haul by road, rail, ocean and air; warehousing; distribution; and retail.

### Education

Ingersoll Rand is a leader in providing a safe, secure, and productive learning environment for students, school staff, and visitors. A safe school environment helps enable students to succeed and teachers excel and earns the trust of parents and the community. To achieve this, we provide tools to help schools address security issues within the campus and beyond – recognizing that security planning is an ongoing process that requires a solution that uniquely fits each situation.

The company's safe schools website (www. safeschools.ingersollrand.com/index.asp) provides information to school officials on resources for planning, crisis response, understanding, and preventing school violence.

The company also shares its expertise in helping schools to locate, assess, and apply for federal, state, private foundation, and corporate grants to pay for school security programs.

#### Grants Help Waukegan High School Improve Security

Waukegan (Illinois) High School has consistently worked toward meeting the academic and social needs of its diverse student population in an environment that is safe and secure. Although campus security is one of the features important to everyone in the community, funding never seemed to stretch far enough to allow an upgrade to a building-wide system. Ingersoll Rand presented the district with information about several grant programs that could help pay for about 100 Schlage Computer Managed locks throughout the school. The "Safe and Drug-Free Schools" and "Communities and Innovative Programs" grant initiatives are forward funded by the U.S. Congress and can be complex in terms of application processes and deadlines. In some cases, applications may be consolidated depending on the rules for administration developed by individual states, which are responsible for regulating the programs and releasing the funds. Combined, the programs offer more than \$100 million in taxpayer-funded appropriations. Waukegan was successful in receiving the grant money to help finance the locks.

## Energy Efficiency

Ingersoll Rand shares its expertise in providing systems, services, and solutions that deliver maximum energy efficiency so others can learn how to save energy where they live, work, and play.

## Girl Scouts Get Moving! Energy Awareness Program

Ingersoll Rand has teamed up with Girl Scouts of the USA to promote smart energy use in buildings. The initial announcement of the energy awareness program was made during the U.S. Green Building Council's 2008 Green Build Conference and Exposition in Boston. Ingersoll Rand and the Girl Scouts of the USA have created plans to distribute Get Moving! to Girl Scouts across the United States.

Girl Scout Juniors and Cadettes participated in a day camp focused on energy use in buildings that offered a full day's worth of hands-on activities designed to address energy use in the buildings where they learn and play - such as schools, libraries, and community centers. The girls conducted an energy audit of the Math and Science Center and the Program Center at Camp Dellwood. An energy audit calculates and evaluates all of the energy used in a building by lights, heating, air conditioning, and other building systems. The girls used Trane Energy Analyzer Software<sup>™</sup> to track and analyze energy use and determine the buildings' impact on the environment. Based on results, the scouts presented recommendations on how to maintain or improve efficiency. In addition to conducting the audits, the program participants:

- Learn about energy
- Conduct fun experiments to demonstrate energy efficiency
- Find out about different types of engineers and how their jobs make a difference
- Take action by reporting findings and creating business cards to take their energy auditing skills to other buildings

Trane and Girl Scouts of the USA are preparing to launch a national energy awareness and conservation program as part of a leadership journey for Girl Scout Juniors (fourth- and fifth-graders). The journey will be available to Girl Scout members nationwide in 2009. The journey, which teaches energy awareness and conservation measures for buildings, offers girls the opportunity to conduct comprehensive energy audits as they explore career opportunities that harness their interests in science, technology, engineering, and math.



#### BTU Crew<sup>™</sup>- Promoting Greener School Buildings in Knox County, Tennessee

Sixty percent of all energy use is attributable to buildings – lights, heating, etc. That is why Trane created The BTU Crew<sup>™</sup>: a Trane Energy Efficiency program for buildings. Over the course of six lessons, students learn about energy – what energy really is, how to conserve it, careers, and ways to take action. We created this curriculum for several reasons:

- Children want to make a difference in the world

   and one very simple way for them to do so
   is by being environmentally responsible and
   understanding ways to save energy.
- Children make decisions on whether to pursue Science, Technology, Engineering, and Math careers typically by the time they reach the 4th to 6th grades. By becoming a member of the BTU Crew, students will experience how much fun energy and science can be. They also learn about a range of well-paying career choices.

These lessons are designed to be easy to use and adaptable to the needs of students. As a leading global provider of indoor comfort systems and services, Trane feels a social responsibility to educate children and their parents on the benefits of being energy efficient.

#### ASHRAE Headquarters Renovation Showcases Sustainability

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) advances technology to serve humanity and promote a sustainable world. More than 630 company employees are members of ASHRAE, and they chair many crucial committees within that professional organization. The company's Trane business unit contributed to the renovation of ASHRAE headquarters in Atlanta, which was completed in July 2008. ASHRAE's goal in renovating its headquarters building was to provide a healthy and productive environment for staff and to showcase ASHRAE technology, while demonstrating the society's commitment to sustainability.

Trane donated key elements of the building's HVAC system to deliver performance, reliability, indoor air quality, and energy efficiency. The system provides ventilation air and control of humidity and building pressure to create an ideal work environment for employees. The Trane dedicated outside air unit is enhanced with Trane CDQ<sup>™</sup> dehumidification, energy recovery wheel, and direct drive plenum fans. Trane also is supporting the naming of a conference room as the Reuben Trane Executive Conference Room.

