

# Working Together for Enduring Results

**2015 SUSTAINABILITY SUPPLEMENT** 

# Contents

## **3** 1. Messages from Leadership

- 3 1.1 Letter from Michael Lamach, CEO
- 5 1.2 Letter from Paul Camuti, Senior Vice President, Innovation and Chief Technology Officer
- 6 1.3 Leadership Team COMMITTED TO ETHICAL LEADERSHIP

### 8 2. About Ingersoll Rand

- 8 2.1 Company Overview WORKING TOGETHER FOR ENDURING RESULTS
- 8 2.2 Market Presence
- 9 2.3 Number of Employees
- 9 2.4 Strategic Business Units and Brands GLOBAL MARKET-LEADING BRANDS
- 10 2.5 Customer Satisfaction
- 10 2.6 Economic Performance and Business Strategy
- 12 2.7 Governance, Ethics and Compliance; Risk Management

BUSINESS ETHICS OUR CODE OF CONDUCT GLOBAL ANTI-BRIBERY AND CORRUPTION POLICY POLITICAL ACTIVITIES AND CONTRIBUTIONS ETHICS HELPLINE REPORTING PLATFORM GLOBAL HUMAN RIGHTS POLICY RISK MANAGEMENT BOARD OF DIRECTORS ROLE OF THE CHAIRMAN AND CEO ROLE OF THE LEAD DIRECTOR CORPORATE GOVERNANCE GUIDELINES

- 15 2.8 Regulations and Policy NEXT-GENERATION REFRIGERANTS REGULATORY COMPLIANCE PUBLIC POLICY
- 17 2.9 2015 Awards and Recognitions
- 18 2.10 Memberships and Partnerships INDUSTRY ASSOCIATIONS
- 19 2.11 Charters

## 20 3. Sustainability at Ingersoll Rand

- 20 3.1 Our Approach
- 20 3.2 Sustainability Governance INTERNAL SUSTAINABILITY STRATEGY COUNCIL EXTERNAL SUSTAINABILITY ADVISORY COUNCIL 2015 COUNCIL MEMBERS CENTER FOR ENERGY EFFICIENCY AND SUSTAINABILITY
- 22 3.3 Our Climate Commitment YEAR 1 PROGRESS
- 23 3.4 About this Supplement CHANGES DURING REPORTING CYCLE ASSURANCE
- 24 3.5 Materiality Assessment MATERIALITY PROCESS INDEPENDENT ASSURANCE STATEMENT TO INGERSOLL RAND OVERVIEW OF METHODOLOGY 2015 MATERIALITY MATRIX GRAPHIC
- 2015 MATERIALITY MATRIX GRAPHIC 29 3.6 Stakeholder Engagement CUSTOMERS INVESTORS POLICYMAKERS SUPPLIERS ADVOCACY GROUPS/NONGOVERNMENTAL ORGANIZATIONS STAKE HOLDER ENGAGEMENT CHART
- 31 3.7 Value Chain
  - VALUE CHAIN STAGES

33 3.8 2020 and Strategic Development Goals EMBEDDING SUSTAINABILITY ACROSS THE ENTERPRISE

### 36 4. Our Planet

- 36 4.1 Environmental Sustainability Strategy OUR POSITION ON CLIMATE CHANGE
- 37 4.2 Employee Engagement
- 38 4.3 Environment, Health, and Safety FUNCTIONAL SCOPE AND GOVERNANCE ENERGY AND CLIMATE KEY DATES AND TARGETS
- 41 4.4 Greenhouse Gas Emissions PRODUCT-RELATED EMISSIONS
- 44 4.5 Company Energy Use
- 45 4.6 Materials Used
- 45 4.7 Water
- 45 4.8 Waste
  - WASTE AND RECYCLING MANAGEMENT
- 46 4.9 Product Environmental Impact

### 49 5. Our People

- 49 5.1 Building Our Winning Culture
- 49 5.2 Progressive, Diverse and Inclusive
- 50 5.3 Learning and Development
- 50 5.4 Occupational Health and Safety SAFETY
- 51 5.5 Wellness
- 52 5.6 Labor Practices, Decent Work and Human Rights LABOR PARTNERSHIPS
- 53 5.7 Supply Chain Transparency and Performance MATERIAL TRACEABILITY AND SOURCING
- 55 5.8 Community Engagement OUR GLOCAL PROGRAM

#### 57 5.9 Philanthropic Giving

- INGERSOLL RAND GLOBAL CITIZENSHIP COUNCIL INGERSOLL RAND FOUNDATION PRIORITY ISSUE GRANTS
- MATCHING GIFTS
- NATURAL DISASTER RELIEF
- EDUCATIONAL SCHOLARSHIPS
  - VOLUNTEERISM PHILANTHROPIC CORE PRINCIPLES

### 60 6. Our Products

- 60 6.1 Product Development Strategy and Processes PRODUCT-DRIVEN GROWTH
- 60 6.2 Technology and Innovation
- 61 6.3 Smarter and More Connected
- 64 6.4 Product Reliability
- 64 6.5 Energy Efficient Products
- 65 6.6 Nexus Opportunities
- 66 6.7 Innovation for Developing Markets
- 67 6.8 Base of the Pyramid Solutions

## 68 GRI Table

77 Appendix A

# **1. Messages from Leadership**

"The company's top-quartile performance in 2015 demonstrates our formula is working well. It is a testament to the power of strategy, discipline, innovation and, above all, the commitment of our employees around the world to the vision, purpose and values of Ingersoll Rand." - MICHAEL W. LAMACH, CHAIRMAN AND CEO



1.1 Letter from Michael Lamach, CEO

I was recently asked to describe what

the world will need from Ingersoll Rand. The answer is clear: it is the combination of our people, technology, science and products and service capabilities, unleashed to reduce energy demand in buildings, transport and industrial systems in a reliable manner. Our core strengths — energy efficiency and reliability — help control the world's carbon footprint and enhance productivity.

With the population expected to expand by 2.4 billion people, or nearly 33 percent, by 2050, the pressure to cut energy demand and greenhouse gas emissions will only increase. Cities will grow even faster, absorbing an additional 3 billion people. It is estimated that, around the globe, 75 percent of the building inventory and public infrastructure that will exist in 2050 has not yet been constructed.

Urbanization at this scale will radically disrupt the planet if it is not sustainable for the economy and the environment. Bridging successfully to the mid-21<sup>st</sup> century will depend in large part on society's ability to rise to the challenges of climate change and resource depletion.

As a company that provides solutions for energy efficiency, economic productivity and greenhouse gas

More than 90 percent of our product portfolio directly addresses demands for greater energy efficiency with lower greenhouse gas emissions in buildings, homes, industrial spaces and transport markets around the world. mitigation, Ingersoll Rand is positioned to help meet these challenges.

The Ingersoll Rand Climate Commitment is our public pledge to significantly increase energy efficiency and reduce environmental impacts from our operations and product portfolio by 2030, with key milestones specified for 2020. These 2020 targets keep us focused on continuous improvement in the areas of environmental impact and social responsibility.

We're strengthening our capacity for customer-centric, environmentally responsible innovation in order to deliver on our sustainability pledge. Our engineering teams have developed new digitally connected software solutions and refrigerants. We're integrating these innovations across the business, transforming them into high-performance, low-global warming potential (GWP) solutions for our customers. At the same time, operational innovations throughout the company are reducing the carbon footprint of our facilities and fleet.

The Ingersoll Rand Climate Commitment has led to the avoidance of approximately 2 million metric tons of  $CO_2e$  to date – equivalent to the  $CO_2$  emissions from burning more than 2.1 billion pounds of coal and the electricity used by more than 270,000 homes for one year. By 2030, we expect to reduce our carbon footprint by 50 million metric tons.

Over just the past two years we have decreased greenhouse gas emissions from the company's operations by 78,000 metric tons of CO2e, or 17 percent. Our total energy use, normalized by net revenue, has declined 5 percent.

Marking a milestone in achieving our Climate Commitment, in 2015 we launched the Ingersoll Rand EcoWise™ portfolio of products. The EcoWise endorsement is given to products with next-generation, low-GWP refrigerants and high efficiency operation. The first products to earn this endorsement were the Trane Sintesis™ air-cooled



chiller and Series E<sup>™</sup> CenTraVac<sup>™</sup> centrifugal chiller, as well as our Thermo King truck and SLXe<sup>™</sup> trailer refrigeration products sold in Europe and global marine refrigeration units.

These initiatives are a testament to the impact of our business operating system, which enables us to execute with discipline and precision in pursuit of continuous improvement. They also demonstrate the power of the distinct culture we've created at Ingersoll Rand — one that embodies employee engagement, diversity and a passion for helping our customers succeed.

Our focus on people is why we value the quality of our culture so highly. Customers prefer doing business with people who are engaged in the mission of meeting their needs and exceeding their expectations. Employee engagement is the essence of our winning culture and we achieved top-quartile scores in overall engagement again in 2015. We introduced sustainability-specific questions in 2011 and continue to see rising scores each year. Our people view Ingersoll Rand as a great place to work, which in turn leads to a better customer experience which ultimately delivers shareholder value.

We encourage our employees to match their engagement in the workplace with involvement in the communities in which we live and do business. Contributing both time and financial support to local philanthropies and community organizations, the people of Ingersoll Rand volunteered more than 19,000 hours in 2015, a 23 percent increase from 2014. Their passion for making the world a better place is the driving force as we work to develop innovative solutions that deliver greater value for our customers and society.

Going forward, we will continue to focus on our growth opportunities, operating system, financial strategy and culture to serve our customers, create value for our shareholders and contribute to a more sustainable global economy. We are committed to delivering enduring results, and I look forward to keeping you apprised of our progress.

Jonal

Michael W. Lamach Chairman and Chief Executive Officer

## 1.2 Letter from Paul Camuti, Senior Vice President, Innovation and Chief Technology Officer

The world's expectations related to resource efficiency and sustainable design are changing fundamentally. Meeting these new expectations demands innovation and innovation is key to our growth and operational excellence strategies at Ingersoll Rand.

As chief technology officer, I am the leader responsible for building systems to stimulate innovation throughout the organization and energizing the whole company around them. Our goal is to use innovation to help Ingersoll Rand become a top organic growth company among our industrial peers.

The exciting part for me is the intersection between our business opportunities and the customer solutions that we can create, whether they are products or service offerings, and the technologies that enable them to happen. Particularly in a company like Ingersoll Rand, which has many different, diversified lines of business, to be able to help the teams create real value using a wide range of business models and technologies is what innovation oversight is all about.

The innovation challenges we face relate to the dynamic nature of our end markets. Customer expectations are changing faster than ever before — not only in mature economies around the world but in developing nations as well. Our key challenge is to help society address the issues of climate change and resource depletion at both the tip and base of the pyramid.

Our strategy is to capitalize on the diverse experiences and perspectives that teams bring to generate new ideas. In this way, we are responding to our market environment, improving our technical skills and customer understanding, and accelerating the pace of innovation across the company.

Our teams are sharpening their focus on the nexus between our market opportunities and the solutions Ingersoll Rand can create. Our customers clearly see value in these new solutions. Our "vitality index" — the percentage of sales generated from products or services introduced within the past three years — has increased from the mid-teens to the mid-twenties since 2010.

The new ideas we create at Ingersoll Rand extend beyond our products and services — they are key to our operational excellence strategy and the way we run the business. We've invested significant human and financial capital in building a system to stimulate innovation and energize the whole company around it.

Internal processes aren't necessarily the most exciting aspect of innovation, but if a team's new ideas don't translate into something commercially viable, they're inventing for the sake of inventing. Discipline is essential to successful innovation, and the Ingersoll Rand business operating system provides tools that enable us to develop and commercialize new solutions with rigor and precision.

Using our business operating system to drive innovation ensures that we are continually weighing our new ideas against their ultimate value to our customers. Deploying its various elements, among them our product growth team approach, we've launched or improved more than 190 products over the past three years, accelerating our performance on key portfolio metrics. These include on-time delivery, product quality, revenue and share growth, margin expansion and sales from new products. We did this while improving safety, environmental performance and engaging our employees.

Since 2012, our ability to get high-quality products to market on time and within budget has improved 69 percent. The percentage of revenue that Ingersoll Rand generates from the more than 144 new offerings has improved 35 percent. More and more of our portfolio is migrating toward smart, connected solutions that are more reliable and energy efficient than in the past. Each one of our business units is executing on a connected strategy.

For example, we've introduced transport refrigeration units with truck telematics. Our Trane Intelligent Services combine sensors, data analytics and human expertise to optimize the performance of buildings. We're pioneering home automation solutions with our Nexia platform. Our golf cars and utility vehicles feature industry-leading GPS-based telematics solutions with advanced functionalities such as performance monitoring, tracking and geo-fencing.

Heating, ventilation and air conditioning, transport and industrial platforms have been digitally connected for a decade or more, and new connectivity technologies



will continue to emerge. We're focused on the data analytics these innovations will enable. Next-generation analytics, driven by machine learning around structured and unstructured data, will provide us with greater insight into how we can add value in the marketplace — whether in our products, our manufacturing processes, or the experience we create for our customers.

We are also pursuing opportunities related to innovative materials and chemistry. For example, 60 percent of our product portfolio relies on refrigerants. We are committed to transitioning our refrigerant technology platform to new types of low-global-warming-potential chemicals. Replacing a wide range of legacy refrigerants is a difficult design challenge, and we are leading the industry in developing innovative solutions to this important global challenge.

Data analytics and new materials are directly beneficial and a result of our focus on sustainability and an increasingly crucial driver of customer value and growth for Ingersoll Rand. Our customers now demand products with fewer environmental impacts from initial design to end of life as well as quality and reliability. These demands are central to our product innovation and development processes.

We have a robust program aimed at identifying the key attributes that make a product environmentally superior throughout its life. We are deploying this knowledge in our innovation and product development processes across the organization to ensure that product lifecycle impacts are considered up front, and that tradeoffs are identified.

Innovation is core to our future success at Ingersoll Rand, and we remain committed to offering products and services with greater reliability and a smaller environmental footprint from ideation through end-of-life.

P-PAC-4

Paul A. Camuti Senior Vice President, Innovation and Chief Technology Officer

## 1.3 Leadership Team

#### **COMMITTED TO ETHICAL LEADERSHIP**

Our leaders embody the five core values of Ingersoll Rand: Integrity, Respect, Teamwork, Innovation and Courage. Serving as coaches and leading by example in their decisions and actions, they help employees hone their skills and grow in their careers. Delivering results through engagement of those closest to the customer and process coupled with collaboration, our leaders serve as role models for the behaviors that underpin a winning culture.

Our employees have validated the company's leadership model over the years. Our people consistently score the Ingersoll Rand leaders' commitment to ethics and integrity at the top of all companies in our employee engagement surveys.

## Executive Leadership Team



#### Pictured Above:

From Left to Right: **Robert G. Zafari**, Executive Vice President, Industrial Segment; **Allen W. Ge**, President, HVAC and Transport, Asia Pacific and India; **M. Stephen Hagood**, Senior Vice President and Chief Information Officer; **Susan K. Carter**, Senior Vice President and Chief Financial Officer; **Paul A. Camuti**, Senior Vice President, Innovation and Chief Technology Officer; **Michael W. Lamach**, Chairman and Chief Executive Officer; **Didier P. M. Teirlinck**, Executive Vice President, Climate Segment; Marcia J. Avedon, Senior Vice President, Human Resources, Communications and Corporate Affairs; Raymond D. Pittard, President, Transport, North America and EMEA; Todd D. Wyman, Senior Vice President and President, Compression Technologies and Service; Keith A. Sultana, Senior Vice President, Global Operations and Integrated Supply Chain; David S. Regnery, President, Commercial HVAC, North America and EMEA; Maria C. Green, Senior Vice President and General Counsel; Gary S. Michel, Senior Vice President and President, Residential HVAC

#### DIRECTORS

Ann C. Berzin: Former Chairman and Chief Executive Officer, Financial Guaranty Insurance Company

John Bruton: Former EU Commission Head of Delegation to the United States and Former Prime Minister of Ireland

Elaine L. Chao: 24th U.S. Secretary of Labor from 2001-2009

Jared L. Cohon: President Emeritus of Carnegie Mellon University

Gary D. Forsee: Retired Chairman and Chief Executive Officer, Sprint Nextel Corporation and Former President of the University of Missouri System

**Constance J. Horner:** Former Deputy Secretary, U.S. Department of Health and Human Services

Linda P. Hudson: Founder, Chairman and CEO of The Cardea Group and former president and CEO of BAE Systems, Inc.

Michael W. Lamach: Chairman and Chief Executive Officer of the Company

Myles P. Lee: Former Chief Executive Officer and Executive Director of CRH plc

John P. Surma: Former Chairman and Chief Executive Officer, United States Steel

Richard J. Swift: Retired Chairman, President and Chief

Executive Officer, Foster Wheeler Ltd. and Former Chairman of Financial Accounting Standards Advisory Council

**Tony L. White:** Retired Chairman, President and Chief Executive Officer, Applied Biosystems Inc.

#### **ENTERPRISE LEADERSHIP TEAM**

Michael W. Lamach: Chairman and Chief Executive Officer

Marcia J. Avedon: Senior Vice President, Human Resources, Communications and Corporate Affairs

**Paul A. Camuti:** Senior Vice President, Innovation and Chief Technology Officer

Susan K. Carter: Senior Vice President and Chief Financial Officer

**Allen W. Ge:** President, HVAC and Transport, Asia Pacific and India

Maria C. Green: Senior Vice President and General Counsel

**M. Stephen Hagood:** Senior Vice President and Chief Information Officer

**Gary S. Michel:** Senior Vice President and President, Residential HVAC

Raymond D. Pittard: President, Transport, North America and EMEA

**David S. Regnery:** President, Commercial HVAC, North America and EMEA

Keith A. Sultana: Senior Vice President, Global Operations and Integrated Supply Chain

Didier P. M. Teirlinck: Executive Vice President, Climate Segment

**Todd D. Wyman:** Senior Vice President and President, Compression Technologies and Services

**Robert G. Zafari:** Executive Vice President, Industrial Segment

#### **OTHER SENIOR LEADERS**

**Christopher J. Kuehn:** Vice President and Chief Accounting Officer

Lawrence R. Kurland: Vice President, Tax

**Zac Nagle:** Treasurer and Vice President, Treasury and Investor Relations

Evan M. Turtz: Secretary

# 2. About Ingersoll Rand

Vision	A world of sustainable progress and enduring results.
Purpose	We advance the quality of life by creating comfortable, sustainable and efficient environments.
Values	<b>INTEGRITY:</b> We act with the highest ethical and legal standards in everything we do.
	<b>RESPECT:</b> We respect and value the worth of all people, cultures, viewpoints and backgrounds.
	<b>TEAMWORK:</b> We work together and share resources to provide greater value to our customers, employees, business partners and shareholders.
	<b>INNOVATION:</b> We use our diverse skills, talents and ideas to develop customer-driven, innovative and imaginative solutions.
	<b>COURAGE:</b> We speak up for what we believe is right and take measured risks to create progress.

## 2.1 Company Overview

Ingersoll Rand (NYSE: IR) creates comfortable, sustainable and efficient environments that advance the quality of life across the globe. We heat, cool and automate homes and buildings, enhance commercial and industrial productivity, and keep transported food safe and fresh. Diversity, engagement and teamwork drive innovation at Ingersoll Rand and fuel our passion for exceeding our customers' expectations. Together with principled leadership and ethical business practices, our high-engagement culture drives enduring results that lead to a better world.

## WORKING TOGETHER FOR ENDURING RESULTS

Teamwork for continuous improvement is fundamental to what we do at Ingersoll Rand. Staying close to our customers, we create products, services and solutions that deliver greater reliability and a better customer experience. Guided by our business operating system, we believe employee engagement is the best way to improve our business processes, reduce complexity and ultimately deliver growth and margin enhancement. Through our businesses and as volunteers in our communities, we work to improve quality of life and advance sustainability across the globe.

## 2.2 Market Presence

Ingersoll-Rand plc, a public limited company incorporated in Ireland in 2009, and its consolidated subsidiaries, is a diversified, global company that operates in more than 100 countries. Our headquarters in the United States are located in Davidson, North Carolina. Sales in the United States are made through branch sales offices, distributors and dealers across the country. Non-U.S. sales are made through numerous subsidiary sales and service companies with a supporting chain of distributors around the world. For more information about our market presence, please refer to our Form 10-K here.

## 2.3 Number of Employees

As of December 31, 2015\*, Ingersoll Rand employed approximately 45,000 people around the world.

REGION	PAYMENT METHOD	FEMALE	MALE	UNKNOWN	TOTAL
Asia Pacific	Hourly	325	2,857		3,182
	Salaried	1,350	2,731		4,081
EMEA	Hourly	111	2,618		2,729
	Salaried	907	2,430		3,337
India	Hourly		267		267
	Salaried	116	1,295		1,411
Latin America	Hourly	176	1,008		1,184
	Salaried	391	876		1,267
North America	Hourly	2,585	9,825		12,410
	Salaried	3,309	8,600		11,909
Unspecified	Contractors			2,891	2,891
GRAND TOTAL		9,720	32,507	2,891	44,668

#### **TABLE 1**

## 2.4 Strategic Business Units and Brands

#### **GLOBAL MARKET-LEADING BRANDS**

Our people and family of brands work together to create value for customers in global commercial, industrial and residential markets.

We have two strategic business segments: Climate and Industrial. Our Climate segment globally delivers energy-efficient products and innovative energy services. It includes Trane<sup>®</sup> and American Standard<sup>®</sup> heating and air conditioning, which provide heating, ventilation and air conditioning (HVAC) systems, and commercial and residential building services, parts, support and controls; energy services and building automation solutions, as well as Thermo King<sup>®</sup> transport temperature control solutions.

Our Industrial segment delivers products and services that enhance energy efficiency, productivity and operations. It includes compressed air and gas systems and services, power tools, material handling systems, ARO<sup>®</sup> fluid management equipment, as well as Club Car<sup>®</sup> golf, utility and rough terrain vehicles. For more information about our strategic business units and brands, please refer to our Form 10-K <u>here</u>.



Enhances operational efficiency, saves energy and improves productivity through innovative products, services and solutions.

Ingersoll Rand industrial products range from complete compressed air and gas systems and services, to power tools, fluid management and material handling systems.



Recognized as industry leaders in efficiency and long-lasting value of golf, utility and personal transportation vehicles.

The Club Car product portfolio includes golf cars, a mobile golf information system, turf and commercial utility vehicles, multi-passenger shuttle vehicles, rough-terrain utility vehicles, and street-legal, lowspeed vehicles.



Ensures homeowners and commercial building owners maximize the comfort and energy efficiency potential of their home or facility.

Trane safely and efficiently optimizes indoor environments with a broad portfolio of heating, ventilation and air conditioning systems, building and energy services, parts support and advanced building automation controls.



Enhances the quality of life through temperature management in global transportation.

Thermo King manufactures transport temperature control systems for a variety of mobile applications, including trailers, truck bodies, buses, shipboard containers and railway cars.



## Achieving Premier Performance – Our Strategy



**Growth Excellence.** We use analytics to make clear, strategic choices on what markets to pursue and how to succeed by introducing productive, energy-efficient and reliable products and services to deliver on our customers' needs.



**Operational Excellence.** We pursue continuous improvement that drives growth, creates value, fosters employee engagement and enhances quality to make the customer experience better.



**Winning Culture.** We engage our employees and develop a workforce with diverse backgrounds and skills to foster an environment of innovation that leads to products and services that are better for our customers, society and the environment.

## 2.5 Customer Satisfaction

(G4: Product and Service Labeling)

Ensuring customer satisfaction and loyalty continues to be a priority at Ingersoll Rand. Using a best practice of our Business Operating System (BOS), customer satisfaction is measured through the Customer Satisfaction Index (CSI) which includes a combination of calculations and weightings based on customer channel. The CSI measurement for our distributor channel for example is net satisfied and net delighted. For end user or direct customer, net satisfied, net promoter and net committed are applied. Attributes pertaining to the sales, product, delivery, and service experiences are measured and tracked to understand how to leverage strengths and where focus is needed to improve weaknesses.

Principles of the program model include "Listen, Interpret, React, and Monitor" which ensure that we gather the right customer feedback and use it to improve our customer's experience with Ingersoll Rand. Since the implementation of the program (2006) Ingersoll Rand has experienced an upward trend for both distributor and direct customer results due to having a focused customer experience Program.

