



Transforming Everyday Life

2017 ANNUAL REPORT
2018 NOTICE AND PROXY STATEMENT



Transforming Everyday Life

Our business is rooted in anticipating and addressing global trends that impact the way we live, work and move. Companies with the right intent and expertise to address pressing global challenges will grow faster than the global economy. By thinking bigger and acting bolder to help customers around the world solve these challenges, we are doing the right thing for our communities, our environment and our business.

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; keep transported food and perishables safe and fresh; and deliver fun, efficient and reliable transportation solutions. Diversity, engagement and teamwork drive innovation and fuel our passion for exceeding customer expectations. Together with our experienced leadership and ethical business practices, our high-performance, winning culture delivers enduring results that lead to a sustainable world.

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Global Market-leading Brands

Our people and family of brands – including Club Car®, Ingersoll Rand®, Thermo King® and Trane® – work together to create value for customers in homes and buildings, transportation and industrial processes, allowing them to be environmentally responsible and productive at the same time.

Club Car®

Club Car leads the industry in delivering fun, efficient and reliable personal transportation solutions for consumer, golf, commercial, institutional and resort uses.

Our product portfolio includes consumer vehicles; connected golf cars with an in-car course entertainment system; turf and commercial utility vehicles; multi-passenger shuttle vehicles; rough-terrain utility vehicles; and a digital fleet management system for course owners and resort operators.

THERMO KING

Thermo King enhances the quality of life through temperature-management solutions in global transportation to preserve fresh foods, pharmaceuticals and other temperature-sensitive products.

We manufacture transport temperature-control systems for a variety of mobile applications, including trailers, trucks, buses, shipboard containers and railway cars.

IR Ingersoll Rand.

Ingersoll Rand enhances operational efficiency, saves energy and improves productivity through innovative equipment, products and services.

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

TRANE®

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

We safely and efficiently optimize residential, commercial and industrial facilities with a broad portfolio of heating, ventilation and air conditioning (HVAC) systems, connected building and energy services, parts support and advanced building automation controls.

OUR STRATEGY FOR CREATING LONG-TERM VALUE:



Growth Excellence

We use customer insights and analytics to make strategic choices on the businesses and markets where we invest, and on the development of innovative, energy-efficient and reliable products and services that deliver on customer needs.



Operational Excellence

We pursue continuous process improvement that drives growth, creates value, fosters employee engagement, and enhances reliability, quality and the customer experience.



Winning Culture

We engage our employees and develop a workforce with diverse backgrounds and skills to foster an environment of innovation and integrity that leads to better solutions for our customers, society and the environment.

2017 Letter to Shareholders

DEAR SHAREHOLDER,

I spend time each year visiting our facilities and hearing from team members and customers around the world. I come away from each conversation firmly believing that success starts with our people. With engaged people, we do more for customers, create more value for shareholders and contribute to a more sustainable world.



Our team is at the forefront of innovating where global trends – like climate change, urbanization and resource scarcity – intersect with buildings, industrial processes and transportation markets. By thinking bigger to help customers around the world solve challenges, we are doing the right thing for our communities, our environment and our business. We are uniquely positioned to grow, and to positively transform everyday life.

Financial Performance

Our focus on financial, social and environmental outcomes continued to produce sustainable results in 2017, as we extended our record of meeting our commitments in metrics that matter to our shareholders. As shown in the charts on page 4, our adjusted continuing earnings per share was up 9%* from the prior year, and we generated \$1.3 billion of free cash flow* – 118% of adjusted net earnings*.

153% total return for shareholders
over the past 5 years

This cash enabled us to retain a healthy balance sheet while returning significant cash to shareholders. At the same time, it allowed us to invest in product and service innovation, and pursue value-accretive technology and channel acquisitions aimed at further improving long-term shareholder returns.

We remain committed to paying a competitive and growing dividend, totaling approximately \$430 million in 2017. We deployed approximately \$1 billion to repurchase shares, and raised the quarterly dividend by approximately 12.5% to \$0.45 per share, concluding 2017 at \$1.80 annualized per share. Over the past five years Ingersoll Rand has delivered a 153% total return for shareholders – far outpacing the S&P 500 Industrials Index.

We faced challenges in 2017, including persistent inflation, which we successfully offset through strong volume, productivity and price. Through operational excellence tools, we effectively managed these challenges and delivered against our commitments. We had strong topline results, and our industrial segment delivered strong operating performance and bookings as these markets improved.

Strategic Innovation

We launched 70 new major products and services in 2017, strengthening our digital capabilities and demonstrating our commitment to being environmentally responsible and productive at the same time.

For example, we launched a best-in-class mobile app to allow remote connectivity to TracKing™, Thermo King's fleet management system. We applied a breakthrough web-based platform called Trane GO, which enables residential customers to make more educated and sustainable HVAC purchasing decisions. We doubled the size of our EcoWise™ portfolio – products with reduced environmental impact through next-generation, low-global warming potential refrigerants and high efficiency operation – significantly ahead of regulatory requirements. In addition, our Compression Technologies and Services business further grew its high-margin customer services worldwide with an array of new CARE service programs, including automated parts shipping and predictive diagnostics.

We are watchful for areas where we can be a leader in solving environmental and industrial challenges through organic growth and thoughtful acquisitions. Focused on channel and technology investments, we made several strategic acquisitions during the year, including the acquisition of CALMAC, a company specializing in thermal energy storage solutions, and GPSi, a provider of cloud-based technology solutions for fleet managers in various transportation markets, including education, golf and resorts. Our innovation pipeline is thriving, and we expect the climate and industrial segments to continue building on this growth momentum in 2018.

Winning Culture

Our commitment to the Ingersoll Rand values – integrity, respect, teamwork, innovation and courage – continues to serve as the catalyst for our profitable growth. What matters to our success is not just what we do, but how we do it.

We respect and value diverse cultures, backgrounds and perspectives, and understand that successful strategic execution requires high employee engagement. Our annual employee engagement scores continued to improve, reaching top tier levels in our industry, and we are creating an environment where our people can learn and thrive in an inclusive and progressive organization.

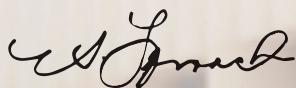
To reinforce our winning culture and commitment to workplace diversity, in 2017 we were the first in our industry to enter the Paradigm for Parity Coalition, a pledge to bring gender parity to our corporate leadership structure by 2030. With my signature, we also joined 150 of America's leading CEOs in a pledge to cultivate diversity and inclusion in the workplace through the CEO Action for Diversity & Inclusion.

Lasting Value

Ingersoll Rand is well positioned to deliver strong shareholder returns over the next several years. Our strategy is tied to attractive, healthy end markets, and linked to long-term global trends. We continue to invest to strengthen our leadership position in markets around the world, and are committed to dynamic and balanced deployment of capital.

I am more optimistic today about Ingersoll Rand's prospects than at any time since I joined the company. We are fully committed to creating lasting value for our stakeholders and society as we innovate to transform everyday life.

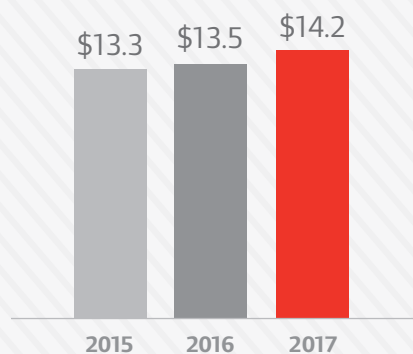
Sincerely,



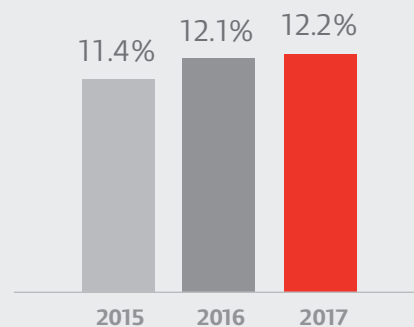
Michael W. Lamach
CHAIRMAN AND CEO



2017 FINANCIAL PERFORMANCE

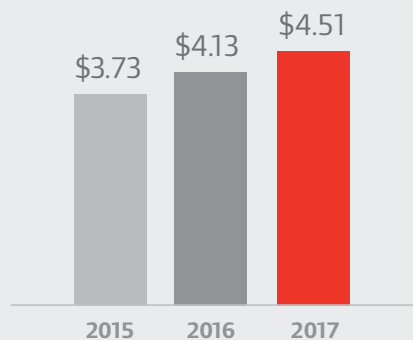


TOTAL NET REVENUE
(Billions)

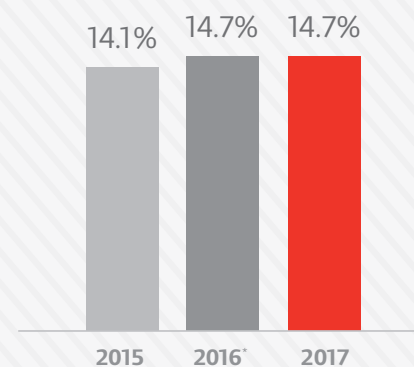


ADJUSTED OPERATING MARGINS*

*2016 REROSPECTIVELY RESTATED FOR ADOPTION OF ASU 2017-07



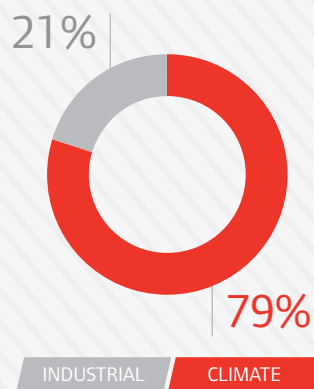
ADJUSTED EARNINGS PER SHARE*



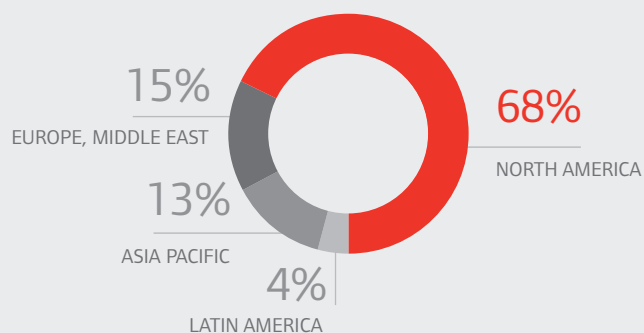
ADJUSTED OPERATING INCOME + DEPRECIATION & AMORTIZATION*

*2016 REROSPECTIVELY RESTATED FOR ADOPTION OF ASU 2017-07

TOTAL NET REVENUE
by Segment



2017 REVENUE
by Geography



*THESE ARE NON-GAAP FINANCIAL MEASURES. RECONCILIATION OF NON-GAAP FINANCIAL MEASURES CAN BE FOUND PRECEDING THE 2018 NOTICE AND PROXY STATEMENT



Growth Excellence

It is not just what we do that inspires us, it is how we do it: creating impactful solutions that deliver value and transform everyday life.

Innovation fuels our strategy for sustained growth. Through strategic and ongoing investment, we have refreshed 85% of our product portfolio over the past four years, achieving superior breadth and depth in nearly every major category in which we compete.

Our products are getting smarter every day, opening doors to new, value-added services. Digital connectivity and data analytics make it possible to provide customers real-time information and insights. Together, we use this data to deliver greater value, efficiency, connectivity and a seamless user experience.

Looking to the future, we will continue to explore new technology frontiers in search of better ways to solve our customers' sustainability and productivity challenges.



70

Number of new
products/services
launched

153%

TOTAL SHAREHOLDER RETURN

over the past 5 years



THE WAY WE LIVE

Trane's connected services and controls solutions enable our customers to improve planning and make quick decisions about the things that matter most: increased occupant comfort, sustainable building performance and reduced operating costs. Our North American energy services and controls business surpassed 9,000 connected buildings in 2017, proving that big data coupled with insights improves energy efficiency. We believe the North American market for connected services and controls represents an estimated \$400 million growth opportunity over three years.

THE WAY WE WORK

Our Compression Technologies and Services (CTS) business added two service programs in 2017 for customers to choose the right maintenance strategy for their operations. These programs, including predictive diagnostic services and automated parts shipment, round out the CARE suite of service offerings that build trusted partnerships based on reliability. CTS is expanding its service programs worldwide, representing what we believe to be a three-year growth opportunity estimated at \$175 million.



THE WAY WE LIVE

Thermo King launched its all-electric TriPac® Envidia™ auxiliary power unit (APU) in 2017, a clean, reliable unit with unmatched runtime that saves fuel and delivers unmatched driver comfort, without needing to idle the engine. "Environmentally speaking, the TriPac helps our trucks run cleaner, longer," said one customer. "Our drivers love the TriPac and enjoy sleeping in a truck that isn't rumbling all night long." Only one-third of the North American sleeper cab fleet is equipped with this technology, making APUs what we believe to be an estimated \$100 million, three-year growth opportunity.

THE WAY WE DRIVE

Club Car's Onward® targets the personal transportation vehicle market with customizable features and a first-class dealership buying experience. Onward offers an unmatched collection of integrated accessories, allowing complete customization. The Onward puts Club Car in front of new customers – young families with children living primarily in planned communities – and we believe it is an estimated \$100 million, three-year growth opportunity.





Operational Excellence

ENERGY USE REDUCTION

15.8% decline in energy use
normalized to revenue

OVER FOUR YEARS

CLIMATE COMMITMENT UPDATE

11 million metric tons of
CO₂e avoided globally

COMPARED TO 2013 BASELINE

SAFETY

45% reduction in total
recordable rate

69% reduction in
lost time incident rate

SINCE 2010

Continuous improvement through teamwork and process excellence is fundamental to how we drive profitable growth and embed sustainability in our business.

Our people rely on and use our business operating system (BOS) – the best-known way of working together – to ensure that we breathe operational excellence into everything we do.

We use standard work in every business and function to reduce complexity and waste, and to enhance our agility in executing on our strategic growth programs. These programs are led by product growth teams, which align product management, supply chain, engineering and sales to the same goals in order to accelerate growth and market share, and expand operating margins.

Ingersoll Rand teams across the globe lead through the BOS to achieve goals, whether launching new products, improving productivity, reducing the company's environmental footprint, serving customers more efficiently or advancing sustainability.



NEW, NEXT-GENERATION REFRIGERANT FOR EUROPEAN CHILLER PORTFOLIO

With the 2017 introduction of XStream™ eXcellent water-cooled chillers, Trane now offers commercial building owners in Europe a solution to achieve their sustainability goals. Part of our EcoWise™ portfolio of products, the eXcellent chillers feature R-1234ze, a next-generation, low-global warming potential refrigerant. The eXcellent delivers unsurpassed heating and cooling efficiency, and high reliability with low environmental impact.

SAHIBABAD GREEN TEAM CONSERVES WATER, HARVESTS RAIN TO BENEFIT ENVIRONMENT, COMMUNITY

Our Sahibabad, India, team spearheaded an effort that dramatically reduced water consumption while recharging the groundwater supply with harvested rainwater. The system they built returns about 1.2 million gallons of rainwater into the ground annually from their manufacturing facility, offsetting approximately 75% of the plant's water usage.



THERMO KING GALWAY FIRST TO ACHIEVE ZERO WASTE TO LANDFILL; EVERYTHING IS RECYCLABLE

More than 90 Ingersoll Rand sites are eliminating waste sent to landfills. At Thermo King's Galway, Ireland, facility, everything has been recyclable since 2014. Before then, 230 tons of waste were sent to landfill annually, but today the total is zero.

FACILITY IMPROVEMENTS IN WUJIANG MAKE A LASTING IMPACT

Our Wujiang, China, plant strives for continuous improvement and contributed towards our Climate Commitment goals by installing LED lighting, cutting electricity use up to 50% and reducing wastewater discharge from 13 to 9 tons per month thanks to standardized cleaning procedures. Industrial process improvements have reduced the discharge of hazardous waste and non-hazardous waste to landfill by 25% and 48%, respectively, since 2013.





Winning Culture

Our relentless focus on Ingersoll Rand people, culture and shared values is what differentiates our company, fuels our growth and enables our success.

We are committed to creating a progressive, diverse and inclusive workplace – an environment that nurtures the best ideas from people with diverse backgrounds and skills, and engages them in pursuit of shared goals, improving the performance of the company. Our business operating system provides our people with the tools they need to master skills, collaborate and solve problems as a team. With this foundation in place, we believe we can accomplish any business objective we set our minds to.

Employee engagement helps drive our business operating system and nurture continuous improvement, enabling us to adopt new ideas more rapidly. Over the past five years, our employee engagement survey scores have steadily risen 18 points, ranking us near the top of all companies, according to external benchmarks.

We have translated this commitment into clear, actionable operational goals, as well as public pledges and partnerships. The objectives for these internal and external efforts range from gender parity to workforce development to human rights, demonstrating that Ingersoll Rand “walks the talk” in pursuit of a more equitable global economy.

ENGAGEMENT SURVEY COMPLETION

94% of employees respond to the annual employee engagement survey

5-YEAR ENGAGEMENT SURVEY TREND

18 point increase in employee engagement over the past 5 years – top decile in manufacturing industry; nearing top decile among all industries

EMPLOYEE VOLUNTEER HOURS

30% increase in time spent volunteering by employees

PHILANTHROPIC GIVING

34% increase in philanthropic gifts to community partners



INGERSOLL RAND ENTERS PARADIGM FOR PARITY COALITION

We were the first in our industry to enter Paradigm for Parity, a coalition of leading businesses pledging gender parity in their corporate leadership structures by 2030.



INGERSOLL RAND HOSTS THOUSANDS ON MANUFACTURING DAY

Ingersoll Rand locations around the world participated in a month-long celebration in honor of Manufacturing Day 2017, inviting students to tour our facilities and learn how they can translate their science, technology, engineering and math knowledge into modern manufacturing career opportunities.

CEO **ACT!ON** FOR DIVERSITY & INCLUSION

INGERSOLL RAND JOINS CEO ACTION FOR DIVERSITY & INCLUSION

We joined more than 150 companies in a CEO pledge to cultivate workplaces that support open dialogue and meaningful action to advance diversity and inclusion. Today more than 400 CEOs and presidents have joined the pledge in support of workplaces that are more inclusive.



INGERSOLL RAND HELPING HAND FUND

In 2017, we rallied to support our colleagues in need through the newly launched global Ingersoll Rand Helping Hand Fund. Together we donated more than \$400,000 in financial assistance to fellow Ingersoll Rand employees facing challenges in the aftermath of natural disasters or unforeseen personal hardships.

NOTABLE RECOGNITION

Seventh
Consecutive
Year

MEMBER OF
**Dow Jones
Sustainability Indices**
In Collaboration with RobecoSAM

Sixth
Consecutive
Year

FORTUNE
WORLD'S MOST
ADMIRABLE
COMPANIES

Fourth
Consecutive
Year



Fourth
Consecutive
Year



Leadership and Governance



Directors

Kirk E. Arnold

Former Chief Executive Officer, Data Intensity

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

Jared L. Cohon, Ph.D.

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

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 Ingersoll Rand

Myles P. Lee

Former Chief Executive Officer and Executive Director of CRH plc

Karen B. Peetz

Former President, BNY Mellon

John P. Surma

Former Chairman and Chief Executive Officer, United States Steel Corporation

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, Ph.D.

Senior Vice President, Human Resources, Communications and Corporate Affairs

Jason E. Bingham

President, Residential HVAC and Supply

Maria F. Blase

President, Fluid Management, Material Handling and Power Tools

Paul A. Camuti

Senior Vice President, Innovation and Chief Technology Officer

Susan K. Carter

Senior Vice President and Chief Financial Officer

Karin De Bondt

President, HVAC and Transport, Latin America

Allen W. Ge

President, HVAC and Transport Solutions, Asia Pacific and India

Maria C. Green

Senior Vice President and General Counsel

M. Stephen Hagood

Senior Vice President and Chief Information Officer

Raymond D. Pittard

President, Transport Solutions, North America and EMEA

David S. Regnery

Executive Vice President, Climate and Industrial Segments

Donald E. Simmons

President, Commercial HVAC, North America and EMEA

Keith A. Sultana

Senior Vice President, Global Operations and Integrated Supply Chain

Didier P.M. Teirlinck, Ph.D.

Strategic Advisor

Mark C. Wagner

President, Club Car

Todd D. Wyman

Senior Vice President and President, Compression Technologies and Services

Other Senior Leaders

Francesco C. Incalza

Vice President and Treasurer

Christopher J. Kuehn

Vice President and Chief Accounting Officer

Lawrence R. Kurland

Vice President, Tax

Zachary A. Nagle

Vice President, Investor Relations

Evan M. Turtz

Secretary

From Left to Right: Maria C. Green, Senior Vice President and General Counsel; Todd D. Wyman, Senior Vice President and President, Compression Technologies and Services; Allen W. Ge, President, HVAC and Transport Solutions, Asia Pacific and India; Marcia J. Avedon, Senior Vice President, Human Resources, Communications and Corporate Affairs; Keith A. Sultana, Senior Vice President, Global Operations and Integrated Supply Chain; Karin De Bondt, President, HVAC and Transport, Latin America; Paul A. Camuti, Senior Vice President, Innovation and Chief Technology Officer; David S. Regnery, Executive Vice President, Climate and Industrial Segments; Mark C. Wagner, President, Club Car; Michael W. Lamach, Chairman and Chief Executive Officer; Didier P.M. Teirlinck, Strategic Advisor; Susan K. Carter, Senior Vice President and Chief Financial Officer; M. Stephen Hagood, Senior Vice President and Chief Information Officer; Raymond D. Pittard, President, Transport Solutions, North America and EMEA; Donald E. Simmons, President, Commercial HVAC, North America and EMEA; Maria F. Blase, President, Fluid Management, Material Handling and Power Tools; Jason E. Bingham, President, Residential HVAC and Supply

Reconciliation of GAAP to non-GAAP

*Non-GAAP measures definitions

Free cash flow in 2017 and 2016 is defined as net cash provided by operating activities, less capital expenditures, plus cash payments for restructuring.

In 2017 **Adjusted net earnings** is defined as earnings from continuing operations attributable to Ingersoll-Rand plc plus restructuring costs, plus the discrete non-cash tax adjustment in Latin America less U.S. tax legislation and other discrete items, net of tax impacts. In 2016, adjusted net earnings is defined as earnings from continuing operations attributable to Ingersoll-Rand plc plus restructuring costs and a legal settlement less the gain recognized on the sale of the company's remaining interest in Hussmann, net of tax impacts.

Adjusted operating margin is defined as the ratio of adjusted operating income divided by net revenues.

In 2017 **Adjusted continuing EPS** is defined as GAAP continuing EPS plus restructuring costs, net of tax impacts, plus the discrete non-cash tax adjustment in Latin America less U.S. tax legislation and other discrete items. In 2016 Adjusted continuing EPS is defined as GAAP continuing EPS plus restructuring costs and a legal settlement, less the gain from the sale of the company's remaining interest in Hussmann, net of tax impacts.

Adjusted operating income plus depreciation & amortization is defined as adjusted operating income plus depreciation and amortization expense.