#### **Bike-to-Work Festivities**

Security Technologies' Kryptonite brand was a sponsor of Bike-to-Work Day festivities in Washington, DC, and Baltimore, MD, and the 14th Annual California Bike to Work Week, and has donated numerous locks for prizes and raffles at other celebrations. Bike-to-Work Day is an annual event held on the third Friday of May across the United States that promotes the bicycle as an option for commuting to work. Cycling to work benefits people and the planet, and more communities are holding events such as this to support commuting by bicycle.





## Local Community Support

Ingersoll Rand donates to community organizations and promotes employee volunteerism. The community contributions our employees make reflect our company's vision, values, and culture. Highlighted below are examples of Ingersoll Rand employees helping their communities during 2008.

#### **United Way**

Our employees are the driving force behind our strong community support programs. The United Way is one of two core agencies endorsed and supported by the Ingersoll Rand Foundation, as part of the company's commitment to philanthropy. The Davidson Campus showed exceptional growth in their involvement with the United Way in 2008, thanks to efforts including a cross-sector team to increase awareness across the campus. Historically, the Davidson Campus' involvement has grown steadily each year. However, there was a desire to substantially increase awareness and participation. A cross-sector team was formed to accomplish this objective, broadening overall participation and financial results. The team launched several new special events, including a golf tournament that raised \$23,000. A total of \$118,500 (pre-company match) was collected in 2008, \$27,000 more than what was raised in 2007. Overall, the results were well above the 10 percent increase financial objective the team set.

#### Bridgeton Employees Keep Giving and Giving

In Bridgeton, Missouri, the facility's annual United Way campaign resulted in nearly \$293,000 collected for the United Way of Greater St. Louis. The Hussmann Retail Americas Management Team served spaghetti lunches for employees, with proceeds benefiting the St. Joseph Institute for the Deaf. Monetary donations are not the only way our employees contribute to those in need. Employees donated toys for more than 50 families through the facility's toy drive. During the holidays, eight families in need received toys, clothes, personal care items, gift cards, and bus passes. A food drive provided Thanksgiving dinner to 100 families in the St. Louis area.

## Ingersoll Rand Chile Helps Local Community, from Children to Senior Citizens

Twice each year, a team of volunteers from Ingersoll Rand Chile collects food, blankets, appliances, and other items donated by friends and family members. The items are then given to senior citizens during visits to the community center in Santiago. The facility participates in two programs to help foundations that assist children and prevent child abuse:

- Paper recycling: the Ingersoll Rand office collects used paper that is then donated to a foundation called "San José para la adopción," which helps orphaned children find foster families. The foundation sells the paper to recycling companies and the proceeds help supply 90 diapers per month for orphaned babies.
- Toner cartridge recycling: empty toner cartridges are collected on site and given to "Fundación

Maria Ayuda," an organization that works to prevent child abuse. The empty cartridges are sold by the foundation and the proceeds used to fund their programs.

#### Helping the Elementary School Next Door

Every Monday night for the past two years, a group of Von Duprin employees has been playing basketball at a nearby Indianapolis, Indiana, public elementary school. Once the employees started playing basketball there, they identified ways they could help the school. The first order of business was to fix all 30 of the school's exterior doors. Security Technologies agreed to donate \$35,000 worth of materials and \$15,000 for engineering and labor. The employees followed up with school uniform and supplies drives benefiting students at the school. In addition, 30 Von Duprin employees spent a Saturday building a storage barn, landscaping, and creating an outdoor classroom around the school's pond. They donated 200 personhours and \$3,000 in supplies. The volunteers hope this will become a long-term partnership between Ingersoll Rand and the school.

## Sponsoring an Amusement Park Visit for Orphans

The "Fondo Unido" (the United Way in Mexico and Latin America) Committee at the Hussmann facility in Monterrey, Mexico, recently organized a visit to an amusement park for children from the local orphanage Casa Hogar de Enfermeras A.C. Hussmann volunteers served hamburgers, refreshments, and candy bags to the children, followed by contests with prizes and entertainment by "Hilito" the clown. The trip was a success thanks to the participation of all Monterrey plant employees. Money raised from recycling aluminum cans at the facility is used to fund charity work and activities that benefit the community, such as the amusement park trip.

#### Indiana National Guard Care Packages

Employees at the Security Technologies facility in Indianapolis, Indiana, collected care packages for Indiana National Guard troops stationed in Iraq. This is the second year that the plant has conducted a care package drive for the troops. Ninety-one boxes containing more than 2,000 items were collected from employee donations, double the results of the 2007 drive. Employees collected items such as toiletries (shampoo, soap, and hand wipes) and snacks (microwave popcorn, granola bars, and cookies).

## Helping to Build Communities

Ingersoll Rand is proud to support local communities by helping to provide and improve housing for those in need.

#### **Rebuilding Together in Indianapolis**

With a \$3,000 charitable donation and the help of 15 employees and their families, Security Technologies sponsored the 2008 Rebuilding Together Game Day as part of a neighborhood revitalization effort in Indianapolis, Indiana. For nine years, Rebuilding Together Indianapolis has provided assistance to



people who own their own homes but are unable, because of physical limitations or low income, to cover the costs of home repairs. This year's event drew more than 850 volunteers who worked in teams all day on 30 homes. The Security Technologies crew helped provide a new roof, furnace and central air conditioning, new windows and safety doors, a refurbished storage shed, and fresh landscaping on the home they sponsored.