In addition, it is our standard practice to comply with regulations and various voluntary codes concerning product labeling and service information, marketing communication and customer safety. Each business unit has a designated legal counsel who follows a process for addressing issues of non-compliance in these areas. Due to market differences, tracking of non-compliance related incidents in the areas of product labeling, marketing communication and customer safety is the responsibility of each business. As such, we do not collect this data or make general statements on this topic at the enterprise level.

## 2.6 Economic Performance and Business Strategy

At Ingersoll Rand, we believe the measure of a great company is consistent, year-after-year top-quartile performance on the most important metrics to our customers, employees and shareholders. Our long-term goal is to increase organic revenue at least twice as fast as the underlying rise in gross domestic product.

We believe we can grow at this rate because our businesses are supported by strong macro-economic trends. World population is expected to increase by 2.4 billion people, or nearly 33 percent, by 2050. Cities will grow even faster, absorbing an additional 3 billion people. It is estimated that, around the globe, 75 percent of the building inventory and public infrastructure that will exist in 2050 has not yet been constructed.

Urbanization at this scale will radically disrupt the planet if it is not sustainable for the economy and the environment. Bridging successfully to the mid- $21^{st}$  century will depend in large part on society's ability to rise to the challenges of climate change and resource depletion.

As a company that provides solutions for energy efficiency, economic productivity and greenhouse gas mitigation, Ingersoll Rand is positioned to help meet these challenges. We continue to invest heavily in product innovation and operational excellence to drive growth and improve profitability.



The year 2015 was an exceptionally unstable period in the energy sectors, in foreign exchange rates, in emerging markets and in the stock market. Nonetheless, Ingersoll Rand extended its multi-year record of top-quartile, diversified industrial peer group performance as measured by organic revenue and earnings growth, incremental margins and total shareholder return.

The company's net revenue for 2015\* grew 3 percent from 2014 on a reported basis. Operating margin increased 10 basis points to 11 percent, adjusted EPS was up 12 percent to \$3.73 million (USD). Adjusted EPS is a non-GAAP financial measure.

We use a disciplined and dynamic model for deploying the company's free cash flow, weighing investments in the business, dividends, share repurchases and potential portfolio transactions in line with market conditions to create maximum shareholder value. The company's dividend increased 16 percent. In 2015, executing on our capital allocation strategy, we repurchased \$4.4 million (USD) Ingersoll Rand shares for \$250 million (USD).

During the past five years, and including 2016, the company's dividend has grown at a compound average

annual rate of 24 percent, amounting to approximately one-third of our strong free cash flow. During this same period the company returned more than \$6 billion (USD) to shareholders through dividends and the repurchase of approximately \$100 million (USD) Ingersoll Rand shares.

The past five years have also been a period of sustained operational improvement at Ingersoll Rand. We have deployed the Ingersoll Rand business operating system throughout our businesses, including strategy development, competitive analysis, engineering, product management, supply chain, manufacturing, customer support and all supporting functions. We have expanded our business without adding fixed costs, headcount or facilities footprint, while improving productivity and reducing our time-to-market. As a result, the company's operating margins have improved 270 basis points since 2011.

This financial performance underscores a commitment we all share at Ingersoll Rand: to shape the direction of future innovation and create a better experience for our customers. Acting on this commitment, we continue to fully deploy a business operating system that enables us to execute with discipline and precision in pursuit of continuous improvement. And we've created a culture that embodies employee engagement, diversity and a passion for helping our customers succeed.

The company's top-quartile performance in 2015 demonstrates this formula is working well. It is a testament to the power of strategy, discipline, innovation and, above all, the commitment of our employees around the world to the vision, purpose and values of Ingersoll Rand.

## 2.7 Governance, Ethics and Compliance; Risk Management

The core values of Ingersoll Rand —Integrity, Respect, Teamwork, Innovation and Courage — are the foundation of our enduring success. Integrity leads this list of values because it is fundamental to our 145year reputation as a company that can be trusted by customers, suppliers, shareholders and the communities in which we operate. Integrity also is fundamental to our philosophy of corporate governance. We not only operate in accordance with the law and the highest standards of ethical conduct, but do what is right for our stakeholders, for the environment, and for society.

#### **BUSINESS ETHICS**

Our commitment to act with integrity is core to the Ingersoll Rand Code of Conduct and Global Human Rights Policy. These documents frame the ethics and legal practices that we expect all of our employees to uphold, wherever they are located around the world, as well as our corporate standards for working conditions and human rights, as modeled after international organizations such as the International Labor Organization and the United Nations.

While some of these standards and rules reinforce legal imperatives in the places where we operate, each one of them reflects our commitment to fairness, honesty and ethical business practices.

#### **OUR CODE OF CONDUCT**

Our Code of Conduct embodies our approach for managing employment, labor relations, human rights, diversity, and equal opportunity, as well as company policies on equal employment opportunity, affirmative action, and harassment. Every employee receives a copy of the Code, which is available in multiple languages and can be accessed under the "Our Company" tab on our website. Our salaried employees participate in an annual Code of Conduct training program and complete a certification agreeing to compliance. Ingersoll Rand has a 100 percent response rate target for salaried staff completing the Annual Compliance Training Program. In 2015, 100 percent of such employees completed the training and certification. Training for our Code of Conduct, which mirrors many of the objectives of the Ingersoll Rand Global Human Rights Policy, consists of a two-hour online training program with a questionnaire for all employees to complete.

## GLOBAL ANTI-BRIBERY AND CORRUPTION POLICY

Ingersoll Rand is committed to winning business on the value proposition of our brands and the superiority of our product and service offerings. Therefore, we require our employees around the world to comply with our Global Anti-Corruption Policy, which is also a part of our Code of Conduct. Our Board of Directors has oversight responsibilities for this policy which, in essence, prohibits the giving and even the offering of anything of value in exchange for a commercial or governmental business advantage.



### award FORTUNE #1 Global Industrial Machinery Company

FORTUNE magazine ranked Ingersoll Rand on its 2015 World's Most Admired Companies list, and for 2016 Ingersoll Rand ranks on the Industrial Machinery category for the fourth consecutive year. We also ranked Top 10 in the Community Responsibility category among all FORTUNE list companies, joining Starbucks, Unilever, Walt Disney and Whole Foods Market in this prestigious key attribute ranking. The Global Anti-Bribery and Corruption Policy underscores our commitment to compliance with the anti-corruption laws of all countries in which Ingersoll Rand and our agents, consultants and affiliates operate. In case they occur, all alleged incidents of corruption are promptly escalated to and investigated by the company's Ethics and Compliance Group. In the event that an investigation were to confirm the corruption allegation, prompt remedial and corrective actions would be taken, including but not necessarily limited to, termination of responsible employees and/ or third parties, as well as enhancement of internal controls and processes. In addition, the company may choose to self-report the violation to the appropriate regulatory authorities.

We communicate our Global Anti-Bribery and Corruption Policy to all our employees around the world through our yearly Code of Conduct and Antitrust training programs. We also address the potential for bribery and corruption when conducting due diligence in qualifying acquisitions and new business partners. We evaluate disclosure of matters in light of applicable regulatory requirements (including applicable SEC rules and regulations and the listing standards of the NYSE) and the materiality of such matters to our company.

#### **POLITICAL ACTIVITIES AND CONTRIBUTIONS**

The laws of many countries prohibit or strictly limit contributions by corporations to political parties and candidates. Although our employees may engage in personal political activity, they are prohibited from doing so on behalf of Ingersoll Rand or in their capacity as a company employee. In the United States, Ingersoll Rand manages a nonpartisan Political Action Committee (PAC) which is compliant with all applicable laws and is regulated by the Federal Election Commission (FEC).

Under the FEC, all funds received by the PAC and resulting contributions to federal candidates are publicly disclosed. For a list of federal contributions, see <u>here</u>. Although Ingersoll Rand employees may make personal contributions to political parties and candidates, they are not permitted any type of reimbursement from the company. The PAC is funded exclusively through voluntary contributions by salaried employees.

#### INGERSOLL RAND FEDERAL POLITICAL ACTION COMMITTEE TOTAL CONTRIBUTIONS (U.S. ONLY)

2015	2014	2013	2012	2011
\$11,000	\$37,500	\$7,500	\$17,500	\$2,000

#### ETHICS HELPLINE REPORTING PLATFORM

Our third-party, global Ethics HelpLine is a whistleblowing mechanism through which employees and external stakeholders, including our business partners, may report any known or suspected violation of laws, regulations or the Code of Conduct. The Ethics Helpline also serves as an instrument to conduct human rights reviews.

Employees may telephone or access the Ethics HelpLine through a secure website and countryspecific, toll-free telephone numbers any time and can remain anonymous, unless restricted by local privacy laws. The availability of the Ethics HelpLine and instructions for its use are covered in detail in the Code of Conduct. The Ethics HelpLine is overseen by the Audit Committee of the Board of Directors and managed by an independent third party organization. We take violations of the Code of Conduct seriously. All reports to the Ethics HelpLine are investigated and actions are taken immediately to ensure compliance.

#### **GLOBAL HUMAN RIGHTS POLICY**

Our commitment to employees, business partners, customers and communities is strengthened by our Global Human Rights Policy. The policy covers nondiscrimination and harassment, prohibitions against child and forced labor, freedom of association and the right to engage in collective bargaining. Many of the adopted standards align with basic concepts regarding working conditions and human rights advanced by international organizations such as the International Labor Organization and the United Nations; the policy represents Ingersoll Rand minimum standards in these areas.

While local laws or regulation may necessitate a different interpretation or application of the policy, we believe that the fundamental values it embodies should serve as our global minimum business standards. Our Code of Conduct employee training program, which mirrors many of the objectives of the Ingersoll Rand Global Human Rights Policy, is conducted annually. This training encourages employees who believe this policy has been violated to report the suspected violations through the company's Ethics HelpLine. The Ingersoll Rand Global Human Rights Policy is also posted online, including instructions on how to report suspected violations through the Ethics HelpLine.

Ingersoll Rand is committed to complying with laws pertaining to freedom of association, consultation, and collective bargaining. Ingersoll Rand respects its employees' right to individually decide to join or refrain from joining any lawful organization. The company's Global Human Resources Policy emphasizes freedom of association.

#### **RISK MANAGEMENT**

The Ingersoll Rand Board of Directors has oversight responsibility for the processes established to report and monitor systems for material risks applicable to the company. Our Enterprise Leadership Team (ELT) functions as Risk Counsel for the company. The Board focuses on the company's general risk management strategy and the most significant risks facing the company and ensures that appropriate risk mitigation strategies are implemented by management.

The company has identified and regularly evaluates strategic, operational, financial and compliance risks, and has established a corresponding control mechanism that enables management to respond effectively to risks in these areas as they may arise. The Board has delegated to its various committees the oversight of risk management practices for categories of risk relevant to their functions as follows:

- The Audit Committee oversees risks associated with the company's systems of disclosure controls and internal controls over financial reporting, as well as the company's compliance with legal and regulatory requirements.
- The Compensation Committee considers risks related to the attraction and retention of talent and risks related to the design of compensation programs and arrangements.
- The Corporate Governance and Nominating Committee oversees risks associated with sustainability.
- The Finance Committee oversees risks associated with foreign exchange, insurance, credit and debt.

The Board considers enterprise risks and succession planning at each Board meeting, receiving reports from each Committee as to risk oversight within their areas of responsibility. Presentations are made to Audit Committee regularly summarizing key risks across the enterprise and ranking enterprise risks based on the Enterprise Risk Management Integrated Framework as published by the Committee of Sponsoring Organizations (COSO), which measures vulnerability, severity of impact and speed of onset.

This framework (1.2.1 Risk Responsibility — 2015 ERM Program) is a three-dimensional approach, considering objectives, risk components and all layers of the organization. We have identified risk objectives and risk components for strategic, operational, financial and compliance risks with a corresponding control mechanism which allows management to respond according to the particular risk or opportunity. Sustainability risks and opportunities, such as those related to climate change and natural resource impacts, are included in this process. We also reference the COSO framework in communicating risk internally to ensure that it is consistently managed across the enterprise.



### сомраму міLestone Ingersoll Rand Marks Climate Commitment Year One

We are publicly committed to significantly increasing energy efficiency and reducing environmental impacts from our operations and product portfolio by 2020. We are advancing high-performance, low-greenhouse gas emissions solutions for our customers, while reducing the carbon footprint of our facilities and fleet.

To date, the Ingersoll Rand Climate Commitment has led to the avoidance of approximately 2 million metric tons of CO2e – equivalent to the CO2 emissions from burning more than 2.1 billion pounds of coal and the electricity used by more than 270,000 homes for one year. By 2030, we expect to reduce the carbon footprint of our product portfolio by 50 million metric tons. Our Chief Financial Officer, who reports directly to the Chief Executive Officer, has been appointed as the company's Chief Risk Officer. In this role, the Chief Financial Officer periodically reports on risk management policies and practices to the relevant Board committees or to the full Board for the purpose of decision making regarding the Board's enterprise risk oversight and the company's risk management and mitigation strategies.

#### **BOARD OF DIRECTORS**

The responsibility for our governance and direction is in the hands of a Board of Directors composed of 12 members — 11 of whom are considered "independent" according to New York Stock Exchange standards. Four of the company's directors are women, and two are non-U.S. citizens. Each of the Board's four committees — Audit, Compensation, Finance and Corporate Governance & Nominating — has a written Board-approved charter detailing its responsibilities. Only non-employee directors serve on these committees.

The Board's core responsibilities are as follows:

- Select individuals for Board membership and evaluate the performance of the Board, Board committees and individual directors.
- Monitor corporate performance and evaluate results compared to the strategic plans and other longrange goals.
- Review the Company's financial controls and reporting systems.
- Review the Company's ethical standards and legal compliance programs and procedures.
- Oversee the Company's management of enterprise risk.
- Monitor relations with shareholders, employees, and the communities in which the Company operates.

#### **ROLE OF THE CHAIRMAN AND CEO**

Our Chairman and Chief Executive Officer, Michael W. Lamach, is responsible for the management of the company under the guidance of the Board, and is the only company employee serving as a director. The Board delegates to the Chief Executive Officer, and through that individual to other senior management, the authority and responsibility for managing the company's business. The Board's role is to oversee the management and governance of the company and to monitor senior management's performance.

#### **ROLE OF THE LEAD DIRECTOR**

The Board appoints a strong, independent Lead Director from among the Board's independent directors for a minimum three-year term, and believes this role adequately addresses the need for independent leadership and an organizational structure for the independent directors. The Lead Director coordinates the activities of all of the Board's independent directors, serves as the principal confidant to the CEO, ensures that the Board has an open, trustful relationship with the company's senior management team, and is responsible for numerous duties in addition to the duties of all Directors as set forth in the company's Corporate Governance Guidelines. Our current Lead Director is Richard J. Swift, who was reappointed to the position in 2013. Swift was originally appointed as Lead Director in 2010, and has been a member of the Board since 1995.

#### **CORPORATE GOVERNANCE GUIDELINES**

Ingersoll Rand is managed under a corporate governance framework and guided by Corporate Governance Guidelines, which ensure that we operate within applicable legal statutes and New York Stock Exchange requirements, and in a manner that is consistent with ethical global business standards and aligned with stakeholder interests. These guidelines detail the Board's responsibilities, policies, procedures, practices and committee structure. Click here to access comprehensive information about corporate governance at Ingersoll Rand.

## 2.8 Regulations and Policy

Energy efficiency remains integral to our global portfolio innovation efforts. To deliver on growth with a focus on innovation, in 2013 we expanded upon our efforts to understand and capture the full spectrum of our product and service impacts of products by incorporating lifecycle assessments (LCAs), customer opportunity assessment, resource consumption, and sustainability risk analysis (including emerging regulations) as part of our new product development process (IRPDP).

We are actively engaged with policymakers to bring solutions to topics that are material to our business. Energy efficiency and refrigerant policy are two areas where the company is most active. Ingersoll Rand supports cost effective policies that facilitate market transition to more energy-efficient technologies. We support strong energy efficiency requirements for

**90** % of our product portfolio directly addresses demands for greater energy efficiency with lower greenhouse gas emissions

> IN BUILDINGS, HOMES, INDUSTRIAL SPACES AND TRANSPORT MARKETS AROUND THE WORLD.

new and existing construction and are working with governments in the United States, Canada, Mexico, European Union, China and India to facilitate adoption and enforcement of such programs.

CO₂e

We actively participate in international forums, such as the United Nations Framework Convention on Climate Change and the Montreal Protocol, to help create an organized approach to global refrigerant transitions. We are also working proactively with government agencies and refrigerant suppliers to help identify alternatives and facilitate a practical transition that reduces greenhouse gas (GHG) emissions as early as possible.

#### **NEXT-GENERATION REFRIGERANTS**

For example, we are engaged with government agencies and refrigerant suppliers in shaping a global transition to next-generation refrigerants with low global warming potential (GWP). With our Climate Commitment, the introduction of the Ingersoll Rand EcoWise portfolio, and our plan to introduce new high-performance chillers and retrofit options with alternatives to R-123 refrigerant by 2018, we are positioned as leaders in this important effort.

We are working proactively with leading suppliers to develop and test various long-term alternatives to the traditional R-123 refrigerant, and numerous next-generation, low-GWP solutions are emerging. Our key objective is to offer Ingersoll Rand customers the widest possible range of options. We continue to evaluate the available alternatives and timing for North America and other markets to ensure that we deliver value to customers and that we have a strong service organization and supply chain in place to support their transition.

#### **REGULATORY COMPLIANCE** (G4: Compliance)

Ingersoll Rand is committed to operating in a way that safequards our people and protects the environment. We realize that environmental impact, climate change, and the health and safety of our employees

and communities are among our most important sustainability focus areas. Our ongoing commitment to safety and sustainability is embedded in our business practices and reflects our belief that our longterm success will be measured not only by financial performance, but also by a continued focus on good corporate citizenship for our customers, employees, suppliers, shareholders and the communities where we live and work.

To achieve a zero injury and incident culture, and to meet our environmental goals, we are committed to integrating sound Environmental, Health and Safety (EHS) practices into our everyday activities with our stakeholders. From a regulatory authority compliance perspective, Ingersoll Rand:

- · Complies with or exceeds requirements of global, national, state and local statutes, regulations and standards which protect the environment, human health and safety. In all cases, whether or not applicable laws and regulations exist, we will apply sound EHS management practices.
- Conducts regular internal and third-party audits to verify compliance with EHS regulatory requirements and company standards.
- · Monitors emerging issues and keeps abreast of regulatory changes and technological innovations.

Additional information can be found here.

#### **PUBLIC POLICY** (G4: Public Policy)

Ingersoll Rand provides refrigeration, cooling and air conditioning solutions for our customers globally. Therefore, we take responsibility for managing materials in a manner that protects our environment, employees, customers and communities. Some refrigerants used in Ingersoll Rand products are considered ozone-depleting substances and, although we have strict guidance around handling these materials, leaks and spills can result in emissions as well as other environmental and safety hazards.

## 2.9 2015 Awards and Recognitions



### SUSTAINABILITY

#### **Dow Jones Sustainability Index**

Named to the Dow Jones Sustainability World and North America Indices for the fifth consecutive year.

#### FTSE4Good Index Series

Added to the prestigious index for meeting stringent environmental, social and governance criteria.

#### Corporate Responsibility Magazine's 100 Best Corporate Citizens List

Ranked on the magazine's 16th annual 100 Best Corporate Citizens List for the third consecutive year.

#### **MSCI Sustainability Index**

Named as a constituent to the MSCI Global Sustainability Indexes.

#### Green Builder Magazine 2015 Eco-Leader

Named a 2015 Eco-Leader by proactively striving to make the world a better place to live through innovations in conservation, waste reduction and reduced carbon emissions.



#### MBN USA Magazine Corporate 101 List

Named in the magazine's annual Corporate 101 List representing the "Most Admired Companies" in supplier diversity.

#### MBN USA Magazine 2015 Best of the Decade

Jackie LaJoie, supplier diversity manager, was named to the "Best of the Decade" list for her steadfast commitment to driving supply chain minority business development.

#### WE USA 2015 Corporations of the Year

Named by Women's Enterprise Magazine as one of the top companies that regard the inclusion of women's business enterprises as essential to supply chain productivity and, ultimately, to corporate success.



#### **CDP Climate Change Report**

Awarded a position on the S&P Climate Disclosure Leadership Index (CDLI), in the CDP's annual global climate change report. The company earned a score of 99 out of a possible 100, a 6-point increase over 2014.

#### **DOE Better Buildings, Better Plants**

Participated in the U.S. Department of Energy's Better Buildings, Better Plants Program setting a specific goal to reduce energy intensity 25 percent over a 10-year period across our U.S. operations. In 2015 we exceeded this goal by improving our energy intensity by 26 percent over four years across 36 U.S. facilities.



#### Human Rights Campaign Foundation's Corporate Equality Index

One of the record 321 Fortune 500-sized businesses listed in 2015 by The Human Rights Campaign Foundation's Corporate Equality Index (CEI).

#### FORTUNE World's Most Admired

Recognized on the magazine's 2016 World's Most Admired Companies list for the fourth consecutive year, ranking No. 4 in the Industrial Machinery category as well as named to the top 10 Social Responsibility category among all Most Admired companies.

#### **Chief Executive Magazine's Best Companies for Leaders**

Ranked No. 13 out of 40 public companies in the magazine's Best Companies for Leaders List.

#### 2015 Dream Company to Work For in India

For the third consecutive year, Ingersoll Rand in India ranked #1 in the Manufacturing sector at the World HRD Congress.

#### 2015 LATINA Style Inc. 50 Report

Ingersoll Rand was named one of LATINA Style Inc.'s top companies on the 2015 LATINA Style 50 Report.

#### Profiles in Diversity Journal Women Worth Watching

Sheila Tierney, vice president of product management for the HVAC Parts & Supply Solutions strategic business unit, was announced a winner of the publication's 14th annual Women Worth Watching Award.

#### The Manufacturing Institute's 2015 Women in Manufacturing STEP Ahead

Katie Davis, director of engineering, and Audrey Mills, test engineer, were recipients of The Manufacturing Institute's 2015 Women in Manufacturing Science, Technology, Engineering and Production (STEP) Awards.



#### EPA Organizational Leadership Award

The U.S. Environmental Protection Agency (EPA) honored Ingersoll Rand with the Organizational Leadership Award for notable internal greenhouse gas management and reduction, response to climate change and leadership in engaging its supply chains and external stakeholders on these issues.

## 2015 Awards and Recognitions



## **PRODUCT PERFORMANCE**

#### Thermo King

Outstanding Service Provider of Cold-chain Logistics Equipment Named an Outstanding Service Provider at the fifth annual China Food Logistics Development Conference and Chinese Food Logistics 50 Strong Enterprises Awards Ceremony.

**Best User Reputation Award of China Cold-chain Equipment 2015** Awarded the Best User Reputation Award of China Cold-chain Equipment 2015 at the second Entrepreneur Annual Meeting of China Food Cold-chain Industry.

#### Outstanding Service Provider of Technology & Equipment in China Pharmaceutical Logistics Industry 2014-2015

Named the Outstanding Service Provider of Technology & Equipment in China Pharmaceutical Logistics Industry 2014-2015 at the Second China Pharmaceutical Logistics Industry Annual Meeting.

#### **Trane Commercial HVAC**

#### **Buildings Magazine 2015 Money-Saving Products**

Our Air-Fi Wireless Technology was selected based on the money-saving qualities it offers to building owners and facility managers in areas such as energy efficiency, water savings and maintenance.

#### Consulting Specifying Engineer 2015 Product of the Year

As the premier award for new products in the HVAC, fire/life safety, electrical, and plumbing systems engineering markets, our EarthWise<sup>™</sup> Ice-enhanced air-cooled chiller was recognized as a top new product in the HVAC space.

#### School Planning & Management 2015 Product of the Year

Our Sintesis  ${}^{\rm TM}$  Air-Cooled Chiller was awarded this ho  $% {}^{\rm TM}$  ability to improve the learning environment.

#### **Residential HVAC**

#### 2015 Lifestory Research America's Most Trusted Heating, Ventilation and Air Conditioning System

Ranked as the most trusted HVAC brand in a survey that tracking how trust impacts customers' evaluations.

#### 2015 Green Builder Reader's Choice Award

Named the Reader's Choice for offering the greenest heating, ventilation and air conditioning products.

#### 2015 Dealer Design Award from ACHR The News

Trane XL 824 Smart Control recognized as a Silver Award winner in the HVAC Residential Controls category.