Reconciliation of GAAP to non-GAAP

Adjusted Operating Income plus Depreciation and Amortization

(In millions)

UNAUDITED

	For the year ended December 31, 2017		For the year ended December 31, 2016*	
	As Reported	Margin	As Reported	Margin
Total Company				
Net revenues	\$ 14,197.6		\$ 13,508.9	
Operating Income	\$ 1,665.3	11.7%	\$ 1,603.2	11.9%
Restructuring/Other	61.7	0.5%	35.5	0.2%
Adjusted Operating Income	1,727.0	12.2%	1,638.7	12.1%
Depreciation and Amortization	353.3	2.5%	352.2	2.6%
Adjusted OI plus D&A	<u>\$ 2,080.3</u>	<u>14.7%</u>	<u>\$ 1,990.9</u>	<u>14.7%</u>

* Retrospectively restated for adoption of ASU 2017-07

Free Cash Flow

(\$ in millions)

UNAUDITED

	Year ended December 31, 2017	Year ended December 31, 2016**
Cash flow provided by operating activities (a)	\$ 1,523.5	\$ 1,521.9
Capital expenditures	(221.3)	(182.7)
Cash payment for Restructuring	38.1	27.5
Free cash flow	<u>\$ 1,340.3</u>	<u>\$ 1,366.7</u>
Adjusted earnings from continuing operations attributable to Ingersoll-Rand plc	\$ 1,162.8	\$ 1,080.4
Discontinued operations, net of tax	(25.4)	32.9
Adjusted net earnings	<u>\$ 1,137.4</u>	<u>\$ 1,113.3</u>
Free cash flow as a percent of adjusted net earnings	118%	123%

(a) Includes both continuing and discontinued operations

** Retrospectively restated for the adoption of ASU 2016-09 on January 1, 2017, the impact of which resulted in an improvement to cash flow provided by operating activities of \$21.7 million.

Reconciliation of GAAP to non-GAAP

(In millions, except per share amounts)	For the year ended December 31, 2017			For the year ended December 31, 2016		
	As Reported	Adjustments	As Adjusted	As Reported	Adjustments	As Adjusted
Net revenues	\$ 14,197.6	\$-	\$ 14,197.6	\$13,508.9	\$-	\$13,508.9
Operating income	1,665.3	61.7 (a)	1,727.0	1,603.2	35.5 (a)	1,638.7
Operating margin	11.7%		12.2%	11.9%		12.1%
Earnings from continuing operations before income taxes	1,417.9	61.7 (a)	1,479.6	1,741.3	(345.9) (a,b,c)	1,395.4
Provision for income taxes	(80.2)	(218.4) (d,e,g)	(298.6)	(281.5)	(17.0) (g)	(298.5)
Tax rate	5.7%		20.2%	16.2%		21.4%
Earnings from continuing operations attributable to Ingersoll-Rand plc	\$1,328.0	\$(165.2) (h)	\$1,162.8	\$1,443.3	\$(362.9) (h)	\$ 1,080.4
<u>Diluted earnings per common share</u>						
Continuing operations	\$5.14	\$(0.63)	\$4.51	\$5.52	(\$1.39)	\$4.13
Weighted-average number of common shares outstanding						
Diluted	258.1	-	258.1	261.7	-	261.7
<u>Detail of Adjustments:</u>						
(a) Restructuring costs		\$61.7			\$35.5	
(b) Hussmann Gain		-			(397.8)	
(c) Legal Settlement		-			16.4	
(d) Latin America discrete non-cash tax adjustment		33.3			-	
(e) US tax legislation and other discrete items		(232.7)			-	
(f) US tax legislation impact on NCI		(8.5)			-	
(g) Tax impact of adjustment (a), (b), and (c)		<u>(19.0)</u>			<u>(17.0)</u>	
(h) Impact of adjustments on earnings from continuing operations attributable to Ingersoll-Rand plc		<u>\$(165.2)</u>			<u>(\$362.9)</u>	

We believe the non-GAAP financial information provides important supplemental information to both management and investors regarding financial and business trends used in assessing our financial condition and results of operations.

The non-GAAP financial measures associated with operating income and margin, tax rate and EPS assist investors with analyzing our business segment results as well as with predicting future performance. In addition, these non-GAAP financial measures are also reviewed by management in order to evaluate the financial performance of each segment. They are the basis for performance reviews, compensation and resource allocation. We believe that the presentation of these non-GAAP financial measures will permit investors to assess the performance of the Company on the same basis as management.

As a result, one should not consider these measures in isolation or as a substitute for our results reported under GAAP. We compensate for these limitations by analyzing results on a GAAP basis as well as a non-GAAP basis, prominently disclosing GAAP results and providing reconciliations from GAAP results to non-GAAP results.

2018 Notice and Proxy Statement

**Ingersoll-Rand plc**

Registered in Ireland No. 469272

U.S. Mailing Address:

800-E Beaty Street
Davidson, NC 28036
(704) 655-4000

Registered Office:

170/175 Lakeview Dr.
Airside Business Park
Swords, Co. Dublin
Ireland

NOTICE OF 2018 ANNUAL GENERAL MEETING OF SHAREHOLDERS

DATE AND TIME

Thursday, June 7, 2018, at 2:30 p.m., local time

LOCATION

Adare Manor Hotel
Adare, County Limerick
Ireland

PROPOSALS TO BE VOTED

1. To elect 12 directors for a period of 1 year.
2. To give advisory approval of the compensation of the Company's Named Executive Officers.
3. To approve the appointment of PricewaterhouseCoopers LLP as independent auditors of the Company and authorize the Audit Committee of the Board of Directors to set the auditors' remuneration.
4. To approve the Company's 2018 Incentive Stock Plan.
5. To renew the existing authority of the directors of the Company (the "Directors") to issue shares.
6. To renew the Directors' existing authority to issue shares for cash without first offering shares to existing shareholders. (Special Resolution)
7. To determine the price range at which the Company can re-allot shares that it holds as treasury shares. (Special Resolution)
8. To conduct such other business properly brought before the meeting.

RECORD DATE

Only shareholders of record as of the close of business on April 9, 2018, are entitled to receive notice of and to vote at the Annual General Meeting.

By Order of the Board of Directors,

EVAN M. TURTZ
Secretary

HOW TO VOTE

Whether or not you plan to attend the meeting, please provide your proxy by either using the Internet or telephone as further explained in the accompanying proxy statement or filling in, signing, dating, and promptly mailing a proxy card.

**BY TELEPHONE**

In the U.S. or Canada, you can vote your shares by submitting your proxy toll-free by calling 1-800-690-6903.

BY INTERNET

You can vote your shares online at www.proxyvote.com.

BY MAIL

You can vote by mail by marking, dating, and signing your proxy card or voting instruction form and returning it in the postage-paid envelope.

ATTENDING THE MEETING

Directions to the meeting can be found on page A-1 of the attached Proxy Statement.

If you are a shareholder who is entitled to attend and vote, then you are entitled to appoint a proxy or proxies to attend and vote on your behalf. A proxy is not required to be a shareholder in the Company. If you wish to appoint as proxy any person other than the individuals specified on the proxy card, please contact the Company Secretary at our registered office.

Important Notice regarding the availability of proxy materials for the Annual General Meeting of Shareholders to be held on June 7, 2018.

The Annual Report and Proxy Statement are available at www.proxyvote.com.

The Notice of Internet Availability of Proxy Materials or this Notice of 2018 Annual General Meeting of Shareholders, the Proxy Statement and the Annual Report are first being mailed to shareholders on or about April 25, 2018.

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PROXY STATEMENT HIGHLIGHTS

This summary highlights information contained elsewhere in this Proxy Statement. For more complete information about these topics, please review Ingersoll-Rand plc's Annual Report on Form 10-K and the entire Proxy Statement.

MEETING INFORMATION

Date and Time: June 7, 2018 at 2:30 p.m., local time

Place: Adare Manor Hotel
Adare, County Limerick
Ireland

Record Date: April 9, 2018

Voting: Shareholders as of the record date are entitled to vote. Each ordinary share is entitled to one vote for each director nominee and each of the other proposals.

Attendance: All shareholders may attend the meeting.

CORPORATE GOVERNANCE HIGHLIGHTS

- Substantial majority of independent directors (11 of 12) current directors
- Annual election of directors
- Majority vote for directors
- Independent Lead Director
- Board oversight of risk management
- Succession planning at all levels, including for Board and CEO
- Annual Board and committee self-assessments
- Executive sessions of non-management directors
- Continuing director education
- Executive and director stock ownership guidelines
- Board oversight of sustainability program

2019 ANNUAL MEETING

Deadline for shareholder proposals for inclusion in the proxy statement: December 26, 2018

Deadline for business proposals and nominations for director: March 9, 2019

OVERVIEW OF PROPOSALS TO BE VOTED

Item 1.

Election of Directors

☒ The Board of Directors recommends a vote FOR the directors nominated for election

 See page 9 for further information

Director Nominees

Name/ Occupation	Age	Director since	Independent	Other current public Boards	Ingersoll-Rand Committees					
					A	C	CG	F	T	E
Kirk E. Arnold Former Chief Executive Officer, Data Intensity	58	2018	YES		M	M		M		
Ann C. Berzin Former Chairman and CEO of Financial Guaranty Insurance Company	66	2001	YES	- Exelon Corporation - Baltimore Gas & Electric Company	M			C		M
John Bruton Former Prime Minister of the Republic of Ireland and Former European Union Commission Head of Delegation to the United States	70	2010	YES		M	M			M	
Jared L. Cohon President Emeritus of Carnegie Mellon University, University Professor of Civil and Environmental Engineering and of Engineering and Public Policy, and Former Director of the Scott Institute for Energy Innovation	70	2008	YES	- Unisys	M	M			C	
Gary D. Forsee Former President of University of Missouri System and Former Chairman of the Board and Chief Executive Officer of Sprint Nextel Corporation	68	2007	YES	- Great Plains Energy Inc. - DST Systems Inc.	M		C		M	M
Linda P. Hudson Founder, Chairman and CEO of The Cardea Group and Former President and CEO of BAE Systems, Inc.	67	2015	YES	- The Southern Company - Bank of America	M			M	M	
Michael W. Lamach Chairman and CEO of Ingersoll-Rand plc	54	2010	NO	- PPG Industries, Inc.						C
Myles P. Lee Former Director and CEO of CRH plc	64	2015	YES	- Babcock International Group plc - UDG Healthcare plc	M			M		
Karen B. Peetz Former President of BNY Mellon	62	2018	YES	- Wells Fargo & Company	M			M		
John P. Surma Former Chairman and CEO of United States Steel Corporation	63	2013	YES	- Marathon Petroleum Corporation - MPLX LP (a publicly traded subsidiary of Marathon Petroleum Corporation) - Concho Resources Inc.	C			M		M
Richard J. Swift Lead Director Former Chairman of Financial Accounting Standards Advisory Council and Former Chairman, President and CEO of Foster Wheeler Ltd.	73	1995	YES	- CVS Health Corporation - Hubbell Incorporated - Kaman Corporation - Public Service Enterprise Group	M			M	M	M
Tony L. White Former Chairman, President and CEO of Applied Biosystems Inc.	71	1997	YES	- CVS Health Corporation		C	M		M	M
A: Audit Committee C: Compensation Committee	CG: Corporate Governance & Nominating Committee F: Finance Committee				T: Technology and Innovation Committee E: Executive Committee			C: Chair M: Member		

Item 2.**Advisory Approval of the Compensation of Our Named Executive Officers****☑ The Board of Directors recommends a vote FOR this item**

We are asking for your advisory approval of the compensation of our named executive officers ("NEOs"). While our Board of Directors intends to carefully consider the shareholder vote resulting from the proposal, the final vote will not be binding on us and is advisory in nature. Before considering this proposal, please read our Compensation Discussion and Analysis, which explains our executive compensation programs and the Compensation Committee's compensation decisions.

 See page 14 and 39 for further information

EXECUTIVE COMPENSATION**CONSIDERATION OF 2017 ADVISORY VOTE ON EXECUTIVE COMPENSATION**

The Compensation Committee regularly reviews the philosophy, objectives and elements of our executive compensation programs in relation to our short and long-term business objectives. In undertaking this review, the Compensation Committee considers the views of shareholders as reflected in their annual advisory vote on our executive compensation proposal. Shareholders voted 94.4% in favor of the company's Advisory Approval of the Compensation of Our Named Executive Officers at our 2017 annual general meeting. Based on the Compensation Committee's review and the support our executive compensation programs received from shareholders, the Compensation Committee determined it would be appropriate to maintain the core elements of our executive compensation programs.

EXECUTIVE COMPENSATION PRINCIPLES

Our executive compensation programs are based on the following principles:

- | | | |
|---------------------------------|---|-----------------------------|
| (i) business strategy alignment | (iii) mix of short and long-term incentives | (v) shareholder alignment |
| (ii) pay for performance | (iv) internal parity | (vi) market competitiveness |

Consistent with these principles, the Compensation Committee has adopted executive compensation programs with a strong link between pay and achievement of short and long-term Company goals.

EXECUTIVE COMPENSATION ELEMENTS

The primary elements of the executive compensation programs are:

Total Direct Compensation

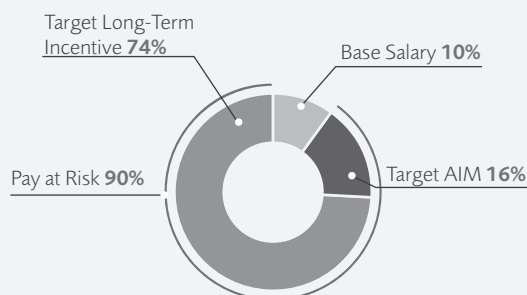
Element ¹	Objective of Element
Base Salary	Fixed cash compensation.
Annual Incentive Matrix ("AIM")	Variable cash incentive compensation. Any award earned is based on performance measured against pre-defined annual revenue, Operating Income, cash flow and Operating Income Margin percent objectives, as well as individual performance measured against pre-defined objectives.
Long-Term Incentives ("LTI")	Variable long-term incentive compensation. Performance is aligned with the Company's stock price and is awarded in the form of stock options, restricted stock units ("RSUs") and performance share units ("PSUs"). PSUs for performance periods beginning prior to 2018 are only payable if the Company's EPS growth and TSR relative to companies in the S&P 500 Industrials Index exceed threshold performance. PSUs granted after January 1, 2018 are only payable if the Company's CROIC growth and TSR relative to companies in the S&P 500 Industrials Index exceed threshold performance.

¹ See Section V of the Compensation Discussion and Analysis entitled "Compensation Program Descriptions and Compensation Decisions," for additional discussion of these elements of compensation.

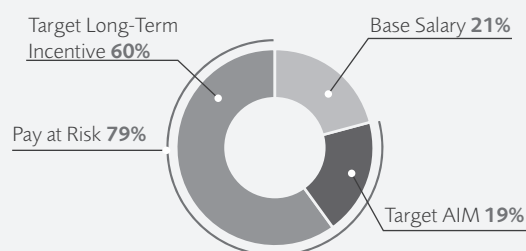
EXECUTIVE COMPENSATION MIX

As illustrated in the charts below, the Compensation Committee places significant emphasis on variable compensation (AIM and LTI) so that a substantial percentage of each NEO's target total direct compensation is contingent on the successful achievement of the Company's short-term and long-term performance goals.

Chairman and CEO 2017 Compensation Mix (Target Total Direct Compensation)



Other NEOs 2017 Compensation Mix (Target Total Direct Compensation)



2017 EXECUTIVE COMPENSATION

The summary below shows the 2017 compensation for our CEO and other NEOs, as required to be reported in the Summary Compensation Table pursuant to U.S. Securities and Exchange Commission ("SEC") rules. Please see the notes accompanying the Summary Compensation Table for further information.

Name and Principal Position	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	Non-Equity Incentive Plan Compensation (\$)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$)	All Other Compensation	Total (\$)
M.W. Lamach Chairman and Chief Executive Officer	1,337,500	–	8,099,505	2,432,076	2,670,000	3,696,297	562,498	18,797,876
S.K. Carter Senior Vice President and Chief Financial Officer	713,750	–	2,018,720	606,157	847,728	463,244	160,707	4,810,306
D. S. Regnery Executive Vice President	573,571	–	2,712,014	235,724	506,493	1,457,972	118,477	5,604,251
M. J. Avedon Senior Vice President, Human Resources, Communications and Corporate Affairs	618,750	–	1,283,512	385,392	656,768	750,984	114,669	3,810,075
M. C. Green Senior Vice President and General Counsel	543,750	–	1,196,270	359,211	518,056	–	136,635	2,753,922
D. P. M. Teirlinck Executive Vice President, Climate Segment	718,750	–	2,064,386	619,880	731,246	869,706	168,622	5,172,590
R.G. Zafari Executive Vice President, Industrial Segment	585,000	–	1,129,909	339,252	763,584	388,788	706,727	3,913,260

Item 3.**Approval of Appointment of Independent Auditors**

☒ **The Board of Directors recommends a vote FOR this item**

We are asking you to approve the appointment of PricewaterhouseCoopers LLP ("PwC") as our independent auditors for 2018 and to authorize the Audit Committee to set PwC's remuneration.

 See page 14 for further information

Item 4.**Approval of the Company's 2018 Incentive Stock Plan**

☒ **The Board of Directors recommends a vote FOR this item**

We are asking you to approve the Company's 2018 Incentive Stock Plan.

 See page 16 for further information

Item 5.**To renew the Directors' existing authority to issue shares.**

☒ **The Board of Directors recommends a vote FOR this item**

We are asking you to renew our Directors' authority to issue shares under Irish law. This authority is fundamental to our business and granting the Board this authority is a routine matter for public companies incorporated in Ireland.

 See page 26 for further information

Item 6.**To renew the Directors' existing authority to issue shares for cash without first offering shares to existing shareholders. (Special Resolution)**

☒ **The Board of Directors recommends a vote FOR this item**

We are asking you to renew the Directors' authority to issue shares for cash without first offering shares to existing shareholders. This authority is fundamental to our business and granting the Board this authority is a routine matter for public companies incorporated in Ireland. As required under Irish law, this proposal requires the affirmative vote of at least 75% of the votes cast.

 See page 27 for further information

Item 7.**To determine the price range at which the Company can re-allot shares that it holds as treasury shares. (Special Resolution)**

☒ **The Board of Directors recommends a vote FOR this item**

We are asking you to determine the price at which the Company can reissue shares held as treasury shares. From time to time the Company may acquire ordinary shares and hold them as treasury shares. The Company may re-allot such treasury shares, and under Irish law, our shareholders must authorize the price range at which we may re-allot any shares held in treasury. As required under Irish law, this proposal requires the affirmative vote of at least 75% of the votes cast.

 See page 28 for further information

PROPOSALS REQUIRING YOUR VOTE

In this Proxy Statement, "Ingersoll Rand," the "Company," "we," "us" and "our" refer to Ingersoll-Rand plc, an Irish public limited company. This Proxy Statement and the enclosed proxy card, or the Notice of Internet Availability of Proxy Materials, are first being mailed to shareholders of record on April 9, 2018 (the "Record Date") on or about April 25, 2018.

Item 1.

Election of Directors

☒ **The Board of Directors recommends a vote FOR the directors nominated for election listed below.**

The Company uses a majority of votes cast standard for the election of directors. A majority of the votes cast means that the number of votes cast "for" a director nominee must exceed the number of votes cast "against" that director nominee. Each director of the Company is being nominated for election for a one-year term beginning at the end of the 2018 Annual General Meeting of Shareholders to be held on June 7, 2018 (the "Annual General Meeting") and expiring at the end of the 2019 Annual General Meeting of Shareholders. Under our Articles of Association, if a director is not re-elected in a director election, the director shall retire at the close or adjournment of the Annual General Meeting.



Principal Occupation

- Chief Executive Officer of Data Intensity from 2013 to 2017.

Current Public Directorships

- None

Other Directorships Held in the Past Five Years

- None

Other Activities

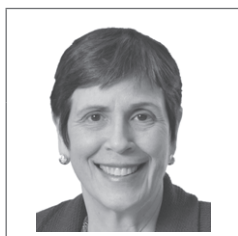
- Director of Cramer Marketing

KIRK E. ARNOLD
Independent Director

Age 58
Director since 2018
Committees
Compensation,
Corporate Governance
and Nominating,
Technology and
Innovation

Nominee Highlights

Ms. Arnold's vast experience in technology and service leadership bring critical insight to the Company's operations, digital analytics, and technologies. Ms. Arnold has served in executive positions throughout the technology industry including as COO at Avid, a technology provider to the media industry, CEO and President of Keane, Inc., then a publicly traded billion-dollar global services provider. Ms. Arnold has also held senior leadership roles at Computer Sciences Corporation, Fidelity Investments and IBM. Ms. Arnold's active participation in the technology and business community provides the Company ongoing insight into digital marketing and technology related issues.



ANN C. BERZIN
Independent Director

Age 66
Director since 2001
Committees Audit,
Finance (Chair),
Executive

Principal Occupation

- Chairman and Chief Executive Officer of Financial Guaranty Insurance Company (insurer of municipal bonds and structured finance obligations), a subsidiary of General Electric Capital Corporation, from 1992 to 2001.

Current Public Directorships

- Exelon Corporation
- Baltimore Gas & Electric Company

Other Directorships Held in the Past Five Years

- None

Nominee Highlights

Ms. Berzin's extensive experience in finance at a global diversified industrial firm and her expertise in complex investment and financial products and services bring critical insight to the Company's financial affairs, including its borrowings, capitalization, and liquidity. In addition, Ms. Berzin's relationships across the global financial community strengthen Ingersoll Rand's access to capital markets. Her board memberships provide deep understanding of trends in the energy sector, which presents ongoing opportunities and challenges for Ingersoll Rand.



JOHN BRUTON
Independent Director

Age 70

Director since 2010

Committees

Compensation,
Corporate Governance
and Nominating,
Technology and
Innovation

Principal Occupation

- European Union Commission Head of Delegation to the United States from 2004 to 2009.
- Prime Minister of the Republic of Ireland from 1994 to 1997.

Current Public Directorships

- None

Other Directorships Held in the Past Five Years

- Montpelier Re Holding Ltd.
- Institute for International and European Affairs

Nominee Highlights

Mr. Bruton's long and successful career of public service on behalf of Ireland and Europe provides extraordinary insight into critical regional and global economic, social and political issues, all of which directly influence the successful execution of the Company's strategic plan. In particular, Mr. Bruton's leadership role in transforming Ireland into one of the world's leading economies during his tenure, as well as in preparing the governing document for managing the Euro, lend substantial authority to Ingersoll Rand's economic and financial oversight.



JARED L. COHON
Independent Director

Age 70

Director since 2008

Committees

Compensation,
Corporate Governance
and Nominating,
Technology and
Innovation (Chair)

Principal Occupation

- President Emeritus at Carnegie Mellon University, President of Carnegie Mellon University from 1997-2013 and also appointed University Professor of Civil and Environmental Engineering / Engineering and Public Policy, and Director of the Scott Institute for Energy Innovation.