## Trane Donates Portable Cooling Units and Water for Extreme Makeover: Home Edition

A Charlotte, North Carolina, episode of the hit ABC television show "Extreme Makeover: Home Edition" included Trane Commercial Systems (TCS) equipment to keep things cool on the set. TCS Carolinas district donated portable cooling units and bottled water for the episode. Duke Energy, a longtime partner to Trane, provided the VIP and media tents for the weeklong building project. It quickly became evident that the sweltering heat in the Carolinas would make the tents unbearable, so Duke Energy reached out to Trane for relief. The team from Trane Charlotte located cooling units for both tents. After working all afternoon in 100-degree weather, the Trane units cooled the tents and provided an oasis for the throngs of VIPs, media, construction crew, and volunteers who worked tirelessly on the project.

#### Habitat for Humanity Project in Augusta

Eight Ingersoll Rand employees, including five members of the Accelerated Development Program (ADP), recently joined 15 local volunteers for a Habitat for Humanity event in Augusta, Georgia. Thanks to a four-wheel-drive Club Car XRT1550 with an IntelliTach attachment system brought by the Ingersoll Rand team to help expedite the work, the two-day project was completed in one day. The team used the donated equipment to move three large piles of dirt, sand, and rocks around the property and then spread grass seed. The event brought together employees from throughout the company, including an employee from India.

## Responding to Natural Disasters

In response to natural disasters or other emergencies, Ingersoll Rand and our employees help assist people coping with sudden and catastrophic changes in their lives.

#### **China Earthquake**

The American Red Cross presented a certificate of appreciation to Ingersoll Rand for its \$100,000 donation to relief and recovery efforts in China's Sichuan Province following the devastating earthquake that hit the region on May 12, 2008. The American Red Cross created a website that enabled Ingersoll Rand employees around the world to make donations to help earthquake victims. Ingersoll Rand matched the funds contributed, up to a combined total of \$50,000. In addition, Ingersoll Rand China donated 1 million Renminbi (about \$146,000) to the Shanghai Red Cross for relief and recovery efforts in China's Sichuan Province.



#### La Crosse-area Flood Relief

The company matched employee contributions to the Scenic Bluff Chapter of the American Red Cross, up to a combined total of \$10,000. The Scenic Bluffs Chapter coordinated the response to aid flood victims in the La Crosse area of Wisconsin. Trane Commercial Systems operates a facility in La Crosse.

#### Hurricane Ike

Trane Commercial Systems-San Antonio came to the aid of Texans, providing cool comfort as they braced for Hurricane Ike. Millions of people evacuated from the Texas coastline because of the storm. Two warehouse buildings on the site of the former Kelly Air Force Base served as temporary shelter. As a result of cooling contingency planning, Trane-San Antonio, in conjunction with the city of San Antonio, provided air conditioning for the buildings. Trane installed portable cooling units to pump air into the warehouses and maintain a level of comfort for the building occupants. Service personnel were responsible for making sure the units were installed and connected properly, in addition to providing daily maintenance.

## Governance, Commitments, and Stakeholder Engagement

Our company is managed under a corporate governance framework and guided by Corporate Governance Guidelines, which ensure we operate within applicable legal statutes and New York Stock Exchange requirements and consistent with ethical global business standards.

In addition to our company's bylaws, our Code of Conduct – which applies to all employees throughout the world – confirms our commitment to ethical behavior and compliance with laws wherever we work.

### Governance Structure

The following corporate governance guidelines and the charters of the committees of the Board of Directors of the company have been approved by the Board of Directors and provide the framework for the corporate governance of the company.

#### **Board of Directors**

The company's business is managed under the direction of the Board of Directors. The role of the company's 13-member Board is to oversee the management and governance of the company and monitor senior management's performance. Except for Herbert L. Henkel, Chairman and Chief Executive Officer, and Patricia Nachtigal, Senior Vice President and General Counsel, who are employees of the company, all of our directors are independent under the standards set forth in our Corporate Governance Guidelines, which are consistent with the New York Stock Exchange listing standards.

Among the Board's core responsibilities are to:

- Select individuals for Board membership and evaluate the performance of the Board, Board committees, and individual directors.
- Select, monitor, evaluate, and compensate senior management.
- Monitor corporate performance and evaluate results compared to strategic plans and other long-range goals.

- Review the company's financial controls and reporting systems.
- Review and approve the company's financial statements and financial reporting.
- Review the company's ethical standards and legal compliance programs and procedures.
- Monitor relations with shareholders, employees, and the communities in which the company operates.

The positions of Chairman of the Board and CEO are held by the same person, except in unusual circumstances. This policy has worked well for the company. It is the Board's view that the company's corporate governance guidelines, the quality, stature, and substantive business knowledge of the members of the Board of Directors, as well as the Board's culture of open communication with the CEO and senior management are conducive to Board effectiveness with a combined Chairman and CEO position.

#### Lead Director

The Board appoints a Lead Director annually from among the independent directors who are not Board committee chairs. Our Lead Director: (a) presides at all meetings of the directors at which the Chairman is not present, including executive sessions of the directors; (b) serves as a liaison between the Chairman and the independent directors; (c) approves the information sent to the directors; (d) with input from the other independent directors, approves Board meeting agendas and Board meeting schedules to assure that there is sufficient time for discussion of all agenda items; (e) has the authority to call meetings of the independent directors; and (f) is available for direct communication from major shareholders.