# 2.10 Memberships and Partnerships

Ingersoll Rand is an active member of numerous industry associations as well as national and international advocacy organizations, which we view as strategic to our business:

#### **INDUSTRY ASSOCIATIONS**

- Air-Conditioning, Heating and Refrigeration Institute (AHRI)
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
- Association of Energy Engineers (AEE)
- British Compressed Air Society (BCAS)

#### 2015 Green Builder Hot 50 Products

Trane TruComfort XV20i Variable-Speed Heat Pump earned recognition in the Heating, Cooling and Water Heating category.

#### Award for Design Excellence (ADEX) 2015 Platinum Awards

The American Standard AccuComfort<sup>M</sup> Platinum 18 Air Conditioner and the Gold 824 Smart Control earned ADEX awards, distinguishing them as superior products.

#### 2015 Contracting Business Favorite Products

The American Standard AccuComfort<sup>™</sup> Platinum 20 and Platinum 18 recognized as a Contracting Business' favorite products of 2015.

#### 2015 Dealer Design Awards sponsored by The ACHR News

American Standard AccuComfort^m Platinum 20 Heat Pump recognized as the Gold Award winner in the HVAC Residential Equipment category.

#### 2015 Design Journal and Archinterious

American Standard AccuComfort  $^{\rm TM}$  Platinum 20 Heat Pump recognized as one of the best products of 2015.

#### **Power Tools**

#### 2015 PTEN Magazine Innovation Award

Ingersoll Rand's W5330 Cordless Right Angle Impactool won a 2015 innovation award in the Power Tools category from Professional Tool and Equipment News (PTEN) magazine.

#### Fluid Management

#### **Ringier Technology Innovation Award**

The ARO smart fluid management system won the Ringier Technology Innovation Award presented by Ringier Trade Media in China.

#### **Compression Technologies and Services**

#### Plant Engineering Product of the Year

Our R-Series small rotary compressor was selected based on qualities that help users do their jobs smarter, safer, more efficiently and more productively.

#### Club Car

Named the Official Golf Car of the PGA of America in 2015 for our longstanding commitment to growing the game and over two decades of support for the PGA Professional.

- Compressed Air and Gas Institute (CAGI)
- Hydraulic Institute
- Manufacturers Alliance for Productivity and Innovation (MAPI)
- Material Handling Institute (MHI)
- National Association of Environmental Management (NAEM)
- National Golf Course Owners Association (NGCOA)
- National Association of Manufacturers (NAM)
- · Alliance for Responsible Atmospheric Policy (ARAP)
- Peer Groups
  - Business Roundtable
  - Corporate Eco Forum (CEF)

- GreenBiz Executive Network
- AHC Group
- Governmental Group Partners
  - American Chamber of Commerce in India (AMCHAM)
  - Montreal Protocol (UNEP Secretariat)
  - United Nations Framework Convention on Climate Change (UNFCCC)
  - US-India Business Council
- NGO Partners
  - Alliance to Save Energy (ASE)
  - EU Alliance to Save Energy
  - Canada Green Building Council (CaGBC)
  - Clinton Global Initiative
  - Forum for the Future
  - Indian Green Building Council (IGBC)
  - The Energy and Resources Institute (TERI)
  - U.S. Business Council for Sustainable Development (USBCSD)
  - U.S. Green Building Council (USGBC)
  - Verband deutscher Maschinen-und Anlagenbau (VDMA)
  - World Environment Center
  - Rocky Mountain Institute's Business Renewables Center
  - European Partnership for Energy and the Environment (EPEE)
  - Business Council for Sustainable Energy (BCSE)
  - American Council for an Energy Efficient Economy (ACEEE)

## 2.11 Charters

#### (G4-15: Commitments to External Initiatives)

Ingersoll Rand subscribes to, and endorses, several externally developed economic, environmental and social charters, principles, and other initiatives as outlined below:

- We are members of We Mean Business, which is committed to reducing short-lived climate pollutant emissions.
- Many of the standards set forth in our Global Human Rights Policy align with basic working conditions and human rights concepts advanced by international organizations such as the International Labor Organization and the UN. For more information about the policy, please click on the following link: <u>https://company.ingersollrand.com/</u> <u>content/dam/ir-corp/documents/pdf/Ingersoll%20</u> <u>Rand%20Global%20Human%20Rights%20</u> <u>Policy.pdf.</u>
- We endorse the White House American Business Act on Climate Pledge.
- We play an important role in the Clinton Global Initiative Commitment to Action through the Ingersoll Rand Climate Commitment.
- We participate in the U.S. Department of Energy's Better Buildings, Better Plants Program, which works with leading manufacturers to improve energy efficiency in the industrial sector.
- We are members of the Climate and Clean Air Coalition's Hydrofluorocarbon (HFC) Initiative, which promotes alternative HFC technology and standards. For more information, please click on the following link: <u>http://www.ccacoalition.org/en/</u> <u>initiatives</u>

# **3. Sustainability at Ingersoll Rand**

Ingersoll Rand is strategically committed to addressing the growing global demand for energy and its effects on the environment. Our products, services and solutions are focused on heating, cooling and automating homes and buildings, enhancing commercial and industrial productivity, and keeping transported food safe and fresh.

## 3.1 Our Approach

We are making rapid progress in reducing the climate impact of our portfolio. At the same time, we are working to create a culture in which best practices for reducing emissions are pervasive while transforming the company's operations to enhance our energy efficiency.

The Ingersoll Rand Climate Commitment is the centerpiece for these efforts. We are publicly committed to significantly increasing energy efficiency and reducing environmental impacts from our operations and product portfolio by 2030, with key milestones specified for 2020. We are advancing highperformance, lower greenhouse gas emitting solutions for our customers, while reducing the carbon footprint of our facilities and fleet.

Click <u>here</u> for more information about our Climate Commitment.

Steering a large company toward environmental responsibility involves changing employee behavior. Success only happens when people are passionate, educated and engaged in making positive changes on an individual level. We encourage all Ingersoll Rand employees to incorporate sustainable practices into their lives at work and in their communities. The core of this effort is a repeatable framework for successful energy efficiency improvement and water, waste and greenhouse gas emissions reduction, including tools, templates and guides that can be implemented and measured consistently across our organization.

We also empower our employees with voluntary training opportunities designed to make the issues of climate change and resource depletion relevant to their day-to-day roles outside of the workplace. An employee who understands the impact of recycling or installing LED lighting at home or in the community is more likely to bring these behaviors back to their job, thus strengthening the practice of environmental stewardship in our business. Our people join in community projects that enhance the environment and quality of life. For example, five years ago we established the Ingersoll Rand Green Team network, which currently consists of more than 85 teams across the globe. Collaborating internally and partnering with community groups to advance our sustainability objectives, Green Teams have made significant contributions in a number of areas, including climate change mitigation and reductions in solid waste and energy and water use.

## 3.2 Sustainability Governance

Sustainability is central to Ingersoll Rand, from the value we provide our customers to the way we run our company and advance quality of life in our communities, countries and the world. For this reason, we believe that serving as a catalyst for global environmental progress is our best path to premier business performance.

Sustainability governance and direction at Ingersoll Rand is the responsibility of our Board of Directors and the Enterprise Leadership Team, with assistance from internal and external advisory and strategy councils. The Corporate Governance and Nominating Committee of the Board is responsible for overseeing our environmental, health and safety performance, which includes: energy consumption, carbon footprint and waste streams. The Committee meets at least once per year to evaluate the company's EHS and sustainability performance.

## INTERNAL SUSTAINABILITY STRATEGY COUNCIL

Accountability for sustainability best practices at Ingersoll Rand is the responsibility of our internal Sustainability Strategy Council. Reporting to, and sponsored by, the Enterprise Leadership Team, this group is comprised of company executives representing priority geographies, strategic business units, and functional areas. Their role as Council members is to set priorities and provide guidance on key social, community and environmental issues, ensuring ownership and shared value of sustainability at the business and functional level. The Council meets quarterly and provides reports on Ingersoll Rand sustainability strategy and initiatives, at least annually, to the Enterprise Leadership Team.

## EXTERNAL SUSTAINABILITY ADVISORY COUNCIL

In addition, Ingersoll Rand draws upon the expertise of an external Sustainability Advisory Council comprised of global thought leaders in infrastructure, energy policy and technology. Their insight helps us better understand emerging global issues, which, in turn, stimulates product and operational innovation.

#### **2015 COUNCIL MEMBERS**

Roberta Bowman, Duke Energy, Senior Vice President and Chief Sustainability Officer (retired)

Marian Chertow, Yale University, Industrial Environmental Management Program, Professor and Director

Stuart Hart, The University of Vermont, Grossman Chair in Sustainable Business

Bindu Lohani, Asian Development Bank, Vice President (retired)

Peter Madden, Future Cities Catapult, Chief Executive

Claus Stig Pedersen, Novozymes, Head of Corporate Sustainability

Katherine Sierra, Brookings Institution, Senior Fellow

Daniel Vermeer, Duke University's Center for Energy, Development, and the Global Environment (EDGE), Professor & Executive Director Terry Yosie, World Environment Center, President and CEO

Marcia Avedon, Ingersoll Rand, Senior Vice President, Human Resources, Communications & Corporate Affairs

Paul Camuti, Ingersoll Rand, Senior Vice President, Innovation and Chief Technology Officer

Gary Michel, Ingersoll Rand, Senior Vice President and President, Residential HVAC

Ginny Mackin, Ingersoll Rand, Vice President, Communications and Brand Management, Corporate Affairs

Eric Rankin, Ingersoll Rand, Vice President, Environmental, Health and Safety (EHS)

W. Scott Tew, Center for Energy Efficiency & Sustainability at Ingersoll Rand, Executive Director

## CENTER FOR ENERGY EFFICIENCY AND SUSTAINABILITY

We created the Ingersoll Rand Center for Energy Efficiency and Sustainability (CEES) six years ago as a mechanism for convening our stakeholders around the issues of climate change and resource depletion. At the core of the CEES is a team of internal experts who are focused on helping our business incorporate energy efficiency and environmentally responsible processes into daily operations.

This team of experts serves as a conduit between Ingersoll Rand and government and non-governmental organizations, universities, and technology and industry leaders. Our involvement with these stakeholders better positions us to understand and implement best practices in sustainability related to product innovation, education and engagement, operations, supply chain and advocacy.



CEES has led a growing range of initiatives designed to help our employees across the company to develop a broad understanding of sustainability, its importance to our corporate mission and — at the individual level best practices for incorporating sustainability into their jobs. Additional CEES programs enable employees to help customers and other Ingersoll Rand stakeholders understand and implement new approaches to meet their sustainability goals.

Scott Tew co-founded CEES and serves as its executive director. He reports to Paul Camuti, senior vice president, innovation, and chief technology officer.

CEES focuses its efforts in the following four areas:

#### **Innovation and Product Stewardship**

We work with customers to see values such as reliability, energy efficiency and sustainability through their eyes, enabling us to design products that meet their most critical challenges.

#### **Issues and Advocacy**

We collaborate with policy and industry stakeholders on initiatives related to next-generation refrigerants with low-global warming potential and smarter energy use, including product standards and assessing product lifecycles.

#### **External Partners**

We engage with thought leaders, nongovernmental organizations, technology experts, academia and industry leaders to foster sustainability research and education and share the findings with the business and scientific communities.

#### **Community and Employee Engagement**

We sponsor programs that bring our employees and neighbors together to channel their passion and commitment in activities that improve the health and well-being of the communities where we work and live.

## 3.3 Our Climate Commitment

In September 2014 we publicly committed to significantly increasing energy efficiency and reducing environmental impacts from our operations and product portfolio by 2030, with key milestones specified for 2020. The core of our Climate Commitment is a pledge to advance high-performance, low-greenhouse gas emissions solutions for our customers, while reducing the carbon footprint of our facilities and fleet.

Our Climate Commitment goals include reducing the greenhouse gas (GHG) refrigerant footprint of Ingersoll Rand products by 50 percent by 2020, incorporating lower global warming potential (GWP) alternatives across the portfolio by 2030, and reducing the GHG footprint of our own operations by 35 percent by 2020. Attaining these goals will contribute to the avoidance of 20 million metric tons of CO<sub>2</sub> equivalent by 2020 and 50 million tons by 2030. In addition, we are committed to investing \$500 million in product-related research and development by 2020 to fund the long-term reduction of GHG emissions.

#### YEAR 1 PROGRESS

To date, the Ingersoll Rand Climate Commitment has supported the avoidance of approximately 2 million metric tons of  $CO_2e$  globally – equivalent to the  $CO_2$  emissions from burning more than 2.1 billion pounds of coal and the electricity used by nearly 270,000 homes for one year. By 2030, we expect to reduce our carbon footprint by 50 million metric tons.

These results were driven by advances in three areas:

#### **Our Products**

- Launched the EcoWise<sup>™</sup> portfolio of products using next-generation low-GWP refrigerant
- Added new Trane and Thermo King products and product families to the EcoWise portfolio

#### **Our Operations**

- Retrofitted facilities with energyefficient equipment
- Measured and quantified the company's GHG
   emissions reduction

#### **Market Leadership and Convening**

- Worked with refrigerant manufacturers and customers to develop, pilot, apply new systems
- Engaged with policymakers, NGOs, media and others in Brazil, Canada, China, Europe, India, Japan, the U.A.E. and U.S.
- Held convening events around design-competitive alternatives to R-410A

We are committed to building on these advances in the months and years ahead, while demonstrating a high level of transparency and creating a culture where best practices for reducing emissions have become pervasive.

## 3.4 About this Supplement

Publishing an annual Sustainability Supplement a practice at Ingersoll Rand since 2007 — is an expression of our commitment to social, environmental and financial responsibility. As in prior years, this report is designed to provide a comprehensive update on our progress in these areas in a clear and easily accessible format.

The content of this supplement illustrates our passion for social, environmental and financial sustainability at every level — that is, to demonstrate how sustainability is intrinsic to our corporate purpose, how we are embedding it in our products and how we engineer and manufacture them, and our pursuit of sustainable progress and enduring results in the communities where we operate.

Click <u>here</u> to access our prior-year Sustainability Supplements.

This report follows the Global Reporting Initiative (GRI) G4 framework. Visit or turn to the GRI Content Index <u>here</u> or appended to this report to learn more about our 2015 sustainability performance. For more information on GRI, please visit <u>www.globalreporting.org</u>.

Ingersoll Rand has published this supplement to transparently and comprehensively communicate the company's social, environmental and economic performance. The scope of this report corresponds to calendar year 2015 — our fiscal year — and spans our global operations including subsidiaries, certain leased facilities and joint ventures in which we have a controlling interest. We define our organizational boundary using the financial control approach. In 2014 we completed a corporate-wide review of Scope 1 and 2 GHG emissions for all owned and leased assets using the Greenhouse Gas Protocol accounting standards. We feel this more accurately reflects the direct impact of our operational footprint. Accordingly, prior years' data has been restated.

We report data from newly opened and acquired facilities as soon as valid data is available. For recently closed or sold facilities, the data is included for the time period it was part of the enterprise and to ensure year-over-year comparisons remain consistent. As such events occur, baselines are adjusted to account for these significant changes in our operations. As our data collection system continues to mature and improve, the environmental data we report improves in accuracy and expands in breadth.

Data is presented in absolute and normalized terms. Normalizing environmental and energy data to total revenue provides us necessary insight into the level of eco-efficiency across our diversified operations and benchmarking against the performance of other industrial companies. Our safety data is normalized by number of hours worked. Please refer to our GHG and Energy Efficiency Inventory <u>protocol document</u> for further information.

#### CHANGES DURING REPORTING CYCLE (G4-13: Organizational Profile)

The data presented in this supplement reflects the company's purchase of the assets of Cameron International Corporation's Centrifugal Compression Business, which became part of our compressed air business in January 2015. It also reflects the company's acquisition of FRIGOBLOCK, which became part of our Thermo King business in March 2015. For more information about significant organizational and operational changes during the reporting period, please refer to our Form 10-K <u>here</u>.

This supplement contains "forward-looking statements," which are statements that are not historical facts, including our ability to address environmental and social challenges, the future success of our growth and operational excellence initiatives, our future financial performance, our growth and our positioning in and the performance of the markets in which we operate. These statements are based on currently available information and our current assumptions, expectations and projections about future events. While we believe that our assumptions, expectations and projections are reasonable in view of the currently available information, you are cautioned not to place undue dependence on our forward-looking statements. Forward-looking statements speak only as of the date they are made and are not guarantees of future performance. They are subject to future events, risks and uncertainties-many of which are beyond our control—as well as potentially inaccurate assumptions that could cause actual results to differ materially from our expectations and projections. You are advised to review the factors described under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Conditions and Results of Operations" in our Form 10-K for the fiscal year ended December 31, 2015, our Forms 10-Q for the quarters ended March 31, 2016 and June 30, 2016, and any further disclosures we make on related subjects in materials we file with or furnish to the Securities and Exchange Commission. We do not undertake to update any forward-looking statements.

#### ASSURANCE (G4-33: Report Profile)

We have our environmental and safety data assured by an independent third party. The assurance process is led by the Vice President, Environmental Health and Safety, Operations, who reports to the Senior Vice President, Global Operations and Integrated Supply Chain. The results of this assurance are presented on pages 25-26.

## 3.5 Materiality Assessment

Ingersoll Rand conducted a comprehensive materiality assessment in 2014, which served as the basis for this year's Sustainability Supplement.

#### **MATERIALITY PROCESS**

We proactively engaged with key external and internal stakeholders to identify the most material sustainability-related topics and metrics for operations strategy as well as public disclosure. Consistent with Global Reporting Initiative (GRI) guidelines, our selection of stakeholders to engage was based on five criteria pertaining to their relationship with Ingersoll Rand:

- Responsibility
- Influence
- Proximity
- Dependency
- Representation

The external stakeholders who provided direct feedback included customers, supply chain partners, industry groups, non-governmental organizations (NGOs), local community organizations, investors, rating agencies and regulators. With support from an independent consulting firm, we engaged with these stakeholders through interviews and surveys, augmented by secondary research on our suppliers and distributors as well as our peer companies and competitors. Internally, we received feedback at various levels, including from leaders of strategic business units. In addition, interviews were conducted with four members of our External Sustainability Advisory Council.

## Independent Assurance Statement to Ingersoll Rand, Pg 1

ERM Certification and Verification Services (ERM CVS) was engaged by Ingersoll Rand Company ('Ingersoll Rand') to provide limited assurance in relation to selected EHS data for the calendar year ending 31st December 2015 as set out below.

Engagement Summary					
	Whether the 2015 corporate level data for the following indicators are fairly presented, in all material respects, with the reporting criteria:				
	<ul> <li>Direct, Indirect and total energy use (in billion BTU)</li> </ul>				
	<ul> <li>Scope 1 GHG emissions from fuel use, refrigerants and VOCs (metric tons CO2e)</li> </ul>				
Scope of our	<ul> <li>Scope 2 GHG emissions from imported electricity (metric tons CO2e)</li> </ul>				
assurance	Total water use (gallons)				
engagement	Total hazardous waste generated (metric tons)				
	<ul> <li>Total non-hazardous waste generated (metric tons)</li> </ul>				
	<ul> <li>Total non-hazardous waste to landfill (metric tons)</li> </ul>				
	<ul> <li>Lost Time Incident Rate (LTIR) for employees and supervised contractors</li> </ul>				
	<ul> <li>Total Recordable Incident Rate (TRIR) for employees and supervised contractors</li> </ul>				
	<ul> <li>Number of employee and supervised contractor fatalities</li> </ul>				
Reporting criteria	The WBCSD/WRI GHG Protocol (2004) for the Scope 1 and 2 GHG emissions and the EHS reporting program and specific metric definitions as prepared by Ingersoll Rand.				
Assurance standard	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).				
Assurance level	Limited assurance.				
Respective	Ingersoll Rand is responsible for preparing the data and for its correct presentation in the Report to third parties, including disclosure of the reporting criteria and boundary.				
responsibilities	ERM CVS's responsibility is to provide conclusions on the agreed scope based on the assurance activities performed and exercising our professional judgement.				

#### **Our conclusions**

Based on our activities, nothing has come to our attention to indicate that the corporate 2015 absolute data for the selected indicators, as listed above, are not fairly presented, in all material respects, with the reporting criteria.

- Direct energy use: 2,014 billion BTU
- Indirect energy use: 1,443 billion BTU
- Total energy use: 3,457 billion BTU
- Scope 1 GHG emissions: 417,932 metric tons CO2e (from fuel use, refrigerants and VOCs)
- Scope 2 GHG emissions: 243,424 metric tons CO2e
- Total Scope 1 and 2 CO2e: 661,356 metric tons
- Total water use: 1,108.88 million gallons
- Total hazardous waste generated: 1,226 metric tons
- Total non-hazardous waste generated: 31,001 metric tons (of which 6,558 metric tons to landfill)
- Lost Time Incident Rate (LTIR): 0.09
- Total recordable incident rate (TRIR): 0.77
- Number of fatalities: zero

## Independent Assurance Statement to Ingersoll Rand, Pg 2

#### Our assurance activities

Our objective was to assess whether the selected data are reported in accordance with the principles of completeness, comparability (across the organisation) and accuracy (including calculations, use of appropriate conversion factors and consolidation). We planned and performed our work to obtain all the information and explanations that we believe were necessary to provide a basis for our assurance conclusions.

A multi-disciplinary team of EHS and assurance specialists performed the following activities:

- Interviews with relevant staff to understand and evaluate the data management systems and processes (including IT systems and internal review processes) used for collecting and reporting the selected data;
- A review of the internal indicator definitions and conversion factors;
- Visits to four sites (Augusta, GA; Vidalia, GA; Arecibo, Puerto Rico; Wujiang, China) and two remote site visits (La Crosse, WI; Monterey, Mexico) to review local reporting processes and consistency of reported annual data with selected underlying source data for each indicator. We interviewed relevant staff, reviewed site data capture and reporting methods, checked calculations and assessed the local internal guality and assurance processes.
- An analytical review of the year end data submitted by all sites included in the consolidated 2015 data set for each of the selected indicators, including investigation of trend anomalies from 2014.
- Year-end assurance activities at corporate level including the results of internal review procedures and the accuracy of the consolidation of the data for the selected indicators from the site data.

#### The limitations of our engagement

The reliability of the assured data is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information and we also note that the GHG Scope 2 emission factors are the same as those used to report GHG emissions in 2014. It is important to understand our assurance conclusions in this context.

Jennifer lansen-Rogers Head of Corporate Assurance Services 26<sup>th</sup> April 2016



ERM Certification and Verification Services, London www.ermcvs.com; email: post@ermcvs.com

ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities and auditor training. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS staff that have undertaken this engagement work have provided no consultancy related services to Ingersoll Rand in any respect.



The content of this report reflects our effort to synthesize GRI sustainability indicators and materiality criteria with metrics we believe are relevant and material to Ingersoll Rand and its stakeholders, based on our 2014 materiality assessment. In addition, the materiality indicators covered by this report mirror the feedback and insights we gather through ongoing external and internal stakeholder interactions at every level and at all of our locations around the world. As a consequence, we believe this report is appropriately balanced in its focus on the sustainability issues most important to our stakeholders and most critical to our business.

We believe the sustainability-related issues of greatest importance to Ingersoll Rand and our stakeholders are:

- 1. Greenhouse Gas Emissions and Climate Strategy
- 2. Energy-Efficient Products
- 3. Technology and Innovation

Also included in this report is information about certain issues in different quadrants of our materiality matrix. We consider these issues important to our business, and disclose them publicly on an ongoing basis. In the matrix, material aspects are defined as those that are in the upper right-hand quadrant when mapped against increasing importance to the business and increasing importance to stakeholders, as follows:

- Greenhouse Gas Emissions
- Energy-Efficient Products
- Technology and Innovation
- · Company Energy Use
- Product Lifecycle
- Customer Satisfaction
- Nexus Opportunities
- Public Policy
- Regulatory Compliance
- · Innovation for Developing Markets
- Product Reliability
- Material Traceability and Sourcing
- Product End-of-Life Considerations
- Materials Used
- Base of the Pyramid Solutions

## 2015 Materiality Matrix

Our materiality matrix depicts the issues that were identified as material during our 2014 materiality assessment and their importance to our business and to stakeholders. The issues indicated in white are being used to guide our reporting.



## 3.6 Stakeholder Engagement

#### **CUSTOMERS**

We are committed to better understanding customer perspectives and refining our offerings to meet and exceed their expectations for reliability and energy efficiency and sustainability. We track customer satisfaction by collecting information — sales, delivery, product and service — on a quarterly basis.