Current Public Directorships

- Unisys

Other Directorships Held in the Past Five Years

- Lexmark, Inc.
- Health Effects Institute, Director
- Heinz Endowments, Trustee

Other Activities

- BNY Mellon Foundation, Trustee
- Carnegie Corporation, Trustee
- Center for Responsible Shale Gas Development, Director and Chair

Nominee Highlights

Dr. Cohon's extensive career in academics, including 16 years as president of an institution known throughout the world for its leadership in the fields of computer science and engineering, offers the Company tremendous insight into the latest developments in areas critical to commercial innovation and manufacturing process improvement. A member of the National Academy of Engineering, Dr. Cohon is a recognized authority on environmental and water resources systems analysis and management. As such, Dr. Cohon also brings unique perspectives on sustainable business practices, both within our own operations and on behalf of our customers and communities. In 2008 and 2009, at the request of Congress, Dr. Cohon chaired the National Research Council Committee that produced the report, "Hidden Costs of Energy: Unpriced Consequences of Energy Production and Use." In 2014, Dr. Cohon was appointed co-chair of the Congressionally-mandated Commission to review and evaluate the National Energy Laboratories. Finally, Dr. Cohon's more than nine years of service as a member of Trane Inc.'s (formerly American Standard) board of directors provides critical insight into that part of the Company's business.



GARY D. FORSEE
Independent Director

Age 68

Director since 2007

Committees

Compensation, Corporate
Governance and Nominating
(Chair), Executive,
Technology and Innovation

Principal Occupation

- President, University of Missouri System from 2008 to 2011.
- Chairman of the Board (from 2006 to 2007) and Chief Executive Officer (from 2005 to 2007) of Sprint Nextel Corporation (a telecommunications company).

Current Public Directorships

- Great Plains Energy Inc.
- DST Systems Inc.

Other Directorships Held in the Past Five Years

- None

Other Activities

- Board, University of Missouri – Kansas City, Foundation
- Board, University of Missouri – Kansas City, Bloch Business School Foundation

Nominee Highlights

In addition to his broad operational and financial expertise, Mr. Forsee's experience as chairman and chief executive officer with the third largest U.S. firm in the global telecommunications industry offers a deep understanding of the challenges and opportunities within markets experiencing significant technology-driven change. His recent role as president of a major university system provides insight into the Company's talent development initiatives, which remain a critical enabler of Ingersoll Rand's long-term success. Mr. Forsee's membership on the board of an energy services utility also benefits the Company as it seeks to achieve more energy-efficient operations and customer solutions.



LINDA P. HUDSON
Independent Director

Age 67
Director since 2015
Committees Audit,
Finance, Technology
and Innovation

Principal Occupation

- Founder, Chairman, and Chief Executive Officer of The Cardea Group, a business management consulting firm
- Former President and Chief Executive Officer of BAE Systems, Inc.

Current Directorships

- The Southern Company
- Bank of America

Other Directorships Held in the Past Five Years

- BAE Systems Plc

Other Activities

- Director, University of Florida Foundation, Inc. and the University of Florida Engineering Leadership Institute
- Director, Discovery Place
- Director, Central Piedmont Community College Foundation

Nominee Highlights

Ms. Hudson's prior role as President and CEO of BAE Systems and her extensive experience in the defense and engineering sectors provides the Company with strong operational insight and understanding of matters crucial to the Company's business. Prior to becoming CEO, Ms. Hudson was president of BAE Systems' Land & Armaments operating group, the world's largest military vehicle and equipment business. In addition, Ms. Hudson has broad experience in strategic planning and risk management in complex business environments.



MICHAEL W. LAMACH
Chairman and CEO

Age 54
Director since 2010
Committees Executive

Principal Occupation

- Chairman of the Company since June 2010
- Chief Executive Officer (since February 2010) of the Company.
- President and Chief Operating Officer of the Company from February 2009 to February 2010.
- Senior Vice President of the Company and President of Trane Commercial Systems, from June 2008 to September 2009.

Current Directorships

- PPG Industries, Inc.

Other Directorships Held in the Past Five Years

- Iron Mountain Incorporated

Nominee Highlights

Mr. Lamach's extensive career of successfully leading global businesses, including fourteen years with Ingersoll Rand, brings significant experience and expertise to the Company's management and governance. His 33 years of business leadership encompass global industrial systems, controls, security and HVAC systems businesses, representing a broad and diverse range of products and services, markets, channels, applied technologies and operational profiles. In his current role of Chairman and Chief Executive Officer, he led the successful spin-off of the Company's commercial and residential security business and has been instrumental in driving growth and operational excellence initiatives across the Company's global operations.



MYLES P. LEE
Independent Director

Age 64
Director since 2015
Committees Audit, Finance

Principal Occupation

- Director (from 2003 to 2013) and Chief Executive Officer (from 2009 to 2013) of CRH plc

Current Public Directorships

- Babcock International Group plc
- UDG Healthcare plc

Other Directorships Held in the Past Five Years

- CRH plc

Other Activities

- Director, St. Vincent's Healthcare Group

Nominee Highlights

Mr. Lee's experience as the former head of the largest public or private company in Ireland provides strategic and practical judgment to critical elements of the Company's growth and productivity strategies, expertise in Irish governance matters and significant insight into the building and construction sector. In addition, Mr. Lee's previous service as Finance Director and General Manager of Finance of CRH plc and in a professional accountancy practice provides valuable financial expertise to the Company.



KAREN B. PEETZ
Independent Director

Age 62
Director since 2018
Committees
Audit, Finance

Principal Occupation

- Senior Advisor at McKinsey & Company and Former President of BNY Mellon (from 2013-2016)

Current Public Directorships

- Wells Fargo & Company

Other Directorships Held in the Past Five Years

- SunCoke Energy

Other Activities

- John Hopkins University, Trustee
- Director Global Lyme Alliance
- Former Director and Chair, Penn State University
- Business Committee Member, Metropolitan Museum of Art

Nominee Highlights

Ms. Peetz adds deep financial and operational leadership experience in complex, global markets to the Board. In particular, Ms. Peetz's experience serving as president of one of the world's largest custodian banks and asset servicing companies brings critical insight to the Company's financial affairs, including its borrowings, capitalization, and liquidity as well as financial management and risk management. Ms. Peetz also has extensive experience leading with respect to governance and corporate responsibility matters that complement the Company's commitment to these issues.



JOHN P. SURMA
Independent Director

Age 63
Director since 2013
Committees
Audit (Chair), Finance, Executive

Principal Occupation

- Former Chairman (from 2006-2013) and Chief Executive Officer (from 2004-2013) of United States Steel Corporation (a steel manufacturing company).

Current Public Directorships

- Marathon Petroleum Corporation
- MPLX LP (a publicly traded subsidiary of Marathon Petroleum Corporation)
- Concho Resources Inc.

Other Directorships Held in the Past Five Years

- None

Other Activities

- Former Director and Chair, Federal Reserve Bank of Cleveland
- Director, UPMC
- Director and Former Chair, National Safety Council
- Director and Former Chair, Allegheny County Parks Foundation

Nominee Highlights

Mr. Surma's experience as the former chairman and chief executive officer of a large industrial company provides significant and direct expertise across all aspects of Ingersoll Rand's operational and financial affairs. In particular, Mr. Surma's financial experience, having previously served as the chief financial officer of United States Steel Corporation and as a partner of the audit firm PricewaterhouseCoopers LLP, provides the Board with valuable insight into financial reporting and accounting oversight of a public company. Mr. Surma's board memberships and other activities provide the Board an understanding of developments in the energy sector as the Company seeks to develop more energy-efficient operations and insight into national and international business and trade policy that could impact the Company.



RICHARD J. SWIFT
Lead Director
Independent Director

Age 73

Director since 1995

Committees

Audit, Finance, Executive,
Technology and Innovation

Principal Occupation

- Chairman of Financial Accounting Standards Advisory Council from 2002 through 2006.
- Chairman, President and Chief Executive Officer of Foster Wheeler Ltd. (provider of design, engineering, construction, manufacturing, management and environmental services) from 1994 to 2001.

Current Directorships

- CVS Health Corporation
- Hubbell Incorporated
- Kaman Corporation
- Public Service Enterprise Group

Other Directorships Held in the Past Five Years

- None

Nominee Highlights

Mr. Swift's experience as chairman and chief executive officer of a global engineering firm, the fact that he was a licensed professional engineer for 35 years prior to his retirement, and his five-year leadership of the advisory organization to the Financial Accounting Standards Board (FASB) imparts substantial expertise to all of the Company's operational and financial matters. His leadership of an organization that was instrumental in some of the world's most significant engineering projects provides unique insight into the complex systems involved in the efficient and effective development of buildings and industrial operations, which represent key global market segments for Ingersoll Rand's products and services. Mr. Swift's board memberships include firms engaged in the manufacture and distribution of industrial, electrical and electronic products, which directly correspond to key elements of the Company's growth and operational strategies.



TONY L. WHITE
Independent Director

Age 71

Director since 1997

Committees

Compensation (Chair),
Corporate Governance and
Nominating, Executive, and
Technology and Innovation

Principal Occupation

- Chairman, President and Chief Executive Officer of Applied Biosystems Inc. (a developer, manufacturer and marketer of life science systems and genomic information products) from 1995 until his retirement in 2008.

Current Directorships

- CVS Health Corporation

Other Directorships Held in the Past Five Years

- None

Nominee Highlights

Mr. White's extensive management experience, including 13 years as chairman and chief executive officer of an advanced-technology life sciences firm, provides substantial expertise and guidance across all aspects of Ingersoll Rand's operational and financial affairs. In particular, Mr. White's leadership of an organization whose success was directly connected to innovation and applied technologies aligns with the Company's focus on innovation as a key source of growth. The Company benefits from Mr. White's ongoing board memberships, where developments related to biotechnology and healthcare delivery systems can offer instructive process methodologies to accelerate our innovation efforts.

Item 2.**Advisory Approval of the Compensation of Our Named Executive Officers**

- ☒ **The Board of Directors recommends a vote FOR advisory approval of the compensation of our Named Executive Officers as disclosed in the Compensation Discussion and Analysis, the compensation tables, and the related disclosure contained in this proxy statement.**

The Company is presenting the following proposal, commonly known as a "Say-on-Pay" proposal, which gives you as a shareholder the opportunity to endorse or not endorse our compensation program for Named Executive Officers by voting for or against the following resolution:

"RESOLVED, that the shareholders approve the compensation of the Company's Named Executive Officers, as disclosed in the Compensation Discussion and Analysis, the compensation tables, and the related disclosure contained in the Company's proxy statement."

While our Board of Directors intends to carefully consider the shareholder vote resulting from the proposal, the final vote will not be binding on us and is advisory in nature.

In considering your vote, please be advised that our compensation program for Named Executive Officers is guided by our design principles, as described in the Compensation Discussion and Analysis section of this Proxy Statement:

(i) business strategy alignment
(ii) pay for performance

(iii) mix of short and long-term incentives
(iv) internal parity

(v) shareholder alignment
(vi) market competitiveness

By following these design principles, we believe that our compensation program for Named Executive Officers is strongly aligned with the long-term interests of our shareholders.

Item 3.**Approval of Appointment of Independent Auditors**

- ☒ **The Board of Directors recommends a vote FOR the proposal to approve the appointment of PwC as independent auditors of the Company and to authorize the Audit Committee of the Board of Directors to set the auditors' remuneration.**

The Audit Committee is directly responsible for the appointment, compensation, retention and oversight of the independent external audit firm retained to audit the Company's financial statements and internal controls over financial reporting. In executing its responsibilities, the Audit Committee engages in an annual evaluation of PricewaterhouseCoopers LLP ("PwC") qualifications, performance and independence. In assessing independence, the Committee reviews the fees paid, including those related to non-audit services. The Audit Committee has sole authority to approve all engagement fees to be paid to PwC. The Audit Committee regularly meets with the lead audit partner without members of management present, and in executive session with only the Audit Committee members present, which provides the opportunity for continuous assessment of the firm's effectiveness and independence and for consideration of rotating audit firms.

In addition, as part of its normal cadence, the Audit Committee considers whether there should be a regular rotation of the independent registered public accounting firm. The Audit Committee ensures that the mandated rotation of PwC's lead engagement partner occurs routinely and the Audit Committee and its Chairman are directly involved in the selection of PwC's lead engagement partner.

The Audit Committee has recommended that shareholders approve the appointment of PwC as our independent auditors for the fiscal year ending December 31, 2018, and authorize the Audit Committee of our Board of Directors to set the independent auditors' remuneration.

PwC has been acting continuously as our independent auditors for over one hundred years and, both by virtue of its long familiarity with the Company's affairs and its professional competencies and resources, is considered best qualified to perform this important function. The Audit Committee and the Board believe that the continued retention of PwC to serve as our independent external auditor is in the best interests of the Company and its investors.

Representatives of PwC will be present at the Annual General Meeting and will be available to respond to appropriate questions. They will have an opportunity to make a statement if they so desire.

AUDIT COMMITTEE REPORT

While management has the primary responsibility for the financial statements and the financial reporting process, including the system of internal controls, the Audit Committee reviews the Company's audited financial statements and financial reporting process on behalf of the Board of Directors. The independent auditors are responsible for performing an independent audit of the Company's consolidated financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States) (the "PCAOB") and to issue a report thereon. The Audit Committee monitors those processes. In this context, the Audit Committee has met and held discussions with management and the independent auditors regarding the fair and complete presentation of the Company's results. The Audit Committee has discussed significant accounting policies applied by the Company in its financial statements, as well as alternative treatments. Management has represented to the Audit Committee that the Company's consolidated financial statements were prepared in accordance with United States generally accepted accounting principles, and the Audit Committee has reviewed and discussed the consolidated financial statements with management and the independent auditors. The Audit Committee also discussed with the independent auditors the matters required to be discussed by Auditing Standard No. 16, "Communications with Audit Committees" issued by the PCAOB (United States).

In addition, the Audit Committee has received and reviewed the written disclosures and the letter from PwC required by the PCAOB regarding PwC's communications with the Audit Committee concerning independence and discussed with PwC the auditors' independence from the Company and its management in connection with the matters stated therein. The Audit Committee also considered whether the independent auditors' provision of non-audit services to the Company is compatible with the auditors' independence. The Audit Committee has concluded that the independent auditors are independent from the Company and its management.

The Audit Committee discussed with the Company's internal and independent auditors the overall scope and plans for their respective audits. The Audit Committee meets separately with the internal and independent auditors, with and without management present, to discuss the results of their examinations, the evaluations of the Company's internal controls and the overall quality of the Company's financial reporting.

In reliance on the reviews and discussions referred to above, the Audit Committee recommended to the Board of Directors, and the Board has approved, that the audited financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 ("2017 Form 10-K"), for filing with the Securities and Exchange Commission (the "SEC"). The Audit Committee has selected PwC, subject to shareholder approval, as the Company's independent auditors for the fiscal year ending December 31, 2018.

AUDIT COMMITTEE

John P. Surma (Chair)
Ann C. Berzin
Linda P. Hudson
Myles P. Lee
Karen B. Peetz
Richard J. Swift

FEES OF THE INDEPENDENT AUDITORS

The following table shows the fees paid or accrued by the Company for audit and other services provided by PwC for the fiscal years ended December 31, 2017 and 2016:

	2017 (\$)	2016 (\$)
Audit Fees ^(a)	12,872,000	12,275,000
Audit-Related Fees ^(b)	159,000	94,000
Tax Fees ^(c)	3,101,000	3,208,000
All Other Fees ^(d)	9,000	18,000
Total	16,141,000	15,595,000

(a) Audit Fees for the fiscal years ended December 31, 2017 and 2016, respectively, were for professional services rendered for the audits of the Company's annual consolidated financial statements and its internal controls over financial reporting, including quarterly reviews, statutory audits, issuance of consents, U.S. tax legislations in 2017 and assistance with, and review of, documents filed with the SEC.

(b) Audit-Related Fees consist of assurance services that are related to performing the audit and review of our financial statements. Audit Related Fees for the fiscal year ended December 31, 2017 include employee benefit plan audits and comfort letter preparation. Audit Related Fees for the fiscal year ended December 31, 2016 include employee benefit plan audits and abandoned and unclaimed property tax assessments.

(c) Tax Fees for the fiscal year ended December 31, 2017 and 2016 include consulting and compliance services in the U.S. and non-U.S. locations.

(d) All Other Fees for the fiscal year ended December 31, 2017 and 2016 include license fees for technical accounting software.

The Audit Committee has adopted policies and procedures which require that the Audit Committee pre-approve all non-audit services that may be provided to the Company by its independent auditors. The policy: (i) provides for pre-approval of an annual budget for each type of service; (ii) requires Audit Committee approval of specific projects if not included in the approved budget; and (iii) requires Audit Committee approval if the forecast of expenditures exceeds the approved budget on any type of service. The Audit Committee pre-approved all of the services described under "Audit-Related Fees," "Tax Fees" and "All Other Fees." The Audit Committee has determined that the provision of all such non-audit services is compatible with maintaining the independence of PwC.

Item 4.

To approve the Company's 2018 Incentive Stock Plan.

☒ **The Board of Directors recommends that you vote FOR approval of the Company's 2018 Incentive Stock Plan.**

We are asking our shareholders to approve the Ingersoll-Rand plc Incentive Stock Plan of 2018 (the "2018 Plan"). The 2018 Plan is intended to serve as the successor plan to the Ingersoll-Rand plc Incentive Stock Plan of 2013 (the "2013 Plan") under which incentive arrangements based on the ordinary shares of the Company may be granted to our employees and non-employee directors. Upon shareholder approval of the 2018 Plan, no further grants will be made under the 2013 Plan except for any off-cycle grants made at the June 7, 2018 meeting of our Compensation Committee which will not exceed 165,000 ordinary shares, calculated under the current 2.54 fungible share counting ratio. As a result, approximately 4,403,000 ordinary shares that were previously authorized and were available for grant under the 2013 Plan will no longer be available for new awards.

OUTSTANDING AWARDS AND DETERMINATION OF SHARE RESERVE

The 2013 Plan is our only active employee equity plan, and as of February 28, 2018 (the "Calculation Date"), we had 4,659,789 shares remaining for the grant of new awards under the 2013 Plan. As of the Calculation Date, there were 7,089,832 options outstanding in aggregate under all plans (the 2013 Plan and Ingersoll-Rand plc Incentive Stock Plan of 2007) with a weighted average exercise price of \$64.46 and a weighted average remaining term of 7.3 years, and 2,012,024 full value awards that were unvested and outstanding under all plans (the 2013 Plan).

In reviewing our historical grant practices and excluding the effect of our share counting rules (whereby every share subject to a full value award was counted as 2.54 share), we determined that we have issued 10,103,181 shares, net of cancellations, under the 2013 Plan between its inception and the Calculation Date. Excluding the effect of our share counting rules, we have issued 6,959,548 shares over the last three fiscal years. The table below summarizes our equity grant practices during the most recent three fiscal years.

Fiscal Year	Basic Weighted Average Shares Outstanding	RSU and PSU Awards Granted	Stock Options Granted	Annualized Burn Rate ⁽¹⁾
2017	254,900,000	582,145	1,518,335	0.8%
2016	259,200,000	784,945	1,958,476	1.1%
2015	265,100,000	658,124	1,457,523	0.8%

(1) Burn rate is calculated as of December 31 of each fiscal year using a 1:1 ratio for RSUs and PSUs. See below for additional information regarding the calculation.

As of the Calculation Date, our overhang was 5.3%, and our burn rate in 2017 was 0.8%. Assuming shareholders approve the 2018 Plan, our overhang will be 11.6%. For this purpose, "overhang" is defined as (A) the amount of outstanding shares awarded to key employees and directors, plus (B) shares available for future grant, divided by ordinary shares outstanding plus the amounts described in clauses (A) and (B), and "burn rate" is the number of shares underlying equity awards granted to key employees and directors in a fiscal year, divided by basic weighted average ordinary shares outstanding.

Based on a review of our historical and projected grant practices, we believe that the shares reserved for use under the 2018 Plan will meet the Company's equity grant needs for approximately four years. The shares reserved may, however, last for more or less than four years depending on currently unknown factors, such as the number of grant recipients, future grant practices and the Company's share price.

KEY TERMS OF THE 2018 PLAN AT A GLANCE AND BEST PRACTICES

The following is a summary of the key provisions of the 2018 Plan, as set forth and stated herein.

Plan Term:	The 2018 Plan was adopted by the Board of Directors on April 4, 2018, subject to obtaining shareholder approval, and will continue in effect until terminated by the Board of Directors.
Eligible Participants:	Employees and directors of the Company and its affiliates generally are eligible to receive restricted shares, restricted share units, non-qualified stock options, share appreciation rights, and other share-based awards under the 2018 Plan. "Incentive stock options," within the meaning of Code Section 422, may be granted only to employees of the Company or a subsidiary.
Shares Available for Awards:	23,000,000 ordinary shares in the capital of the Company have been reserved for issuance pursuant to awards under the 2018 Plan, subject to adjustment in the event of certain changes in the capitalization of the Company.
Award Types:	(1) Non-qualified stock options and incentive stock options (2) Restricted shares (3) Share appreciation rights (4) Restricted share units (5) Dividend equivalent rights (6) Other share-based awards (7) Performance-based Awards
Award Terms (Exercisability Period):	Options, share appreciation rights, and other share-based awards have a term of no longer than 10 years.
ISO Limits:	No more than 20% of the shares reserved for issuance may be issued upon the exercise of incentive stock options granted under the 2018 Plan.

Best Practices:

- **Prohibition on Repricing.** The 2018 Plan explicitly prohibits repricing of stock options (including the cash purchase of underwater options) without shareholder approval.
- **Limitations on Payments of Dividends on Unvested Awards.** The 2018 Plan explicitly prohibits the payment of dividends on unvested restricted stock and dividend equivalents on unvested restricted stock units or performance share units unless and until the underlying awards vest.
- **Clawback.** All awards granted under the 2018 Plan are subject to the Company's incentive compensation clawback or recoupment policy, as may be amended from time to time.
- **Reasonable Limit on Full-Value Awards.** For purposes of calculating the shares that remain available for issuance under the 2018 Plan, grants of options and stock appreciation rights will be counted as the grant of one share for each one share actually granted. However, to protect stockholders from potentially greater dilutive effect of full value awards, all grants of full value awards will be deducted from the 2018 Plan's share reserve as 4.64 shares for every one share actually granted.
- **Reasonable Vesting and Performance Periods.** Although the Committee determines the vesting conditions and schedule applicable to the awards granted under the 2018 Plan, time-based awards generally vest over three years and performance awards generally vest based on the attainment of performance goals that are measured over a three-year performance period.
- **Limitations on Grants.** Individual limits on awards granted to any employee pursuant to the 2018 Plan during any calendar year apply as follows: (i) a maximum of 750,000 shares of common stock may be subject to all options and stock appreciation rights and (ii) a maximum of \$15 million in performance-based awards.
- **Prohibition on Liberal Share Recycling Practices for Options.** The 2018 Plan does not allow for the re-granting of shares that are withheld by the Company to pay the exercise price of options or that are delivered or withheld to satisfy the tax withholding obligations under an option or share appreciation right.
- **No Automatic Single-Trigger Vesting of Time-Based Awards.** The automatic vesting acceleration provision for time-based awards which took effect solely on a change in control that was included in the 2013 Plan has been eliminated in the 2018 Plan. Instead, the 2018 Plan provides that time-based awards will only vest on a change in control if they are not assumed, substituted or otherwise replaced in connection with the change in control. If the awards are assumed or continued after the change in control, the Compensation Committee may provide that such awards will be subject to automatic vesting acceleration upon a participant's involuntary termination within a designated period following the change in control.
- **Non-Employee Director Compensation Limit.** An annual limit of \$1,000,000 per calendar year applies to the sum of all cash and other compensation and the value of all equity, cash-based and other awards granted to a non-employee director for services as a member of the Board of Directors.