#### **Board Committees**

The Board of Directors has the following committees: Audit, Compensation, Corporate Governance and Nominating, and Finance. All committees have written, Board-approved charters detailing their responsibilities. Only independent directors serve on these committees. Chairpersons and members of these four committees are rotated periodically, as appropriate.

The Audit Committee meets at least eight times each year, the Compensation, Finance, Corporate Governance, and Nominating Committees each meet at least four times each year. Additional committee meetings are called as required.

#### **Contacting the Board**

Shareholders and other interested parties wishing to communicate with the Board, the non-employee directors, or any individual director (including our Lead Director and Compensation Committee Chairperson) may do so either by sending a communication to the Board and/or a particular Board member, in care of the Secretary of the company, or by e-mail at *irboard@irco.com*.

During 2008, topics raised through these mechanisms addressed economic performance, such as executive compensation, but there were none related to environmental or social performance.

#### **Management Compensation**

A large percentage of an executive's total compensation opportunity is contingent on, and variable with, performance. Performance is measured on:

- Actual business unit and company financial performance against pre-established business plans, and
- The executive's ability to achieve company objectives, develop and carry out strategic initiatives, contribute to both the dramatic growth and operational excellence of the company, and demonstrate collaboration in the pursuit of a onecompany culture.

In response to a shareholder vote supporting a "say-on-pay," our Board leadership, including the Chairman and CEO, the Lead Director, and the chairs of the Compensation Committee and the Corporate Governance and Nominating Committee, met with the company's largest 25 shareholders (representing over 50 percent of issued and outstanding shares) regarding governance matters, including executive compensation. The purpose of this meeting was to establish a regular dialogue on governance-related and other topics of interest to Ingersoll Rand shareholders. The inaugural meeting was held in September 2008. Of the 25 shareholders invited, 8 participated in the meeting. Additional meetings may be held, based on shareholder interest.

The company has established an e-mail link to the Chair of its Compensation Committee, which all of our shareholders can use to share their comments on executive compensation. This e-mail link can be accessed by clicking inside the box entitled "Executive Compensation Feedback" in the top, righthand corner of the following link to the company's website: http://company.Ingersollrand.com/aboutus/ corpgov/Pages/default.aspx.

Shareholders may also directly e-mail their comments on executive compensation to the company's Board of Directors at *irboard@irco.com*.

#### **Avoiding Conflicts of Interest**

Annually, we report in the proxy statement if a director has a related party transaction (i.e., if a director works at a company that has a business transaction with Ingersoll Rand). If so, then Ingersoll Rand will examine the transaction to determine if it is material. In accordance with NYSE requirements, anything over \$120,000 is considered material.

#### **Determining Board Member Qualifications**

The screening process for new members to the Board is done by the Corporate Governance and Nominating Committee with direct input from the Chairman and CEO and from the other directors. Shareholders may also recommend candidates for Board membership. In considering candidates for director, the Corporate Governance and Nominating Committee will take into account factors including understanding of business and financial issues and ability to exercise sound judgment, diversity, and leadership. The Committee believes that at a minimum each nominee should satisfy the following criteria:

- Highest character and integrity;
- Experience and understanding of strategy and policy-setting;
- Sufficient time to devote to Board matters; and
- Lack of a conflict of interest that would interfere with performance as a director.

## Board and Board Committee Performance Evaluation

In an effort to increase the effectiveness of the Board of Directors and its relationship to management, the Board evaluates its own performance as a whole and the performance of its committees. Each Board committee is also responsible for conducting an annual evaluation of its performance. The effectiveness and contributions of individual directors are considered each time a director is nominated for re-election to the Board.

## Vision, Values, and Code of Conduct

Ingersoll Rand has long-standing, internally developed principles that guide our economic, environmental, and social performance. These principles are embodied on the company's vision, values, and code of conduct – which apply to all of our employees around the world.

#### **Our Vision**

We are dedicated to inspiring progress for our customers, shareholders, employees, and communities by achieving:

- **Dramatic Growth**, by focusing on innovative solutions for our customers.
- **Operational Excellence**, by pursuing continuous improvement in all of our operations.
- Dual Citizenship, by bringing together the talents of all Ingersoll Rand people to leverage the capabilities of our global enterprise.

#### Our Values

- Integrity. We act in the highest legal and ethical standards in everything we do. We conduct ourselves in a manner that nurtures and inspires the confidence of our colleagues, customers, and shareholders.
- **Respect.** We communicate and act in ways that respect and value the worth of all people, cultures, viewpoints, and backgrounds. We value different perspectives because they enrich their own.
- **Teamwork**. We work together and share resources to provide greater value to our customers, fellow employees, business partners, and shareholders. When we join forces, we multiply our ability to achieve innovation and progress, and we increase our competitive advantage in all our markets.
- Innovation. We use our diverse skills, talents, and ideas to develop innovative, imaginative, and creative solutions for our customers. Our innovativeness drives progress and generates growth to benefit customers, employees, and shareholders.
- Courage. We speak up for what is right and take measured risks so our company can thrive. We make choices and challenge the status quo with confidence.