#### **INVESTORS**

We regularly meet with the investor community to address Ingersoll Rand's key strategies for delivering total shareholder return. We typically host two annual meetings — a general shareholder meeting where we provide updates about the company's progress and relevant developments, and an investor and analyst meeting where members of our senior leadership team address the company's key strategies for achieving growth through premier performance.

#### POLICYMAKERS

Ingersoll Rand actively collaborates with a worldwide array of governments, business and trade associations, environmental groups and economic development organizations in efforts to address global challenges. These efforts are implemented by a Government Affairs Leadership Team (GALT), consisting of nine members, representing our Strategic Business Units (SBUs) and operating locations around the world.

The GALT meets quarterly, working with business leadership at the regional level to discuss and integrate their concerns within a companywide policy prioritization framework. The GALT reports to the Government Affairs Steering Committee, which includes the CEO, general counsel and SBU leaders. This committee establishes the company's overall government affairs policy.

The Ingersoll Rand Climate Commitment is our highest priority policy leadership initiative. It positions Ingersoll Rand at the forefront of sustainable solutions and signals to our stakeholders that we are squarely focused on the future and dedicated to helping to solve some of the world's most pressing challenges. We are working proactively with government agencies and refrigerant suppliers to lead a global transition to next-generation refrigerants with low-global warming potential. We have an established Network of Excellence, which is composed of engineers and chemists charged with analyzing refrigerant technology trends, engaging in improving industry standards, and identifying new products that facilitate our commitment to reduce the greenhouse gas refrigerant footprint of our products by 50 percent by 2020.

#### **SUPPLIERS**

We assess our suppliers on environmental and social dimensions as part of our guarterly risk assessment process, rolled out in 2014. This process helps strengthen our supplier relationships by requiring a quarterly assessment of suppliers in our top 80 percent of spend, across several dimensions, including what percent of business we represent, sustainability, supplier performance and criticality to the business. We added supplier diversity baselines into the Ingersoll Rand Business Partner Code of Conduct in 2013. As part of our larger procurement sustainability metric, we launched our conflict minerals program in 2013. This program seeks to responsibly source materials and derivative metals by aiding our supply chain in education, development and implementation of conflict minerals policies.

#### ADVOCACY GROUPS/NONGOVERNMENTAL ORGANIZATIONS

Our Enterprise Leadership Team, as well as the internal experts who are members of the Center for Energy Efficiency and Sustainability (CEES), proactively engage with leaders of advocacy groups and nongovernmental organizations (NGOs) in addressing global environmental priorities. We created the CEES six years ago as a mechanism for convening our stakeholders. The team of experts serves as a conduit between Ingersoll Rand and government and nongovernmental organizations.

STAKEHOLDER EN	GAGEMENT OVERVIEW		
STAKEHOLDER GROUP	ENGAGED BY	ENGAGEMENT MODE	
CUSTOMERS	Sales Managers and Personnel in areas such as customer support, field service, distribution, professional services	<ul><li>Annually:</li><li>Executive meetings</li><li>Annual customer leadership forum</li></ul>	<ul> <li>As needed:</li> <li>Day-to-day conversations and in-person meetings</li> <li>Online through our website</li> <li>Customer help desk</li> <li>Events and conferences</li> <li>Sales and promotional events</li> </ul>
INVESTORS & INVESTMENT ANALYSTS	Enterprise leadership, Investor relations	<ul> <li>Annually:</li> <li>Annual General Meeting, Analyst and Investor Day, SEC filings, Annual Report</li> <li>Quarterly earnings calls</li> </ul>	As needed: • Events and conferences • Meetings and conversations • Online through Investor Relations Portal
EMPLOYEES	Leadership, People Managers, Human Resources	Regularly: • Annual Employee Engagement survey • Town halls • Performance reviews • Training sessions	As needed: • Help Desk • Team meetings
BUSINESS	Procurement Managers and Supplier Quality Group	Periodically: <ul> <li>Governance meetings</li> <li>On-site audits</li> </ul>	As needed: • Training sessions • Collaborations and events
POLICYMAKERS AND REGULATORS	Enterprise Leadership, Government Affairs Leadership Team, Product Advocacy teams	Periodically: Filings and complience-based reporting	<ul> <li>As needed:</li> <li>Direct engagement at various events, forums, and policy discussions</li> <li>Online</li> </ul>
EDUCATIONAL INSTITUTIONS	University Relations, Research and Development Team, Product Advocacy teams	Periodically: Filings and complience-based reporting	As needed: • Collaborative R&D efforts • Conferences and workshops
LOCAL COMMUNITIES	All employees	Periodically: • Green Teams • Glocal Teams • Volunteering • Serving on local boards • Philanthropy	
NEWS MEDIA	Enterprise leadership, Company thought leaders, Company spokespeople	Periodically: Media Inquiries on company-related issues	Periodically: Direct engagement on thought leadership issues
ADVOCACY GROUP/ NGO	Enterprise Leadership, Government Affairs Leadership Team, Product Advocacy teams	Periodically: Filings and complience-based reporting	As needed: Direct engagement at various events, forums, and policy discussions Online

## 3.7 Value Chain

Ingersoll Rand is a multinational business with global facilities and a broad product portfolio. As a result, our operations have a wide range of environmental, social and economic impacts. The graphic to the right illustrates our business operations as a value chain consisting of nine major stages. For each stage, we have identified the key impacts, or material topics as determined by our Materiality Analysis, as well as the stakeholder groups most directly affected by these impacts.

#### **VALUE CHAIN STAGES**

#### **Product Management**

Decisions about the technologies we will develop, the products we will make, and where we will make them, are fundamental to the value we create. We carefully consider the potential environmental, and economic impacts of new technologies and products when making these decisions.

#### **Raw Materials**

Extracting and processing raw materials leads to economic benefits for raw material suppliers and local communities, but these activities also have environmental and social consequences. Our Business Partner Code of Conduct, which includes our Global Human Rights Policy, addresses these issues and serves as our framework for raw materials sourcing.

#### **Direct Suppliers**

Our relationships with suppliers lead to job creation and economic activity in communities around the world. Our suppliers' operations have environmental, social and economic impacts as well. We work systematically to ensure that our suppliers share our values and adhere to our standards of business ethics, health and safety, environmental and social responsibility as specified in our Business Partner Code of Conduct.

#### Transportation

Shipping parts to our manufacturing sites and finished products to our distributors benefits the transportation and packaging industries, but this activity also creates emissions, waste and traffic impacts.

#### Manufacturing

Ingersoll Rand plant operations generate employment and related business activity in the communities where we operate. We strive to enhance the impact of our presence in these communities by improving the environmental performance of our facilities, by

#### Value Chain Stages



creating a safe, inclusive and engaging workplace for our employees, and by contributing to the betterment of our local communities.

#### Sales

Communicating with our customers and distributors ensures that our products, services and solutions are targeted to their needs and exceed their expectations. The mission of our sales organization is to sustain a productive dialogue with these key stakeholders. The insights we obtain from this dialogue drive our product and service development process.

#### **Product Use**

As a company that provides solutions for energy efficiency, economic productivity and greenhouse gas mitigation, Ingersoll Rand has multiple impacts on energy use and greenhouse gas emissions in buildings, homes, industrial spaces and transport markets around the world. Our growth, operations and culture excellence strategies are focused on delivering products, services and solutions that contribute to a more sustainable global economy.

#### Service

With smart, connected solutions becoming increasingly important to our product portfolio, we are working to adopt a services mindset across the enterprise. Our service organization works as trusted advisors for our customers — not only helping them select the optimal solution for their needs, but providing them reliable support over the lives of their Ingersoll Rand products and applications.

#### **End of Life**

The value of our products frequently extends beyond their operational lives. A significant percentage of the materials in many of our products can be reused or recycled. Value Chain Map

**Bold: Major Impact** 

Light: Minor Impact

Value Chain Map			Bold: Major Impac	t Light: Minor Impa
A Product Management	B Raw Materials	C Direct Suppliers	D	E Manufacturing
		Material Topics	1	1
Greenhouse Gas Emissions Energy Efficient Products Technology and Innovation Product Lifecycle Customer Satisfaction Regulatory Compliance Nexus Opportunities Product End of Use Considerations Material Used Product Reliability Innovation for Developing Markets Base of the Pyramid Solutions	Product Lifecycle Regulatory Compliance Material Traceability and Sourcing Material Used	Greenhouse Gas Emissions Technology and Innovation Product Lifecycle Customer Satisfaction Regulatory Compliance Material Traceability and Sourcing Product End of Use Considerations Material Used Product Reliability	Greenhouse Gas Emissions Customer Satisfaction	Greenhouse Gas Emissions Company Energy Use Customer Satisfaction Regulatory Compliance Public Policy Material Traceability and Sourcing Product Reliability
Customers Employees Investors Suppliers Policymakers Educational Institutions NGOs	Suppliers Policymakers Local communities NGOs	Stakeholder Groups Suppliers Local communities NGOs	Suppliers Local communities	Customers Employees Investors Suppliers Policymakers Educational Institutions Local communities News/Media NGOs
D Transportation* -Owned -Shipping partners	F Sales	G Product Use	H Service	End of Life
		Material Topics		
Greenhouse Gas Emissions Company Energy Use (to confirm) Customer Satisfaction	Owned/Direct: Greenhouse Gas Emissions Company Energy Use Customer Satisfaction Regulatory Compliance Product Reliability Independent Distributor: Customer Satisfaction Product Reliability Direct: Company Energy Use	Greenhouse Gas Emissions Energy Efficient Products Technology and Innovation Product Lifecycle Customer Satisfaction Public Policy Product End of Use Considerations Product Reliability	Greenhouse Gas Emissions Technology and Innovation Product Lifecycle Customer Satisfaction Regulatory Compliance Product End of Use Considerations Product Reliability	Greenhouse Gas Emissions Technology and Innovation Product Lifecycle Customer Satisfaction Regulatory Compliance Material Traceability and Sourcing Product End of Use Considerations Material Used
	·	Stakeholder Groups	·	·
Customers Local communities	Owned/Direct: Customers Employees Policymakers Local communities Independent Distributor: Customers Local communities Direct: Customers	Customers Investors Policymakers Local communities News/Media NGOs	Customers Employees	Customers Suppliers Policymakers Local communities News/Media

# 3.8 2020 and Strategic Development Goals

At Ingersoll Rand, our passion for sustainability is embedded in the way we serve our customers and operate our business, and in the strategic initiatives we are pursuing in every function across our global enterprise. Sustainability is a core value that is ingrained in how we work every day and everywhere in the organization.

A world facing resource scarcity, rapid urbanization and the threat of climate change expects more from the corporate sector than compliance with traditional energy, waste and safety standards.

With our materiality assessment as the foundation, in 2014 we developed new long-term sustainability targets for 2020. Engaging our stakeholders, we identified the issues of greatest importance to the company, the environment and society, as well as key related opportunities for improvement. We focused on five categories, encompassing governance, suppliers, operational footprint, customer outcomes, our people and corporate citizenship.

The related opportunities cut across our global organization and span our entire value chain

and were designed to be transformational, industryleading and progressive. Building on this goal-setting initiative, we set new baselines and began tracking and comprehensively disclosing our progress against these goals in 2015.

Also in 2015, all 193 United Nations (UN) Member States agreed to adopt a visionary set of 17 Sustainable Development Goals (SDGs). The SDGs define global sustainable development priorities and aspirations for 2030 and seek to mobilize global efforts around a common set of goals and targets.

The UN has urged private industry to use the SDGs as an overarching framework to shape, steer, communicate and report their strategies, goals and activities.

Ingersoll Rand reflected these issues of greatest importance to our business, as prioritized by stakeholders in our 2014 materiality assessment. We believe there are major areas of alignment between our 2020 sustainability targets and the UN SDGs, highlighted by our Climate Commitment, corporate citizenship initiatives and efforts to foster an inclusive, engaging workplace that connects our employees to the company's purpose.

The graphic below outlines our 2020 Targets and the alignment between the targets and the SDGs.

Governance	Suppliers	<b>Operational Footprint</b>
Enhance efforts to uphold our standards or ethical business conduct, transparency, compliance, and oversight	Collaborate with suppliers to cultivate a sustainable and innovative supply chain to meet customer needs	Optimize the use of natural resources in our operations to reduce environmental impact
Adhere to a Global Framework for Reporting our Sustainability Progress	8 Ensure Alignment of Business Partners to a Common Set of Ethical Beliefs and Expectations	7 Optimize Energy Use
Respond to the annual CDP request	<ul> <li>100% of new suppliers have agreed to our Business Partner Code of Conduct</li> <li>60% of our direct spend will be Preferred</li> </ul>	<ul> <li>Increase energy efficiency in owned facilities by 10%</li> <li>Increase fuel efficiency in owned fleet</li> <li>Evaluate all long term leases &gt; 100k sq. ft. against environmental and energy criteria</li> </ul>
Align with Global Human Rights Initiatives	Leverage IRPDP to Use Preferred Suppliers	13 Reduce our Scope 1 and 2 Greenhouse Gas Emissions
Maintain and update a Global Human Rights Policy	<ul> <li>80% of Early Sourcing Work Plan (ESWP) completed in Phase 1 of IRPDP</li> </ul>	• Reduce scope 1 and 2 emissions by 35%

## Embedding Sustainability Across the Enterprise

## Embedding Sustainability Across the Enterprise Pg. 2



#### **Customer Outcomes**

Innovate to deliver optimal economic and performance value over product lifecycle

#### Design Products for World Class Resource Efficiency During Use of Product

 Establish portfolios that meet world class environmental criteria (energy consumption, emissions from the use of the product)

#### **Our People**

Build a Winning Culture that is values-based, inclusive and engages and develops people for premier performance

#### 5 Attract and Retain Top-Quality Diverse Talent and Leadership

- Increase number of women in professional and leadership roles
- Create slates with diverse candidates
- Retain 95% of key talent

#### Corporate Citizenship

Address social and environmental imperatives that: create shared value, result in sustained customer and employee loyalty, improve the communities where we have business operations



- Share energy conservation knowledge with 200 developing region officials
- Launch signature program to increase female representation in manufacturing positions and advance technical workforce development programs at 100 community colleges and technology institutes worldwide

## Embedding Sustainability Across the Enterprise Pg. 3

Customer Outcomes	Our People	Corporate Citizenship
13 Reduce Direct GHG Emissions	Develop People and Processes to Build Strategic Capabilities	4 5 Expand Competency in Science, Technology, Engineering and Math
<ul> <li>Reduce the GHG refrigerant footprint of our products by 50%</li> <li>Increase Reliability, Durability</li> <li>Improve quality and time to solution</li> </ul>	<ul> <li>95% of employees have development plans in place</li> <li>Improve Leadership Effectiveness Index by 80%</li> <li>Achieve a growth and development index score of 75% for strategic capability development</li> </ul>	<ul> <li>Launch signature program to increase female representation in manufacturing positions and advance technical workforce development programs at 100 community colleges and technology institutes worldwide</li> <li>Sponsor 20,000 females in STEM-related activities to increase career interest</li> </ul>
9 Reduce Environmental Impact at End of Products' Useful Life	10 Foster an Inclusive, Engaging Workplace that Connects Employees to Company Purpose	2 Address Nutrition and Food Waste Reduction
<ul> <li>Perform an LCA on 100% of new products</li> <li>100% of NPD projects in IRPDP have end of life manual created</li> </ul>	<ul> <li>Achieve employee engagement rate of 80%</li> <li>Achieve Progressive, Diverse and Inclusive Index score of 80%</li> <li>75% of employees participate in community or sustainability initiatives</li> </ul>	<ul> <li>Provide food and nutrition education to 200,000 children</li> </ul>
Improve Health and Safety	Provide a Safe and Secure Workplace that Supports Employee Well-Being and Productivity	11 Support Housing and Shelter Needs
Improve service-ability through IRPDP	<ul> <li>Provide accessibility to wellness programs to <sup>3</sup>/<sub>4</sub> of employee base</li> <li>Increase employee participation in wellness activities globally by 25%</li> <li>Achieve world class performance in lost time incident rate, 60% reduction from 2013 base</li> </ul>	<ul> <li>Volunteer 40,000 hours related to housing and shelter</li> </ul>



# 4. Our Planet

Our sustainability strategy is an intrinsic part of our business operating system, consistent with our vision for a world of sustainable progress and enduring results. The strategy is based on the core principles of transparency, accountability and shareholder engagement and driven by our materiality assessment.

# 4.1 Environmental Sustainability Strategy

As outlined in the discussion, "Our Approach to Sustainability," which is included in the "Sustainability at Ingersoll Rand" section of this Supplement, sustainability is embedded in our business model. Our products, services and solutions are focused on heating, cooling and automating homes and buildings, enhancing commercial and industrial productivity, and keeping transported food safe and fresh. Across our portfolio of offerings, we are working to address the growing global demand for energy and its effects on the environment.



Dow Jones Sustainability Indices In Collaboration with RobecoSAM (





## award Ingersoll Rand Selected for 2015 Dow Jones Sustainability World and North America Indices

Recognition by third-party organizations documents our improved performance, while also allowing us to benchmark ourselves against peer companies. We were honored to be listed on the 2015 Dow Jones Sustainability World and North America Indices for the fifth consecutive year in addition to our debut appearance on the FTSE4Good Index Series. Ingersoll Rand's placement on this index series further solidifies its position as an economic, environmental and social leader in its industries. Our materiality analysis reflects this positioning, and the key elements of our sustainability strategy directly address our primary material issues:

#### **Greenhouse Gas Emissions and Climate Change**

The Ingersoll Rand Climate Commitment is key to our greenhouse gas emissions reduction initiatives. We are making rapid progress in reducing the climate impact of our portfolio of product and service offerings.

#### **Energy Efficient Products**

Energy efficiency joins reliability as the highest priority for product design at Ingersoll Rand. Executing on our Climate Commitment, in 2015 we launched the Ingersoll Rand EcoWise™ portfolio of products. The EcoWise endorsement is given to products with nextgeneration, low-GWP refrigerants and high efficiency operation.

#### Technology and Innovation

Using our business operating system to drive innovation ensures that we are continually weighing our new ideas against their ultimate value to our customers. Deploying our product growth team approach, we have launched or improved more than 190 products over the past three years.

Beyond closely managing and reporting our progress on these key material issues, we are focused on improving our performance related to additional environmental metrics such as water consumption, natural resources and, waste and recycling management. In addition, we work with our suppliers to reduce their environmental impacts and thus improve sustainability across the entire value chain.

#### **Company Energy Use**

Our business operating system enables us to execute with discipline and precision in pursuit of continuous improvement. Increasing the energy efficiency of our global facilities and fleet is core to operational improvement in all of our business units, and our total
energy use, normalized by net revenue, has declined 5 percent over just the past two years.

#### **OUR POSITION ON CLIMATE CHANGE**

- Ingersoll Rand supports government policies that recognize the importance of managing future greenhouse gas (GHG) emissions. This provides an incentive for technology investments in energy efficiency that would reduce future GHG emissions.
- We believe that enforceable global governmental agreements which provide clear direction for all domestic GHG policies are necessary to effectively reduce and manage future GHG emissions.
- Refrigerants are a key component that impact the performance of our products, but current refrigerants have relatively high global warming potential (GWP). We are already launching new products with significantly less GWP that are safe, energy efficient, cost effective and environmentally sound, ahead of regulations. We actively participate in international forums, such as the United Nations Framework Convention on Climate Change and the Montreal Protocol, to help create an organized approach to global refrigerant transitions. We are also working proactively with government agencies and refrigerant suppliers to help identify alternatives and facilitate a practical transition that reduces GHG emissions as early as possible.
- Ingersoll Rand supports cost effective policies that facilitate market transition to more energy efficient technologies. We believe that improving energy efficiency in commercial, residential and industrial buildings can significantly contribute to solving some of our most pressing global challenges. We support strong energy efficiency requirements for new and existing construction and are working with governments in the United States, Canada, Mexico, European Union, China and India to facilitate adoption and enforcement of such programs.

## INGERSOLL RAND PARTICIPATES IN TWO WHITE HOUSE EVENTS

Ingersoll Rand took the world stage in 2015 at two important U.S. White House events — the Corporate Climate Pledge and second annual Hydrofluorocarbon (HFC) Reduction Roundtable — held to recognize companies that are committing to reduce their climate impact.

Representing the company at the Corporate Climate Pledge was Gary Michel, senior vice president and president, Residential HVAC, who announced our updated Climate Commitment goals. These include reducing emissions from Ingersoll Rand products and operations by more than 20 million metric tons (MMT) of CO<sub>2</sub>e by 2020 and 50 MMT of CO<sub>2</sub>e by 2030.

Paul Camuti, senior vice president, Innovation and chief technology officer, and David Modi, vice president, government relations, represented Ingersoll Rand at the second annual White House HFC Reduction Roundtable. The event recognized the one-year anniversary of several companies' commitments to reduce HFC use and greenhouse gas impacts.

Paul and David discussed Thermo King's progress on its commitment at the prior year's roundtable to launch new lines of trailer and self-powered truck products and retrofit alternatives that use a nextgeneration, low-global warming potential refrigerant, with breakthrough coil technology that requires 30 percent less refrigerant. These products were introduced in Europe, the Middle East, and Africa in 2014, and are planned to be available in the United States by the end of 2018, pending U.S. Environmental Protection Agency approval under the Significant New Alternatives Policy (SNAP) program.

## 4.2 Employee Engagement

#### **GREEN TEAMS**

Our employees around the world have long been engaged in community projects that enhance the environment and quality of life. Established in 2011, the Ingersoll Rand Green Team network, which currently consists of nearly 100 teams across the globe, is the centerpiece for these efforts. Green Team members collaborate internally and work in partnership with community groups to advance our sustainability objectives.

Ingersoll Rand Green Teams initiated a wide range of activities in 2015, encompassing sustainability awareness, education and operational improvement. Major areas of focus included climate change mitigation and reductions in solid waste and energy and water use. Our employee sustainability initiatives saved an estimated 9.4 billion BTUs of energy and 917 metric tons of  $CO_2$  emissions, while also saving 745,000 gallons of water.

In 2015, we established a process to measure the total number of employees participating in sustainability

#### **2015 GREEN TEAM ACCOMPLISHMENTS**

Number of employees participating in Green Team activities	11,347
Total energy saved due to Green Team activities	95.6 Billion BTUs
Total CO <sub>2</sub> reduced	3,520 Metric Tons
Total waste diverted from landfill	5.3 Million Pounds
Total water saved due to Green Team activities	802 Thousand Gallons
Total estimated \$ saved due to Green Team activities	\$1.3 Million (USD)

or community related activities to support our 2020 goal of 75 percent. We are working to continue increasing employee participation and engagement in sustainability-related actions in 2016 and beyond. Our Green Teams are a catalyst for this initiative.

# 4.3 Environment, Health and Safety

Eliminating injuries and improving the well-being of our employees makes Ingersoll Rand more competitive by increasing productivity, enhancing employee engagement, improving retention and reducing healthcare costs. Creating an open reporting culture and sustaining a safety-focused, zero-incident philosophy is a top priority for all of us.

#### FUNCTIONAL SCOPE AND GOVERNANCE

Our injury reduction strategy is focused on three elements: ergonomic improvements; recognizing, reporting and correcting at-risk behaviors; and recognizing, reporting and correcting unsafe conditions. Creating standard work and training provides employees with the tools and knowledge they need to perform their work safely and without injury.

We publicly released our <u>Environment, Health and</u> <u>Safety (EHS) policy</u> for the first time in 2015. The policy has been signed by Michael Lamach, Chairman and CEO, and EHS commitment and accountability begins with him. Our corporate EHS group creates standard work through our business operating system, training and coaching, which assists our business managers and facilities in executing EHS solutions that address their specific needs. EHS committees meet regularly to create standard work for the service organization. Keith Sultana, senior vice president of Global Integrated Supply Chain, serves as the executive sponsor of EHS programs across all Ingersoll Rand operations.

View 2020 Goals for our Operational Footprint here.

#### **EHS Management**

All of our facilities and service organizations are implementing and maturing our EHS management systems or Business Operating Systems (BOS). Employee engagement and EHS committees are critical to effective EHS programs and improvements. Direct employee involvement is used in strategic planning, assessing performance status, and as a means to ensure continuous engagement on the part of leadership, subject matter experts and production associates. These committees generally meet at least monthly.

In 2014, we replaced our web-based EHS data management system with Gensuite. Gensuite's automated system provided an enterprise solution which improved data accuracy and visibility, while also providing mobile tracking and significantly enhancing our data mining and reporting capabilities.