SUMMARY OF THE 2018 PLAN

The following summary of certain material features of the 2018 Plan is qualified in its entirety by reference to the 2018 Plan, which is attached to this proxy statement as Appendix B.

PURPOSE OF 2018 PLAN

The purpose of the 2018 Plan is to aid the Company and its affiliates in recruiting and retaining key employees and directors and to motivate such employees and directors to exert their best efforts on behalf of the Company and its affiliates by providing incentives through the granting of awards. The Company expects that it will benefit from the added interest which such key employees and directors will have in the welfare of the Company as a result of their proprietary interest in the Company's success.

SHARES RESERVED FOR ISSUANCE UNDER 2018 PLAN

Shares Reserved

The total number of our ordinary shares that are authorized and available for issuance pursuant to awards granted under the 2018 Plan is 23,000,000 shares, subject to adjustment in the event of specified capitalization events of the Company.

Shares Reissuable Under 2018 Plan

The following shares are reissuable pursuant to new awards granted under the 2018 Plan: shares that are not issued as a result of the termination, cancellation, expiration or lapsing of any award; shares subject to a full value award that are not issued because the award is settled in cash; shares covered by a full value award that are retained or are otherwise not issued by the Company in order to satisfy tax withholding obligations in connection with full value awards.

Shares Not Reissuable Under 2018 Plan

The following shares will be deducted from the aggregate number of shares available for future awards: shares subject to a stock option or share appreciation right that are retained or otherwise not issued by the Company in order to satisfy tax withholding obligations or the exercise price (whether through withholding of shares or net exercise) and shares that are repurchased or redeemed on the open market with the proceeds of the exercise of an option.

Shares Not Counted Against Share Reserve Pool Under the 2018 Plan

Except in the case of outstanding stock options intended to be incentive stock options, shares issued in assumption of, or in substitution for, any outstanding awards will not reduce the overall limit on shares available for grant under the 2018 Plan. To the extent permitted by any applicable stock exchange rule, shares available under a shareholder approved plan of an entity acquired by the Company or with which the Company combines (as appropriately adjusted to reflect the acquisition or combination transaction) may be used for awards under the 2018 Plan and will not reduce the number of shares available for delivery under the 2018 Plan.

AWARDS

Under the 2018 Plan, the following awards may be granted: nonqualified stock options, incentive stock options, restricted shares, share appreciation rights, restricted share units, dividend equivalent rights, other share-based awards and performance-based awards (all such grants are collectively referred to as "awards").

ELIGIBILITY

Incentive stock options may be granted only to our employees and to employees of any of our subsidiaries meeting the requirements of the Code. Awards other than incentive stock options may be granted to our non-employee directors and to employees of the Company and any of its affiliates. The primary recipients of awards under our 2018 Plan will be our non-employee directors, officers and other key employees. As of the Calculation Date, there were approximately 44,000 full and part-time employees of the Company, of which approximately 3,000 were officers and key employees and 10 were non-employee directors.

ADMINISTRATION

The 2018 Plan provides that it will generally be administered by the Compensation Committee, unless the Compensation Committee delegates its administration duties to a sub-committee thereof or an employee or group of employees, consistent with applicable law (the "Committee") and guidelines established by the Committee from time to time. Any subcommittee to which administration duties are delegated must consist solely of two or more individuals, each of whom is a "non-employee director" satisfying the requirements of Section 16 of the Securities Exchange Act of 1934, as amended, and an "independent director" under the New York Stock Exchange rules. The Committee may appoint such agents as it deems necessary or advisable for the proper administration of the 2018 Plan; provided, however, that such appointment is consistent with applicable laws and guidelines established by the Committee from time to time. Other than awards granted to non-employee directors that require the full Board of Directors acting by a majority of its members, the Committee has the sole authority to grant awards and sole and exclusive discretion to interpret and administer the 2018 Plan. In particular, the 2018 Plan specifies that the Committee has the exclusive power, authority and discretion to:

- designate participants to receive awards, determine the types of awards to be granted to each participant, determine the number of awards to be granted and the number of shares to which an award will relate, and determine the terms and conditions of any award granted under the 2018 Plan;
- determine if and when an award may be cancelled, forfeited, surrendered, settled or exercised and if any amount for settlement or exercise will be paid in cash, shares, other awards or other property;
- prescribe the forms of award agreement and decide all other matters that must be determined in connection with an award;
- establish, adopt, or revise any rules and regulations, including adopting sub-plans to the 2018 Plan for the purposes of complying with foreign laws and/or taking advantage of tax-favorable treatment for awards granted to participants outside the United States;
- interpret the terms of the 2018 Plan or any award agreement, decide any matter arising under the 2018 Plan and correct any defect or supply any omission or reconcile any inconsistency in the 2018 Plan; and
- make all other decisions and determinations that may be required under the 2018 Plan or as the Committee deems necessary or advisable to administer the 2018 Plan.

With respect to above listed interpretation and administration powers, any decisions by the Committee or its delegate are conclusive and binding on all parties concerned.

RESTRICTED SHARE UNITS

The 2018 Plan provides certain terms applicable to awards of restricted share units. Restricted share units are denominated in unit equivalent of shares and are typically awarded to participants without payment of consideration. Restricted share units may be subject to vesting conditions based upon the passage of time or the attainment of performance goals as determined in the discretion of the Committee. Except as otherwise determined by the Committee at the time of the grant of the award or thereafter, any restricted share units that are not vested as of the date of the participant's termination of service will be forfeited. Unlike restricted shares, the shares underlying restricted share units will not be issued until the restricted share units have vested. In addition, recipients of restricted share units generally have no voting or dividend rights until the vesting conditions are satisfied and the underlying shares are issued. Restricted share units may be settled in shares, cash or a combination of both, at the discretion of the Committee. Until the shares are issued, if any, upon settlement of a restricted share unit, no right to vote or receive dividends or any other rights as a shareholder will exist with respect to the shares subject to the restricted stock unit.

RESTRICTED SHARE AWARDS

The 2018 Plan provides certain terms applicable to awards of restricted shares. A restricted share is a direct grant of a share, subject to such restrictions on transferability and other restrictions as the Committee may impose (including, without limitation, limitations on the right to vote the underlying shares or the right to receive dividends with respect to the underlying shares). These restrictions may lapse at such times, under such circumstances, in such installments, or otherwise, as the Committee determines at the time of the grant of the award or thereafter. Restrictions may be based on the passage of time, the attainment of performance goals or such other conditions as determined in the discretion of the Committee. Unless otherwise determined by the Committee at the time of grant, any shares subject to restrictions are forfeited upon termination of employment.

STOCK OPTIONS

The 2018 Plan authorizes the grant of incentive stock options, which are intended to satisfy the requirements of Code Section 422, and non-qualified stock options, which do not satisfy the requirements of Code Section 422. Stock options with respect to up to 23,000,000 shares (subject to the limitation of 4,600,000 shares with respect to incentive stock options noted above) may be granted under the 2018 Plan. The exercise price for all stock options granted under the 2018 Plan may not be less than 100% of the fair market value of one of our shares on the date of grant. While the shares are traded on an established stock exchange, "fair market value" means, as of any given date, the closing price of a share as quoted on the principal exchange on which the shares are listed for such date, or if no sale occurred on such date, the first trading date immediately prior to such date during which a sale occurred. As of the Record Date, the closing price of our ordinary shares traded on the New York Stock Exchange ("NYSE") was \$82.76 per share. Stock options granted under the 2018 Plan will vest at the rate and on the conditions specified by the Committee, which conditions may include a participant's continued service, the attainment of specified performance goals and/or such other conditions as may be determined by the Committee. Once vested, stock options will be exercisable for such term, and thereafter will expire, as determined by the Committee, provided that the maximum term any stock option may remain outstanding is ten years after the date it is granted, after which date it shall expire.

The Committee determines the methods by which the exercise price of stock options is paid, including the following: in cash or check, through a broker-dealer sale and remittance procedure under which the participant effects a same-day exercise of the stock option and sale of the purchased shares in order to cover the exercise price for the purchased shares and the applicable withholding taxes, or any other method of payment authorized by the Committee.

A stock option may not be exercised for a fraction of a share. No right to vote or receive dividends or any other rights as a shareholder will exist with respect to the shares subject to a stock option until such stock option is exercised and the shares are paid for.

If a participant ceases to provide services to the Company or any affiliate, the participant may exercise his or her stock option within such period of time as is specified in the award agreement to the extent that the stock option is vested on the date of termination (but in no event later than the expiration of the term of such option as set forth in the award agreement). Unless otherwise provided by the Committee, if on the date of termination the participant is not vested as to his or her entire stock option, the unvested portion of the stock option will be forfeited and the shares covered by the unvested portion of the stock option will revert to the 2018 Plan. If after termination of service the participant does not exercise his or her stock option within the time specified by the Committee, the stock option will terminate, and the shares covered by such unexercised stock option will revert to the 2018 Plan and be available for reissuance.

SHARE APPRECIATION RIGHTS

Share appreciation rights may be granted with an exercise price equal to or greater than the fair market value of our ordinary shares on the date of grant and typically provide for payments to the holder based upon the amount by which the fair market value of our shares as of the date that the right is exercised exceeds the exercise price. The Committee will generally determine when and on what conditions the share appreciation right will vest and become exercisable. The Committee determines the term of a share appreciation right, but no share appreciation right will remain outstanding or be exercisable more than ten years after the date it is granted.

A share appreciation right may be granted separate from or in connection with the grant of a stock option. Share appreciation rights granted in connection with a stock option must be granted at the same time the stock option is granted, with the same terms and conditions, and with respect to the same number of underlying shares. Upon exercise of a share appreciation right granted in connection with a stock option, in whole or in part, the corresponding portion of the stock option must be surrendered and the holder will be entitled to receive cash or shares, as determined by the Committee, having a value equal to the excess of the fair market value of the shares at the time of exercise over the exercise price for the tandem award. If the related stock option is exercised, in whole or in part, then the corresponding portion of the share appreciation right will terminate as of the date of such exercise.

Until the shares are issued, if any, upon exercise of a share appreciation right, no right to vote or receive dividends or any other rights as a shareholder will exist with respect to the shares subject to a share appreciation right. Upon termination of a participant's employment, a share appreciation right will generally be subject to the same conditions as apply to stock options.

OTHER SHARE-BASED AWARDS

The Committee is authorized under the 2018 Plan to make any other award that is not inconsistent with the provisions of the 2018 Plan and that by its terms involves or might involve the issuance of shares, or of a right vesting based on the passage of time, the occurrence of one or more events, or the satisfaction of performance goals or other conditions, or the issuance of any other security with the value derived from the value of the shares. The Committee may elect to settle these awards in cash, in shares or in a combination of cash and shares. The Committee may also grant shares as a bonus or may grant other awards in lieu of obligations to pay cash or other property under the 2018 Plan or other compensatory arrangements. The Committee is authorized to determine the term of all other share-based awards, but no such award will remain outstanding more than ten years after the date it is granted.

PERFORMANCE-BASED AWARDS

The Committee is authorized under the 2018 Plan to grant performance awards, which are full value awards that vest, in whole or in part, upon the attainment of performance goals that are measured over a specified performance period and are based on performance criteria that may include, but are not limited to, any of the following: (i) consolidated earnings before or after taxes (including earnings before interest, taxes, depreciation and amortization); (ii) net income; (iii) operating income; (iv) operating income margin; (v) gross margin; (vi) earnings per Share; (vii) book value per Share; (viii) return on shareholders' equity; (ix) expense management; (x) return on invested capital; (xi) improvements in capital structure; (xii) profitability of an identifiable business unit or product; (xiii) maintenance or improvement of profit margins or revenue; (xiv) Share price; (xv) market share; (xvi) revenues or sales; (xvii) costs; (xviii) available cash flow; (xix) working capital; (xx) return on assets; (xxi) total shareholder return, (xxii) productivity ratios, and (xxiii) economic value added. The Committee may provide that one or more adjustments may be made to one or more of the performance goals. The performance goals may be calculated in accordance with applicable accounting standards or on an adjusted basis and measured on absolute or relative terms. In addition, the performance goals may be expressed in terms of overall Company performance, the performance of an affiliate, the performance of a division or business unit of the Company or an affiliate or the performance of an individual or team.

AWARD LIMITS FOR EMPLOYEES

The maximum number of shares of common stock that may be subject to options or share appreciation awards that are granted to any employee during any calendar year may not exceed 750,000 shares, subject to adjustments in the event of certain capitalization events. The maximum amount with respect to one or more full value performance awards that may be granted to any employee during any calendar year may not exceed \$15 million.

TRANSFERABILITY OF AWARDS

Except as otherwise provided by the Committee, no award granted under the 2018 Plan may be assigned, transferred or otherwise disposed of by a participant other than by will or the laws of descent and distribution. The Committee, however, may permit the transfer of an award (other than an incentive stock option) for no consideration in connection with estate planning or charitable transfers subject to compliance with applicable laws and such rules as the Committee may adopt to preserve the purposes of the Plan.

DIVIDENDS/DIVIDEND EQUIVALENTS

The Committee may grant dividend equivalent rights in connection with restricted share units or other share-based awards (including performance-based awards) that are full value awards and may provide for dividends to be accumulated with respect to restricted share awards, provided that, to the extent that any dividends or dividend equivalents are payable with respect to such full value award, the dividends or dividend equivalents, as applicable, will not be paid unless and until the underlying award vests.

CHANGE IN CONTROL

In the event of a change in control of our Company (as defined in the 2018 Plan), all time-based awards that are not converted, assumed, substituted or replaced by the successor company in connection with the change in control will automatically vest. If time-based awards are assumed or continued after a change in control, the Committee may provide that one or more of these awards will automatically accelerate upon an involuntary termination of the holder's employment or service within a designated period in connection with the change in control. Performance-based awards will automatically vest upon a change in control of our Company, based on (A) the target level, pro-rated to reflect the period the participant was in service during the performance period or (B) the actual performance level attained, in each case, as determined by the Committee.

In connection with any change in control, the Committee may provide for cancellation of any outstanding awards and payment to the holders of such awards that are vested as of such cancellation the value of such awards, if any, as determined by the Committee, provided that any stock option or share appreciation right having a per share exercise price equal to, or in excess of, the fair market value of a share subject thereto may be canceled and terminated without any payment or consideration. Any such payments may be made in cash or in the form of such other consideration payable to shareholders in the change in control.

ADJUSTMENTS UPON CHANGES IN CAPITALIZATION

In the event of any change in the outstanding shares of the Company (including the price thereof) by reason of any reorganization, recapitalization, merger, consolidation, spin-off, combination, or transaction or exchange of shares or other corporate exchange, or any distribution to shareholders (other than regular cash dividends), bonus issue, share split or any similar transaction, the Committee will make appropriate substitutions or adjustments, as it deems necessary, in the number and type of shares or other securities reserved for issuance under the 2018 Plan or pursuant to outstanding awards, the terms and conditions of any award outstanding under the 2018 Plan, and the grant or exercise price of any such award.

AMENDMENT AND TERMINATION OF THE 2018 PLAN

The 2018 Plan may be amended, altered or discontinued by the Board of Directors at any time. However, no amendment shall be effective without shareholder approval if (1) such amendment materially increases the total number of shares that may be issued under the 2018 Plan other than through application of the adjustments and change in control provisions of the 2018 Plan as described above, (2) such amendment materially expands the classes of persons eligible to receive awards or the types of award available under the 2018 Plan, (3) such amendment requires shareholder approval under any law or the rules of any exchange on which the Company's ordinary shares are listed for trading or (4) the Committee determines that such approval is otherwise required or advisable to facilitate compliance with applicable laws. Unless the Committee determines that an amendment facilitates compliance with applicable law or exchange requirements, no amendment may materially adversely affect the rights of a participant under any outstanding award without such participant's consent.

NO REPRICING OF AWARDS

Except in connection with a capitalization event or a change in control, in no event may the Company take any action without approval of the shareholders of the Company that would (1) reduce the exercise price of any stock option or share appreciation right, (2) result in the cancellation of any outstanding option or share appreciation right and replacement with a new option or share appreciation right with a lower exercise price or with a cash payment or other award at a time when the option or share appreciation right has a per share exercise price that is higher than the fair market value of a share on the date of the replacement or (3) result in any other action that would be considered a "repricing" for purposes of the shareholder approval rules of any securities exchange or inter-dealer quotation system on which the securities of the Company are listed or quoted.

CLAWBACK/RECOVERY

All awards granted under the 2018 Plan shall be and remain subject to the Company's incentive compensation clawback or recoupment policy, as may be amended from time to time.

PLAN TERM

The 2018 Plan will continue in effect until terminated by our Board of Directors, but no incentive stock options may be granted under the 2018 Plan after the tenth anniversary of the date the 2018 Plan is approved by our shareholders. Any awards that are outstanding at the time the 2018 Plan terminates will remain in force according to the terms of the 2018 Plan and the applicable award agreement.

FEDERAL INCOME TAX CONSEQUENCES

The following is a summary of the U.S. federal income tax consequences applicable to equity awards under the 2018 Plan based on current U.S. federal income tax laws. The 2018 Plan is not qualified under Section 401(a) of the Internal Revenue Code. The summary is general in nature and is not intended to cover all tax consequences that may apply to a particular employee, director or to our company. The provisions of the Internal Revenue Code and regulations thereunder relating to these matters are complicated and may change, and their impact in any one case may depend upon the particular circumstances. Further, this summary does not discuss the tax consequences of a participant's death or the provisions of any income tax laws of any municipality, state or foreign country in which a participant may reside.

Nonqualified Stock Options

With respect to nonqualified stock options: (i) no income is recognized by the participant at the time the nonqualified stock option is granted; (ii) generally, at exercise, ordinary income is recognized by the participant in an amount equal to the difference between the option exercise price paid for the shares and the fair market value of the shares on the date of exercise and the Company is entitled to a tax deduction in the same amount (subject to the restrictions on deductibility described under "Section 162(m) Limitation" below); and (iii) upon disposition of the shares, any gain or loss is treated as capital gain or loss. If the options are exercised and the shares acquired are sold on the same date, generally, the difference between the option exercise price paid for the shares and the sale price is recognized as ordinary income, and no capital gain or loss is reported. If required, income tax must be withheld from the participant on the income recognized by the participant upon exercise of a nonqualified stock option.

Incentive Stock Options

The grant of an incentive stock option under the 2018 Plan will not result in any federal income tax consequences to the participant or to the Company. A participant recognizes no federal taxable income upon exercising an incentive stock option (subject to the alternative minimum tax rules discussed below), and the Company receives no deduction at the time of exercise. In the event of a disposition of shares acquired upon exercise of an incentive stock option, the tax consequences depend upon how long the participant has held the shares. If the participant does not dispose of the shares within two years after the incentive stock option was granted, or within one year after the incentive stock option was exercised, the participant will recognize a long-term capital gain (or loss) equal to the difference between the sale price of the shares and the exercise price. The Company is not entitled to any tax deduction under these circumstances.

If the participant fails to satisfy either of these holding periods, he or she must recognize ordinary income in the year of the disposition (referred to as a "disqualifying disposition"). The amount of such ordinary income generally is the lesser of (A) the difference between the amount realized on the disposition and the exercise price or (B) the difference between the fair market value of a share on the exercise date and the exercise price. Any gain in excess of the amount taxed as ordinary income will be treated as a long or short-term capital gain, depending on whether the share was held for more than one year. In the year of the disqualifying disposition, the Company is entitled to a tax deduction equal to the amount of ordinary income recognized by the participant, subject to the restrictions on deductibility described under "Section 162(m) Limitation" below.

The "spread" under an incentive stock option — i.e., the difference between the fair market value of the shares at exercise and the exercise price — is classified as an item of adjustment in the year of exercise for purposes of the participant's alternative minimum tax. If a participant's alternative minimum tax liability exceeds such participant's regular income tax liability, the participant will owe the larger amount of taxes. The alternative minimum tax will not apply with respect to incentive stock options if the participant sells the shares within the same calendar year in which the incentive stock options are exercised. However, such a sale of shares within the same year of exercise will constitute a disqualifying disposition, as described above.

Share Appreciation Rights

Upon exercise of a share appreciation right, the participant will recognize ordinary income (treated as compensation) in an amount equal to the difference between the aggregate fair market value of the shares with respect to the number of shares that the share appreciation right is exercised over the aggregate exercise price for such shares subject to the share appreciation right. The Company generally will be entitled to a tax deduction in the same amount and at the same time as the participant recognizes ordinary compensation income (subject to the restrictions on deductibility described under "Section 162(m) Limitation" below). If required, income tax must be withheld from the participant on the income recognized by the participant upon exercise of a share appreciation right.

Restricted Shares

In the absence of a Section 83(b) election (as described below), a participant who receives restricted shares will recognize no income at the time of grant. When the restrictions lapse, a participant will recognize ordinary income (treated as compensation) equal to the fair market value of a share when the restrictions lapse over the amount paid (if any) for the share. As the restrictions applicable to a grant of restricted share lapse (for example, if the restrictions on 33% of a grant lapse on each anniversary of the grant date), the participant will include the applicable portion of the shares that vests as ordinary income (treated as compensation). The participant's

basis in the shares is equal to the amount included in income on the expiration of the restrictions and the amount paid (if any), and the holding period will begin when the restrictions end. Any disposition of the restricted shares will result in a long- or short-term capital gain or loss (depending on the time the shares are held after the restrictions end). The Company generally will be entitled to a tax deduction equal to the fair market value of the share when it is included in the participant's income (subject to the restrictions on deductibility described under "Section 162(m) Limitation" below).

If a Section 83(b) election is made within 30 days of the grant of the award, the participant must recognize the fair market value of the restricted shares on the date of grant as ordinary income (treated as compensation) as of the date of grant, and the holding period, for capital gains purposes, would begin at the time the restricted shares are granted. The Company generally would be entitled to a corresponding tax deduction for the grant, but dividends on a share would not be deductible. Any subsequent disposition of a share by the participant, other than by forfeiture, would result in capital gain or loss, which would be long- or short-term, depending on the holding period. Upon a subsequent forfeiture of restricted shares with respect to which a Section 83(b) election has been made, no deduction will be allowed to the participant in respect of the amount included in income at the time the Section 83(b) election was made.

If required, income tax must be withheld from the participant on the income recognized by the participant at the time the restrictions on the restricted shares lapse (or grant of the restricted shares, in the event the participant makes a Section 83(b) election).