#### **Code of Conduct**

Throughout the company's history, Ingersoll Rand has been committed to conducting business with the highest ethical standards. Maintaining these standards has never been more important than in today's competitive and rapidly changing global business climate. The Code of Conduct is an extension of our core values. All employees are obligated to promptly report any known or suspected violations of the Code or requests that might constitute violations. Employees are provided with a variety of methods of filing a report through written communications or a toll-free HelpLine. To the extent reasonably possible, reports will be treated confidentially. Employees also have the option of reporting concerns anonymously. Company policy strictly prohibits any retaliation or harassment for reporting under this policy. The Code has been translated into 13 languages.

In 2009, we will update our Code of Conduct to reflect the integration of the Trane businesses into Ingersoll Rand.

Compliance with the Code of Conduct is the purview of the Audit Committee of the Board. This committee monitors hotline issues and the status of investigations. Once a year, the full Board participates in a review of the compliance and ethics program. Each year, the Board receives training on the compliance program.

### External Sustainability Initiatives

Ingersoll Rand is a voluntary participant in several external sustainability initiatives that help drive improved performance for our company and the greater community:

- Climate Leaders Climate Leaders is a U.S. EPA industry-government partnership that works with companies to develop comprehensive climate change strategies. Partner companies commit to reducing their impact on the global environment by completing a corporate-wide inventory of their greenhouse gas emissions based on a quality management system, setting aggressive reduction goals, and annually reporting their progress to EPA.
- Climate RESOLVE Business Roundtable's Climate RESOLVE (Responsible Environmental Steps, Opportunities to Lead by Voluntary Efforts) initiative seeks to have every member company in every sector of the economy undertake voluntary actions to control greenhouse gas emissions and improve the greenhouse gas intensity of the U.S. economy.
- GreenChill The GreenChill Advanced Refrigeration Partnership is a U.S. EPA cooperative alliance with the supermarket industry and other stakeholders to promote advanced technologies, strategies, and practices that reduce refrigerant charges and emissions of ozone-depleting substances and greenhouse gases. Working with

EPA, GreenChill Partners transition to non-ozonedepleting refrigerants; reduce refrigerant charges; reduce both ozone-depleting and greenhouse gas refrigerant emissions; and promote supermarkets' adoption of advanced refrigeration technologies.

- S.E.E. Change Business Roundtable's S.E.E. Change (Society, Environment and Economy) initiative encourages member companies to lead by example and adopt business strategies and projects that measurably improve society, the environment, and the economy. The program's driving force revolves around the concept of sustainability as the cornerstone for how member companies can "do well by doing good" – now a proven growth strategy.
- SmartWay Thermo King is an affiliate partner in U.S. EPA's SmartWay Transport. SmartWay Transport is an innovative collaboration between the freight industry and the government. It works to reduce fuel consumption from trucks and rail delivering freight, operating costs associated with freight delivery, emissions of carbon dioxide, and emissions of nitrogen oxide, particulate matter, and air toxics.

## Industry and Advocacy Organizations

Ingersoll Rand is actively involved and holds leadership roles in the following national and international trade and advocacy organizations, many of which are advocating for responsible, sustainable business practices and initiatives:

- ABRAVA, Brazilian Association of Refrigeration, Ventilation and Air Conditioning
- ACEEE, American Council for an Energy Efficient Economy
- AHRI, Air Conditioning, Heating and Refrigeration Institute
- AIA, American Institute of Architects
- Alliance for Responsible Atmospheric Policy
- ANEFRYC, The Spanish National Association of Cold and Air Conditioning Companies (Asociación Nacional de Empresas de Frío y Climatización)
- ANFIR, Association of Manufacturers of Refrigeration Industry
- ASE, Alliance to Save Energy
- ASHRAE, American Society of Heating, Refrigerating and Air-Conditioning Engineers
- Australian Standards
- BOMA, Building Owners & Managers Association
- BRA, British Refrigeration Association
- BCSE, Business Council for Sustainable Atmospheric Policy

- China Chain Store and Franchise Association
- China Construction Ministry Science and Technology Committed City Bus Specialist Committee
- China Federation of Logistic and Purchase
- China Refrigeration and Air-Conditioning Industry
   Association
- China Supply Chain Council
- Council of Urban Public Transport Society of China Civil Engineering Society
- ECSLA, European Cold Storage and Logistics Association
- EPEE, European Partnership for Energy & Environment
- Eurovent, European Committee of Air Handling and Refrigeration Equipment Manufacturers
- Food Logistics Commission of China National Food Industry Association
- GBCs, national and local chapters of Green Building Councils in the U.S., Canada, India, Mexico, Brazil, and the Middle East
- GBI, Green Building Initiative
- IIR, Industrial Information Resources
- IRTA, International Refrigerated Transportation Association
- MAPI, The Manufacturers Alliance
- Mutual Aid Committee of Northern Industries (Comite de Ayuda Mutua de Industrias del Norte)
- NAESCO, National Association of Energy Service Companies
- NAM, The National Association of Manufacturers
- NASEO, National Association of State Energy
   Officers
- Nuevo Leon's Recycling Committee (Comite de Reciclamiento de Nuevo Leon)
- ORC, Organization Resources Counselors
- Risk and Insurance Management Society
- The Japan Refrigeration and Air Conditioning Industry Association
- Transfrigoroute
- UIMM, Union des Industries et Métiers de la Métallurgie
- United Fund, Fondo Unido, A.C.
- U.S. Business Roundtable



### Public Policy Involvement

Representatives from Ingersoll Rand are involved in informing public policy makers on important sustainability issues, such as climate change, energy efficiency, and refrigerant use.