Gensuite is currently supporting nearly 3,000 registered users across the company. The EHS staff uses the Gensuite output to provide monthly reports on EHS progress to the executive leadership team. In a self-sustaining cycle, the insights in these reports lead to training and programming initiatives that drive continuous improvement in our EHS performance. Our EHS management systems focus on performance monitoring and improvement in the following areas, among others:

- Pollution prevention, environmental management, and integrated permitting
- Air emission management
- Water supply management, including a unique water quality management system
- Hazardous substance management
- · General safety and health management
- Personal protective equipment
- Wastewater discharges management
- Waste management
- Dangerous substances
- Physical hazards
- Mechanical hazards
- Fire protection

Our corporate EHS group regularly monitors facilitylevel performance in these areas against global EHS standards and applicable regulatory requirements. We use a combination of third-party consultants and EHS staff to arrange independent audits of each Ingersoll Rand site at least once every three years. We also conduct annual self-assessments following a standard protocol to identify opportunities to improve EHS performance. All personnel directly related to GISC and Services activities receive EHS training annually. Indirect and enterprise personnel receive EHS training upon initial hire, and then periodically thereafter based upon individual risk and exposures.

Our foundation for recording and reporting accidents is the U.S. Occupational Safety and Health Organization (OSHA), regulation 29CFR1904. This standard is applied to Ingersoll Rand sites globally. Additionally, sites will comply with local regulations when they are stricter than the US OSHA standard. Our EHS data is assured annually by a third party. The results of our 2015 assurance can be found <u>here</u>.

Employees have a number of ways to be involved in health and safety programs. Global health issues are addressed through multiple mechanisms. These issues include, among others, high-risk travel destinations, global crisis emergency planning, practices for emergency medical responders, and company health programs. Additional awareness training is planned for service personnel who perform work in medical healthcare facilities. During acquisitions, Ingersoll Rand executes a formal due diligence process that includes EHS considerations. Formal change management programs are implemented for new operations and/or the introduction of new or redesigned products. EHS risk assessments are implemented at multiple levels, including pre-task, pre-project, within change management, and when evaluating overall enterprise risks. Ingersoll Rand does not subscribe to Article 15 of the Rio Principles, and therefore currently does not address the precautionary approach and principle.

View 2020 Goals for our Crisis Plan here.

#### **ENERGY AND CLIMATE**

Ingersoll Rand is strategically focused on helping to solve some of the world's most pressing challenges — chief among them the unsustainable demand for energy resources and its impact on greenhouse gas (GHG) emissions. We are pursuing challenging environmental targets related both to the products we provide to our customers and the way we manage our business.

Complementing our product-related sustainability initiatives are actions designed to reduce the environmental impact of our own operations and business policies, processes and practices. Our performance target for these initiatives is a 35 percent reduction in GHG emissions from Ingersoll Rand office buildings, manufacturing and vehicle fleet by 2020.

To achieve this emissions reduction target, we are retrofitting our facilities with new equipment that is energy and operationally efficient. To improve fleet fuel efficiency we are making vehicle choices available that significantly increase our fuel economy and reduce emissions. We are designing smaller more efficient mobile workplaces and we're introducing alternate fuel vehicles with improved fuel economy and lower emissions. In addition, we are reducing the use of high-GWP foam blowing agents in our operations.

In 2015 we set annual EHS goals pertaining to our operations. The significant goals, among others, were:

- Absolute reduction in energy consumption of 1 percent.
- Achieve all milestones related to GHG reduction planning for our operations.
- Absolute reduction in water withdrawn from water stressed areas of 2 percent.

Our annual EHS goals are reset every year and cascaded to the business operational and EHS management functions. The goals address all of our operations in more than 60 countries, from manufacturing to office buildings to fleet.

Beyond closely managing and reporting energy consumption and GHG emissions related to our business operations, we also monitor and disclose our performance related to environmental metrics such as water consumption, natural resources and waste and recycling management. In addition, we work with our suppliers to reduce their environmental impacts and thus improve sustainability across both our supply and value chains.

We believe that making responsible use of Earth's limited resources and reducing our GHG emissions is integral to achieving operational excellence. Translating this belief into action, we continued to make progress in 2015 reducing the environmental footprint of our global facilities. As an example, we reduced our total energy use, normalized by net revenue, by approximately 5 percent over the past two years. We reduced our absolute emissions by 10 percent over the past two years, or 75,000 metric tons CO<sub>2</sub>e during the same two year period.

#### **Climate Change Action Plan**

We have established bold targets for reducing the environmental impacts of our products and global operations. Achieving them will require both internal and external cooperation. Our engineering and product management teams will develop and commercialize new products that are tailored for each world region. Our marketing and sales teams will communicate the value of environmentally responsible designs. Our supply chain teams will secure alternatives to existing refrigerants, offering end users the choice of when and how to phase out of products that have high GWP.

In our efforts to accelerate GHG reductions throughout the industry, we plan to spend \$500 million on research and development by 2020 to continue to develop safe and efficient technologies that reduce GHG emissions. All Ingersoll Rand businesses, brands and functions are committed to successfully implementing our Climate Change Action Plan, driven by an expanding number of cross-functional internal teams.

We recognize, however, that climate change is a global challenge and that no one company or institution has all the answers. We will act as a convener to help identify a lower GWP road map for areas without other viable options, particularly areas with high ambient temperatures. This includes working with universities to develop and test alternative technologies to address issues such as heat transfer properties and overall performance. We also will work with building owners and industrial and transport customers to better understand their needs and accelerate the development of next-generation sustainability solutions.



## **PRODUCT PORTFOLIO LAUNCH** EcoWise Products Feature Next-Generation, Low-global Warming Potential Refrigerants

Marking a milestone in achieving our Climate Commitment, in 2015 we launched the Ingersoll Rand EcoWise<sup>™</sup> portfolio of products; the EcoWise endorsement is given to products with next-generation, low-global warming potential (GWP) refrigerants and high efficiency operation. "We look forward to introducing many more commercial, residential and transport HVAC, transport refrigeration and refrigerated dryer products that achieve the criteria for the EcoWise endorsement," says Didier Teirlinck, executive vice president, climate segment.

The first products to earn the EcoWise endorsement are:

- Trane Sintesis<sup>™</sup> air-cooled chiller. Energy-efficient and quiet, with a low-GWP refrigerant option available globally.
- Trane Series E<sup>™</sup> CenTraVac<sup>™</sup>. Large capacity, based on current low-pressure CenTraVac centrifugal chiller design, using next-generation, low-GWP refrigerant. Available in Europe, the Middle East and other 50hz markets including Japan.
- Thermo King truck and SLXe<sup>™</sup> trailer refrigeration products sold in Europe, as well as global marine refrigeration units. Safe, reliable and efficient with about 50 percent lower GWP than current refrigerant.

#### **KEY DATES AND TARGETS**

#### 2015 — 2016

- Launch at least five products that incorporate lower GWP alternatives ahead of regulatory requirements.
- Establish new branding and marketing to drive demand for climate-responsible products.
- Convene stakeholders to discuss refrigerant technology needs around high ambient temperature HVAC solutions.
- Invest \$200 million in research and development to identify global solutions.
- Set more stringent standards for higher fuel economy in fleet.
- Increase employee education and engagement to reduce energy consumption.

#### 2017 — 2019

- Launch at least seven additional products that incorporate lower GWP alternatives ahead of regulatory requirements.
- Improve design and product development processes to drive reduced refrigerant charge and leaks.
- Invest \$300 million in research and development to identify and demonstrate global solutions.
- Begin transition from high GWP foams.
- Improve refrigerant-related leak testing equipment.

For more information about Ingersoll Rand's climate change strategy, please refer to our CDP Disclosure <u>here</u>.

### **4.4 Greenhouse Gas Emissions** (G4: Emissions)

Our scope 1 and 2 emissions decreased in 2015 due to several emission reduction activities, primarily through reductions in electricity use. Lighting retrofits (upgrading to LEDs) reduced energy consumption at 10 of our North American manufacturing plants. Refrigerant handling improvements further reduced scope 1 emissions, and HVAC improvements further reduced scope 2 emissions.

Scope 1 emissions were significantly reduced in 2015 due to our continued transition to higher efficiency service vehicles and hybrid sales vehicles. In 2015, the Ingersoll Rand fleet was comprised of more than 5,600 vehicles including trucks, vans, and sedans. Our fleet vehicles are used for sales, service delivery and other operational needs, and each is engineered specifically to meet our service delivery model.

As we continued our journey toward greater sustainability and reduced environmental impact, the Ingersoll Rand fleet focused on two key initiatives. The first was the standardization of service vehicles in order to improve the company's ability to consistently place more efficient vehicles in service. This standardization has resulted in reducing our platform variance from 38 to 14 and our upfit variance from 485 possible configurations to under 100. This aligns with our continued investment in engineering to reduce vehicle weight and improve our impact on the environment.

Our second key initiative was increasing the number of hybrid vehicles in the non-service category. In 2015 we increased the number of hybrid units by 17 percent, with an expectation to convert another 40 percent by 2017. Our objective is to move this category of vehicles from an average MPG of 21 to an average of 40 MPG. During 2015, we saw improvements in MPG and reduced  $CO_2$  emissions per vehicle.

We will continue to explore technologies such as telematics to provide opportunities such as route optimization and asset control; and continue to work with the business to better align vehicles to their needs. Since the beginning of our journey in 2013, we have reduced our emissions by more than 600 metric tons and generated fuel savings of greater than \$3 million.

#### THERMO KING LOW-GWP TRAILER UNITS HIT THE ROAD ACROSS EUROPE

Our new Thermo King SLXe trailer refrigeration units with next-generation, low-global warming potential (GWP) R-452A refrigerant are hitting the road in countries all across Europe, including the Netherlands, Germany, Poland, France, Italy and Spain. The SLXe line is one of the first three offerings in the Ingersoll Rand EcoWise<sup>™</sup> portfolio of products launched in 2015. All SLXe trailer refrigeration units use R-452A refrigerant — the safest, most environmentally responsible and technically and commercially viable solution for trailer and truck refrigeration applications.

The first official customer delivery of a new SLXe unit went to F. LLI LANDO S.p.A., an Italian food distributor that operates through its own distribution chains IperLANDO and Lando Supermarkets. "Environmental responsibility is one of our prime concerns, and we're always on the lookout for innovations that help us be more sustainable," says Gianfranco Marchetto, logistic, transports, and distribution manager at the F. LLI LANDO S.p.A.. "When Thermo King announced the units with this next-generation refrigerant, we decided to join them in this innovative move and take a proactive approach to modernize and lower the environmental impact of our own delivery fleet."

#### **PRODUCT-RELATED EMISSIONS**

Scope 1 and 2 emissions encompass all of our manufacturing. We do not generate scope 3 emissions as part of the processing of our products. Therefore this emissions category is not relevant to Ingersoll Rand. However, GHG emissions and energy use related to the use of our products are material climate-related issues for the company. More than 90 percent of our product portfolio directly addresses demands for greater energy efficiency with lower greenhouse gas emissions in buildings, homes, industrial spaces and transport markets around the world.

In 2015 we launched the Ingersoll Rand EcoWise <u>portfolio</u> of products; the EcoWise endorsement is given to products with next-generation, low-global

warming potential (GWP) refrigerants and high efficiency operation. The first products to earn the EcoWise endorsement include: Trane Sintesis aircooled chiller; Trane Series E CenTraVac low pressure design chiller; and Thermo King truck and SLXe trailer refrigeration products with refrigerant that has half the GWP of prior generation refrigerant. These products are the direct result of our commitment to invest \$500 million in product-related research and development through 2020 to fund long-term GHG emissions reductions.

This investment is driving our global commitment to reduce the greenhouse gas refrigerant footprint of products by 50 percent by 2020 and to incorporate lower global warming potential refrigerant alternatives across our product portfolio by 2030. To accomplish these goals, we are introducing products that are energy and operationally efficient, that use refrigerants with dramatically lower GWP and that do not compromise the safety, performance or efficiency that end users expect. These initiatives have reduced refrigerant-related emissions from our products by approximately two million metric tons over the past two years.

	2015	2014	2013
Total Direct GHG Emissions (Scope 1)	417,932	441,549	476,422
North America	321,195	311,697	379,510
Latin America	22,705	30,415	2,850
Europe/Middle East	39,096	35,319	38,912
Asia	34,936	64,118	55,150

#### TOTAL DIRECT EMISSIONS (METRIC TONS OF CO,e)

#### TOTAL INDIRECT EMISSIONS (METRIC TONS OF CO,e)

	2015	2014	2013
Total Indirect GHG Emissions (Scope 2)	243,424	251,079	260,353
North America	182,929	188,266	211,362
Latin America	13,710	14,262	244
Europe/Middle East	13,841	13,574	12,298
Asia	32,944	34,977	36,449

## REDUCING GREENHOUSE EMISSIONS Thermo King Offers New Transport Refrigeration Choices

Thermo King announced its commitment to offer North American customers new options for trailer and selfpowered transport refrigeration products with lower global warming potential (GWP), pending approval by the U.S. Environmental Protection Agency under the Significant New Alternatives Policy (SNAP) program. The new units are part of the Ingersoll Rand EcoWise<sup>™</sup> portfolio of products. They are energy-efficient and reliable, and use a next-generation refrigerant with about half the GWP of the refrigerant currently used for these applications.

We will continue to offer our North American customers Thermo King's current line of transport refrigeration products, ensuring that optimum levels of service are available throughout the products' lifecycle until customers are ready to transition. The new EcoWise products are currently available to customers in Europe, the Middle East and Africa, and more than 500 units were sold in their

first three months on the market.

We make reducing energy use and improving the carbon footprint of our products two primary objectives of our sustainability efforts. Moving air consumes a large amount of energy – up to 60 percent of a building's overall energy use. HVAC and compressor systems alone are estimated to account for up to 30 percent or more of the energy consumed by commercial and industrial facilities. Given the prevalence of energy consuming Ingersoll Rand products in the built environment, energy efficiency is important to us.

Refrigerants are essential to many of our products, and there is a growing awareness and concern regarding the global warming potential of such materials. National, regional and international regulations and policies are being considered to curtail their use. As we begin to see regulations impeding the use of the current class of widely used refrigerants, we are planning for, and managing transitions to, sustainable solutions. We are already launching new products with significantly less GWP that are safe, energy efficient, cost effective and environmentally sound, ahead of regulations. We have

#### GHG EMISSIONS (Metric tons CO<sub>2</sub>e)

2015	2014	2013
661,356	692,628	736,774

#### NORMALIZED DIRECT AND INDIRECT GHG EMISSIONS (Metric tons of CO,e per million USD net revenue)

2015	2014	2013
49.72	53.73	59.66

## VOLUME OF SIGNIFICANT AIR EMISSIONS OF VOLATILE ORGANIC COMPOUNDS (VOCs) (Metric tons of CO,e)

2015	2014	2013
3,272	2,232	3,603

#### REFRIGERANT GHG EMISSIONS (Metric tons CO,e)

2015	2014	2013
288,976	310,883	351,081

#### NORMALIZED REFRIGERANT GHG EMISSIONS (Metric tons CO<sub>2</sub>e per billion USD revenue)

2015	2014	2013
21.73	24.12	28.43

partnered with a third party to develop a cloud-based carbon impact calculator that enables us to calculate use and disposal phase impact of the energy and refrigerant use of all our company's products. Since 2013, we have achieved a 2 million metric tons CO<sub>2</sub>e avoidance in refrigerant-related emissions.

## **4.5 Company Energy Use** (G4: Energy)

Our company energy use decreased in 2015 as a result of numerous operational initiatives. For example, at our facility in Waco, Texas, we installed a Duro Last Cool zone roof, retrofitted 50 tons of HVAC laboratory testing equipment, and improved our primary assembly line and fabrication to reduce energy consumption and improve safety. The Waco facility also implemented a lighting conservation program, installed high-efficiency outdoor lighting, and improved HVAC efficiency by installing high-efficiency water source heat pumps. Our North American HVAC business worked with GE Lighting Partners to upgrade lighting levels by 75 to 100 percent in 10 of our plants through the use of LEDs, reducing energy consumption by 10.7 billion BTUs.

#### **TOTAL ENERGY CONSUMPTION (MWh)**

	2015	2014	2013
Total Energy Consumption	1,013,235	1,029,678	993,815
Fuel Purchased/Consumed	590,304	593,153	564,089
Electricity Purchased/Consumed	422,931	436,526	429,726

#### FUEL CONSUMPTION BY TYPE (MWh)

	2015	2014	2013
Natural Gas	252,613	267,258	252,375
Gasoline	253,462	240,437	225,460
Aviation	4,551	2,009	0
Propane	19,803	21,148	17,150
Diesel	59,874	62,300	69,105

#### NORMALIZED ENERGY CONSUMPTION (Thousand MWh per million USD of net revenue)

2015	2014	2013
76.18	79.87	80.47

## 4.6 Materials Used

We manufacture many of the components included in our products, which requires us to employ a wide variety of renewable and non-renewable materials, including steel, copper and aluminum. For more information about our materials management strategy, please refer to our Form 10-K <u>here</u>.

## 4.7 Water

The world is running out of clean, fresh water, making it vital to reduce water consumption in our operations. We track our water use at the facility level on a monthly basis through our GenSuite environment management system. The system's Water Watch module also tracks compliance to environmental permits related to our water emissions and reporting requirements.

#### NORMALIZED WATER WITHDRAWALS (Cubic meters/million USD of net revenue)

	WATER USED
2015	315
2014	313
2013	300

#### ABSOLUTE WATER WITHDRAWALS (Cubic meters)

	WATER USED
2015	4,197,998
2014	4,035,326
2013	3,710,553

#### WASTEWATER PERMIT EXCEEDENCES (Number of exceedences)

	WATER USED
2015	5
2014	4
2013	16

We use the World Resources Institute Water Risk Atlas Tool to compare our company water use at active manufacturing facilities with validated regional water availability data.

Facilities are mapped to estimate the number and location of sites that could be impacted by water stress now and in the future. We are executing a number enterprise water management policies at the facilities level. For example, in 2015 our Trane facility in Waco, Texas, committed to a significant reduction in water use. By eliminating process water in manufacturing and upgrading building plumbing and landscaping, the team reduced water use in 2015 per equivalent unit of production by 12 percent.

## 4.8 Waste

### WASTE AND RECYCLING MANAGEMENT

At Ingersoll Rand, we are deeply committed to environmental stewardship, natural resources conservation and environmental compliance. Executing on these business priorities, we strive to use best practices in waste management, source reduction and recycling at all of our manufacturing facilities and at our office locations globally.

We engage and empower our employees to identify opportunities for process improvement and drive the needed changes. Generating less waste not only contributes to environmental sustainability, but improves operating margins and enhances the lifecycle cost profile of our products. We are committed to reducing the amount of waste produced at all Ingersoll Rand facilities around the world.

We execute on this commitment in four ways. The first is to prevent the generation of waste by reducing the amount and toxicity of materials used in packaging, manufacturing and handling of our products throughout their lifecycles. Second, we work to extend the life of our products and reuse items when possible. Third, we identify and deploy methods for recycling our various waste streams. And fourth, we maximize our conversion of waste to energy as an alternative to disposal.

Since 2013, we have achieved a 4.9 percent absolute reduction in non-hazardous waste sent to landfill at our facilities around the world. In 2015, the amount of non-hazardous waste recycled, reused or sent for energy recovery exceeded three times the amount sent to landfill. We reduced the amount of hazardous

#### WASTE STATISTICS (Metric tons)

	2015	2014	2013
Total Non-Hazardous Waste Generated	31,001	32,826	33,238
Non-Hazardous Waste to Landfill	6,558	7,214	6,895
Non-Hazardous Waste Recycled	22,613	24,042	22,345
Hazardous Waste Generated	1,226	1,469	1,488
Total Hazardous Waste Transported	1,103	1,351	1,389
Non-Hazardous Non-Landfill Waste	1,830	1,570	3,999

waste generated by 16.5 percent since 2014 and a 17.6 percent reduction when compared to 2013. Our 2015 waste reductions were due, in part, to activities such as Green Team projects to increase recycling efforts and internal process improvements and supply chain collaboration to reduce total nonhazardous waste generated. The company recorded no spills in 2015.

## 4.9 Product Environmental Impact

Ingersoll Rand customers now demand products with fewer environmental impacts from initial design to end of life as well as quality and reliability. These demands are central to our product innovation and development processes. Our portfolio most directly affects the environment during the in-use phase of the product's lifecycle, so designing for energy-efficient operation is paramount. But a product's disposal and recycling characteristics contribute to its overall environmental footprint.

Reducing environmental impacts through the product lifecycle is a key objective in the Ingersoll Rand Product Development Process (IRPDP). Launched early in 2013, the IRPDP applies standard work to the product development lifecycle, improving the way we develop and launch new product and service offerings from initial concept to point of sale.

Lifecycle Assessments (LCAs) are required for all products passing through the IRPDP. Our teams use an LCA decision tool to determine whether an extensive or streamlined LCA is most appropriate. The streamlined approach is usually selected. Extensive LCAs typically are conducted in response to customer demand or when the product will assist customers in obtaining certifications such as LEED.

Our streamlined and extensive LCAs both cover our product impacts from ideation to end-of-use, including raw materials, manufacturing, and the in-service phase, as well as disassembly, repair, component reuse and product recycling.All of our extensive LCAs adhere to an Environmental Product Determination (EPD), are third-party certified and published, and are conducted in accordance with ISO 14025. Our most recent EPDs also have been in conformance with EN 15804. Customers in certain Ingersoll Rand markets are beginning to choose our products because of their EPDs, and revenue associated with products that have completed LCAs has grown substantially since 2013.

## CASE STUDY Ingersoll Rand Meets DOE Better Plants Goal

The U.S. Department of Energy's Better Buildings, Better Plants Program is working with leading manufacturers to improve energy efficiency in the industrial sector. Participating companies set a specific goal, typically to reduce energy intensity 25 percent over a 10-year period across all their U.S. operations. Ingersoll Rand met its goal in 2015, improving energy intensity 26 percent over four years across 36 U.S. facilities.

#### **Product Lifecycle**

We have a robust program aimed at identifying the key attributes that make a product environmentally superior throughout its life. We are deploying this knowledge in our innovation and product development processes across the organization to ensure that product lifecycle impacts are considered up front, and that tradeoffs are identified during product design.

The Ingersoll Rand Product Development Process (IRPDP) is designed to minimize sustainability-related risk and capture available customer opportunities related to sustainability. The IRPDP also fosters product design, manufacturing and packaging approaches that minimize the use of natural resources, reduce the use of hazardous materials, and trim product weight.

To support the IRPDP Design for Sustainability Module, of courseware and a certificate that enhances the participants' skills in incorporating lifecycle-related attributes into their product development work.

In addition, Ingersoll Rand is actively involved with supplier and university research projects aimed at reducing product lifecycle impacts. For example, we are working on multiple fronts to reduce the environmental impacts of refrigerant use. These initiatives focus on minimizing product refrigerant leak potential, reducing product refrigerant charge to optimize refrigerant solutions with the lowest resulting greenhouse gas emissions and improving the energy efficiency of these solutions.

#### **Product End of Use Considerations**

End of use considerations are integral to the Ingersoll Rand Product Development Process (IRPDP). The IRPDP includes an aftermarket strategy that focuses on designing for disassembly, repair and reusability of product components, as well as the recycling of remaining materials.

Executing on this aftermarket strategy, we have created end-of-life manuals for seven new products and additional manuals are under development. In addition we have performed recyclability calculations for a number of products with additional calculations planned for the near future. Our goals are to perform a product footprint study on 100 percent of the new products we introduce and evaluate 100 percent of these same products for end-of-life considerations.

Multiple Ingersoll Rand businesses have implemented product end-of-life programs. Club Car, for example, uses recyclable plastics in its cosmetic body panels and manufactures frames and chassis from easily recycled aluminum. Club Car also leverages its dealer network and end-of-life vehicle management team to facilitate vehicle returns from customers for remanufacturing. Approximately 23 percent of Club Car's business currently consists of remanufactured golf cars that have moved on to a second life.

In our Compression Technologies and Services (CTS) business, customers often keep their air compressors in service until end of product life. As a result, remanufacturing is an important aspect of our sustainability philosophy. Providing the market with remanufactured equipment allows us to better meet customer needs while reducing the environmental footprint of our business. Our Material Handling business offers customers a trade-in incentive program that provides a 20 percent discount off the price of a new winch or hoist component. In our Residential HVAC business, we recycle all products we test in our labs or scrap for any reason.