Restricted Share Units

A participant will not recognize any income at the time a restricted share unit is granted, nor will the Company be entitled to a tax deduction at that time. When payment on a restricted share unit is made, the participant will recognize ordinary income in an amount equal to the fair market value of the shares received (or if the restricted share unit is settled in cash, the cash amount). If required, income tax must be withheld on the income recognized by the participant. The Company will receive a tax deduction for federal income tax purposes equal to the ordinary income recognized by the participant, subject to the restrictions on deductibility described under "Section 162(m) Limitation" below.

Dividends and Dividend Equivalent Rights

A recipient of dividends and dividend equivalent rights generally will recognize ordinary income at the time the dividend or dividend equivalent is paid. If required, income tax must be withheld on the income recognized by the participant. The Company will receive a tax deduction for federal income tax purposes equal to the ordinary income recognized by the participant, subject to the restrictions on deductibility described under "Section 162(m) Limitation" below.

Section 162(m)

Section 162(m) of the Code generally provides that publicly held companies (as defined in Section 162(m)(2) of the Code) may not deduct compensation paid to certain of their top executive officers to the extent such compensation exceeds \$1 million per covered officer in any year. For taxable years beginning prior to 2018, a limited exception to Section 162(m) has applied with respect to "qualified performance-based compensation" that complies with conditions imposed by Section 162(m) rules. However, this exception from Section 162(m)'s deduction limit for qualified performance-based compensation has been repealed by the Tax Cuts and Jobs Act, effective for taxable years beginning after December 31, 2017, except with respect to certain grandfathered arrangements in effect as of November 2, 2017. Historically, awards granted under the 2013 Plan to our covered executive officers could be designed to qualify for the performance-based exception from the \$1 million deduction limit described above. However, going forward, compensation paid to our covered executive officers (as determined by Section 162(m) rules), including pursuant to awards granted under the 2018 Plan, in excess of \$1 million will not be deductible.

Section 280G Deductibility Limitation

In addition, our ability to obtain a tax deduction for future payments under the 2018 Plan could also be limited by the golden parachute payment rules of Section 280G of the Code, which prevent the deductibility of certain excess parachute payments made in connection with a change in control of an employer-corporation.

Section 409A

Code Section 409A imposes certain requirements on non-qualified deferred compensation arrangements. These include requirements on an individual's election to defer compensation and the individual's selection of the timing and form of distribution of the deferred compensation. Section 409A also generally provides that distributions must be made on or following the occurrence of certain events (i.e., the individual's separation from service, a predetermined date, or the individual's death). Section 409A imposes restrictions on an individual's ability to change his or her distribution timing or form after the compensation has been deferred. For certain individuals who are officers, Section 409A requires that such individual's distribution commence no earlier than six months after such officer's separation from service.

Certain awards under the 2018 Plan may be designed to be subject to the requirements of Section 409A in form and in operation. For example, restricted share units that provide for a settlement date following the vesting date may be subject to Section 409A. If an award under the 2018 Plan is subject to and fails to satisfy the requirements of Section 409A, the recipient of that award may recognize ordinary income on the amounts deferred under the award, to the extent vested, which may be prior to when the compensation is actually or constructively received. Also, if an award that is subject to Section 409A fails to comply with the requirements of Section 409A, Section 409A imposes an additional 20% federal penalty tax on compensation recognized as ordinary income, as well as interest on such deferred compensation.

FUTURE PLAN BENEFITS

As of the date of this Proxy Statement, no awards (including stock options) have been granted under the 2018 Plan. Awards (including stock options) under the 2018 Plan may be made at the discretion of the Committee, and any awards (including stock options) that may be made and any benefits and amounts that may be received or allocated under the 2018 Plan in the future are not determinable at this time. As such, the Company has omitted the New Plan Benefits table and the number of stock options that may be received under the 2018 Plan in the future.

Item 5.

Renewal of the Directors' existing authority to issue shares

☒ **The Board of Directors recommends that you vote FOR renewing the Directors' authority to issue shares.**

Under Irish law, directors of an Irish public limited company must have authority from its shareholders to issue any shares, including shares which are part of the company's authorized but unissued share capital. Our shareholders provided the Directors with this authorization at our 2017 annual general meeting on June 8, 2017 for a period of 18 months. Because this share authorization period will expire in December 2018, we are presenting this proposal to renew the Directors' authority to issue our authorized shares on the terms set forth below.

We are seeking approval to authorize our Board of Directors to issue up to 33% of our issued ordinary share capital as of April 9, 2018 (the latest practicable date before this proxy statement), for a period expiring 18 months from the passing of this resolution, unless renewed, varied or revoked.

Granting the Board of Directors this authority is a routine matter for public companies incorporated in Ireland and is consistent with Irish market practice. This authority is fundamental to our business and enables us to issue shares, including in connection with our equity compensation plans (where required) and, if applicable, funding acquisitions and raising capital. We are not asking you to approve an increase in our authorized share capital or to approve a specific issuance of shares. Instead, approval of this proposal will only grant the Board of Directors the authority to issue shares that are already authorized under our articles of association upon the terms below. In addition, we note that, because we are a NYSE-listed company, our shareholders continue to benefit from the protections afforded to them under the rules and regulations of the NYSE and SEC, including those rules that limit our ability to issue shares in specified circumstances. Furthermore, we note that this authorization is required as a matter of Irish law and is not otherwise required for other U.S. companies listed on the NYSE with whom we compete. Renewal of the Directors' existing authority to issue shares is fully consistent with NYSE rules and listing standards and with U.S. capital markets practice and governance standards.

As required under Irish law, the resolution in respect of this resolution is an ordinary resolution that requires the affirmative vote of a simple majority of the votes cast.

The text of this resolution is as follows:

"That the Directors be and are hereby generally and unconditionally authorized with effect from the passing of this resolution to exercise all powers of the Company to allot relevant securities (within the meaning of Section 1021 of the Companies Act) up to an aggregate nominal amount of \$89,911,605 (89,911,605 shares) (being equivalent to approximately 33% of the aggregate nominal value of the issued ordinary share capital of the Company as of April 9, 2018 (the latest practicable date before this proxy statement)), and the authority conferred by this resolution shall expire 18 months from the passing of this resolution, unless previously renewed, varied or revoked; provided that the Company may make an offer or agreement before the expiry of this authority, which would or might require any such securities to be allotted after this authority has expired, and in that case, the Directors may allot relevant securities in pursuance of any such offer or agreement as if the authority conferred hereby had not expired."

Item 6.**Renewal of the Directors' existing authority to issue shares for cash without first offering shares to existing shareholders.**

☒ **The Board of Directors recommends that you vote FOR renewing the Directors' authority to issue shares for cash without first offering shares to existing shareholders.**

Under Irish law, unless otherwise authorized, when an Irish public limited company issues shares for cash, it is required first to offer those shares on the same or more favorable terms to existing shareholders of the company on a pro-rata basis (commonly referred to as the statutory pre-emption right). Our shareholders provided the Directors with this authorization at our 2017 annual general meeting on June 8, 2017 for a period of 18 months. Because this share authorization period will expire in December 2018, we are presenting this proposal to renew the Directors' authority to opt-out of the pre-emption right on the terms set forth below.

We are seeking approval to authorize our Board of Directors to opt out of the statutory pre-emption rights provision in the event of (1) the issuance of shares for cash in connection with any rights issue and (2) any other issuance of shares for cash, if the issuance is limited to up to 5% of our issued ordinary share capital as of April 9, 2018 (the latest practicable date before this proxy statement), for a period expiring 18 months from the passing of this resolution, unless renewed, varied or revoked.

Granting the Board of Directors this authority is a routine matter for public companies incorporated in Ireland and is consistent with Irish market practice. Similar to the authorization sought for Item 5, this authority is fundamental to our business and enables us to issue shares under our equity compensation plans (where required) and if applicable, will facilitate our ability to fund acquisitions and otherwise raise capital. We are not asking you to approve an increase in our authorized share capital. Instead, approval of this proposal will only grant the Board of Directors the authority to issue shares in the manner already permitted under our articles of association upon the terms below. Without this authorization, in each case where we issue shares for cash, we would first have to offer those shares on the same or more favorable terms to all of our existing shareholders. This requirement could undermine the operation of our compensation plans and cause delays in the completion of acquisitions and capital raising for our business. Furthermore, we note that this authorization is required as a matter of Irish law and is not otherwise required for other U.S. companies listed on the NYSE with whom we compete. Renewal of the Directors' existing authorization to opt out of the statutory pre-emption rights as described above is fully consistent with NYSE rules and listing standards and with U.S. capital markets practice and governance standards.

As required under Irish law, the resolution in respect of this proposal is a special resolution that requires the affirmative vote of at least 75% of the votes cast.

The text of the resolution in respect of this proposal is as follows:

"As a special resolution, that, subject to the passing of the resolution in respect of Item 5 as set out above and with effect from the passing of this resolution, the Directors be and are hereby empowered pursuant to Section 1023 of the Companies Act 2014 to allot equity securities (as defined in Section 1023 of that Act) for cash, pursuant to the authority conferred by Item 5 as if sub-section (1) of Section 1022 did not apply to any such allotment, provided that this power shall be limited to:

- (a) the allotment of equity securities in connection with a rights issue in favor of the holders of ordinary shares (including rights to subscribe for, or convert into, ordinary shares) where the equity securities respectively attributable to the interests of such holders are proportional (as nearly as may be) to the respective numbers of ordinary shares held by them (but subject to such exclusions or other arrangements as the directors may deem necessary or expedient to deal with fractional entitlements that would otherwise arise, or with legal or practical problems under the laws of, or the requirements of any recognized regulatory body or any stock exchange in, any territory, or otherwise); and
- (b) the allotment (otherwise than pursuant to sub-paragraph (a) above) of equity securities up to an aggregate nominal value of \$13,622,970 (13,622,970 shares) (being equivalent to approximately 5% of the aggregate nominal value of the issued ordinary share capital of the Company as of April 9, 2018 (the latest practicable date before this proxy statement)) and the authority conferred by this resolution shall expire 18 months from the passing of this resolution, unless previously renewed, varied or revoked; provided that the Company may make an offer or agreement before the expiry of this authority, which would or might require any such securities to be allotted after this authority has expired, and in that case, the Directors may allot equity securities in pursuance of any such offer or agreement as if the authority conferred hereby had not expired."

Item 7.**Determine the price at which the Company can re-allot shares held as treasury shares.**

- ☒ **The Board of Directors recommends that shareholders vote FOR the proposal to determine the price at which the Company can re-allot shares held as treasury shares.**

Our open-market share repurchases (redemptions) and other share buyback activities may result in ordinary shares being acquired and held by the Company as treasury shares. We may reissue treasury shares that we acquire through our various share buyback activities including in connection with our executive compensation program and our director programs.

Under Irish law, our shareholders must authorize the price range at which we may re-allot any shares held in treasury. In this proposal, that price range is expressed as a minimum and maximum percentage of the closing market price of our ordinary shares on the NYSE the day preceding the day on which the relevant share is re-allotted. Under Irish law, this authorization expires 18 months after its passing unless renewed.

The authority being sought from shareholders provides that the minimum and maximum prices at which an ordinary share held in treasury may be re-allotted are 95% and 120%, respectively, of the closing market price of the ordinary shares on the NYSE the day preceding the day on which the relevant share is re-issued, except as described below with respect to obligations under employee share schemes, which may be at a minimum price of nominal value. Any re-allotment of treasury shares will be at price levels that the Board considers in the best interests of our shareholders.

As required under Irish law, the resolution in respect of this proposal is a special resolution that requires the affirmative vote of at least 75% of the votes cast.

The text of the resolution in respect of this proposal is as follows:

"As a special resolution, that the re-allotment price range at which any treasury shares held by the Company may be re-allotted shall be as follows:

- (a) the maximum price at which such treasury share may be re-allotted shall be an amount equal to 120% of the "market price"; and
- (b) the minimum price at which a treasury share may be re-allotted shall be the nominal value of the share where such a share is required to satisfy an obligation under an employee share scheme or any option schemes operated by the Company or, in all other cases, an amount equal to 95% of the "market price"; and
- (c) for the purposes of this resolution, the "market price" shall mean the closing market price of the ordinary shares on the NYSE the day preceding the day on which the relevant share is re-allotted.

FURTHER, that this authority to reissue treasury shares shall expire at 18 months from the date of the passing of this resolution unless previously varied or renewed in accordance with the provisions of Sections 109 and 1078 of the Companies Act 2014."

CORPORATE GOVERNANCE

CORPORATE GOVERNANCE GUIDELINES

Our Corporate Governance Guidelines, together with the charters of the various Board committees, provide a framework for the corporate governance of the Company. The following is a summary of our Corporate Governance Guidelines and practices. A copy of our Corporate Governance Guidelines, as well as the charters of each of our Board committees, are available on our website at www.ingersollrand.com under the heading "Company – Corporate Governance."

ROLE OF THE BOARD OF DIRECTORS

The Company's business is managed under the direction of the Board of Directors. The role of the Board of Directors is to oversee the management and governance of the Company and monitor senior management's performance.

BOARD RESPONSIBILITIES

The Board of Directors' core responsibilities include:

- selecting, monitoring, evaluating and compensating senior management;
- assuring that management succession planning is adequate;
- reviewing the Company's financial controls and reporting systems;
- overseeing the Company's management of enterprise risk;
- reviewing the Company's ethical standards and legal compliance programs and procedures; and
- evaluating the performance of the Board of Directors, Board committees and individual directors.

BOARD LEADERSHIP STRUCTURE

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

In addition, the Board of Directors has a strong, independent Lead Director and it believes this role adequately addresses the need for independent leadership and an organizational structure for the independent directors. The Board of Directors appoints a Lead Director for a three-year minimum term from among the Board's independent directors. The Lead Director coordinates the activities of all of the Board's independent directors. The Lead Director is the principal confidant to the CEO and ensures that the Board of Directors has an open, trustful relationship with the Company's senior management team. In addition to the duties of all directors, as set forth in the Company's Governance Guidelines, the specific responsibilities of the Lead Director are as follows:

- Chair the meetings of the independent directors when the Chairman is not present;
- Ensure the full participation and engagement of all Board members in deliberations;
- Lead the Board of Directors in all deliberations involving the CEO's employment, including hiring, contract negotiations, performance evaluations, and dismissal;
- Counsel the Chairman on issues of interest/concern to directors and encourage all directors to engage the Chairman with their interests and concerns;
- Work with the Chairman to develop an appropriate schedule of Board meetings and approve such schedule, to ensure that the directors have sufficient time for discussion of all agenda items, while not interfering with the flow of Company operations;
- Work with the Chairman to develop the Board and Committee agendas and approve the final agendas;
- Keep abreast of key Company activities and advise the Chairman as to the quality, quantity and timeliness of the flow of information from Company management that is necessary for the directors to effectively and responsibly perform their duties; although Company management is responsible for the preparation of materials for the Board of Directors, the Lead Director will approve information provided to the Board and may specifically request the inclusion of certain material;
- Engage consultants who report directly to the Board of Directors and assist in recommending consultants that work directly for Board Committees;
- Work in conjunction with the Corporate Governance and Nominating Committee in compliance with Governance Committee processes to interview all Board candidates and make recommendations to the Board of Directors;

- Assist the Board of Directors and Company officers in assuring compliance with and implementation of the Company's Governance Guidelines; work in conjunction with the Corporate Governance Committee to recommend revisions to the Governance Guidelines;
- Call, coordinate and develop the agenda for and chair executive sessions of the Board's independent directors; act as principal liaison between the independent directors and the CEO;
- Work in conjunction with the Corporate Governance and Nominating Committee to identify for appointment the members of the various Board Committees, as well as selection of the Committee chairs;
- Be available for consultation and direct communication with major shareholders;
- Make a commitment to serve in the role of Lead Director for a minimum of three years; and
- Help set the tone for the highest standards of ethics and integrity.

Mr. Swift has been the Company's Lead Director since January 2010.

BOARD RISK OVERSIGHT

The Board of Directors has oversight responsibility of the processes established to report and monitor systems for material risks applicable to the Company. The Board of Directors 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 full Board is responsible for considering strategic risks and succession planning and, at each Board meeting, receives reports from each Committee as to risk oversight within their areas of responsibility. The Board of Directors 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 and the Company's information technology security environment as it relates to the network, data, product controls and monitoring solutions.
- 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 board succession, conflicts of interest, corporate governance and sustainability.
- The Finance Committee oversees risks associated with foreign exchange, insurance, credit and debt.

The Company has appointed the Chief Financial Officer as its Chief Risk Officer and, in that role, the Chief Risk Officer periodically reports on risk management policies and practices to the relevant Board Committee or to the full Board so that any decisions can be made as to any required changes in the Company's risk management and mitigation strategies or in the Board's oversight of these. As part of its oversight of the Company's executive compensation program, the Compensation Committee considers the impact of the Company's executive compensation program and the incentives created by the compensation awards that it administers on the Company's risk profile. In addition, the Company reviews all of its compensation policies and procedures, including the incentives that they create and factors that may reduce the likelihood of excessive risk taking, to determine whether they present a significant risk to the Company. Based on this review, the Company has concluded that its compensation policies and procedures are not reasonably likely to have a material adverse effect on the Company.

DIRECTOR COMPENSATION AND SHARE OWNERSHIP

It is the policy of the Board of Directors that directors' fees be the sole compensation received from the Company by any non-employee director. The Company has a share ownership requirement of five times the annual cash retainer paid to the directors. A director cannot sell any shares of Company stock until he or she attains such level of ownership and any sale thereafter cannot reduce the total number of holdings below the required ownership level. A director is required to retain this minimum level of Company share ownership until his or her resignation or retirement from the Board.

BOARD COMMITTEES

The Board of Directors has the following committees: Audit Committee, Compensation Committee, Corporate Governance and Nominating Committee, Finance Committee, Technology and Innovation Committee and Executive Committee. The Board of Directors consists of a substantial majority of independent, non-employee directors. Only non-employee directors serve on the Audit, Compensation, Corporate Governance and Nominating, Finance and Technology and Innovation Committees. The Board of Directors has determined that each member of each of these committees is "independent" as defined in the NYSE listing standards and the Company's Guidelines for Determining Independence of Directors. Chairpersons and members of these five committees are rotated periodically, as appropriate. The Chairman, who is also the CEO, serves on the Company's Executive Committee and is Chairperson of such Committee. The remainder of the Executive Committee is comprised of the Lead Director and the non-employee director Chairpersons of the Audit, Compensation, Corporate Governance and Nominating and Finance Committees. Committee memberships and chairs are rotated periodically.

BOARD DIVERSITY

The Company's policy on Board diversity relates to the selection of nominees for the Board of Directors. In selecting a nominee for the Board, the Corporate Governance and Nominating Committee considers the skills, expertise and background that would complement the existing Board and ensure that its members are of sufficiently diverse and independent backgrounds, recognizing that the Company's businesses and operations are diverse and global in nature. The Board of Directors currently has four female directors, one Hispanic director and two Irish directors out of a total of 12 directors.

BOARD ADVISORS

The Board of Directors and its committees may, under their respective charters, retain their own advisors to carry out their responsibilities.

EXECUTIVE SESSIONS

The Company's independent directors meet privately in regularly scheduled executive sessions, without management present, to consider such matters as the independent directors deem appropriate. These executive sessions are required to be held no less than twice each year.

BOARD AND BOARD COMMITTEE PERFORMANCE EVALUATION

The Corporate Governance and Nominating Committee assists the Board in evaluating its performance and the performance of the Board committees. Each committee also conducts an annual self-evaluation. The effectiveness of individual directors is considered each year when the directors stand for re-nomination.

DIRECTOR ORIENTATION AND EDUCATION

The Company has developed an orientation program for new directors and provides continuing education for all directors. In addition, the directors are given full access to management and corporate staff as a means of providing additional information.

DIRECTOR NOMINATION PROCESS

The Corporate Governance and Nominating Committee reviews the composition of the full Board to identify the qualifications and areas of expertise needed to further enhance the composition of the Board, makes recommendations to the Board concerning the appropriate size and needs of the Board and, on its own or with the assistance of management, a search firm or others, identifies candidates with those qualifications. In considering candidates, the Corporate Governance and Nominating Committee will take into account all factors it considers appropriate, including breadth of experience, understanding of business and financial issues, ability to exercise sound judgment, diversity, leadership, and achievements and experience in matters affecting business and industry. The Corporate Governance and Nominating Committee considers the entirety of each candidate's credentials and believes that at a minimum each nominee should satisfy the following criteria: highest character and integrity, experience and understanding of strategy and policy-setting, sufficient time to devote to Board matters, and no conflict of interest that would interfere with performance as a director. Shareholders may recommend candidates for consideration for Board membership by sending the recommendation to the Corporate Governance and Nominating Committee, in care of the Secretary of the Company. Candidates recommended by shareholders are evaluated in the same manner as director candidates identified by any other means.

DIRECTOR RETIREMENT

It is the policy of the Board of Directors that each non-employee director must retire at the annual general meeting immediately following his or her 75th birthday. Directors who change the occupation they held when initially elected must offer to resign from the Board of Directors. At that time, the Corporate Governance and Nominating Committee reviews the continued appropriateness of Board membership under the new circumstances and makes a recommendation to the Board of Directors. Employee directors, including the CEO, must retire from the Board of Directors at the time of a change in their status as an officer of the Company, unless the policy is waived by the Board.

DIRECTOR INDEPENDENCE

The Board of Directors has determined that all of our current directors and director nominees, except Mr. Lamach, who is an employee of the Company, are independent under the standards set forth in Exhibit I to our Corporate Governance Guidelines, which are consistent with the NYSE listing standards. In determining the independence of directors, the Board evaluated transactions between the Company and entities with which directors were affiliated that occurred in the ordinary course of business and that were provided on the same terms and conditions available to other customers. A copy of Exhibit I to our Corporate Governance Guidelines is available on our website, www.ingersollrand.com, under the heading "Company—Corporate Governance."

COMMUNICATIONS WITH DIRECTORS

Shareholders and other interested parties wishing to communicate with the Board of Directors, the non-employee directors or any individual director (including our Lead Director and Compensation Committee Chair) may do so either by sending a communication to the Board and/or a particular Board member, in care of the Secretary of the Company, or by e-mail at irboard@irco.com. Depending upon the nature of the communication and to whom it is directed, the Secretary will: (a) forward the communication to the appropriate director or directors; (b) forward the communication to the relevant department within the Company; or (c) attempt to handle the matter directly (for example, a communication dealing with a share ownership matter).

MANAGEMENT SUCCESSION PLANNING

Our Board of Directors believes that ensuring leadership continuity and strong management capabilities exist to effectively carry out the Company's strategy are critical responsibilities of the board. The board collaborates with the CEO and the SVP, Human Resources on the succession planning process, including establishing selection criteria that reflect our business strategies, identifying and developing internal candidates. The Board also ensures there are successors available for key positions in the normal course of business and for emergency situations.

The full Board formally reviews, at least annually, the plans for development, retention and replacement of key executives, and most importantly the CEO. In addition, management succession for key leadership positions is discussed regularly by the directors in Board meetings and in executive sessions of the Board of Directors. Directors become familiar with potential successors for key leadership positions through various means including regular talent reviews, presentations to the Board, and informal meetings.