#### Ingersoll Rand Leader Goes to Capitol Hill for Great Energy Efficiency Day

In April 2008, John W. Conover IV, president of the Trane Commercial System business in the Americas, participated in the Great Energy Efficiency Day on Capitol Hill, Washington, D.C., sponsored by the Alliance to Save Energy. As part of a discussion titled "Building for the Future: The Elements of Success," Conover shared his thoughts on sustainable solutions for business and the environment, including trends in today's built environment, available technologies, case examples, and environment and economic impacts.

Launched in 2004, the annual Great Energy Efficiency Day draws more that 400 stakeholders from business, industry, government, academia, the media, and the public interest sector. The event features the leading voices in energy efficiency addressing timely issues and provides insight from Capitol Hill with keynote addresses from congressional members.

#### Position on Refrigerant Use

We follow the refrigerant selection factors listed below in the systems we use in our own facilities and the systems we sell to our customers:

- Low ozone depletion potential (ODP)
- Low global warming potential (GWP)
- High operating efficiency
- Short atmospheric life

• Low operating pressure (low leakage rate) One example of this strategy is our use of R-123 in centrifugal chillers. R-123 is a balanced, environmentally responsible refrigerant with low global warming potential and near zero ozone depletion potential. It also has an extremely short atmospheric life. When R-123 is combined with Trane technology in the CenTraVac<sup>®</sup> chiller, it is the most efficient chiller available today – up to 13.5 percent more efficient than any alternative. In addition, Ingersoll Rand guarantees that our Trane CenTraVac chillers with R-123 will emit less than 0.5 percent each year the system is in use, which is a small fraction of the federal allowable limits for refrigerant emissions.

#### **Position on Climate Change**

Ingersoll Rand is actively involved in climate change policy development in national and international forums, such as the United Nations Framework Convention for Climate Change (UNFCCC). Energy efficiency and refrigerant policy are two areas where the company is most active. Although this complicated issue continues to evolve, key elements of the Ingersoll Rand position on climate change include:

- Pricing Greenhouse Gas Emissions: Ingersoll Rand supports government policy that will create a price signal for greenhouse gas emissions as an effective tool to spur energy efficiency and renewable energy investments.
- Cap vs. Tax: Ingersoll Rand supports a cap and trade legislative framework for limiting carbon emissions over a carbon tax in order to incent readily available, cost-effective, energy-efficient technologies while driving longer term technology investment in renewable energy technologies that are not readily available or cost effective today.
- National and International Linkage: Ingersoll Rand believes that a global policy agreed to within the UNFCCC process, followed by domestic programs in both developed and developing countries, is critical to place countries on a level competitive playing field while ensuring climate change mitigation.
- Offsets: Major facets of any regulatory scheme in national legislation should be linked to and harmonized with international programs (such as the UNFCCC). Where possible, credits for energy efficiency and renewable energy investments (i.e., offset credits) that provide financial incentives will drive progressive climate change mitigating technologies. Any offset credits should be verifiable, sustainable, and additional to normal business practices.
- Separate Treatment of Hydrofluorocarbon (HFC) Refrigerants: HFCs are unique in that the refrigerants are the only greenhouse gas deliberately produced and sold as a product for societal value as opposed to being an unintended by-product. Until more energy efficient, safe, and less potent substitutes are developed, any policy should provide for an acceptable transition time away from today's best practice solution. In addition, any transition should take into account a balanced view on environmental impact. This balanced view should minimize both ozone depletion and global warming potential of the

fluid, minimize refrigerant emissions in their applications, and maximize energy efficiency.

• The Role of Energy Efficiency: Since the majority of energy production today is fossil fuel based, with resulting carbon dioxide emissions, reducing energy use will have a direct impact on carbon dioxide emissions reductions. By transforming the built environment to be more energy efficient and climate friendly, the building sector can play a major role in reducing the threat of climate change. Using energy efficiency technologies available today will not only help abate greenhouse gas emissions, but can also provide sound investments for end users. Ingersoll Rand supports incentives for investment in energy efficiency as opposed to aggressive increases in minimum efficiency standards. These incentives will provide a larger reduction in energy use than would aggressive increases in minimum standards – especially in existing buildings, industrial facilities, and homes – while being financially attractive to end users.

## Engaging Stakeholders

We recognize our stakeholders as those parties that are in a position to influence the success and growth of our business.