Together, these initiatives have significantly increased the percentage of our total revenues represented by products that are disassembled, re-manufactured, reused or recycled.

#### TRANE BUILDING ADVANTAGE DRIVES EFFICIENCY AND SUSTAINABILITY

American businesses spend more than \$24 billion annually on energy costs in commercial buildings. We believe every one of these buildings has the potential to be better. Trane Building Advantage™, a portfolio of energy services and solutions introduced by Trane<sup>®</sup> in 2015, uses data and analytics to guide owners in maximizing building efficiency and operating at peak performance. The portfolio aligns with the core attributes of the Trane brand, but remains distinct from our traditional service, parts and equipment businesses and includes:

#### • BUILDING CONTROLS AND AUTOMATION

From sensors to industry-leading building automation systems, Trane Tracer<sup>®</sup> controls are built on a platform that supports open standards so they can be integrated with existing equipment, regardless of brand.

#### • ENERGY MANAGEMENT SYSTEMS AND SERVICES

Trane Intelligent Services include monitoring, analysis, alerts, reporting, tracking and data visualization. A team of experienced Trane building professionals transforms this information into insights for performance improvement.

#### · ENERGY CONTRACTING

As an accredited Energy Services Company (ESCO), Trane designs and implements a range of energy savings projects. These include retrofitting existing systems, energy conservation improvements, energy infrastructure outsourcing, power generation, and energy supply and risk management solutions.

#### • RENEWABLE ENERGY AND POWER SOLUTIONS

Trane advises and assists building owners in transitioning their current grid systems to autonomous operation, in fulfilling regulatory, marketing, or contractual obligations for sustainability, and in meeting regulatory standards for energy conservation.

#### ENERGY PROCUREMENT AND MANAGEMENT SERVICES

Trane's energy supply expertise helps building owners secure competitive pricing and contract terms from electricity and natural gas suppliers, while delivering unsurpassed market intelligence and customer service.



## CASE STUDY Trane Waco's Sustainability Journey

In 2008, the team at our Trane facility in Waco, Texas, committed to the goals of zero waste by 2016 and grid neutrality by 2020, as well as a significant reduction in water use. The facility, which manufactures the Ingersoll Rand water source heat pump product portfolio, is well on its way toward achieving these targets.

Retrofitting new plant HVAC, roofing and lighting systems has reduced electricity use per equivalent unit of production 45 percent. Non-hazardous waste to landfill has been cut 90 percent, and total recycling including scrap metal has increased from 73 to 97 percent. By eliminating process water in manufacturing and upgrading building plumbing and landscaping, the team has reduced water use per equivalent unit of production 65 percent.

# 5. Our People

Ingersoll Rand is the kind of company where the best people aspire to work, a place where employees feel connected with the company's vision and empowered to do the right thing. Our employees are committed to exceeding customer expectations. This commitment, in turn, leads to the operational excellence that ultimately drives growth, top-tier performance and better outcomes for society and the planet.

## 5.1 Building Our Winning Culture

#### **OVERVIEW**

Having engaged people who are passionate about what they do is critical to delivering for customers, which ultimately creates value for all stakeholders. This formula is the basis for our winning culture; a culture we work continually to improve and one that is difficult for others to replicate. A high-engagement culture enables us to sustain continuous improvement across the organization, which we see as a distinct competitive advantage.

We conduct an anonymous, third-party administered annual survey of our employees to assess their levels of engagement in the company's vision, purpose and values. Our 2015 survey reflected feedback from more than 95 percent of our global workforce. Employee engagement in 2015 rose 2 points, a 14-point improvement overall since 2012, again placing Ingersoll Rand in the top quartile of participating companies worldwide. A high-engagement culture enables us to sustain continuous improvement across the organization, which we see as a distinct competitive advantage in the markets we serve.

# 5.2 Progressive, Diverse and Inclusive

Ingersoll Rand is committed to building an environment where employees from all backgrounds can thrive and are encouraged to grow in their careers. Our broad range of diversity and inclusion efforts continued to gain momentum in 2015. Some were enterprise-wide, but many others, such as our employee resource groups (ERGs), were local or country-specific initiatives.

We have seven ERGs companywide, including the Women's Network, Black Employee Network, New Net for newly hired employees, Veterans Employee Resource Group, Asian Employee Resource Group,

## Ingersoll Rand Launches Ally Program as Part of June Pride Month

The Ingersoll Rand Women's Leadership program, which enhances retention and professional advancement for our female employees, expanded to Latin America in 2015. Following in the footsteps of female colleagues in Europe and North America, 18 women participated in two leadership training modules – the first conducted in the United States and the second held in Chile – and were mentored by senior executives.

"Women around the world still face barriers in the workplace, and we have a way to go to level the playing field for women to become top leaders at Ingersoll Rand," says Maria Blase, President HVAC and Transportation for Latin America. "The Women's Leadership Program provides the tools, training, and experience that female employees need to succeed at a higher level. I am proud of the talented individuals in this program and look forward to seeing them continue growing in their careers."

Group of Latinos, and the PRIDE Employee Resource Group, which encompasses lesbian, gay, bisexual and transgender employees and their allies. In addition to fostering innovation and engagement within Ingersoll Rand, the ERG activities result in talent acquisition and retention as we continue to attract growing numbers of military veterans, women and minorities.

#### WOMEN'S LEADERSHIP PROGRAM LAUNCHES IN LATIN AMERICA

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## 5.3 Learning and Development

Sustaining a high-engagement culture requires a commitment to personal development. It is important to help people with varied skills and experiences work collaboratively and make a difference together and grow in their careers. The Ingersoll Rand business operating system provides our employees with the tools they need to master skills, collaborate, deal with conflict and solve problems as a team — in other words, to win.

The business operating system fuses employee engagement around customer needs with the commitment to practice, rigor and perseverance that make success possible.

Ingersoll Rand is also committed to organizational learning and leadership development. We strive to develop inspirational, courageous leaders with the skills to achieve results through teamwork and collaboration. We expect our leaders to serve as coaches, helping their employees improve their skills and competencies, and as role models for the personal behaviors that underpin a winning culture. Our employee ratings on whether our leaders model Ingersoll Rand values rose two points in 2015. In addition, our performance management process is a critical activity that ensures employees receive feedback on their objectives and competencies throughout the year. In 2015, 97 percent of our salaried employees completed a performance review with their manager.

Employees early in their careers gain exposure to leaders, experience leadership training and build their technical and functional skills. For experienced professionals and executives, we offer learning solutions that focus on skill-building in areas such as innovation, collaboration and business strategy. The centerpiece for these initiatives is Ingersoll Rand University (IRU). Founded in 2003, IRU offers a range of leadership development solutions, including custom executive programs developed in partnership with some of the top higher education partners in the world.

# 5.4 Occupational Health and Safety

#### SAFETY

Creating and sustaining a safety-focused, zero-incident culture is a top priority for all of us at Ingersoll Rand. This commitment starts with our CEO and is pervasive across the entire organization.

Ingersoll Rand manufactures a variety of products per the business portfolio. Typical manufacturing sites have 234 to 240 production days per year. Ingersoll Rand also offers service and installation at customer locations, and may be called upon 24/7 and 365 days per year. The company's employees, including supervised contract employees, worked a total of 88,600,000 hours in 2015. In spite of the inherent challenges employees face in manufacturing processes and customer locations, we continued to drive down injury rates in 2015 into the ranks of world class performance. In 2015, we achieved an 18 percent reduction in Total Recordable Incident Rate (TRIR), and an even more impressive 44 percent reduction in Lost Time Incident Rate (LTIR). The company experienced zero work-related fatalities in 2015.

In 2015, our injury prevention efforts were heavily focused on two major contributors to injuries, 1) ergonomic risk factors, and 2) unsafe behaviors that lead to injuries. Building on the three pillars of people, process and systems, we drove standard work for both Ergonomics and Behavior Based Safety (BBS). With overwhelming support from the leadership team, we achieved a 17 percent reduction in ergonomic-

## Ingersoll Rand India Wins 2015 Dream Company to Work For Award

For the third consecutive year, Ingersoll Rand in India retained #1 ranking within the Manufacturing sector at the World HRD Congress. The organization additionally also won awards for 'Innovative HR Practices' and 'Excellence in Training' as part of the Global HR Excellence awards.



related injuries in 2015, and we anticipate continued reductions as engineering improvements are completed in the workplaces. Everyone at Ingersoll Rand is responsible for their own safety and implementation of the BBS program is taking us to the next level of performance. Our BBS program is building a better culture of ownership where employees feel responsibility for their coworkers' safety as much as their own safety. The BBS program establishes a worldwide structure to promote open discussions with management regarding work-related hazards and safety issues. In responding to this year's employee engagement survey, 92 percent of employees stated they believe Ingersoll Rand is committed to employee safety.

We communicate our safety expectations through quarterly CEO town hall meetings as well as monthly EHS meetings at both the facility and service organization levels. These meetings raise awareness of safety compliance issues and provide our employees with opportunities to share best practices.

## 5.5 Wellness

Ingersoll Rand offers employees a comprehensive health care benefits program, including a range of medical treatment options. Employees who have enrolled themselves and their family members in these programs have numerous opportunities to become educated and proactively prevent diseases.

To support our employees, Ingersoll Rand offers Health Savings Account contributions for participation in the Health Progress program. By completing an annual biometric screening, a personal health questionnaire, and participating in wellness activities, employees and their spouses/same-sex domestic partners enrolled in an Ingersoll Rand plan, can fully fund their deductible (in most cases).Wellness activities include: health coaching, healthy maternity program, tobacco cessation program, using our cost transparency tool, taking part in a company-sponsored wellness challenge, and tracking steps using apps or a fitness device.



## CASE STUDY 6 Million Hours without a Lost Time Injury in Wujiang, China

"Safety is number one for our people, and zero tolerance is the standard," says Wang Jun, manager of our manufacturing plant in Wujiang, China. The Wujiang team's latest safety achievement is proof of that – six million hours worked without a lost time injury, spanning nearly three years. Wujiang becomes the second facility in the Ingersoll Rand Compression Technologies and Services business to reach this performance level. In addition to air compressors, employees at the plant also build Club Car products and Thermo King truck refrigeration units, bus air conditioners and containers.

#### **INCIDENT METRICS**

	NORTH AMERICA	EUROPE, MIDDLE EAST, AFRICA	ASIA	LATIN AMERICA	TOTAL
2015					
Total Recordable Cases	269	38	19	18	344
Total Lost Workday Cases	33	3	1	6	43
Total Days Away From Work	1,349	183	4	486	2,022
2014					
Total Recordable Cases	329	43	26	19	417
Total Lost Workday Cases	53	11	6	3	73
Total Days Away From Work	2,284	901	382	102	3,669
2013					
Total Recordable Cases	296	35	14	28	373
Total Lost Workday Cases	47	10	4	6	67
Total Days Away From Work	1,710	123	155	54	2,042

## 5.6 Labor Practices, Decent Work and Human Rights

#### LABOR PARTNERSHIPS

Ingersoll Rand's global workforce is a mix of represented and non-represented employees. Represented employees may be members of a works council or a trade union, even where collective bargaining agreements may not be in place. Globally, 28 percent of our total employee base is covered by collective bargaining agreements. This includes employees at 29 of our manufacturing plants and employees in our service businesses around the world.

In Europe, there are approximately 30 local works councils, which the company informs and consults on local matters including reductions in force and restructurings. Ingersoll Rand has, for many years, had a European Works Council representing employees across Europe, with which the company regularly informs and consults on transnational matters. Whether an employee population is represented or unrepresented, Ingersoll Rand engages employees in organizational restructurings and makes efforts to redeploy impacted employees, seek voluntary retirements, and otherwise take steps to minimize the impacts on affected employees. Most of our collective bargaining agreements include a 60-day notice for negotiating a new agreement.

While there is not a global standard in place, Ingersoll Rand aims to provide employees with ample notice before implementing significant operational changes. Severance is offered routinely to those employees impacted by these changes. Many of our collective labor agreements require a minimum notice period before enacting significant operational changes and vary based on individual agreements.

# 5.7 Supply Chain Transparency and Performance

Ingersoll Rand has a combined annual spend of \$7.5 billion for direct commodities. Our global procurement team sources these commodities from a large, multi-tiered supply base. Utilizing our Preferred Supplier Program and Supplier Council, we promote business with those strategic suppliers that best align with our expectations on quality, service, value and risk.

We strive to ensure that our suppliers demonstrate a commitment to environmental responsibility, business ethics, employee health and safety, as well as social responsibility. We pay strict attention to supplier compliance with human rights principles and labor laws, in line with the Ingersoll Rand Business Partner Code of Conduct, which our suppliers are required to follow.

#### Our Supply Chain



Understanding how our suppliers are performing, both environmentally and socially, enables us to manage risk and collaborate with those that are best in class.

#### MATERIAL TRACEABILITY AND SOURCING

#### **Supplier Relationships**

The ability to establish mutually beneficial supplier relationships is a key success factor in our business. We aim to engage local suppliers globally as much as possible, provided they meet our cost and quality expectations. We have systematic processes in place to govern these relationships, ensuring our suppliers share our values and adhere to our standards of business ethics, health and safety, environmental and social responsibility.

As part of our enterprise risk management processes, we periodically assess the sustainability and business continuity risks associated with our supply chain. The Ingersoll Rand Business Partner Code of Conduct, which includes our Global Human Rights Policy, is now integral to our standard purchase agreement and communicates the social, environmental, quality and compliance-related expectations that we have of our supply chain partners.

Our Business Partner Code of Conduct requires that suppliers not violate basic human rights of life, liberty and security. No harsh or inhumane treatment, including any sexual harassment, sexual abuse, corporal punishment, mental or physical coercion or verbal abuse of workers. Suppliers must have an effective environmental policy and conduct their operations in a way that protects the environment. Suppliers must also obtain and keep current all required environmental permits and meet all applicable environmental rules, regulations and laws in the countries where they do business. Our Business Partner Code of Conduct can be found <u>here</u> and <u>here</u>.

In implementing our supplier selection process, we use a Quality Supplier Onsite Assessment to screen 100 percent of our new direct material suppliers based on environmental criteria. For example, the assessment asks if suppliers have a program for tracking and managing water use, if they have a program for tracking and managing hazardous waste, if they are located in high risk water areas. The assessment also screens for human rights and labor practices criteria by asking, for example, if the supplier hires and pays all employees at or above local law requirements, and if they refrain from using prison or forced labor, among other questions.

Ingersoll Rand employs more than 2,500 contract security guards worldwide, who are under the management of our Global Security function. All security personnel are contract employees and are required to comply with our Business Partner Code of Conduct, which includes the Global Human Rights Policy.

For more information about our supplier relationships, please refer please refer to our Form 10-K <u>here</u>.

#### **Supplier Diversity**

Our objective is to ensure a diverse and innovative supply base. Supplier diversity is integral to our global supply chain strategy not only because it is consistent with our values, but because it enhances competitiveness and capacity building, drives market connectivity, and creates jobs and economic growth in the marketplace. To support this objective, we are extending our supplier diversity program globally in a phased approach to leverage the flexibility, innovation and diversity of thought in our supply chain.

The diversity program, launched in 2012, embraces suppliers whose ownership is primarily minority, woman or veteran. The goal of the program is to maximize marketplace connectivity and corporate sustainability by focusing on three pillars: 1) increased utilization of diverse suppliers; 2) supplier development and mentoring; and 3) strategic outreach that drives increased brand awareness. We purchased more than \$337 million of goods and services from diverse-owned businesses in 2015, a 10 percent increase from 2014.

#### **Supplier Engagement**

In 2014 we launched our Market Connectivity Ambassador Program (MCAP), which focuses on engaging our Employee Resource Groups (ERGs) in our supplier diversity initiatives. Each of our seven ERGs companywide is a grassroots initiative led by local employees and managers with the support of our Diversity and Inclusion Team. As champions for diversity within the enterprise, ERG members are ideally positioned to help with outreach to supplier firms led by minorities, women and veterans.

In 2015 we introduced a seven-step strategic sourcing process including a Supplier Decision Matrix, which enables us to avoid using price as the primary driver for supplier selection. Instead, we consider a range of factors as agreed upon by a cross-functional team, such as supplier diversity, quality and risk.

Early in 2016 we hosted 200 representatives from our 100 top direct material and indirect suppliers for our first global supplier conference. These suppliers represent 25 percent of our annual commodity spend. We discussed our Preferred Supplier Program and set expectations for 2016 and beyond. We also recognized five supplier partners for their exemplary efforts in 2015 by presenting them with the first Ingersoll Rand global supplier awards, including Sustainability, Innovation and Value Creation, Most Improved, Go the Extra Mile and Supplier Quality. The global supplier conference featured five targeted breakout sessions with ample time for discussion and questions: Supplier Roundtable, Sustainability, Conflict Minerals and Supplier Code of Conduct, Supplier Quality Manual, Procure to Pay Value Stream and Supplier Portal Strategy. The conference reinforced that Ingersoll Rand is seeking like-minded suppliers who invest in innovation and support ongoing improvement efforts for sustainability.

The Ingersoll Rand Preferred Supplier Program is a key initiative to identify and engage world class suppliers capable of enabling profitable growth for our Strategic Business Units. The program highlights those suppliers that best align with our high expectations on customer and business standards for quality, service, value and risk. Preferred Suppliers will be the first choice for early engagement on new product development and strategic sourcing programs and will have priority opportunity to extend their product and service offerings to all Ingersoll Rand locations.

Leading up to 2020, we have set the following targets for Ingersoll Rand:

- Ensure alignment of business partners to a common set of ethical beliefs and expectations
- Leverage supplier innovation to deliver advanced solutions
- Maximize marketplace connectivity by fostering supplier diversity
- Partner with suppliers to minimize the environmental impact of our supply chain
- Minimize impacts on our customers by ensuring a viable supply chain

By the year 2020:

- 100 percent of suppliers have agreed to our Business Partner Code of Conduct
- We will extend supplier diversity program to spend with diverse companies globally
- We will reduce emissions due to freight by 5 percent
- We will designate 80 percent of spend assessed on a quarterly basis for risk

#### **Conflict Minerals Statement**

Ingersoll-Rand plc has conducted a reasonable country of origin inquiry ("RCOI") regarding the minerals specified by Rule 13p-1 of the Securities Exchange Act of 1934, as amended (the "conflict minerals") necessary to the functionality or production of products manufactured by the Company for the fiscal year ended December 31, 2015. The Company exercised due diligence on the source and chain of custody of its conflict minerals using the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (the "OECD Framework").

For more information about our approach to conflict minerals, please click <u>here</u>.

## 5.8 Community Engagement

Ingersoll Rand assists its employees in contributing both time and financial support to local nonprofit groups and community organizations. Our employees strive to match their engagement in the workplace with involvement in the communities in which we live and work. We believe a winning culture is one that assists employees in contributing both time and financial support to local philanthropies and community organizations.

We encourage our fellow employees to align their work as volunteers with environmental and social priorities around the world: energy efficiency; science, technology, engineering and math; nutrition and food waste reduction; and housing and shelter. Ingersoll Rand employees volunteered more than 19,000 hours in 2015, a 23 percent increase from 2014, to support our neighbors and strengthen our communities. Over the past five years, employee volunteerism hours have increased 69 percent, with a 23 percent improvement last year.

#### **OUR GLOCAL PROGRAM**

Prominent among these initiatives is the Ingersoll Rand Glocal (global + local) program. The Center for Energy Efficiency and Sustainability (CEES) launched Glocal in 2014 to encourage our employees to partner with local nonprofits and community organizations as a way to advance Ingersoll Rand's social sustainability efforts, nurture authentic engagement and improve local enterprise relations.

Ingersoll Rand employees in China initiated our Glocal pilot program and were proud to create a framework for success worldwide. Today, employees at the Ingersoll Rand Engineering and Technology Center in Shanghai are working to strengthen the education system at Shuangcai School through capacity building with teachers, students, families and facilities. Employees at our manufacturing plant in Wujiang are investing in a community, partnering with local government and nearby companies to plant trees to combat air pollution. Taicang manufacturing plant employees are helping enhance learning at the Hengli School.

Glocal teams are focused on creating a self-help mindset that results in lasting change. Today's Glocal sites can be found in China, Thailand and the Czech Republic. At each site, our employees serve as volunteers in efforts to address social challenges, building capability within the local communities aimed at making an enduring impact where our employees live and work.

In Thailand, King Bhumibol Adulyadej has introduced a philosophy known as Sufficiency Economy over the past three decades. It promotes the idea that all people should live sustainably and in moderation, consuming what they produce and trading excess production to other communities.

The Glocal Team at our Trane Thailand site chose a project at that would allow the community to learn more about Sufficiency Economy and put it into practice. Twenty Glocal volunteers helped with a facilities revamp at the Sufficiency Economy Learning Center. The Center attracts people from all over Thailand who may not normally have the means to learn about Sufficiency Economy, or the ability to put it into practice. Our Thailand plant manager regularly attends learning sessions at the Center.

Improvements included building walls and shelves to protect books and learning materials, installing lighting, and providing tables and chairs for training sessions. For its next project, the Thailand Glocal Team plans to build a food distribution center at the edge of a lowincome housing complex near the Sufficiency Economy Center so community members coming to the facility can access inexpensive food.

With Glocal teams at work in China and Thailand, in 2015 we looked to our sites in Eastern Europe as a next logical step for growing the program. With a project vision for advancing environmental education for young people in and around Prague in the Czech Republic, employees at the Ingersoll Rand Engineering and Technology Center in that city formed a Glocal team to support social sustainability through a partnership with the Czech Union for Nature Conservation — a national organization with 350 local chapters around the country. This initial project focused on expanding



## сомминиту service Building a Connection with the Next Generation

The Glocal (global + local) team at the Ingersoll Rand Compression Technologies and Services manufacturing site in the Unicov area of the Czech Republic has a multi-year vision to build a connection with local youth and encourage students to explore science, technology, engineering and mathematics (STEM) careers. The team's first community project focused on the renovation of a playground and city park.

"Cleaning up the playground and improving the safety and condition of the equipment was a great first step in building a relationship with our community," says Pavlina Samankova, site Glocal champion. "Our team looks forward to more partnerships, increasing access to educational opportunities for our youth and developing a mentoring program."

## Real Tools for Schools

Sponsored by the Ingersoll Rand Foundation and our Power Tools business, the Real Tools for Schools Program makes grants of up to \$10,000 available to as many as 50 high school automotive technology vocational programs. In addition, Ingersoll Rand employees are partnering with participating high schools to deliver seminars, hands-on training and learning enrichment experiences for students enrolled in automotive technician programs. Students are eligible to receive special discounts on Ingersoll Rand tool kits and individual tools up to six months after they graduate with a technical degree.

## Bring Your Future Engineer to Work Day

A team of Ingersoll Rand engineers, lab technicians, human resources representatives, sales team members and procurement leaders celebrated 2015 National Engineers Week by hosting our first annual "Bring Your Future Engineer to Work Day" at our campus in Davidson, North Carolina. The goals were to further our STEM outreach into the community and spark children's interest in engineering careers. The STEM initiative aims to increase the number of minorities in the field, and the event engaged participants from multiple cultures, genders and nationalities. A 7-yearold girl led the winning team in the egg drop contest with an egg that fell 105 feet without breaking. a pathway and building a bridge at a local nature preserve.

At the same time, the Glocal team at our Compression Technologies and Services manufacturing site in the Unicov area of the Czech Republic focused on the renovation of a playground and city park, embarking on a long-term vision to build a connection with local youth and encourage students to explore science, technology, engineering and math (STEM) careers.

Employees at each of these Glocal team sites have built a foundation for corporate social responsibility, further underpinning Ingersoll Rand's commitment to our sites, our people, and the communities in which we operate. The social action planning that has begun with Glocal teams serves as a model of the impact that our winning culture can have around the world.

## ETC AP GLOCAL GREEN TEAM SUSTAINS LOCAL STUDENTS IN EDUCATION

As part of our Glocal (global + local) program, more than 20 volunteers from the Ingersoll Rand Asia Pacific Engineering and Technology Center (ETC AP) paid four visits to the Shuangcai Primary School in Jiangsu Province, China. Limited resources make it difficult to improve educational conditions and teaching capabilities at the school.

Glocal volunteers installed two Trane air conditioners and a laptop computer, and conducted a computer operation training session for teachers. They visited nine poverty-stricken families to better understand their situations and needs, and presented scholarships to 36 students with excellent performance and nine students suffering from poverty. The volunteers also interacted with students in activities such as digital painting, movie watching and competitive games.