CODE OF CONDUCT

The Company has adopted a worldwide Code of Conduct, applicable to all employees, directors and officers, including our Chief Executive Officer, our Chief Financial Officer and our Controller. The Code of Conduct meets the requirements of a "code of ethics" as defined by Item 406 of Regulation S-K, as well as the requirements of a "code of business conduct and ethics" under the NYSE listing standards. The Code of Conduct covers topics including, but not limited to, conflicts of interest, confidentiality of information, and compliance with laws and regulations. A copy of the Code of Conduct is available on our website located at www.ingersollrand.com under the heading "Company—Corporate Governance." Amendments to, or waivers of the provisions of, the Code of Conduct, if any, made with respect to any of our directors and executive officers will be posted on our website.

ANTI-HEDGING POLICY AND OTHER RESTRICTIONS

The Company prohibits its directors and executive officers from (i) purchasing any financial instruments designed to hedge or offset any decrease in the market value of Company securities, (ii) engaging in any form of short-term speculative trading in Company securities and (iii) holding Company securities in a margin account or pledging Company securities as collateral for a loan.

INVESTOR OUTREACH

We believe it is important to understand our shareholders and their concerns and questions about our Company. During 2017, we met with a significant number of our major shareholders and with prospective shareholders to answer questions about our Company and to learn about issues that are important to them. We also held an Investor Day in May 2017 at which we discussed the Company's long-term strategy and outlook.

COMMITTEES OF THE BOARD

AUDIT COMMITTEE

Meetings in 2017: 9

Members

John P. Surma (Chair)
Ann C. Berzin
Linda P. Hudson
Myles P. Lee
Karen B. Peetz
Richard J. Swift

Key Functions

- Review annual audited and quarterly financial statements, as well as the Company's disclosures under "Management's Discussion and Analysis of Financial Conditions and Results of Operations," with management and the independent auditors.
- Obtain and review periodic reports, at least annually, from management assessing the effectiveness of the Company's internal controls and procedures for financial reporting.
- Review the Company's processes to assure compliance with all applicable laws, regulations and corporate policy.
- Recommend the public accounting firm to be proposed for appointment by the shareholders as our independent auditors and review the performance of the independent auditors.
- Review the scope of the audit and the findings and approve the fees of the independent auditors.
- Approve in advance, subject to and in accordance with applicable laws and regulations, permitted audit and non-audit services to be performed by the independent auditors.
- Satisfy itself as to the independence of the independent auditors and ensure receipt of their annual independence statement.

The Board of Directors has determined that each member of the Audit Committee is "independent" for purposes of the applicable rules and regulations of the SEC, as defined in the NYSE listing standards and the Company's Corporate Governance Guidelines, and has determined that each member meets the qualifications of an "audit committee financial expert," as that term is defined by rules of the SEC. In addition, each member of the Audit Committee qualifies as an independent director and possesses the requisite competence in accounting or auditing in satisfaction of the requirements for audit committees prescribed by the Companies Act 2014.

A copy of the charter of the Audit Committee is available on our website, www.ingersollrand.com, under the heading "Company—Corporate Governance – Board Committees and Charters."

COMPENSATION COMMITTEE

Meetings in 2017: 6

Members

Tony L. White (Chair)
Kirk E. Arnold
John Bruton
Jared L. Cohon
Gary D. Forsee

Key Functions

- Establish our executive compensation strategies, policies and programs.
- Review and approve the goals and objectives relevant to the compensation of the Chief Executive Officer, evaluate the Chief Executive Officer's performance against those goals and objectives and set the Chief Executive Officer's compensation level based on this evaluation. The Compensation Committee Chair presents all compensation decisions pertaining to the Chief Executive Officer to the full Board of Directors.
- Approve compensation of all other elected officers.
- Review and approve executive compensation and benefit programs.
- Administer the Company's equity compensation plans.
- Review and recommend significant changes in principal employee benefit programs.
- Approve and oversee Compensation Committee consultants.

For a discussion concerning the processes and procedures for determining NEO and director compensation and the role of executive officers and compensation consultants in determining or recommending the amount or form of compensation, see "Compensation Discussion and Analysis" and "Compensation of Directors," respectively. The Board of Directors has determined that each member of the Compensation Committee is "independent" as defined in the NYSE listing standards and the Company's Corporate Governance Guidelines. In addition, the Board of Directors has determined that each member of the Compensation Committee qualifies as a "Non-Employee Director" within the meaning of Rule 16b-3 of the Securities Exchange Act of 1934 and an "outside director" within the meaning of Section 162(m) of the Code.

A copy of the charter of the Compensation Committee is available on our website, www.ingersollrand.com, under the heading "Company—Corporate Governance – Board Committees and Charters."

**CORPORATE
GOVERNANCE
AND NOMINATING
COMMITTEE**
Meetings in 2017: 6

Members

Gary D. Forsee (Chair)
Kirk E. Arnold
John Bruton
Jared L. Cohon
Tony L. White

Key Functions

- Identify individuals qualified to become directors and recommend the candidates for all directorships.
- Recommend individuals for election as officers.
- Review the Company's Corporate Governance Guidelines and make recommendations for changes.
- Consider questions of independence of directors and possible conflicts of interest of directors as well as executive officers.
- Take a leadership role in shaping the corporate governance of the Company.
- Oversee the Company's sustainability efforts.

The Board of Directors has determined that each member of the Corporate Governance and Nominating Committee is "independent" as defined in the NYSE listing standards and the Company's Corporate Governance Guidelines.

A copy of the charter of the Corporate Governance and Nominating Committee is available on our website, www.ingersollrand.com, under the heading "Company—Corporate Governance – Board Committees and Charters."

**FINANCE
COMMITTEE**
Meetings in 2017: 6

Members

Ann C. Berzin (Chair)
Linda P. Hudson
Myles P. Lee
Karen B. Peetz
John P. Surma
Richard J. Swift

Key Functions

- Consider and recommend for approval by the Board of Directors of (a) issuances of equity and/or debt securities; or (b) authorizations for other financing transactions, including bank credit facilities.
- Consider and recommend for approval by the Board of Directors the repurchase of the Company's shares.
- Review cash management policies.
- Review periodic reports of the investment performance of the Company's employee benefit plans.

The Board of Directors has determined that each member of the Finance Committee is "independent" as defined in the NYSE listing standards and the Company's Corporate Governance Guidelines.

A copy of the charter of the Finance Committee is available on our website, www.ingersollrand.com, under the heading "Company—Corporate Governance – Board Committees and Charters."

**EXECUTIVE
COMMITTEE**
Meetings in 2017: 0

Members

Michael W. Lamach
(Chair)
Ann C. Berzin
Gary D. Forsee
John P. Surma
Richard J. Swift
Tony L. White

Key Functions

- Aids the Board in handling matters which, in the opinion of the Chairman of the Board or Lead Director, should not be postponed until the next scheduled meeting of the Board (except as limited by the charter of the Executive Committee).

The Board of Directors has determined that each member of the Executive Committee (other than Michael W. Lamach) is "independent" as defined in the NYSE listing standards and the Company's Corporate Governance Guidelines.

A copy of the charter of the Executive Committee is available on our website, www.ingersollrand.com, under the heading "Company—Corporate Governance – Board Committees and Charters."

**TECHNOLOGY
AND INNOVATION
COMMITTEE****Meetings in 2017: 2****Members**

Jared L. Cohon (Chair)
 Kirk E. Arnold
 John Bruton
 Gary D. Forsee
 Linda P. Hudson
 Richard J. Swift
 Tony L. White

Key Functions

- Reviews the Company's technology and innovation strategy and approach, including its impact on the Company's performance, growth and competitive position.
- Reviews with management technologies that can have a material impact on the Company, including product and process development technologies, manufacturing technologies and practices, and the utilization of quality assurance programs.
- Assists the Board in its oversight of the Company's investments in technology and innovation, including through acquisitions and other business development activities.
- Reviews technology trends that could significantly affect the Company and the industries in which it operates.
- Assists the Board in its oversight of the Company's technology and innovation initiatives.
- Oversees the direction and effectiveness of the Company's research and development operations

The Board of Directors has determined that each member of the Technology and Innovation Committee is "independent" as defined in the NYSE listing standards and the Company's Corporate Governance Guidelines.

A copy of the charter of the Technology and Innovation Committee is available on our website, www.ingersollrand.com, under the heading "Company—Corporate Governance – Board Committees and Charters."

BOARD, COMMITTEE AND ANNUAL MEETING ATTENDANCE

The Board of Directors and its committees held the following number of meetings during the fiscal year ended December 31, 2017:

Board	6
Audit Committee	9
Compensation Committee	6
Corporate Governance and Nominating Committee	6
Finance Committee	6
Executive Committee	0
Technology and Innovation Committee	2

All directors attended at least 75% or more of the total number of meetings of the Board of Directors and the committees on which he or she served during the year. The Company's non-employee directors held six independent director meetings without management present during the fiscal year 2017. It is the Board's general practice to hold independent director meetings in connection with regularly scheduled Board meetings.

The Company expects all Board members to attend the annual general meeting, but from time to time other commitments prevent all directors from attending the meeting. Nine of the ten members of our Board standing for re-election at the 2017 Annual General Meeting attended that meeting, which was held on June 8, 2017.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

Our Compensation Committee is composed solely of independent directors. During fiscal 2017, no member of our Compensation Committee was an employee or officer or former officer of the Company or had any relationships requiring disclosure under Item 404 of Regulation S-K. None of our executive officers has served on the board of directors or compensation committee of any other entity that has or has had one or more executive officers who served as a member of our Board or our Compensation Committee during fiscal 2017.

COMPENSATION OF DIRECTORS

DIRECTOR COMPENSATION

Our director compensation program is designed to compensate non-employee directors fairly for work required for a company of our size and scope and to align their interests with the long-term interests of our shareholders. The program reflects our desire to attract, retain and use the expertise of highly qualified people serving on the Company's Board of Directors. Employee directors do not receive any additional compensation for serving as a director. Our 2017 director compensation program for non-employee directors consisted of the following elements:

Compensation Element	Compensation Value (\$)
Annual Retainer (1/2 paid in cash and 1/2 paid in restricted stock units) *	285,000
Audit Committee Chair Cash Retainer	30,000
Compensation Committee Chair Cash Retainer	20,000
Corporate Governance and Nominating Committee Chair and Finance Committee Chair Cash Retainer	15,000
Executive Committee Chair Retainer	No retainer paid to the Chair
Technology and Innovation Committee Chair Retainer	7,500
Audit Committee Member Cash Retainer (other than Chair)	7,500
Lead Director Cash Retainer	50,000
Additional Meetings or Unscheduled Planning Session Fees **	2,500 (per meeting or session)

* The number of restricted stock units granted is determined by dividing the grant date value of the award, \$142,500 by the average of the high and low prices of the Company's common stock on the date of grant. A director who retires, resigns or otherwise separates from the Company receives a pro-rata cash retainer payment for the quarter in which such event occurs based on the number of days elapsed since the end of the immediately preceding quarter.

** The Board and the Compensation Committee, Corporate Governance and Nominating Committee and Finance Committee, each had 6 regularly scheduled meetings during 2017. The Audit Committee had 9 regularly scheduled meetings during 2017. The Technology and Innovation Committee had two regularly scheduled meetings during 2017. The Executive Committee meets on an as needed basis when directed by the Chairman or Lead Director.

The Corporate Governance and Nominating Committee periodically reviews the compensation level of our non-employee directors in consultation with the Committee's independent compensation consultant, Korn Ferry Hay Group, Inc., and makes recommendations to the Board of Directors. Based on its most recent review, our Corporate Governance and Nominating Committee recommended certain changes to director compensation effective January 1, 2018, which were approved by our Board. These changes included an increase in the annual retainer to \$305,000 with \$142,500 of the retainer paid in cash and \$162,500 paid in RSUs and an update to the director share ownership requirement to require five times the annual cash retainer paid to the directors rather than four times, both of which were effective as of January 1, 2018.

If our 2018 Incentive Stock Plan is approved by shareholders, the aggregate amount of stock-based and cash-based awards which may be granted to any non-employee director in respect of any calendar year, solely with respect to his or her service as a member of the Board of Directors, is limited to \$1,000,000.

SHARE OWNERSHIP REQUIREMENT

To align the interests of directors with shareholders, the Board of Directors has adopted a share ownership requirement of five times the annual cash retainer paid to the directors. A director cannot sell any shares of Company stock until he or she attains such level of ownership and any sale thereafter cannot reduce the total number of holdings below the required ownership level. A director is required to retain this minimum level of Company share ownership until his or her resignation or retirement from the Board.

2017 DIRECTOR COMPENSATION

The compensation paid or credited to our non-employee directors for the year ended December 31, 2017, is summarized in the table below. Ms. Arnold and Ms. Peetz did not serve as directors in 2017.

Name	Fees earned or paid in cash (\$) ^(a)	Equity / Stock Awards (\$) ^(b)	All Other Compensation (\$) ^(c)	Total (\$)
A. C. Berzin	172,500	142,536	15,808	330,844
J. Bruton	142,500	142,536	854	285,890
E. L. Chao ^(d)	12,271	–	–	12,271
J.L. Cohon	152,500	142,536	21,013	316,049
G.D. Forsee	165,000	142,536	9,815	323,116
C.J. Horner ^(d)	129,011	–	23,040	152,051
L. P. Hudson	150,000	142,536	135	292,671
M. P. Lee	150,000	142,536	1,593	294,129
J.P. Surma	172,500	142,536	21,013	336,049
R.J. Swift	202,500	142,536	15,092	365,648
T.L. White	162,500	142,536	19,032	325,678

(a) The amounts in this column represent the following: annual cash retainer, the Committee Chair retainers, the Audit Committee member retainer, the Lead Director retainer, and the Board, Committee and other meeting or session fees and cash fees paid in lieu of equity for Ms. Horner who retired at the June 8, 2017 Annual General Meeting:

Name	Cash Retainer (\$)	Cash Paid in Lieu of Equity for Retiring Director (\$)	Committee Chair Retainer (\$)	Audit Committee Member Retainer (\$)	Lead Director Retainer Fees (\$)	Board, Committee and Other Meeting or Session Fees (\$)	Total Fees earned or paid in cash (\$)
A. C. Berzin	142,500	–	15,000	7,500	–	7,500	172,500
J. Bruton	142,500	–	–	–	–	–	142,500
E. L. Chao	12,271	–	–	–	–	–	12,271
J.L. Cohon	142,500	–	7,500	–	–	2,500	152,500
G.D. Forsee	142,500	–	15,000	–	–	7,500	165,000
C.J. Horner	66,920	62,091	–	–	–	–	129,011
L. P. Hudson	142,500	–	–	7,500	–	–	150,000
M. P. Lee	142,500	–	–	7,500	–	–	150,000
J.P. Surma	142,500	–	30,000	–	–	–	172,500
R.J. Swift	142,500	–	–	7,500	50,000	2,500	202,500
T.L. White	142,500	–	20,000	–	–	–	162,500

(b) Represents RSUs awarded in 2017 as part of each director's annual retainer. The amounts in this column reflect the aggregate grant date fair value of RSU awards granted for the year under Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718 and do not reflect amounts paid to or realized by the directors. For a discussion of the assumptions made in determining the ASC 718 values see Note 12, "Share-Based Compensation," to the Company's consolidated financial statements contained in its 2017 Form 10-K.

COMPENSATION OF DIRECTORS

(c) Includes (i) benefits in kind (spousal travel, meals, non-board related activities and gifts) in connection with the June 2017 board meeting and (ii) payment of Irish taxes on the benefits in kind:

Name	Benefits in Kind (\$) ^(a)	Payment of taxes on Benefits in Kind (\$) ^(b)	Total (\$) ^(b)
A. C. Berzin	8,220	7,588	15,808
J. Bruton	854	–	854
J.L. Cohon	10,927	10,086	21,013
G.D. Forsee	5,104	4,711	9,815
C.J. Horner ^(d)	11,981	11,059	23,040
L. P. Hudson	70	65	135
M. P. Lee	1,593	–	1,593
J.P. Surma	10,927	10,086	21,013
R.J. Swift	7,848	7,244	15,092
T.L. White	9,897	9,135	19,032

(d) Ms. Chao resigned from the Board on January 31, 2017 in connection with her appointment as Secretary of the United States Department of Transportation. Ms. Horner resigned from the Board on June 8, 2017, the date of our 2017 Annual General Meeting in accordance with our Corporate Governance Guidelines due to her attaining the age of 75 prior to such meeting.

COMPENSATION OF DIRECTORS

For each non-employee director, the following table reflects all unvested RSU awards at December 31, 2017:

Name	Number of Unvested RSUs
A. C. Berzin	1,620
J. Bruton	1,620
E. L. Chao	–
J.L. Cohon	1,620
G.D. Forsee	1,620
C.J. Horner	–
L. P. Hudson	1,620
M. P. Lee	1,620
J.P. Surma	1,620
R.J. Swift	1,620
T.L. White	1,620

COMPENSATION DISCUSSION AND ANALYSIS

The Compensation Discussion and Analysis ("CD&A") set forth below provides an overview of our executive compensation philosophy and the underlying programs, including the objectives of such programs, as well as a discussion of how awards are determined for our Named Executive Officers ("NEOs"). These NEOs include our Chairman and Chief Executive Officer ("CEO"), our Chief Financial Officer ("CFO"), and our three most highly compensated executive officers from the 2017 fiscal year other than the CEO and CFO. Two additional executive officers have been included as NEOs based on their compensation and their service as executive officers during 2017. The NEOs are:

Named Executive Officers	Title
Mr. Michael W. Lamach	Chairman and Chief Executive Officer
Ms. Susan K. Carter	Senior Vice President and Chief Financial Officer
Mr. David S. Regnery	Executive Vice President
Ms. Marcia J. Avedon, Ph.D.	Senior Vice President, Human Resources, Communications and Corporate Affairs
Ms. Maria C. Green	Senior Vice President and General Counsel
Mr. Didier P. M. Teirlinck, Ph.D.	Strategic Advisor, former Executive Vice President, Climate Segment
Mr. Robert G. Zafari	Retired Strategic Advisor, former Executive Vice President, Industrial Segment

This discussion and analysis is divided into the following sections:

- I. Executive Summary
- II. Compensation Philosophy and Design Principles
- III. Factors Considered in the Determination of Target Total Direct Compensation
- IV. Role of the Committee, Independent Advisor, and Committee Actions
- V. Compensation Program Descriptions and Compensation Decisions
- VI. Other Compensation and Tax Matters

I. EXECUTIVE SUMMARY

Ingersoll Rand is a world leader in the creation of comfortable, sustainable and efficient environments. Our people and our family of brands – including Ingersoll-Rand, Trane, Thermo King and Club Car – 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 continue to develop, mature and implement our business operating system throughout the company to consistently deliver top quartile growth, margin improvement, EPS growth and Cash Flow.

2017 FINANCIAL RESULTS

The following table documents the enterprise financial results realized in 2017 relative to our executive incentive compensation performance targets established for the period:

Metric	Performance ⁽¹⁾
Revenue	Adjusted Annual Revenue of \$13.985 billion, which is 102% of adjusted target and an increase of 5.2% over 2016
Operating Income	Adjusted Operating Income of \$1.700 billion, which is 98% of adjusted target and an increase of 7.2% over 2016
Operating Income Margin	Adjusted Operating Income Margin of 12.15%, which is 0.21 percentage points less than target and an increase of 0.22 percentage points over 2016
Cash Flow	Adjusted Cash Flow of \$1.282 billion, which is 114% of target and a decrease of 31% from 2016
3-Year EPS Growth	3-year adjusted EPS growth (2015 - 2017) of 16.35%, which ranks at the 95th percentile of the companies in the S&P 500 Industrials Index
3-Year TSR	3-year TSR (2015-2017) of 44.71%, which ranks at the 52nd percentile of the companies in the S&P 500 Industrials Index

(1) We report our financial results in our annual report on Form 10-K and our quarterly reports on Form 10-Q in accordance with generally accepted accounting principles ("GAAP"). Our financial results described above for Revenue, Operating Income, Operating Income Margin, Cash Flow and 3-Year EPS Growth have been adjusted to exclude the impact of certain non-routine and other items as permitted by our incentive plans and approved by the Committee and are non-GAAP financial measures. These metrics and the related performance targets and results are relevant only to our executive compensation program and should not be used or applied in other contexts. For a description of how the metrics above are calculated from our GAAP financial statements, please see "Annual Incentive Matrix ('AIM') - Determination of Payout" with respect to AIM payments and "Long Term Incentive Program ('LTI') – 2015 - 2017 Performance Share Units Payout" with respect to PSP awards.

- Based on our 2017 results for Revenue, Operating Income, Operating Income Margin and Cash Flow, achievement under the Annual Incentive Matrix ("AIM") financial score was 117.74% of target for the Enterprise. At the Segment level, 2017 AIM financial score payout levels were 94.60% of target for the Climate Segment and 186.78% of target for the Industrial Segment.
- Based on our average EPS growth rate of 16.35% and a total shareholder return ("TSR") of 44.71% during the 2015 to 2017 performance period, Performance Share Units ("PSUs") under our Performance Share Program ("PSP") achievement was 153.5% of target.

OTHER 2017 ACHIEVEMENTS

The company:

- Successfully completed several acquisitions in 2017 including GPSi Holdings, LLC, a leading technology provider of cloud-based technology solutions for fleet managers in various transportation markets, including golf; CALMAC, a company specializing in cool energy technologies; and Thermocold Construzioni, a privately held Italian company that manufactures and distributes heating, ventilating and air-condition systems and solutions in Europe. These acquisitions deepen our capabilities in delivering exceptional customer value.
- Continued to significantly reduce the greenhouse gas emissions of our products and operations, while also convening industry leaders to develop long-term solutions aimed at solving global climate challenges.
- Joined the CEO Action for Diversity and Inclusion, which focuses on a commitment to advance diversity and inclusion in the workplace as well as the Paradigm for Parity coalition, whose goal is to bring gender parity to corporate leadership structures by 2030.
- Continued to be recognized for performance in the areas of climate change, employee engagement, environmental stewardship, human rights and philanthropy. Examples of this recognition included:
 - Being named as one of the 100 best corporate citizens for the fourth year in a row in Corporate Responsibility Magazine;
 - For the fifth consecutive year, recognized by Fortune Magazine as one of the most-admired companies;
 - For the second year in a row, being awarded a perfect score in workplace equality on the Human Rights Campaign Foundation's equality index;
 - Our Chairman and CEO was named as the inaugural recipient of a Sustaining Leadership Award by the University of South Carolina's Darla Moore School of Business. The award recognizes CEOs who deliver superior financial, social and reputational performance, and demonstrate a profound commitment to developing future organizational leadership;
 - For the third consecutive year, named to the FTSE4Good equity index, which measures companies with strong environmental stewardship, human rights and corporate governance; and,
 - Maintained the company listing on the Dow Jones Sustainability World and North America Indices, for the seventh consecutive year—the longest consecutively listed industrial in both indices.
- In addition, for the fifth consecutive year, improved our employee engagement as we sought meaningful ways to enhance the working lives of our employees, which translates into improved commitment to the company's core values and mission. Our overall employee engagement score positions us well into the top quartile of all companies globally.
- Continued to increase our dividend, delivering on our strategy to provide value to our shareholders. In 2017 our dividend increased by 12.5%.