Stakeholders	Approaches to Engagement	Key Issues	How Issues have been Addressed
Customers (provide revenue)	Ongoing customer research, including customer satisfaction metrics. Continuous engagement through business relationships.	Delivering continuous improvements in performance and reliability, efficiency of performance, and service levels at a value that is competitive in the marketplace. Help them meet their critical business requirements in all operational areas (not just profitability), e.g., energy efficiency. Identify financing for green building upgrades.	Focusing business strategy on innovation, ongoing productivity improvements, and less cyclical markets. Identifying and implementing energy- saving opportunities for customers.
Investors (provide capital) - more than 70 percent of shares held by institutional investors	Regular dialogue through one-on- one discussions, formal meetings, and participation at industry conferences. Dialogue with top 25 shareholders representing 50 percent of outstanding shares.	Executive compensation. Demonstrating performance that meets socially responsible investor expectations.	The Board agreed to include a shareholder advisory vote on executive compensation, also called a "Say on Pay" proposal, at the company's Annual General Meeting in June 2009. In addition, the Compensation Committee of the Board of Directors has approved modifications to the company's long- term incentive program, which became effective January 1, 2009. Company was included in Dow Jones Sustainability Index for North America as well as several KLD socially responsible investment indices in 2008.
Employees (provide knowledge and expertise)	Ingersoll Rand Daily News (IRDN), CEO webcasts, employee engagement surveys on work environment and line of sight.	Facility closures. Enabling employees to be competitive globally and view themselves as citizens of Ingersoll Rand as a whole as well as citizens of their community.	Providing layoff benefits comparable to other companies. Instituting cost savings to reduce need for layoffs. Meeting employee expectations on work environment, competitive pay, and work-life balance.
Distributors and dealers (provide channels)	Engagement led by the businesses.	Balancing competing needs, including boundaries and flexibility.	Establishing Dealer Advisory Councils for regular communications; holding frequent "Town Hall" meetings to ensure opportunities for Q&A sessions and information sharing; sponsoring national and regional distributor meetings to obtain feedback and provide updates; establishing awards programs to provide recognition for outstanding service and outreach.
Facility neighbors, local government, and communities (provide local permits, pool of potential employees and "license to operate")	Community open houses, community ambassador committees, meetings with elected officials.	Providing jobs. Managing energy efficiency, greenhouse gas emissions, and CFCs. Ingersoll Rand refrigerant choices.	Providing business stability and employment. Encouraging employee volunteerism in the community and local philanthropic support. Setting goals and implementing energy and environmental improvements in company operations, products, and services. Communicating benefits of refrigerant choice.

## Awards and Recognition

In 2008, many Ingersoll Rand facilities received public recognition for their environmental, safety, and social programs and performance. Below are selected awards and recognition.

### External Awards

- Ingersoll Rand was listed on the Dow Jones Sustainability Index North America for the first time in 2008. The company was also listed on several KLD socially responsible investment indices.
- Twelve Trane offices, including its headquarters, were recognized by the American Heart Association as a heart-healthy workplace:
  - Platinum Awards: La Crosse, Wisconsin; Macon, Georgia; and Vidalia, Georgia
  - Gold Awards: Clarksville, Tennessee; Columbia, South Carolina; Lexington, Kentucky; Lynn Haven, Florida; Piscataway, New Jersey; Pueblo, Colorado; Trenton, New Jersey; Tyler, Texas; and Trane Gulf South
- Club Car received an honorable mention for environmental sustainability by *Golf Inc.* magazine's 2008 Green Awards competition.
- Nirvana air compressor series received a silver award for energy-saving technology and products at the Third Shanghai International Energy-saving and Emission-reduction Exhibition.
- The association of refrigeration manufacturers in Mexico recognized the engineering team at Hussmann, Monterrey, for a decade of service to the national industry for its active participation in the creation of new standards for energy consumption, emissions, and safety.
- The Thermo King facility in Shenzhen, China, was named an "Advanced Enterprise for Cleaner Production in Guangdong Province" by the Economic and Trade Commission, Guangdong Department of Science and Technology, the Environmental Protection Bureau, and the Guangdong Department of Finance.
- Thermo King's Hastings, Nebraska, facility received the Well Workplace Gold Award at the Sixth Annual Safety and Worksite Wellness Conference sponsored by the Great Plains Safety and Health Organization and Well Workplace Nebraska.
- Trane Asia received a Premier Business Partner award from Jardine Engineering Corporation.

- Climate Control Technologies' facility in Saskatchewan, Canada, received recognition and a certificate of safety excellence by the provincial government.
- The Hussmann Canada facility in Dartmouth, Nova Scotia, received safety excellence recognition from the government of Nova Scotia.
- Security Technologies' facility in El Sauzal, Mexico, received recognition from the Mexican environmental agency and labor agency for its environmental and safety management systems.
- Thermo King Hastings, Nebraska, site won the Safety Award of Honor designation from the Great Plains Safety and Health Organization.
- Thermo King, Suzhou, China, was one of 10 operations out of more than 4,000 recognized by the Suzhou municipal government for its safety program and performance.
- The Industrial Technologies Campbellsville, Kentucky, facility received a Governor's Safety Award for its safety performance.
- The Jurong, Singapore, Industrial Technologies facility received an eco community award from the Southwest Community Development Council for its recycling efforts.
- Trane, in Trenton, New Jersey, received an award from the Governor's annual occupational safety and health award program.

### Internal Awards

Ingersoll Rand has several types of internal awards: environmental, safety and health achievement, and innovation. The awards program encourages innovation, continuous improvement, and good management behavior that aligns EHS with the company's overall strategic goals.