"I am glad that I can provide personal support to those kids." says Tina Hong, one of the Glocal volunteers who joined the activity with her daughter. "In this program, my daughter and I have established true friendship with the school's students. She is more than willing to help those diligent 'brothers and sisters'. More than that, she also cherishes a lot of the life she enjoys now. I hope such kind of meaningful activity can be continued."

## 5.9 Philanthropic Giving

We reinforce our employees' community engagement through philanthropic giving, focusing corporate resources on areas where Ingersoll Rand can truly make a difference. These efforts are aligned with our global environmental and social priorities: energy efficiency; science, technology, engineering and math; nutrition and food waste reduction; and housing and shelter, focusing on communities around the world where we have operations. Over the past five years, we have donated more than \$24 million in philanthropic gifts to community partners.

#### INGERSOLL RAND GLOBAL CITIZENSHIP COUNCIL

Ingersoll Rand strives to embody best practices in corporate citizenship. We work tirelessly to ensure that the impacts of our business activity, together with the involvement of our employees as friends and neighbors, contribute to a better quality of life in all of the communities in which we operate. The Ingersoll Rand Global Citizenship Council aligns our businesses and employees with this vision. The council's mission is to make recommendations that focus resources on areas where we truly can make a difference.

This mission reflects our preference for making charitable contributions and involving employees as volunteers to achieve targeted results. Instead of providing charitable support for "worthy causes," our objective is to make resource investments that lead to measurable, observable changes in people, communities and our environment.

#### **INGERSOLL RAND FOUNDATION**

The Ingersoll Rand Foundation serves as the focal point for our corporate philanthropic activity. The Foundation's purpose is to develop charitable partnerships that help build comfortable, sustainable, efficient and educated communities. These partnerships help make our communities better places to live and work, while building employee morale and engagement and nurturing trust in Ingersoll Rand.

The Ingersoll Rand Foundation is engaged in five programs that align with our business and extend our enterprise vision — a word of sustainable progress and enduring results — into the communities where we live, work and operate.

#### **PRIORITY ISSUE GRANTS**

This program makes available general grants, and is open to requests from all employees and 501(c) (3) designated nonprofit organizations. Grants for consideration must address at least one of the Foundation's four priority issues: energy and natural resource efficiency; housing and shelter; science, technology, engineering and mathematics (STEM); and nutrition and food waste reduction.

#### **MATCHING GIFTS**

All Ingersoll Rand locations have the opportunity to set up a United Way annual employee giving campaign. Money donated by employees during campaigns will be matched dollar for dollar by the Foundation. Although United Way campaigns are primarily held within the United States, our locations in India and Puerto Rico have also taken part in the program. In addition, the Foundation will match contributions to educational institutions made by eligible employees up to an annual, aggregate maximum of \$15,000.



## Club Car Supports Military Families with Donation to Folds of Honor Foundation

Led by the Club Car chapter of the Ingersoll Rand Veterans Employee Resource Group (VERG), Club Car donated \$10,000 to support the mission and programs of the Folds of Honor Foundation. The Foundation provides educational scholarships for children and spouses of U.S. military service men and women killed or disabled while serving. The Club Car VERG is composed of Club Car employees who donate time to help veterans, active military members and their families through networking, special events and welcoming and onboarding veterans into the Club Car family.

#### INGERSOLL RAND CHINA HELPS AIDS-AFFECTED ORPHANS PURSUE EDUCATION

Ingersoll Rand China has partnered with the nonprofit Chi Heng Foundation (CHF) to conduct its first corporate social responsibility effort — the AIDSaffected Orphan Program. Launched in 2014, the program engages employees of Ingersoll Rand in China to help AIDS-affected orphans pursue education and vocational training. It also enables more people to build an understanding of the AIDS disease and treat AIDSaffected people respectfully and fairly.

In the program's first year, Ingersoll Rand employees from around China took part in the "Talk to AIDS" workshop and participated in a volunteer activity at the Shanghai Young Bakers baking center, funded by CHF. We continued the program in 2015 with a "Children's Charity Drawing Competition," inviting all of our China employees to submit their children's paintings in the theme of "My Dream." The aim was to help AIDS-affected orphans pursue their education dreams through online bidding and an on-site auction of the paintings at the Ingersoll Rand Shanghai office.

Before bidding began, the team exhibited about 100 brilliant paintings by children of employees. CHF presented paintings drawn by the AIDS-affected orphans and shared the painters' stories, vividly displaying their determination, optimism and positive attitude towards life. All funds raised in the auction were donated to CHF to support 81 AIDS-affected orphans in Anhui Province in completing their one-year primary school education, and company leaders presented the prizes to the 19 winners and their parents.

PR Newswire, a global leading news distribution agency, named the Ingersoll Rand China AIDSaffected Orphan Program the Best Corporate Social Responsibility (CSR) Communications of the year. The award recognizes the program's positive social impact generated across China, as well as the multiple communications channels it has leveraged over two consecutive years to reach a wider group of people with its positive message.

#### NATURAL DISASTER RELIEF

Ingersoll Rand is a longstanding partner with the American Red Cross. This partnership accelerates support for disaster relief efforts worldwide, and ensures that our employees will receive relief from the Red Cross in the event of a natural disaster. It also facilitates employee giving to Red Cross relief efforts in disaster-stricken areas.

#### **EDUCATIONAL SCHOLARSHIPS**

The Ingersoll Rand Scholarship Program fosters employee goodwill by rewarding, recognizing and supporting the academic success of our employees' children throughout their college careers. High school juniors and seniors are eligible for merit scholarships of up to \$2,500 annually for one to four years per recipient. The program is available on a global basis. In addition to academic accomplishments, financial need is an important factor in selecting award recipients.

#### VOLUNTEERISM

Named "Dollars for Doers," our volunteer program rewards individuals and employee teams who donate their time to community causes with a gift from the Foundation to eligible nonprofit organizations. The amount of the donation corresponds with the number of hours volunteered and the needs of the organization selected.

## Thermo King Employees Help more than 100 Children's Back-to-School Experience

Thermo King Minneapolis employees helped change local children's back-to-school experience by participating in the "Stuff the Bus" school supply drive in partnership with non-profit social services agency Volunteers Enlisted to Assist People. Employees surpassed their goal of 100 backpacks, ending the event by donating 111 backpacks, 7 boxes of school supplies and \$200 in cash. Employees who offered a donation were entered into a raffle drawing for company-funded prizes that included sports tickets, restaurant gift cards, candy baskets and Thermo King merchandise with winners being drawn daily. This was the third year Thermo King participated in the Stuff the Bus event, partnering with other local companies to make the community aware of school children's need for backpacks and school supplies.

#### PHILANTHROPIC CORE PRINCIPLES

Our culture of giving advances the quality of life in communities around the world, while building employee morale and engagement and nurturing trust in Ingersoll Rand. By establishing priorities and guidelines for our charitable giving both the Ingersoll Rand Global Citizenship Council and Foundation translate the following core principles into action:

- Achieving Impact: Our objective is to make resource investments that lead to measurable, observable changes in people, communities and the environment.
- Advancing Business-Community Synergy: Corporate citizenship for its own sake is intrinsically valuable. Our philanthropic efforts are responsive to both our communities and our business interests, and effectively use our unique resources.
- Community Responsiveness: Our philanthropic efforts are responsive to identified needs in the community that are appropriate for our involvement.
- Employee Preference: The interests and preferences and volunteer efforts of our employees are recognized in the community programs we support.
- Globalization and Diversity: Awareness of people, issues, communities and environments around the world, is an important element of our corporate citizenship responsibility.
- Inspiring Progress and Sustainability: Working toward sustainable solutions requires an integrated view of a community and the various issues and indicators that link that community's environment, society and economy.

## Thermo King Teams Up with Dealers for a Great Cause

Thermo King leveraged its annual North America Dealer Principal Meeting to support Volunteers Enlisted to Assist People (VEAP), a non-profit social services agency meeting the needs of low-income families in Bloomington, Edina, Richfield and South Minneapolis in Minnesota. Auctioning two custom-painted, 75th anniversary trailer refrigeration units at the meeting raised a total of \$67,000 in new funding for VEAP. "The generosity that emerged from this opportunity was more than we anticipated — we truly have an amazing dealer network," says Tim Minor, vice president, Thermo King dealer development and customer solutions.

# 6. Our Products

## 6.1 Product Development Strategy and Processes

#### **PRODUCT-DRIVEN GROWTH**

Our product development strategy is driven by innovation. We work to stimulate innovation throughout the organization, capitalizing on the diverse experiences and perspectives that teams bring to bear in generating new ideas. We approach potential customer solutions objectively, consider ideas from any source and recognize that the seemingly impossible may in fact be achievable.

Developing new products, however, requires more than open minds. The other essential element is disciplined execution. Our business operating system ensures this discipline. It provides the people on our teams with standard processes and tools for achieving excellence in both growth and operational performance.

There is no better example of how the Ingersoll Rand business operating system supports a winning culture than our product growth teams (PGTs). Bringing together leaders in product management, global integrated supply chain (GISC) and engineering, PGTs exemplify our value stream transformation. They align these functions around the company's key initiatives to achieve a common goal: to grow market share and expand margins for their products and services.

PGT-led value streams cover a significant portion of the Ingersoll Rand portfolio. They are generating insights into customers' needs through a disciplined market segmentation and activation process. They are making informed strategic choices about where to invest resources and about how to win in ways to deliver growth in our product and service portfolio.

## 6.2 Technology and Innovation (G4-EN24: Products and Services)

At Ingersoll Rand, we create new technology with an eye toward the world we and our customers will inhabit in the future. We believe that innovation — finding new ways to meet the market's future needs for reliable, energy-efficient solutions — will be critical to driving our organic revenue growth. We operate four engineering and technology centers globally, including facilities in Bangalore and Chennai in India, and Prague in the Czech Republic. Our fourth facility, located in Shanghai, China, doubled its laboratory footprint in 2015. The expanded Shanghai center positions Ingersoll Rand as a research and development leader in the Asia Pacific region. It is accelerating our speed to market in the development of innovative Trane and Thermo King heating, ventilation and air conditioning and refrigeration (HVAC-R) technologies that meet the region's national regulatory codes, while also enabling us to serve our customers more quickly and efficiently.

We believe that innovation drives operational excellence as well as growth. Industrial companies traditionally organized themselves in vertical silos. These internal groups were designed to hand off work from one to another, often leading to inefficiencies and a loss of focus on value creation for customers.

Ingersoll Rand embarked on a different approach when we broke tradition by establishing value streams working horizontally across functions to deliver value as defined by the customer. Now fundamental to the way we do business, the value stream process provides teams across the company with tools that enable them to think and operate holistically.

By deploying value stream methodologies, each team can focus simultaneously on products, process and customers, eliminating waste and improving cycle times. Five years into the Ingersoll Rand value stream journey, virtually all of our company operations and all of our major product and service offerings are currently part of value streams.

#### NEW ARO STATION PUMPING SYSTEM MINIMIZES HAZARDS

Ingersoll Rand introduced the ARO Station, a pumping system developed for the European market designed to reduce leaks and fumes during chemical transfer from one container to another. Standing independently from a truck, the ARO Station is designed to protect operators as well as the environment during the transportation of chemicals and other hazardous materials.

Utilizing a standardized skid size that reduces integration costs, the ARO Station combines an ARO

### INNOVATING FOR THE FUTURE W5330 Impactool™ Notches Another Innovation Award for Ingersoll Rand

Another Ingersoll Rand power tool has earned recognition for innovation. Our W5330 cordless right-angle Impactool<sup>™</sup> won a 2015 innovation award in the Power Tools category from Professional Tool and Equipment News (PTEN) magazine. Its lightweight design and patentpending inline battery allow the W5330 to reach spaces once only accessible to a traditional ratchet or a technician's bare hands.

PTEN awards recognize outstanding companies whose products respond to the automotive repair industry's market challenges with creativity and innovation. Last year the Ingersoll Rand R3130 cordless ratchet wrench won the same honor, following an award for the pneumatic version of the W5330 the previous year, positioning us at the forefront in both pneumatic and cordless power

tool technologies.

pump and piping in a compact, durable housing. It can be used as a free-standing pumping system or equipped with wheels for mobility. ARO offers three add-ons to increase environmental and operator safety: a leak detector, a heater to prevent freezing and an alarm that monitors the level of liquid in the tank and whether the system is running dry.

#### INGERSOLL RAND EXPANDS ASIA PACIFIC ENGINEERING AND TECHNOLOGY CENTER

Our Asia Pacific Engineering and Technology Center (ETC), located in Shanghai, China, doubled its laboratory footprint in 2015. The expanded Shanghai center positions Ingersoll Rand as a research and development leader in the Asia Pacific region. It is accelerating our speed to market in the development of innovative Trane and Thermo King heating, ventilation and air conditioning and refrigeration (HVAC-R) technologies that meet the region's national regulatory codes, while also enabling us to serve our customers more guickly and efficiently.

Ingersoll Rand founded the Asia Pacific ETC in 2003, establishing a world-class laboratory for HVAC-R technology development, as well as facilities for production and operational technical support. The facility houses engineers who collaborate closely with Ingersoll Rand colleagues worldwide. Over the past 12 years the Asia Pacific ETC has produced numerous business development and product innovations, including localization of the world's leading efficient centrifugal chiller and 49 patent awards in China and globally. It is the first Ingersoll Rand ETC to receive ISO17025 certification.

#### INGERSOLL RAND EXPANDS LINE OF PRECISION FASTENING TOOLS WITH QX SERIES HIGH TORQUE ANGLE WRENCH

Ingersoll Rand expanded its QX Series<sup>™</sup> of cordless power tools for assembly markets by introducing the High Torque Angle Wrench – a cordless, right-angle fastening tool designed to increase efficiency and productivity for assembly manufacturing. It features a wireless connectivity option that integrates the tool and the assembly line into a true plant-wide network with managed data, process control and the ability to adjust tool configurations in real time.

"Advanced manufacturing methods and new materials demand higher torque, speeds and accuracy for fastening parts, whether in the heavy equipment, light manufacturing, automotive, or aerospace sectors," says Brian Welborn, global channel marketing leader, Ingersoll Rand Power Tools. "Our assembly manufacturing customers also asked for power tools that get the job done right, the first time. With its traceability and connected technology options, our QX Series High Torque Angle Wrench ensures quality in the assembly process with diligent tracking mechanisms while delivering comfort, accuracy and reliability."

## 6.3 Smarter and More Connected

As our product growth teams and value streams illustrate, the power arises when our growth and operational excellence strategies merge together in one value stream, leading to increased market share and margins for Ingersoll Rand through an improved customer experience. We make our technology choices based on findings from our market and customer tools and analytics.

Data-driven customer insights and a proven process enable us to answer key strategic growth questions: which customer needs represent our biggest market opportunities, which of these markets should we serve, who are our target customers, how can Ingersoll Rand serve them most effectively, and what capabilities and systems must we have to win?

Our people and innovation process have enabled us to launch or improve more than 190 products over the past three years, accelerating our performance on key portfolio metrics. These include on-time delivery, product quality, revenue and share growth, margin expansion and sales from new products. Our ability to get high-quality products to market on time and within budget has improved 69 percent since 2012. The percentage of revenue that Ingersoll Rand generates from the more than 144 new offerings has improved 35 percent since 2012.

Executing on our growth strategy in 2015, each of our strategic business units developed critical strategies using market analytics to identify clear, bold decisions leading to growth opportunities aligned with enterprise strategies. We have targeted several of these programs for investment and resourcing.

Among these programs is a new solution for optimizing industrial compressed air systems. Companies around the world spend billions of dollars annually operating their compressed air systems. It is estimated, however, that 30 to 50 percent of a typical system's compressed air goes to waste. We have developed a new, proprietary software tool that unveils hidden inefficiencies caused by leaks, artificial demand and improper uses. The tool then models alternative system configurations before they are installed. Testing potential solutions virtually — before lifting a wrench — eliminates guesswork and reduces risk for our customers.

As another example, we have established a presence for Ingersoll Rand in the global variable refrigerant flow (VRF) market. A popular alternative to traditional ducted HVAC technologies, VRF systems are compact, flexible and capable of simultaneously heating and cooling different areas within a building. By combining innovations related to controls, drives and heat exchanger technologies, Trane is redefining the VRF space.

Our digital offerings are smarter and more connected than ever before. Over the past several years we have introduced a growing portfolio of energy-efficient products, energy management services and industrial productivity solutions. For example, American businesses spend more than \$24 billion annually on energy costs in commercial buildings. Trane Building Advantage™, a portfolio of energy solutions provided by Trane, uses data and analytics to guide building owners through a journey to operating the most efficient and sustainable buildings.

Trane Intelligent Services, a building energy management solution, is used by our energy professionals to turn building data into energy reduction solutions. Additionally, our team uses renewables and power generation, energy storage, supply side consulting, financial tools and turnkey services to help customers deliver business outcomes that matter. Trane Building Advantage energy solutions are helping building owners earn bottom-line results and maximize their return on investment.

As our portfolio migrates toward smart, connected solutions, we are working to adopt a services mindset across the organization. Serving as trusted advisors, our people are applying their knowledge and experience to help customers select the solution that best meets their business goals. In addition, we are leveraging our global service footprint and the exceptional technical skills of our people to provide reliable support for our customers over the lives of their Ingersoll Rand products and applications.



### PRODUCT TREND Smarter and More Connected

Things work better when they're smarter and more connected, and our product portfolio is proof. In addition to Trane Building Advantage and the Ingersoll Rand MR150, Club Car's Precedent i3 golf car features a cloud-based system that streams location, condition and diagnostics information 24/7 to customers about their fleet. For homeowners, our Nexia<sup>™</sup> smart home system delivers the convenience to monitor and control temperature, locks, lights and even garage doors from virtually anywhere. Nexia diagnostics provide residential HVAC dealers with real-time data about how systems are performing and can prompt action to keep comfort on track. Thermo King SLXe<sup>™</sup> trailer refrigeration products sold in Europe have a patented geofencing controller that automatically switches the unit into low-noise mode when entering a controlled zone. In addition, our customers expect us to provide them with products with a smaller environmental footprint throughout its life. We are working to identify the attributes that make a product environmentally superior from initial design until its removal from service. Our product development teams are deploying this knowledge to ensure that product lifecycle impacts are minimized across the portfolio.

#### KINETIC SERIES LEVER HOIST NAMED PRODUCT OF THE YEAR

Plant Engineering magazine named the Ingersoll Rand KL Kinetic Lever Hoist its product of the year for 2014 in the material handling systems category. It is a lightweight, compact hoist built to minimize the manual effort required by the user, which makes for an overall smoother operation. The KL Kinetic Lever Hoist is ideal for industrial and manufacturing applications in refineries and in the construction, power generation, ship building and workboat markets. The lifting capacity of the lever chain hoist ranges from .75 to 9 metric tons (1,653 to 19,841 pounds).

"This is great recognition and an important thirdparty endorsement for the Kinetic Lever Hoist," says Cleve Pechuekonis, global product leader for industrial lifting, Power Tools business unit of Ingersoll Rand. "Not only is Plant Engineering magazine a respected source of information and influence in the industry, but the winners of these awards are chosen by the readers of the magazine themselves. Being rated above the many other fine products in competition in the category is a real tribute to the talents of our product development team."

#### INGERSOLL RAND INTRODUCES REVOLUTIONARY COMPRESSED AIR AND GAS TECHNOLOGIES

Acquiring the assets of Cameron International Corporation's Centrifugal Compression division early in 2015 enabled us to enhance our offering in air separation, process gas and highly-specified engineered air markets. During the year we launched a range of new centrifugal, rotary compressors and air treatment products designed to advance the reliability, productivity and energy efficiency of compressed air and gas systems. They include:

RS-Series Contact-Cooled Rotary Screw Air compressors.



## certification Thermo King Receives European Rail Industry Certification

Thermo King's Kolin, Czech Republic, team ended a twoyear journey when it passed Europe's International Railway Industry Standard (IRIS) 2.1 certification audit. Based on ISO 9001, IRIS certification adds more demanding requirements specific to heating, ventilation and air conditioning equipment for the rail industry. "To pass the audit we had to meet arduous requirements in production, purchasing, internal audits, design and development. Having this certificate provides us with a real competitive advantage and we expect to see project growth due to this accomplishment," says Miroslav Platenka, Thermo King quality manager in Kolin.

- A line of three new dryers, including the Ingersoll Rand Sub-Freezing Air Dryer (SFD), XL series refrigeration air dryers and Ingersoll Rand D1800IB
   ABV advanced heated blower.
- The TURBO-AIR NX 12000 Centrifugal Compressor.
- TURBO-DRI Air Treatment portfolio.

"We've invested in broadening our portfolio, enhancing our energy-efficient solutions and building on our proven record of reliability, and the results of these efforts are evident in the new compressors and air treatment products we launched this year," says Todd Wyman, Ingersoll Rand senior vice president and president, Compression Technologies and Services. "These new products are engineered to excel with digital connectivity and next-generation materials that deliver our customers top-tier performance, reliability and energy efficiency."

## 6.4 Product Reliability (G4 PR1, PR2: Customer Health & Safety)

Customer health and safety considerations are integrated into our standard new product development process. In Phase 2 of our new product development process, there are specific deliverables where the product team identifies Environmental Health & Safety risks and/or sustainability risks. In phase 2 we also identify the applicable Environmental Health & Safety /Sustainability related codes that affect the product.

It is our standard practice to comply with regulations and various voluntary codes concerning product labeling and service information, marketing communication and customer safety. Each business unit has a designated legal counsel who follows a process for addressing issues of non-compliance in these areas. Due to market differences, tracking of non-compliance related incidents in the areas of product labeling, marketing communication and customer safety is the responsibility of each business. As such, we do not collect this data or make general statements on this topic at the enterprise level.

It is estimated that residential, commercial and public buildings account for more than 30 percent of the



## COMPANY MILESTONE ARO Celebrates 85 Years of Reliability, Service and Expertise

ARO<sup>™</sup>, our Fluid Management business, marked its 85<sup>th</sup> anniversary in 2015 with events for more than 1,000 employees at nine locations around the globe. "We're celebrating the legacy of ARO and what it stands for – building reliability and trust into every pump and part we manufacture," says Oakley Roberts, vice president of product management at Ingersoll Rand Fluid Management. "We're also looking forward with new products such as ARO's new integrated pump controller, which adds intelligence and connectivity to air-operated pumps never before seen in our markets. world's energy consumption. Growth in the amount of occupied space, combined with increasing service demands for electronic equipment, computing and communications, is driving building energy use even higher. However, approximately 30 percent of the energy consumed in buildings is used inefficiently or unnecessarily.

Installing improvements to reduce wasted energy in existing buildings can lower the total cost of ownership 20 to 50 percent. Advances in technologies for lighting fixtures, windows, insulation, building controls and appliances make it possible to deliver many building services at lower energy intensity. Similar progress is occurring in the HVAC space, as well as industrial compressed air, driven by advances in technologies such as refrigerants.

## 6.5 Energy Efficient Products (G4: Energy)

Ingersoll Rand truly makes its mark on the global environment through the products, services and solutions it delivers in markets around the world. Industrial energy demand, for example, is projected to increase as much as 44 percent over the next 20 years. Our success in the marketplace leads to reduced energy use and lower greenhouse gas emissions in buildings and in the transport and industrial sectors.

Whether for comfort, commerce or manufacturing, moving air consumes a large amount of energy — up to 60 percent of a building's overall energy use. HVAC and compressor systems alone are estimated to account for up to 30 percent or more of the energy consumed by commercial and industrial facilities. Ingersoll Rand is delivering higher levels of energy efficiency across a wide range of HVAC, compressor and industrial process applications.

At the same time, Ingersoll Rand products and services are continuing to help reduce the global problem of food spoilage. It is estimated that nearly \$1 trillion of food is wasted every year, with much of the loss occurring during transport. We design and manufacture the transportation industry's most advanced refrigeration and temperature control solutions, as well as auxiliary power units that reduce engine idling.

### 6.6 Nexus Opportunities (G4: Material Aspect)

Our Materiality Assessment indicates that Nexus Opportunities are important to Ingersoll Rand and our stakeholders. As a global provider of energy-related technology solutions, we are positioned to pursue opportunities that arise from the nexus between energy efficiency and climate change mitigation. Although energy resource demands and climate change represent great risks for society and the planet, innovation that addresses these issues is a potential growth driver for our business.