EXECUTIVE COMPENSATION PROGRAM OVERVIEW

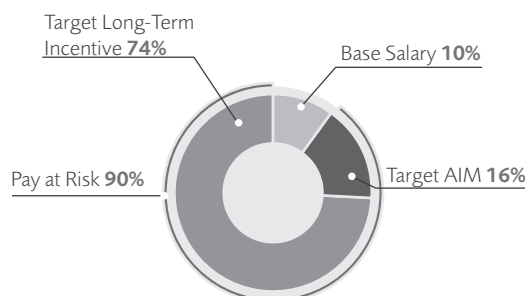
The Compensation Committee (the "Committee") has adopted executive compensation programs with a strong link between pay and the achievement of short-term and long-term Company goals. The primary elements of the executive compensation programs are:

Total Direct Compensation	
Element ⁽¹⁾	Objective of Element
Base Salary	Fixed cash compensation.
Annual Incentive Matrix ("AIM")	Variable cash incentive compensation. Any award earned is based on performance measured against pre-defined annual revenue, Operating Income, cash flow and Operating Income Margin percent objectives, as well as individual performance measured against pre-defined objectives.
Long-Term Incentives ("LTI")	Variable long-term incentive compensation. Performance is aligned with the Company's stock price and is awarded in the form of stock options, restricted stock units ("RSUs") and PSUs. PSUs for performance periods beginning prior to 2018 are only payable if the Company's EPS growth and TSR relative to companies in the S&P 500 Industrials Index exceed threshold performance. PSUs granted after January 1, 2018 are only payable if the Company's CROIC growth and TSR relative to companies in the S&P 500 Industrials Index exceed threshold performance.

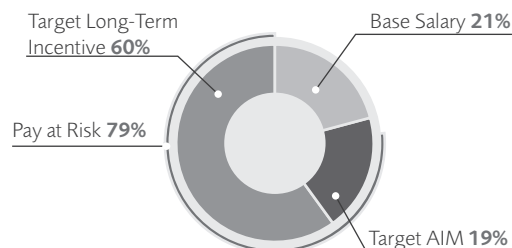
(1) See Section V, "Compensation Program Descriptions and Compensation Decisions", for additional discussion of these elements of compensation.

As illustrated in the charts below, the Committee places significant emphasis on variable compensation AIM and LTI so that a substantial percentage of each NEO's target total direct compensation is contingent on the successful achievement of the Company's short-term and long-term performance goals.

**Chairman and CEO
2017 Compensation Mix
(Target Total Direct Compensation)**



**Other NEOs
2017 Compensation Mix
(Target Total Direct Compensation)**



2017 COMMITTEE ACTIONS

The Committee took the following actions during 2017:

- Made a recommendation to the full Board, which they subsequently approved, to adopt an annual advisory vote on Executive Compensation;
- Reviewed and approved a revised peer group to be used to benchmark executive compensation levels and plan design in 2018.

GOOD GOVERNANCE PRACTICES

In addition to the actions taken in 2017, various good governance practices are in place at the company, including:

- Diversified metrics for our AIM and PSP programs to align with business strategies and shareholder interests;
- Incentive awards are tied to the achievement of rigorous pre-determined and measurable performance objectives;
- Significant emphasis is placed on variable compensation (AIM and LTI) in designing our compensation mix;
- Regular compensation reviews are conducted, and we are committed to fair and competitive pay for our employees and the avoidance of discrimination against any protected class or individual;
- A claw-back/recoupment policy and robust stock ownership requirements are maintained for our executives;
- No tax gross-ups for any change-in-control agreement entered into after May of 2009 are provided. Only 4 of our 17 officers had a tax gross-up provision in an agreement entered into with such officer prior to May 2009;
- Tally sheets are used to fully understand all elements of current and potential future compensation, which are reviewed by the Committee prior to making compensation decisions for the NEOs;
- Re-pricing of equity awards is prohibited;
- "Double-trigger" vesting for any cash payments under our change in control agreements is required;
- Regular reviews of our executive compensation design to ensure it addresses business needs, shareholder interests and regulatory requirements are conducted; and,
- A 2018 Incentive Stock Plan which includes additional good governance practices is being proposed for adoption. See Proposal 4 for more details.

CONSIDERATION OF 2017 ADVISORY VOTE ON EXECUTIVE COMPENSATION

The Committee regularly reviews the philosophy, objectives and elements of our executive compensation programs in relation to our short and long-term business objectives. In undertaking this review, the Committee considers the views of shareholders as reflected in their annual advisory vote on our executive compensation proposal. Shareholders voted 94.4% in favor of the company's Advisory Approval of the Compensation of Our Named Executive Officers proposal at our 2017 annual general meeting. Based on the Committee's review and the support our executive compensation programs received from shareholders, the Committee determined it would be appropriate to maintain the core elements of our executive compensation programs.

II. COMPENSATION PHILOSOPHY AND DESIGN PRINCIPLES

Our executive compensation programs are designed to enable us to attract, retain and focus the talent and energy of executive officers (including our NEOs) who are capable of meeting the Company's current and future goals, most notably the creation of sustainable shareholder value. As we operate in an ever-changing environment, our Committee makes decisions with consideration of economic, technological, regulatory, investor and competitive factors as well as our executive compensation principles.

The design principles that govern our executive compensation programs are:

Business strategy alignment	Our executive compensation programs provide flexibility to align with changing Company or business strategies. The programs allow for individuals within the Company's businesses to focus on specific financial measures to meet the short and long-term plans of the particular business for which they are accountable. It is not only possible but also desirable for certain leaders to earn substantial awards in years when their business outperforms against their annual operating plan. Conversely, if a business fails to meet its performance goals, that business' leader may earn a lesser award than his or her peers in that year. To provide a balanced incentive, all executives have a significant portion of their compensation tied to Company performance.
Pay for performance	A strong pay for performance culture is paramount to our Company's success. As a result, each executive's target total direct compensation ("TDC") is tied to performance of the Company, the applicable business, and individual goals. Company and business performance is measured against pre-established financial, operational and strategic objectives. Individual performance is measured against pre-established individual goals as well as demonstrated leadership competencies and behaviors consistent with our Company values. In addition, a portion of the long-term incentive is earned based upon earnings and shareholder value performance relative to peer companies.
Mix of short and long-term incentives	A proper mix between short and long-term incentives is important to encourage decision making that mitigates risk and balances the need to meet our Annual Operating Plan ("AOP") objectives while also taking into account the long-term interests of the Company and its shareholders. The mix of pay, including short and long-term incentives, is determined by considering the Company's pay for performance compensation philosophy and strategic objectives as well as competitive market practice.

Internal parity	Each executive's target TDC opportunity is proportionate with the responsibility, scope and complexity of his or her role within the Company. Thus, similar jobs are assigned similar target compensation opportunities.
Shareholder alignment	Our executive compensation programs align the interests of our executives with those of shareholders by rewarding key financial targets such as revenue growth, EPS, Cash Flow Return on Invested Capital (CROIC) growth and cash flow. These financial targets should correlate with both share price appreciation over time and the generation of cash flow for the company. In addition, our long-term incentives are tied to total shareholder returns, increases in value as share price increases, and the effective use of assets to generate cash flow. Other program requirements, including share ownership guidelines for executives and vesting schedules on equity awards further align executives' and shareholder's interests.
Market competitiveness	Compensation opportunities must serve to attract and retain high performing executives in a competitive environment for talent. Therefore, target TDC levels are set referencing applicable market compensation benchmarks with consideration of retention and recruiting demands in the industries and markets where we compete for business and executive talent. As a result, each executive's target TDC may be above or below the market benchmark reference based on his or her experience, proficiency, performance and potential in performing the duties of his or her position in addition to the competitive market for that individual and his or her experience.

III. FACTORS CONSIDERED IN THE DETERMINATION OF TARGET TOTAL DIRECT COMPENSATION

Our Committee reviews and evaluates our executive compensation levels and practices against those companies of comparable revenue, industry and/or business fit with which we compete for executive talent. These reviews are conducted throughout the year using a variety of methods such as:

- The direct analysis of the proxy statements of other diversified industrial companies (refer to peer group below),
- A review of compensation survey data of other global, diversified industrial companies of similar size published by independent consulting firms,
- A review of customized compensation survey data provided by independent consulting firms, and
- Feedback received from external constituencies.

The Committee does not rely on a single source of information when making executive compensation decisions. Many of the companies included in these compensation surveys are also included in the S&P 500 Industrials Index referred to in our 2017 Form 10-K under the caption "Performance Graph."

The Committee, with the assistance of its independent advisor, develops a peer group that it uses to evaluate executive compensation programs and levels. The 2017 peer group is comprised of the following eighteen global diversified industrial companies.

3M	Honeywell International	Pentair ⁽¹⁾
Cummins, Inc.	Illinois Tool Works	Rockwell Automation
Danaher Corp	Johnson Controls Inc.	Stanley Black & Decker
Dover	Paccar Inc.	TE Connectivity
Eaton plc	Parker Hannifin Corp	Textron
Emerson Electric	PPG Industries	Tyco International ⁽¹⁾

(1) The peer group is reviewed annually and is updated periodically to ensure that it appropriately reflects the Company's size, businesses and complexity. In August of 2017, Tyco International and Pentair plc were removed and Fortive Corporation was added. This revised peer group will be used in 2018 for benchmarking.

In assessing the relationship of CEO compensation to compensation of other executive officers (including our NEOs), the Committee considers overall organization structure and scope of responsibility and also reviews the NEOs' compensation levels relative to the CEO and to one another. This ensures that the target TDC levels are set in consideration of internal pay equity as well as market references and each executive's experience, proficiency, performance and potential in performing the duties of his or her role.

The Company conducted a thorough review of the market competitiveness of our executive pay and determined that target long-term incentive opportunities and overall compensation targets for certain executives were below market levels and not fully reflective of the competency that they bring to their roles. Consequently, the Committee approved some increases in 2018 target long-term incentives to set total compensation targets at appropriate market levels. These adjusted long-term incentive targets better reflect the particular executives' value to the Company and in the marketplace. These increases are summarized in the "2018 Compensation Decisions" section.

IV. ROLE OF THE COMMITTEE, INDEPENDENT ADVISOR AND COMMITTEE ACTIONS

Our Committee, which is composed solely of independent directors, oversees our compensation plans and policies, administers our equity-based programs and reviews and approves all forms of compensation relating to our executive officers, including the NEOs.

The Committee exclusively decides the compensation elements and the amounts to be awarded to our CEO. Our CEO does not make any recommendations regarding his own compensation and is not informed of these awards until the decisions have been finalized. Our CEO makes compensation recommendations related to our other NEOs and executive officers. The Committee considers these recommendations when approving the compensation elements and amounts to be awarded to our other NEOs.

Our Committee is responsible for reviewing and approving amendments to our executive compensation and benefit plans. In addition, our Committee is responsible for reviewing our major broad-based employee benefit plans and making recommendations to our Board of Directors for significant amendments to, or termination of, such plans. The Committee's duties are described in the Committee's Charter, which is available on our website at www.ingersollrand.com.

Our Committee has the authority to retain an independent advisor for the purpose of reviewing and providing guidance related to our executive compensation and benefit programs. The Committee is directly responsible for the compensation and oversight of the independent advisor. For 2017, the Committee continued to engage Korn Ferry Hay Group, Inc. ("Hay Group") to serve as its independent compensation advisor. Hay Group also provided the Corporate Governance and Nominating Committee with advice on director compensation matters. The Committee determined that Hay Group is independent and does not have a conflict of interest. In making this determination, the Committee considered the factors adopted by the New York Stock Exchange with respect to independence and conflicts of interest.

V. COMPENSATION PROGRAM DESCRIPTIONS AND COMPENSATION DECISIONS

The following table provides a summary of the elements, objectives, risk mitigation factors and other key features of our TDC program. Each of these elements is described in detail below:

Element	Objective of Element including Risk Mitigation Factors	Key Features Relative to NEOs
Base Salary	To provide a sufficient and stable source of cash compensation. To avoid encouraging excessive risk-taking by ensuring that an appropriate level of cash compensation is not variable.	Adjustments are determined by the Committee based on an evaluation of the NEO's proficiency in fulfilling his or her responsibilities, as well as performance against key objectives and behaviors. Base salary represents only 10% of the CEO's target total direct compensation and only 21%, on average, for the other NEOs.
Annual Incentive Matrix ("AIM") Program	To serve as an annual cash award tied to the achievement of pre-established performance objectives. Structured to take into consideration the unique needs of the various businesses. Amount of compensation earned cannot exceed a maximum payout of 200% of individual target levels and is also subject to a claw-back in the event of a financial restatement.	Each NEO has an AIM target expressed as a percentage of base salary. Targets are set based on the compensation levels of similar jobs in comparable companies, as well as on the NEO's experience and proficiency level in performing the duties of the role. Actual AIM payouts are dependent on business and enterprise financial and individual performance. The financial metrics used to determine the awards for 2017 were Revenue, Operating Income, and Cash Flow, modified (up or down) based on Operating Income Margin performance. AIM represents 16% of the CEO's target total direct compensation and 19%, on average, for the other NEOs.

Element	Objective of Element including Risk Mitigation Factors	Key Features Relative to NEOs
Performance Share Program ("PSP")	To serve as a long-term incentive to outperform, on a relative basis, companies in the S&P 500 Industrials Index. To promote long-term strategic focus and discourage an overemphasis on attaining short-term goals. Amount earned cannot exceed a maximum payout of 200% of individual target levels and is also subject to a claw-back in the event of a financial restatement.	Performance share units ("PSUs") granted under the PSP are earned over a 3-year performance period. The number of PSUs earned is based on relative TSR and relative EPS growth compared to companies within the S&P 500 Industrials Index (with equal weight given to each metric) for awards granted through 2017. Beginning in 2018, the number of PSUs earned is based on relative TSR and relative CROIC growth compared to companies within the S&P 500 Industrials Index (with equal weight given to each metric.) Actual value of the PSUs earned depends on our share price at the time of payment. PSUs represent 37% of the CEO's target total direct compensation and 30%, on average, for the other NEOs.
Stock Options / Restricted Stock Units ("RSUs")	Aligns the interests of the NEOs and shareholders. Awards provide a balance between performance and retention. Awards are subject to a claw-back in the event of a financial restatement.	Stock options and RSUs are granted annually, with stock options having an exercise price equal to the fair market value of ordinary shares on the date of grant. Both stock options and RSUs typically vest ratably over three years, at a rate of one-third per year. Stock options expire on the day immediately preceding the 10th anniversary of the grant date (unless employment terminates sooner). A balanced mix of stock options and RSUs represent 37% of the CEO's target total direct compensation and 30%, on average, for the other NEOs.

BASE SALARY

The table below reflects the base salary adjustments for the NEOs for the 2017 performance period. When determining base salary adjustments, each NEO is evaluated based on their position to the market for their job and on the results achieved and the behaviors demonstrated.

(dollar amounts annualized)	2016 (\$)	2017 (\$)	Percentage Change (%)
M. W. Lamach	1,300,000	1,350,000	3.8%
S. K. Carter	695,000	720,000	3.6%
D. Regnery ⁽¹⁾	500,000	700,000	40%
M. J. Avedon	600,000	625,000	4.2%
M. C. Green	525,000	550,000	4.8%
D. P. M. Teirlinck	700,000	725,000	3.6%
R. G. Zafari	570,000	590,000	3.5%

(1) Mr. Regnery was promoted on September 5, 2017 to the position of Executive Vice President. The percentage change shown above represents a 4+% increase he received in April 2017 as part of the regular merit cycle as well as a 35+% increase at the time of his promotion.

ANNUAL INCENTIVE MATRIX ("AIM")

The AIM program is an annual cash incentive program designed to reward NEOs for Revenue growth, increases in Operating Income, the delivery of strong Cash Flow and individual contributions to the Company. We believe that our AIM design provides participants with clarity as to how they can earn a cash incentive based on strong performance relative to each metric. The Committee establishes a target award for each NEO that is expressed as a percentage of base salary. Individual AIM payouts are calculated as the product of a financial performance score and an individual performance score, both of which are based on achievement relative to pre-established performance objectives adopted by the Committee. Individual AIM awards are calculated by multiplying individual AIM targets by an AIM Payout Percentage calculated as illustrated below:

Financial Score: Core Financial Metrics 1/3 Revenue 1/3 Operating Income 1/3 Cash Flow	x	Multiplier Operating Margin Percent	=	Adjusted Financial Score (0% to 200%) Financial Score x Multiplier	x	Individual Performance Score (0% to 150%) Performance against Individual Objectives	=	AIM Payout Percentage (0% to 200%) Adjusted Financial Score x Individual Performance Score
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Regardless of performance, AIM payouts for a NEO cannot exceed an established percentage of Operating Income from continuing operations. See discussion of the Senior Executive Performance Plan ("SEPP").

Financial Performance

AIM incentive opportunity is tied to pre-established goals for three equally-weighted performance metrics ("Core Financial Metrics"): Revenue, Operating Income, and Cash Flow. These metrics align with the Company's objectives to profitably grow the businesses, and improve margins through operational efficiency. Threshold performance for each metric must be achieved in order for any incentive to be payable for that metric. The financial AIM payout is the sum of the calculated payout percentage for each metric, adjusted by an Operating Income Margin percentage multiplier ("Multiplier"), which can range from 85% to 115%.

The Committee retains the authority to adjust the Company's reported financial results for the impact of changes in accounting principles, extraordinary items and unusual or non-recurring gains or losses, including significant differences from the assumptions contained in the financial plan upon which the incentive targets were established. Adjustments to reported financial results are intended to better reflect an executive's actual performance results, align award payments with decisions which support the plan and strategies, avoid unintended inflation or deflation of awards due to unusual or non-recurring items in the applicable period, and emphasize the Company's preference for long-term and sustainable growth.

2017 AIM financial executive compensation performance goals for the NEOs are summarized in the following table:

	Pre-Established Financial Targets (\$ in millions) *					
	Revenue	Operating Income	Cash Flow	Payout as % of Target **	Operating Income Margin	Operating Income Margin Multiplier
Enterprise						
Threshold	\$13,019.5	\$1,524.6	\$899.8	30%	11.71%	85%
Target	\$13,704.7	\$1,694.0	\$1,124.8	100%	12.36%	100%
Maximum	\$14,389.9	\$1,863.4	\$1,349.8	200%	12.95%	115%
Climate Segment						
Threshold	\$10,288.2	\$1,442.3	\$1,371.0	30%	14.02%	85%
Target	\$10,829.7	\$1,602.6	\$1,713.8	100%	14.80%	100%
Maximum	\$11,371.2	\$1,762.9	\$2,056.6	200%	15.50%	115%
Industrial Segment						
Threshold	\$2,731.3	\$288.1	\$248.1	30%	10.55%	85%
Target	\$2,875.0	\$320.1	\$310.1	100%	11.13%	100%
Maximum	\$3,018.8	\$352.1	\$372.1	200%	11.66%	115%

* Reflects the financial goals for the Enterprise and segments to which incentive opportunity for our 2017 NEOs was tied.

** Results are interpolated between performance levels.

For 2017 AIM purposes, Mr. Lamach, Ms. Carter, Ms. Avedon and Ms. Green were measured on the basis of the Enterprise financial metrics. Mr. Regnery was measured on a combination of Enterprise, Segment and Commercial HVAC North America and EMEA business unit objectives. Messrs. Teirlinck and Zafari were measured based on a combination of Enterprise financial objectives (50% weighting) and their respective 2017 Segment financial objectives (50% weighting).

The table below summarizes 2017 performance relative to performance targets and corresponding 2017 AIM payout levels.

(\$ in millions)	Financial Targets	Adjusted Financial Performance	Payout as a % of Target	Aggregate Payout as % of Target	Operating Income Margin Multiplier	AIM Financial Score for 2017
Enterprise						
Revenue	\$13,704.7	\$13,985.2	141%	138.10%	95.15%	117.74% *
Operating Income	\$1,694.0	\$1,699.7	103%			
Cash Flow	\$1,124.8	\$1,282.3	170%			
Operating Income Margin	12.36%	12.15%	N/A			
Climate Segment						
Revenue	\$10,829.7	\$11,030.8	137%	106.36%	92.50%	94.60% *
Operating Income	\$1,602.6	\$1,589.5	94%			
Cash Flow	\$1,713.8	\$1,653.3	88%			
Operating Income Margin	14.80%	14.41%	N/A			
Industrial Segment						
Revenue	\$2,875.0	\$2,954.4	155%	185.07%	115.00%	186.78% *
Operating Income	\$320.1	\$366.6	200%			
Cash Flow	\$310.1	\$459.1	200%			
Operating Income Margin	11.13%	12.41%	N/A			

* Committee Discretion applied to final AIM Financial Scores – (13.66%) Enterprise; (3.78%) Climate; (13.22%) Industrial.

Individual Performance

Individual objectives are established annually and include strategic initiatives as well as financial and non-financial metrics. Each NEO is evaluated based upon actual results against established measures and our leadership competencies. At the end of the fiscal year, the CEO evaluates each NEO's overall performance against individual objectives and submits a recommendation to the Committee. The Committee evaluates the CEO's performance against individual objectives. Based on its evaluation of the CEO, and the CEO's recommendation for other NEOs, the Committee determines the individual performance score for each NEO, which can range from 0% to 150%.

In determining the individual factor for each NEO's AIM award, the Committee considered pre-established individual performance objectives, including the following:

- Execution of identified key growth initiatives and the development of strategic organizational growth capabilities.
- Successful achievement of milestones to further implement operational excellence, the business operating system, and sustainability initiatives.
- Successful integration of strategic acquisitions.
- Accomplishments to further implement the information technology strategy and system launches.
- Improvements in employee engagement, talent development, retention, and diversity.

Determination of Payout

The actual AIM payout is determined by multiplying the NEO's target award by the financial performance score and multiplying that result by the individual performance score. AIM payouts cannot exceed 200% of the target award. If the overall AIM payout score is less than 30%, no award is payable. In that event, the CEO, with approval from the Committee, may establish a discretionary pool (equal to 30% of the target payout levels) for top performers and/or other deserving employees in an amount determined to be appropriate based on their performance against objectives. Performance targets are established and results are measured against financial metrics that have been adjusted from our GAAP results as described below.

2017 AIM Revenue, Operating Income and Cash Flow performance goals were set based on 2017 financial plans that had anticipated a challenging year. As the year progressed, the Company experienced business conditions that were generally more favorable than anticipated, and as a result, the Committee used its discretion to adjust performance results for these three metrics downward. In addition, the 2017 financial plans were set using foreign exchange rates ("FX") in effect at the time that the plans were established as well as projected FX rates over the course of 2017. During the year, there was an unanticipated and unintended favorable impact on business results and AIM payout levels to plan. The Committee used its discretion to adjust performance results to reflect exchange rates used in setting 2017 performance goals. This resulted in downward adjustments to Operating Income and Cash Flow (Revenue is adjusted through the plan design). In addition, certain businesses significantly underspent their 2017 Capital Expenditures budget resulting in overly favorable Cash Flow and to a lesser degree Operating Income performance. The Committee again used their discretion to adjust performance results for both these metrics accordingly. The result of these downward adjustments was a lower AIM payout.