The environmental awards recognize facilities that have demonstrated superior environmental performance, continuous environmental improvement, and innovations in environmental engineering and management. The safety and health awards also emphasize implementing management systems and best practices that maintain an injury-free workplace. The awards criteria go beyond lagging indicators, such as injury/illness rates, and encourage proactive programs. The EHS awards program is open to all non-office sites around the world, including manufacturing facilities, service centers, and warehouse/distribution sites. There are three awards categories: achievement, innovation, and facility of the year. To be nominated in the achievement and innovation categories, sites have to demonstrate that their practices improved workplace environmental or safety and health conditions. Only facilities earning accolades in both the achievement and innovation categories can be placed in the running for the top facility of the year award. In addition, the facility of the year must earn external third-party recognition for its practices.

Ingersoll Rand also recognizes our business units with quarterly President's Awards, which typically include sustainability-related awards. At the end of the year, all President's Awards winners are nominated for the Chairman's award, the highest level of internal recognition.

#### **Climate Control Technologies**

- Bridgeton, Missouri Environmental Achievement
- Cambridge, Ontario Safety Achievement
- Galway, Ireland Environmental Innovation, Safety Innovation, Safety Achievement
- Grand Rapids, Michigan Environmental Achievement
- Halifax, Nova Scotia Safety Achievement
- Hastings, Nebraska Health Innovation, Safety Achievement
- Iztapalapa, Mexico Environmental Innovation, Safety Innovation
- Louisville, Georgia Environmental Achievement, Safety Achievement
- Luoyang, China Health Innovation
- Madison, Wisconsin Environmental Achievement, Safety Innovation
- Marshfield, Wisconsin Environmental Achievement, Safety Achievement
- Minneapolis, Minnesota Environmental Achievement, Safety Achievement
- Monterrey, Mexico Environmental Innovation (2 awards), Safety Innovation
- Mt. Laurel, New Jersey Environmental Achievement
- Pamplona, Spain Environmental Achievement
- Powder Springs, Georgia Environmental Innovation
- Regina, Saskatchewan Safety Achievement
- Salem, New Hampshire Environmental Achievement
- St. Rose, Louisiana Safety Innovation
- Suzhou, China Health Innovation, Safety Achievement
- Tampa, Florida Environmental Achievement
- Tlalnepantla, Mexico Environmental Innovation



- Urbandale, Iowa Environmental Achievement
- Winnipeg, Manitoba Safety Achievement Industrial Technologies
- Campbellsville, Kentucky Environmental Achievement, Safety Achievement
- Oberhausen, Germany Environmental Achievement, Safety Achievement

#### **Residential Systems**

- Ft. Smith, Arkansas Environmental Achievement
- Tyler, Texas Environmental Achievement
- Vidalia, Georgia Safety Achievement

#### **Security Technologies**

- Chino, California Safety Achievement
- El Sauzal, Mexico Environmental Achievement, Safety Innovation, Safety Achievement, Safety/ Health Facility of the Year
- Ensenada, Mexico Environmental Achievement
- Indianapolis, Indiana Safety Innovation
- Leamington Spa, U.K. Environmental Achievement
- Newcastle, U.K. Environmental Achievement
- Otay Mesa, California Safety Achievement
- Princeton, Illinois Environmental Innovation, Safety Innovation
- Security, Colorado Safety Innovation
- Suwanee, Georgia Safety Innovation
- Tecate, Mexico Safety Achievement

#### Trane Commercial Systems

- Lynn Haven, Florida Safety Achievement
- Pueblo, Colorado Safety Achievement
- SE Territory Safety Innovation

# Ingersoll Rand GRI Topic Index

Report Section	GRI Indicator	Page
Awards	2.10	38
Benefits	LA3	24
Career Development	LA12	24
CEO Statement	1.1, 1.2	1
Company Profile	2.2, 2.3, 2.4, 2.5, 2.7, 2.8, EC1, EC2, LA1	2
Customer Satisfaction	PR5	9
Diversity	LA13	25
EHS Responsibilities	LA8	21
Energy	EN3, EN4, EN5, EN6	14, 15
External Initiatives	4.12	34
Governance Structure	2.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.9, 4.10	32–34
Green Buildings	S01	4
Greenhouse Gases	EN16, EN18	14, 15
GRI Index	3.12	40
Home	2.1	front cover
Human Rights	LA4, HR6, HR7	24, 25
Industry and Advocacy	4.13	35
Local Community Support	EC8, SO1	29–31
Material Issues	3.5	3
Material Use	EN8, EN21	15
Product Stewardship	EN26, EN29, PR1	17–19
Public Policy	1.2, SO5	1, 36
Report	2.9, 3.1, 3.2, 3.3, 3.4, 3.10, 3.11,3.13	back cover, 3
Stakeholders	4.14, 4.15, 4.16, 4.17	37
Training	LA10, LA11	23
Vision	4.8	34
Waste and Recycling	EN22	14, 17

#### **Contact Information**

For information on sustainability performance, including copies of this report, contact:

Aaron Kleinbaum Vice President, Environment, Health and Safety and Deputy General Counsel Ingersoll Rand One Centennial Drive Piscataway, NJ 08855

732.652.6728 aaron\_kleinbaum@irco.com

© Copyright 2009 Ingersoll-Rand Company Limited



Ingersoll Rand is a global diversified firm providing products, services and solutions to enhance the quality and comfort of air in homes and buildings, transport and protect food and perishables, secure homes and commercial properties, and enhance industrial productivity and efficiency. Driven by a 100-year-old tradition of technological innovation, we enable our customers to create progress and a positive impact in their world.

ingersollrand.com