More than 90 percent of our product portfolio directly addresses demands for greater energy efficiency with lower greenhouse gas emissions in buildings, homes, industrial spaces and transport markets around the world. Across all of our brands and businesses, our growth and operational excellence strategies are focused on opportunities to simultaneously address the world's growing demand for products that consume less energy while also accelerating the global transition to a less carbon-intensive way of life.

The Ingersoll Rand Climate Commitment is the

centerpiece for these initiatives. We have pledged to significantly increase energy efficiency and reduce environmental impacts from our operations and product portfolio by 2030, with key milestones specified for 2020. The core of our Climate Commitment is a pledge to advance high-performance, low-global warming potential (GWP) solutions for our customers while reducing the carbon footprint of our facilities and fleet.

Executing on this pledge in 2015, we launched the EcoWise<sup>™</sup> portfolio of products using next-generation, low-GWP refrigerant. In addition, we added new Trane and Thermo King products and product families to the EcoWise portfolio. These new products deliver higher energy efficiency with a smaller carbon footprint than comparable legacy products.

As a complement to this product strategy, we are pursuing Nexus Opportunities by participating in a number of voluntary global climate change initiatives. Among them is the Climate and Clean Air Coalition — a group of governments, civil society and private sector members committed to improving air quality and protecting the climate in next few decades by reducing short-lived climate pollutants (SLCPs) across sectors.

In addition, we are actively involved as a member of We Mean Business — a coalition of organizations

working with business and the investment community to promote the transition to a low carbon economy. As a global leader in the use of low-GWP refrigerants in heating, air conditioning and industrial applications, Ingersoll Rand is well-positioned to help these and other visionary nonprofits promote new alternative technologies and emissions standards related to SLCPs such as hydrofluorocarbons.

### INNOVATING FOR THE FUTURE Club Car Launches New 2016 Carryall Utility Vehicles

We understand the budget and staff reductions, increased workloads, tighter regulations and other business constraints our Club Car customers face, and introduced a new line of 2016 Carryall vehicles to address these challenges. Available in gas, diesel and zero-emissions electric models, these small but high-performing vehicles cost less to operate and can be used in lieu of larger, less efficient and more expensive pickup trucks.

Gas models feature an electronic fuel injection engine that delivers more horsepower while requiring less fuel and maintenance than competitive vehicles. Zero-emissions electric Carryalls are built with heavy-duty controllers and motors, and can be equipped with an energy-efficient charger that issues alerts to prevent dead batteries. All Club Car Carryalls feature rustproof, corrosion-resistant aluminum frames designed to be more durable than steel frames. In addition to delivering superior performance, power, versatility and savings, they provide owners greater peace of mind with the best overall warranty in the industry.

These 2015 initiatives represent the initial phase of what promises to be a long-term strategy at Ingersoll Rand to develop technologies that address the challenges of energy efficiency and climate change on an integrated basis. Recognizing the importance of Nexus Opportunities as a material issue both to our stakeholders and our company, we will expand the scope of this strategy in the coming years.

This expanded scope is in line with two of our key business imperatives — enhancing industrial productivity and keeping transported food safe and fresh. Leveraging the expertise of our transportation refrigeration and industrial businesses, we are exploring opportunities related to the nexus between food security and energy, as well as the nexus between water conservation and energy.

## 6.7 Innovation for Developing Markets

#### (G4: Material Aspect)

Our Materiality Assessment indicates that our success in driving innovation for developing markets is an issue of significant importance to both our stakeholders and Ingersoll Rand. Consequently, one of our core strategies is to increase our exposure to emerging markets.

This strategy has been particularly successful in China, Brazil, Mexico and India, which make up approximately 50 percent of our emerging market revenue. In these four countries, we have established large local teams with full capabilities, manufacturing facilities and strong localized channel partners. Our remaining emerging market sales are highly concentrated, with approximately 25 percent of sales coming from eight other countries or regions.

We are working aggressively to increase our participation in early-stage markets for Ingersoll Rand products. We use a three-step process to prioritize our investments in emerging markets. First, we consider the macroeconomic and geopolitical conditions of an emerging market at the country level. Where these factors are acceptable, we next perform an analytical assessment of the current attractiveness of our business, considering competitors, customers and channels. Finally, we consider how the attractiveness of this business will likely evolve over time.

Using this assessment, we decided to prioritize our heating, ventilating and air conditioning business in Africa. We added a new account structure for Africa including four regional account managers, one distribution leader, one West African service engineer and three sales persons. We added two more account managers in 2015, an additional sales engineer and a service technical support leader. All of the positions are locally based.

The Ingersoll Rand fluids business also used this process to identify and prioritize its expansion efforts in markets where we had inadequate coverage. Based on analytics performed in 2014, the business determined to focus on four new markets, which included three emerging markets: Mexico, Brazil and United Arab Emirates. We have embarked on hiring and training local sales and application resources to improve business and channel development in each of these countries, to achieve aggressive revenue growth targets.

In parallel with these market expansion initiatives, we are developing innovative technologies and products targeted for the unique requirements of developing markets. A key focus is atmospheric water generation to address the global problem of water scarcity.

Water scarcity affects agriculture, food processing, industrial production and basic sanitation. The United Nations Food and Agriculture Organization (FAO) estimates that about 1.2 billion people live in water scarce regions today and this will increase to 1.8 billion by 2025. Many methods are being used to address the water scarcity. Condensate water from air is one of the methods being explored and useful where pure drinking water is difficult or impossible to obtain due to significant contamination of ground water.

Atmospheric water generation (AWG) is the extraction of water vapor from the atmosphere by cooling the air below its dew point, thereby producing potable water. The atmospheric air is a promising alternative, sustainable and ubiquitous water source. AWG not only reduces dependence on rain water, ground water or natural water bodies for water supply, but the water produced is purer than groundwater or supply drawn from natural water bodies. In addition, AWG can eliminate complex water distribution systems as it is deployed at point of use.

Energy efficiency forms the backbone of AWG and more innovations are expected in this domain. Our role as a leading HVAC solutions provider, together with our commitment to global sustainability, strongly position Ingersoll Rand to lead the way in AWG technology research. Our engineering and innovation teams are currently investigating the commercial feasibility of a number of AWG solutions.

## 6.8 Base of the Pyramid Solutions

(G4: Material Aspect)

Our Materiality Assessment indicates that our success in delivering Base of the Pyramid solutions is an issue of significant importance to both our stakeholders and Ingersoll Rand. We recognize that there is a great opportunity to innovate solutions locally for the underserved — those living on less than \$2.50 (USD) a day — and are committed to addressing social and environmental imperatives to assist in expanding energy and other resource efficiency knowledge in developing regions.

A key focus is low-cost cooling. An estimated 700 million outdoor workers globally earn less than \$5 (USD) a day. Due to harsh environmental conditions, they are typically subjected to hypothermia (heat stroke) during summer days. Heat strokes often results in dizziness, cramps and convulsions, and if untreated immediately may result in death.

According to recent studies, these outdoor workers lose about 8 man-days on an average in a year due to heat stroke across the globe and typically spend about \$10 (USD) on medical expenses. The immediate need for these workers is low cost and sustained respite from extreme heat.

As a leading cooling solution provider with a global commitment on sustainability, Ingersoll Rand is addressing this problem for the Base of the Pyramid population. One of our engineering teams is currently working on an innovative and affordable evaporative cooling solution, using a specially designed wearable technology.

STANDARD DISCLOSURE	DISCLOSURE TITLE	LOCATION	EXTERNAL ASSURANCE
STRATEGY AND ANALYSI	5		
G4-1	Statement from the most senior deci- sion-maker of the organization	Please see our <u>CEO</u> and <u>CTO letters</u>	
ORGANIZATIONAL PROFI	LE		
G4-3	Name of the organization	Please see our Form 10-K Annual Report, cover page	
G4-4	Primary brands, products, and services	Please see our <u>Form 10-K Annual Report, pg. 4</u>	
G4-5	Location of the organization's head- quarters	Please see our Form 10-K Annual Report, cover page	
G4-6	Number of countries where the organization operates, and names of countries where either the organization has significant operations or areas that are specifically relevant to the sustain- ability topics covered in the report	Please see our <u>Form 10-K Annual Report, pg. 17</u>	
G4-7	Nature of ownership and legal form	Please see our <u>Form 10-K Annual Report, cover</u> page, pg. <u>3</u>	
G4-8	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	Please see our 2015 Annual Report/2016 Notice and Proxy Statement, pgs.1, 4	
G4-9	Scale of the organization	Please see our <u>Form 10-K Annual Report, pgs. 6-7,</u> <u>17, 22</u>	
G4-10	Workforce Information	Please see our <u>Sustainability Supplement: About</u> Ingersoll Rand (employee chart)	
G4-11	Percentage of total employees covered by collective bargaining agreements	28%	

STANDARD DISCLOSURE	DISCLOSURE TITLE	LOCATION	EXTERNAL ASSURANCE
ORGANIZATIONAL PROF	ILE		
G4-12	Describe the organization's supply chain	Ingersoll Rand has a combined annual spend of \$7.5 billion for direct commodities (raw material used in the manufacturing process) and indirect products (materials and services used in the operations of our facilities). Ingersoll Rand's global procurement team sources these products from a large, multi-tiered supply base. Utilizing its Preferred Supplier Program and Supplier Council, Ingersoll Rand promotes business with those strategic suppliers that best align with our expectations on quality, service, value and risk. Please see our Form 10-K Annual Report, pgs. 11, 12	
G4-13	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	Please see our <u>Form 10-K Annual Report, pgs. 4, 5</u>	
G4-14	Whether and how the precautionary approach or principle is addressed by the organization	Please see our Sustainability Supplement: <u>Environ-</u> <u>ment, Health and Safety</u>	
G4-15	Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	<ul> <li>We Mean Business: commit to reduce short-lived climate pollutant emissions</li> <li>Global Human Rights Policy: many of the standards set forth in our Policy align with basic working conditions and human rights concepts advanced by international organizations such as the International Labor Organization and the United Nations (UN).</li> <li>Please see: White House American Business Act on Climate Pledge</li> <li>Clinton Global Initiative Commitment to Action: Ingersoll Rand Climate commitment</li> <li>US DOE Better Plants partners</li> <li>CCAC HFC initiative</li> </ul>	

STANDARD DISCLOSURE	DISCLOSURE TITLE	LOCATION	EXTERNAL ASSURANCE
ORGANIZATIONAL PROF	ILE		
54-16	Memberships of associations (such as industry associations) and work with	Strategic memberships:	
	national or international advocacy	Industry Associations:	
	organizations	Air-Conditioning, Heating and Refrigeration Institute	
		(AHRI)	
		American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)	
		All-Conditioning Engineers (ASHKAE) Association of Energy Engineers (AEE)	
		British Compressed Air Society (BCAS)	
		Compressed Air and Gas Institute (CAGI)	
		Hydraulic Institute	
		Manufacturers Alliance for Productivity and Innova-	
		tion (MAPI) Material Handling Institute (MHI)	
		National Association of Environmental Management	
		(NAEM)	
		National Golf Course Owners Association (NGCOA)	
		NAM (National Association of Manufacturers) Alliance for Responsible Atmospheric Policy (ARAP)	
		Annance for Responsible Atmospheric Folicy (Arvir)	
		Peer Groups:	
		Business Roundtable	
		Corporate Eco Forum (CEF) Green Biz Executive Network	
		AHC Group	
		Governmental Group Partners:	
		American Chamber of Commerce in India (AMCHAM)	
		Montreal Protocol (UNEP Secretariat) United Nations Framework Convention on Climate	
		Change (UNFCCC)	
		US-India Business Council	
		NGO Partners:	
		Alliance to Save Energy (ASE) EU Alliance to Save Energy	
		Business Council for Sustainable Development	
		(BCSD)	
		Canada Green Building Council (CaGBC)	
		Clinton Global Initiative Forum for the Future	
		Indian Green Building Council (IGBC)	
		The Energy and Resources Institute (TERI)	
		U.S. Green Building Council (USGBC)	
		Verband Deutscher Maschinen and Anlagenbau (VDMA)	
		World Environment Center	
		RMI's Business Renewables Center	
		European Partnership for Energy and the Environ-	
		ment (EPEE)	
		Business Council for Sustainable Energy (BCSE) American Council for and Energy Efficient Economy	
		(ACEEE)	

STANDARD DISCLOSURE	DISCLOSURE TITLE	LOCATION	EXTERNAL ASSURANCE
IDENTIFIED MATERIAL A	SPECTS AND BOUNDARIES		
G4-17	List all entities included in consolidat- ed financial statements or equivalent documents, including whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report	All entities are included in this report. Please see our Form 10-K Annual Report, pg. 5	
G4-18	Explain the process for defining the report content and the Aspect Bound- aries. Explain how the organization has implemented the Reporting Principles for Defining Reporting Content	Please see our Sustainability Supplement: <u>About this Supplement</u>	
G4-19	List all the material Aspects identified in the process for defining report content	Please see our Sustainability Supplement: About this Supplement	
G4-20	For each material Aspect, report the Aspect Boundary within the organi- zation	Please see our Sustainability Supplement: <u>Value Chain Map</u>	
G4-21	For each material Aspect, report the Aspect Boundary outside the organi- zation	Please see our Sustainability Supplement: <u>Value Chain Map</u>	
G4-22	The effect of any restatements of in- formation provided in previous reports, and the reasons for such restatements	Please see our Sustainability Supplement: About this Supplement	
G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	Please see our Sustainability Supplement: About this Supplement	
STAKEHOLDER ENGAGEN	<b>NENT</b>		
G4-24	List of stakeholder groups engaged by the organization	Please see our Sustainability Supplement: Sustainability at Ingersoll Rand (stakeholder engagement)	
G4-25	The basis for identification and selection of stakeholders with whom to engage	Please see our Sustainability Supplement: Sustainability at Ingersoll Rand (stakeholder engagement)	
G4-26	Approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifi- cally as part of the report preparation process	Please see our Sustainability Supplement: Sustainability at Ingersoll Rand (stakeholder engagement)	

STANDARD DISCLOSURE	DISCLOSURE TITLE	LOCATION	EXTERNAL ASSURANCE
G4-27	Key topics and concerns that have been raised through stakeholder en- gagement, and how the organization has responded to those key topics and concerns, including through its report- ing. Report the stakeholder groups that raised each of the key topics and concerns	Please see our Sustainability Supplement: <u>Value</u> <u>Chain Map</u>	
REPORT PROFILE			
G4-28	Reporting period (such as fiscal or calendar year) for information provided	Calendar Year: January - December 31, 2015	
G4-29	Date of most recent previous report	August 13, 2015	
G4-30	Reporting cycle	Annual	
G4-31	Contact point for questions regarding the report or its contents	Misty Zelent 704-655-5324 mzelent@irco.com	
G4-32	Report the 'in accordance' option the organization has chosen; GRI Content Index for the chosen option; Report the reference to the External Assurance Report, if the report has been external- ly assured	In accordance - Core Self-reported	
G4-33	Policy and current practice with regard to seeking external assurance for the report; Report the scope and basis of any external assurance provided; Report the relationship between the organization and the assurance providers; Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability supplement	Ingersoll Rand has our environmental and safety data assured by an independent third party. Please see our <u>Assurance Letter</u> and our Sustainability Supplement: <u>About this Supplement</u> . The assurance process is led by the Vice President, Environmental Health and Safety, Operations who reports to the Senior Vice President, Global Operations and Integrated Supply Chain.	
GOVERNANCE			
G4-34	Governance structure of the organi- zation, including committees of the highest governance body. Identify any committees responsible for deci- sion-making on economic, environ- mental and social impacts	Please see our Sustainability Supplement: <u>About</u> Ingersoll Rand (Governance, Ethics & Compliance)	
ETHICS AND INTEGRITY			
G4-56	Organization's values, principles, stan- dards and norms of behavior such as codes of conduct and codes of ethics	Please see our <u>Code of Conduct</u>	

STANDARD DISCLOSURE	DISCLOSURE TITLE	LOCATION	EXTERNAL ASSURANCE
G4 ASPECT: EMISSIONS MATERIAL TOPIC: GREE	S ENHOUSE GAS EMISSIONS		
G4-DMA	Emissions DMA	Please see our Sustainability Supplement: Energy & Climate	
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	Please see our <u>CDP Response</u>	<ul> <li>Image: A second s</li></ul>
G4-EN16	Energy indirect greenhouse gas (GHG) emis- sions (Scope 2)	Please see our <u>CDP Response</u>	$\checkmark$
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	Please see our <u>CDP Response</u>	
G4-EN18	Greenhouse gas (GHG) emissions intensity	Please see our <u>CDP Response</u>	
G4-EN19	Reduction of greenhouse gas (GHG) emissions	Please see our <u>CDP Response</u> , pg. 7 Reductions apply to CO2 and HFCs only	
G4-EN21	NOX, SOX, and other significant air emissions	All are NA except VOCs. Lbs of VOCs in 2015: 565550; 2014: 627723;	

G4 ASPECT: ENER MATERIAL TOPIC:	GY ENERGY EFFICIENT PRODUCTS; COMPANY ENER	GY USE
G4-DMA	Energy DMA	Please see our Sustainability Supplement: Energy & Climate
G4-EN7	Reductions in energy requirements of products and services	Please see our Sustainability Supplement: Product-Related Emissions
G4-EN3	Energy consumption within the organization	Please see our Sustainability Supplement: <u>Company Energy Use</u> Please see our Assurance Letter (p. 25)
G4-EN5	Energy intensity	Please see our Sustainability Supplement: Energy & Climate
G4-EN6	Reduction of energy consumption	Please see our <u>CDP Response</u>

STANDARD DISCLOSURE	DISCLOSURE TITLE	LOCATION	EXTERNAL ASSURANCE
G4 ASPECT: PRODUCTS	S AND SERVICES DUCT LIFE; PRODUCT END OF USE CONSIDEF	NATIONS	
MATERIAL TOPIC. PRO	DOCT LIFE, PRODUCT END OF USE CONSIDER	ATIONS	
G4-DMA	Products and Services DMA	Please see our Sustainability Supplement: Product Environmental Impact	
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	Please see our Sustainability Supplement: Product Environmental Impact	
N/A	End of Life Manuals; R&D End of Life Consid- erations; LCA lifecycle analysis; remanufactur- ing; end of life manual; reclaim refrigerant	Please see our Sustainability Supplement: Energy & Climate	
G4 ASPECT: PRODUCT A	AND SERVICE LABELING TOMER SATISFACTION		
G4-DMA	Product and Service Labeling DMA	Please see our Sustainability Supplement: About Ingersoll Rand (Customer Satisfac- tion)	
G4-PR5	Results of surveys measuring customer satisfac- tion	Please see our Sustainability Supplement: About Ingersoll Rand (Customer Satisfac- tion)	
G4 ASPECT: COMPLIAN	ICE		
MATERIAL TOPIC: REG	ULATOR COMPLIANCE		
G4-DMA	Compliance DMA	Please see our Sustainability Supplement: <u>About Ingersoll Rand (Governance, Ethics</u> <u>&amp; Compliance)</u>	
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Please see our Sustainability Supplement: Corporate Governance & Risk Management	

STANDARD DISCLOSURE	DISCLOSURE TITLE	LOCATION	EXTERNAL ASSURANCE						
G4 ASPECT: PUBLIC POLICY MATERIAL TOPIC: PUBLIC POLICY									
G4-DMA	Public Policy DMA	Please see our Sustainability Supplement: <u>About Ingersoll Rand (Regulations &amp;</u> <u>Policy)</u>							
G4-S06	Total value of political contributions by country and recipient/beneficiary	Please see our Sustainability Supplement: <u>Governance, Ethics &amp; Compliance (Political</u> <u>Activities &amp; Contributions)</u>							
G4 ASPECT: SUPPLIER MATERIAL TOPIC: MAT	ASSESSMENT ERIAL TRACEABILITY AND SOURCING								
G4-DMA	Public Policy DMA	Please see our Sustainability Supplement: <u>About Ingersoll Rand (Regulations &amp;</u> <u>Policy)</u>							
G4-S06	Total value of political contributions by country and recipient/beneficiary	Please see our Sustainability Supplement: <u>Governance, Ethics &amp; Compliance (Political</u> <u>Activities &amp; Contributions)</u>							
G4 ASPECT: MATERIAL MATERIAL TOPIC: MAT									
G4-DMA	Materials DMA	Please see our Sustainability Supplement: Our Planet (Materials Used)							
G4-EN1	Materials used by weight or volume	Please see our Sustainability Supplement: Our Planet (Materials Used)							
G4 ASPECT: CUSTOMER MATERIAL TOPIC: PRO									
G4-DMA	Customer Health and Safety DMA	Please see our Sustainability Supplement: Our Products (Product Reliability)							
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concern- ing the health and safety impacts of products and services during their lifecycle, by type of outcomes	Please see our Sustainability Supplement: <u>Our Products (Product Reliability)</u>							

STANDARD DISCLOSURE	DISCLOSURE TITLE	LOCATION	EXTERNAL ASSURANCE						
G4 ASPECT: N/A MATERIAL TOPIC: INNOVATION FOR DEVELOPING MARKETS									
G4-DMA	Innovation and Developing Markets DMA	Please see our Sustainability Supplement: Innovation for Developing Markets							
G4 ASPECT: N/A									
MATERIAL TOPIC: BASI	E OF THE PYRAMID SOLUTIONS								
G4-DMA	Base of the Pyramid Solutions	Please see our Sustainability Supplement: Base of the Pyramid Solutions							
G4 ASPECT: N/A MATERIAL TOPIC: TECHNOLOGY AND INNOVATION									
G4-DMA	Technology and Innovation DMA	Please see our Sustainability Supplement: <u>CTO letter</u>							
G4 ASPECT: N/A									
MATERIAL TOPIC: NEXUS OPPORTUNITIES									
G4-DMA	Nexus Opportunities DMA	Please see our Sustainability Supplement: Nexus Opportunities							

## Appendix A

#### Ingersoll-Rand PLC

**Reconciliation of non-GAAP to GAAP** 

	For the year ended December 31, 2015		For the year ended December 31, 2014			
	As		As	As		As
(\$ in millions, except per-share amounts)	Reported	Adjustments	Adjusted	Reported	Adjustments	Adjusted
Earnings from continuing operations attributable to Ingersoll-Rand plc	688.9	309.3	998.2	897.0	16.5	913.5
Diluted Earnings per common share Continuing operations	2.57	1.16	3.73	3.27	0.06	3.33
Weighted-average number of common shares outstanding Diluted	267.8		267.8	274.3		274.3
<u>Detailed Adjustments</u> (a) Restructuring costs		34.3			12.5	
(b) Refinancing premium		-			10.2	
(c) Acquisition Inventory step-up		24.7			-	
(d) Venezuela remeasurement of monetary assets		42.6			-	
(e)Tax impact of adjustments a, b, c, and d		(18.9)			(6.2)	
(f) IRS agreement		226.6			-	
Impact of adjustments on earnings from continuing operations attributable to Ingersoll-Rand pl	c	309.3			16.5	

Adjusted EPS is a non-GAAP financial measure. Adjusted EPS for 2015 is defined as GAAP EPS plus restructuring expenses, acquisition inventory stepup costs, Venezuela re-measurement of monetary assets and the IRS agreement, net of tax impacts. Adjusted EPS for 2014 is defined as GAAP EPS plus restructuring expenses and the redemption premium expense incurred for the early retirement of debt net of tax impacts

The Company reports its financial results in accordance with generally accepted accounting principles in the United States (GAAP). This supplemental table provides non-GAAP financial information and a quantitative reconciliation of the difference between Adjusted EPS and EPS, the financial measure calculated and reported in accordance with GAAP.

Adjusted EPS should be considered supplemental to, not a substitute for or superior to, EPS calculated in accordance with GAAP. Non-GAAP financial measures have limitations in that they do not reflect all of the costs associated with the operations of our businesses as determined in accordance with GAAP. In addition, these measures may not be comparable to non-GAAP financial measures reported by other companies.

We believe that Adjusted EPS provides important supplemental information to both management and investors regarding financial and business trends used in assessing our financial condition and results of operations.



Ingersoll Rand (NYSE:IR) advances the quality of life by creating comfortable, sustainable and efficient environments. Our people and our family of brands—including Club Car®, Ingersoll Rand®, Thermo King® and Trane®—work together to enhance the quality and comfort of air in homes and buildings; transport and protect food and perishables; and increase industrial productivity and efficiency. We are a \$13 billion global business working together for enduring results.









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