The Committee also approved adjustments to 2017 performance results for AIM purposes at the enterprise and segment levels to a) offset the impact of costs associated with acquisition and divestiture activity and b) exclude unplanned costs associated with natural disasters in order to bring facilities back to normal operations and provide support to employees. These events and related financial impact had not been contemplated when the 2017 performance goals and plans were determined. In addition, the financial impact of certain contracts were excluded from 2017 performance results as those contracts had been excluded from 2017 goals when they were established.

All of the above financial adjustments were also reviewed with the Audit Committee prior to approval by the Compensation Committee.

The Committee approved the following AIM awards for NEOs based on achieving both the 2017 financial and individual objectives:

Name	AIM Target	AIM Financial Score for 2017	Individual Performance Score	AIM Award for 2017
M. W. Lamach	160% of \$1,350,000	117.74%	105%	\$2,670,000
S. K. Carter	100% of \$720,000	117.74%	100%	\$847,728
D. S. Regnery	\$507,814 ⁽¹⁾	99.74%	100%	\$506,493
M. J. Avedon	85% of \$625,000	117.74%	105%	\$656,768
M. C. Green	80% of \$550,000	117.74%	100%	\$518,056
D. P. M. Teirlinck	95% of \$725,000	106.17%	100%	\$731,246
R. G. Zafari	85% of \$590,000	152.26%	100%	\$763,584

(1) Mr. Regnery's AIM target was prorated to reflect time in both his prior position and current position during 2017.

LONG-TERM INCENTIVE PROGRAM ("LTI")

Our long-term incentive program is comprised of stock options, RSUs and PSUs. This mix of equity-based awards aligns the executives' interests with the interests of our shareholders from the perspectives of stock price appreciation and relative performance. This approach enables us to develop and implement long-term strategies that we believe are in the best interest of shareholders.

Stock Options/Restricted Stock Units

We grant our NEOs an equal mix of stock options and RSUs. Our Committee believes that this mix provides an effective balance between performance and retention for our NEOs and conserves share usage under our incentive stock plan. Stock options are considered "at risk" since there is no value unless the stock price appreciates during the term of the option period. RSUs, on the other hand, provide stronger retentive value because they have value even if our stock price does not grow during the restricted period. Our Committee annually reviews our equity mix and grant policies to ensure they are aligned with our pay for performance philosophy, our executive compensation objectives and the interests of our shareholders.

Stock option and RSU targets are expressed in dollars. The dollar target is converted to a number of shares based on the fair market value of the Company's shares on the date that the award is granted.

Both stock options and RSUs generally vest ratably, one third per year, over a three year period following the grant. Dividend equivalents are accrued on outstanding RSU awards at the same time and at the same rate as dividends are paid to shareholders. Dividend equivalents on RSUs are only payable if the underlying RSU award vests. At the time of vesting, one ordinary share is issued for each RSU and any accrued dividend equivalents are paid in cash.

Performance Share Program ("PSP")

Our PSP is an equity-based incentive compensation program that provides our NEOs and other key executives with an opportunity to earn PSUs based on the Company's performance relative to the companies in the S&P 500 Industrials Index. PSUs granted through 2017 are earned over a 3-year performance period based equally on our relative EPS growth (from continuing operations) and relative TSR as compared to the companies within the S&P 500 Industrials Index. The actual number of PSUs earned for grants made in 2017 (which can range from 0% to 200% of target) is based on the following thresholds:

Ingersoll Rand's Performance Relative to the Companies within the S&P 500 Industrials Index	2017 – 2019 Measurement Period % of Target PSUs Earned *
< 25 th Percentile	0%
25 th Percentile	25%
50 th Percentile	100%
≥ 75 th Percentile	200%

* Results are interpolated between percentiles achieved.

The NEOs' PSP target awards, expressed as a dollar amount, are set in consideration of competitive long-term incentive market values for executives in our peer group with similar roles and responsibilities and our mix of long-term incentives. The dollar target is converted to share equivalent PSUs based on the fair market value of the Company's shares on the date that the award is granted. The number of PSUs earned is based on relative TSR and relative EPS growth compared to companies within the S&P 500 Industrials Index (with equal weight given to each metric).

- EPS growth is measured as the average of the annual EPS growth in each of the three years of the performance cycle. EPS provides a clear line of sight linking an executive's actions to specific business goals and the results necessary to reach those goals.
- TSR is measured as the total stock price appreciation and dividends earned during the three years of the performance cycle. To prevent an anomalous short-term change in stock price from having an inappropriate and outsized impact on payout levels, a 30-day average stock price at the beginning and ending periods is used. TSR provides a tool for measuring performance among peers.

Beginning in 2018, the number of PSUs earned is based on relative TSR and relative CROIC growth compared to companies within the S&P 500 Industrials Index (with equal weight given to each metric).

- CROIC is measured by dividing Free Cash Flow by a combination of gross fixed assets (Plant, Property & Equipment) plus Working Capital (Accounts and Notes Receivable plus Inventory less Accounts and Notes Payable).

Our Committee retains the authority and discretion to make downward adjustments to the calculated PSP award payouts or not to grant any award payout regardless of actual performance. EPS is calculated in accordance with GAAP, subject to adjustments for unusual or infrequent items; the impact of any change in accounting principles; goodwill and other intangible asset impairments; and gains or charges associated with discontinued operations or through the acquisition or divestiture of a business. As a result, expense for outstanding PSP awards is recorded using the fixed accounting method.

Dividend equivalents are accrued on outstanding PSU awards at the same time and at the same rate as dividends paid to shareholders. Dividend equivalents are only paid upon vesting of the number of PSUs actually earned and vested. Dividend equivalents are payable in cash at the time the associated PSUs are distributed unless the NEO elected to defer the PSUs into our executive deferred compensation plan, in which case the dividend equivalents are also deferred.

2017 EQUITY AWARDS

In 2017, the Committee approved the PSU, stock option and RSU awards based on its evaluation of market competitiveness and each NEO's sustained individual performance and demonstrated potential to impact future business results. The values in the table below reflect equity-based awards approved by the Committee. These values differ from the corresponding values reported in the Summary Compensation Table and the Grants of Plan-Based Awards Table due to different methodologies used in assigning the economic value of equity-based awards required for accounting and proxy statement reporting purposes. The Committee makes equity award decisions based on grant date expected value while the accounting and proxy statement values are determined in accordance with GAAP requirements. The difference between the two methodologies is most significant for the PSU awards which are earned, in part, based on TSR performance relative to the S&P 500 Industrials Index over a three-year performance period which requires valuations to take into account the expected payout distribution from 0-200% of target for accounting and proxy statement purposes.

Name	Stock Option Award (\$)	RSU Award (\$)	Target Value 2017-19 PSU Award (\$)
M. W. Lamach	2,437,500	2,437,500	4,875,000
S. K. Carter	607,500	607,500	1,215,000
D. S. Regnery ⁽¹⁾	236,250	236,250	300,000
M. J. Avedon	386,250	386,250	772,500
M. C. Green	360,000	360,000	720,000
D. P. M. Teirlinck	621,250	621,250	1,242,500
R. G. Zafari	340,000	340,000	680,000

(1) Mr. Regnery was granted additional equity on October 3, 2017 as part of his promotion to Executive Vice President. He was granted an RSU Award valued at \$1,000,000 and a PSU Award for the 2018-2020 performance period valued at \$1,000,000.

2015 – 2017 PERFORMANCE SHARE UNITS PAYOUT

As discussed above, PSUs for the three-year 2015 - 2017 performance period were earned based on the Company's EPS growth (from continuing operations) and TSR performance relative to all of the companies in the S&P 500 Industrials Index.

- EPS growth is measured as the average of the annual EPS growth in each of the three years of the performance cycle. The rate of EPS growth was 16.35% for the 2015 to 2017 period, which ranked at the 95th percentile of the companies in the S&P 500 Industrials Index.
- TSR is measured as the total stock price appreciation plus dividends earned during the three years of the performance cycle. To account for stock price volatility, a 30-day average stock price at the beginning and ending periods is used. TSR was 44.71% for the 2015 to 2017 period, which ranked at the 52nd percentile of the companies in the S&P 500 Industrials Index.

PSUs for the 2015 to 2017 performance cycle achieved 153.5% of target levels as summarized in the table below.

Performance Metric	Ingersoll Rand Performance	Percentile Rank	Metric Payout	Weighting	Payout Level
Relative EPS Growth	16.35%	95 th	200%	50%	100%
Relative TSR	44.71%	52 nd	107%	50%	53.5%
Total Award Payout Percentage:					153.5%

2018 COMPENSATION DECISIONS

The Committee annually reviews the total direct compensation for each NEO and, using its discretion based on its compensation philosophy and design principles, may revise such compensation. For 2018, the Committee has set the base salary and target AIM award for each NEO as follows:

Name ⁽¹⁾	Base Salary (\$)	Change From 2017	Target AIM Award
M. W. Lamach	1,350,000	N/A	160%
S. K. Carter	740,000	2.8%	100%
D. S. Regnery	740,000	5.7%	100%
M. J. Avedon	650,000	4.0%	85%
M. C. Green	570,000	3.6%	80%
D. P. M. Teirlinck	725,000	N/A	95%

(1) Mr. Zafari retired in January of 2018.

The Committee and the Company have been considering using a return based metric in the PSP for the last several years. In February of 2018, our Committee approved the replacement of EPS with CROIC in our PSP program. Therefore, for PSP awards granted in 2018, relative TSR and CROIC will be the two metrics used, with each metric weighted equally. CROIC is considered a reliable return-based performance metric because it excludes non-revenue generated assets (e.g. Goodwill and Intangible Assets) and focuses PSU performance on the balance sheet and returns generated from revenue-generating assets. In addition, CROIC is not significantly impacted by company-specific capital structures, making it a comparable metric across companies in a peer group.

The Committee established the following target long-term incentives including PSU awards for the 2018 - 2020 performance period and granted the following stock option and RSU awards for each NEO in 2018:

Name ⁽¹⁾	Target 2018 Long-Term Incentive Value (\$) ⁽²⁾	Shares Underlying Stock Option Awards (#) ⁽³⁾	RSU Shares (#) ⁽⁴⁾	Target 2018-20 PSU Shares (#) ^{(4) (5)}
M. W. Lamach	9,750,000	166,383	27,063	54,125
S. K. Carter	2,680,000	45,734	7,439	14,878
D. S. Regnery	2,000,000	34,130	5,552	11,103
M. J. Avedon	1,680,000	28,669	4,664	9,327
M. C. Green	1,480,000	25,256	4,108	8,216
D. P. M. Teirlinck	2,485,000	42,407	6,898	13,795

(1) Mr. Zafari retired in January 2018.

(2) The target long-term incentive value is delivered 25% in stock options, 25% in RSUs and 50% in PSUs. These target values reflect increases made in 2018 to better reflect the particular executive's value to the Company and in the marketplace.

(3) The number of stock options was determined based on the Black-Scholes ratio on December 31, 2017 and the fair market value of our ordinary shares on the date of grant.

(4) The number of RSUs and target PSUs were determined using the fair market value of our ordinary shares on the date of grant.

(5) Beginning with the 2018 awards, PSUs are earned based on relative TSR and relative CROIC (both metrics will have an equal weighting of 50% each).

VI. OTHER COMPENSATION AND TAX MATTERS

RETIREMENT PROGRAMS AND OTHER BENEFITS

We maintain qualified and nonqualified defined benefit pension plans for our employees, including the NEOs, to provide for fixed benefits upon retirement based on the individual's age and number of years of service. These plans include the Pension Plan, the Supplemental Pension Plans and our supplemental executive retirement plans (the Elected Officer Supplemental Pension ("EOSP") or the Key Management Supplemental Pension ("KMP") programs). Refer to the Pension Benefits table and accompanying narrative for additional details on these programs.

We offer a qualified defined contribution (401(k)) plan called the Ingersoll-Rand Company Employee Savings Plan (the “ESP”) to our salaried and non-union hourly U.S. workforce, including the NEOs. The ESP is a plan that provides a dollar-for-dollar Company match on the first six percent of the employee’s eligible compensation that the employee contributes to the ESP. The ESP has a number of investment options and is an important component of our retirement program.

We also have a nonqualified defined contribution plan. The Ingersoll-Rand Company Supplemental Employee Savings Plan (the “Supplemental ESP”) is an unfunded plan that makes up matching contributions that cannot be made to the ESP due to Internal Revenue Code limitations. Supplemental ESP balances are deemed to be invested in the funds selected by the NEOs, which are the same funds available in the ESP, except for a self-directed brokerage account, which is not available in the Supplemental ESP.

In June 2012, our Board of Directors approved significant changes to our broad-based, qualified retirement programs with the intent to move employees from a combined defined benefit/defined contribution approach to a fully defined contribution plan approach over time. Employees active prior to July 1, 2012 were given a choice between continuing to participate in the defined benefit plan until December 31, 2022, or moving to an enhanced version of the ESP effective January 1, 2013. Employees hired or rehired on or after July 1, 2012 were automatically covered under the enhanced version of the ESP. Under the enhanced version of the ESP, employees will receive a basic employer contribution equal to two percent of eligible compensation in addition to the Company’s matching contribution while ceasing to accrue benefits under the defined benefit plan (employees of our Club Car business are generally not eligible for the basic employer contribution). Effective as of December 31, 2022, accruals in the tax-qualified defined benefit plan will cease for all employees. The Committee approved corresponding changes to the applicable nonqualified defined benefit and contribution pension plans. Additional details on the changes can be found in the narrative accompanying the Pension Benefits table.

Our Ingersoll Rand Executive Deferred Compensation Plan (the “EDCP Plan I”) and the Ingersoll Rand Executive Deferred Compensation Plan II (the “EDCP Plan II” and, together with the EDCP Plan I, the “EDCP Plans”) allow eligible employees to defer receipt of a part of their annual salary, AIM award and/or PSP award in exchange for investments in ordinary shares or mutual fund investment equivalents. Refer to the Nonqualified Deferred Compensation table for additional details on the EDCP Plan.

We provide an enhanced, long-term disability plan to certain executives. The plan supplements the broad-based group plan and provides an additional monthly maximum benefit if the executive elects to purchase supplemental coverage under the group plan. It has an underlying individual policy that is portable when the executive terminates.

In light of the enactment of Section 409A of the Code as part of American Jobs Creation Act of 2004, “mirror plans” for several of our nonqualified plans, including the Ingersoll-Rand Supplemental Pension Plan (“Supplemental Pension Plan I”) and the EDCP I, were created. The mirror plans are the Ingersoll-Rand Supplemental Pension Plan II (“Supplemental Pension Plan II” and, together with the Supplemental Pension Plan I, the “Supplemental Pension Plans”) and the EDCP II. The purpose of these mirror plans is not to provide additional benefits to participants, but merely to preserve the tax treatment of the plans that were in place prior to December 31, 2004. In the case of the Supplemental Plans, the mirror plan benefits are calculated by subtracting the original benefit value to avoid double-counting the benefit. For the EDCP Plans, balances accrued through December 31, 2004 are maintained separately from balances accrued after that date.

We provide our NEOs with other benefits that we believe are consistent with prevailing market practice and those of our peer companies. These other benefits and their incremental cost to the Company are reported in “All Other Compensation” shown in the Summary Compensation Table.

SEVERANCE ARRANGEMENTS

In connection with external recruiting of certain officers, we generally enter into employment arrangements that provide for severance payments upon certain termination events, other than in the event of a change in control (which is covered by separate agreements with the officers). Mr. Lamach, Ms. Carter and Ms. Avedon have such arrangements. In 2012, we adopted a Severance Plan, amended outstanding award agreements and adopted new equity award agreements to provide certain employees, including our NEOs, with certain benefits in the event of a termination of employment without cause or for good reason under a Major Restructuring (as defined in the Post-Employment Section below). Although we do not have a formal severance policy for our executives (other than in the event of a Major Restructuring), we do have guidelines that in most cases would provide for severance in the event of termination without cause. The severance payable under employment agreements for Mr. Lamach, Ms. Carter and Ms. Avedon and the benefits available in connection with a Major Restructuring and under the severance guidelines are further described in the Post-Employment Benefits section of the proxy statement.

CHANGE-IN-CONTROL PROVISIONS

We have entered into change-in-control agreements with our NEOs. Payments are subject to a "double trigger", meaning that payments would be received only if an officer is terminated without cause or resigns for "good reason" within two years following a change in control. We provide change-in-control agreements to our NEOs to focus them on the best interests of shareholders and assure continuity of management in circumstances that reduce or eliminate job security and might otherwise lead to accelerated departures. Our 2013 incentive stock plan provides for the accelerated vesting of outstanding stock awards in the event of a change in control of the Company only for awards issued through June 7, 2018. Outstanding PSUs would be prorated based on the target for the actual days worked during the applicable performance period. Under the proposed 2018 Stock Plan, subject to approval of the shareholders at the annual meeting to be held in June, time-based awards will only vest and become exercisable or payable, as applicable, on a change in control if they are not assumed, substituted or otherwise replaced in connection with the change in control. If the awards are assumed or continued after the change in control, the Committee may provide that such awards will be subject to automatic vesting acceleration upon a participant's involuntary termination within a designated period following the change in control. Further, under the proposed 2018 Stock Plan, PSUs will automatically vest upon a change in control of our Company, based on (a) the target level, pro-rated to reflect the period the participant was in service during the performance period or (b) the actual performance level attained, in each case, as determined by the Committee. Refer to the Post-Employment Benefits section of this proxy statement for a more detailed description of the change-in-control provisions.

TAX AND ACCOUNTING CONSIDERATIONS

Section 162(m) of the Code generally imposes a limit of \$1,000,000 on the amount that we may deduct for federal income tax purposes in any one year for compensation paid to certain of our senior executive officers, including some of our NEOs. Historically, this deduction limitation did not apply to compensation that was "performance-based" within the meaning of Section 162(m), and we have designed some of our compensation arrangements in a manner intended to allow us to utilize this performance-based exception. However, we have authorized compensation payments that may not be deductible when, in our judgment, such payments are appropriate and in the best interests of the Company, taking into consideration changing business conditions and the performance of our employees. For 2017, we considered the application of Section 162(m) in awarding compensation to our NEOs, and designed many of the variable compensation awards granted to our covered executives (e.g., AIM, PSP and stock options) in a manner intended to qualify as performance-based compensation. However, as a result of the elimination of the performance-based compensation enacted at the end of 2017, subject to certain "grandfathering" rules, beginning in 2018, the Company will no longer be permitted to take deductions for performance-based compensation payable to our executive officers covered by Section 162(m). Notwithstanding this, we plan to continue to monitor developments and assess alternatives for preserving the deductibility of compensation payments and benefits to the extent reasonably practicable in light of the changes to Section 162(m). However, as in the past, we will continue to weigh the loss of any deduction under Section 162(m) against the need to maintain compensation programs that are intended to attract and retain our senior executive officers and provide them with compensation that encourages the creation of long-term shareholder value, consistent with our compensation philosophy and make determinations that we believe are in the best interests of the Company and its shareholders.

Further, in determining our variable compensation programs, we consider other tax and accounting implications of particular forms of compensation, such as the implications of Section 409A of the Code governing deferred compensation arrangements and favorable accounting treatment afforded certain equity based plans that are settled in shares. Although we consider the tax and accounting consequences of our compensation programs, the forms of compensation we utilize are determined primarily by their effectiveness in creating maximum alignment with our key strategic objectives and the interests of our shareholders.

SENIOR EXECUTIVE PERFORMANCE PLAN ("SEPP")

The SEPP is a shareholder approved plan that funds the annual cash incentive awards that may be granted to each of the NEOs. Under the SEPP, the maximum amount of cash incentive that can be paid to the CEO is 0.6% of Consolidated Operating Income from Continuing Operations (as defined in the SEPP) and the maximum amount of cash incentive that can be paid to any other covered executive is 0.3% of Consolidated Operating Income from Continuing Operations. Our Committee generally exercises its discretion to pay less than the maximum amount to the NEOs, after considering the factors described in the AIM Program.

TIMING OF AWARDS

The Committee generally grants our regular annual equity awards after the annual earnings release. The grant date is never selected or changed to increase the value of equity awards for executives.

CLAW-BACK/RECOUPMENT POLICY

To further align the interests of our employees and our shareholders, we have a claw-back/recoupment policy to ensure that any fraud or intentional misconduct leading to a restatement of our financial statements would be properly addressed. The policy provides that if it is found that an employee committed fraud or engaged in intentional misconduct that resulted, directly or indirectly, in a need to restate our financial statements, then our Committee has the discretion to direct the Company to recover all or a portion of any cash or equity incentive compensation paid or value realized, and/or to cancel any stock-based awards or AIM award granted to an employee on or after the effective date of the policy. Our Committee may also request that the Company seek to recover any gains realized on or after the effective date of the policy for equity or cash awards made prior to that date (including AIM, stock options, PSUs and RSUs). Application of the claw-back/recoupment policy is subject to a determination by our Committee that: (i) the cash incentive or equity compensation to be recouped was calculated on, or its realized value affected by, the financial results that were subsequently restated; (ii) the cash incentive or equity award would have been less valuable than what was actually awarded or paid based on the application of the correct financial results; and (iii) the employee to whom the policy applied engaged in fraud or intentional misconduct. This policy will be revised if required under the Dodd-Frank Act if and when final regulations implementing the claw-back policy requirements of that law have been adopted.

SHARE-OWNERSHIP GUIDELINES

We impose share ownership requirements on each of our officers. These share ownership requirements are designed to emphasize share ownership by our officers and to further align their interests with our shareholders. Each officer must achieve and maintain ownership of ordinary shares or ordinary share equivalents at or above a prescribed level. The requirements are as follows:

Position	Number of Active Participants as of the Record Date	Individual Ownership Requirement (Shares and Equivalents ⁽¹⁾)
Chief Executive Officer	1	120,000
Executive Vice Presidents	1	50,000
Senior Vice Presidents	8	30,000
Corporate Vice Presidents	7	15,000

(1) When designing the 2018 Incentive Stock Plan we elected to change our ownership requirements to be more in line with market competitiveness and also to take into consideration our stock price. The Compensation Committee reserves the right to make future adjustments if there is significant appreciation or depreciation in our stock price or if market practices change. The revised requirements are shown in the table above.

Based on the closing price on the record date of \$82.76, this equates to an ownership requirement of approximately 7 times for the CEO, 6 times for the EVP, and close to 4 times for the Senior Vice Presidents. These ownership requirements have either been met or are on track to be met based on the time allowed to achieve the guidelines. Our CEO is almost at 20 times base salary, our EVP (who was just recently promoted to this position and who has five years to achieve the guideline) is at almost 5 times base salary and our SVPs who were NEOs during 2017 are at almost 10 times base salary.

Our share-ownership program requires the accumulation of ordinary shares (or ordinary share equivalents) over a five-year period following the date the person becomes subject to share-ownership requirements at the rate of 20% of the required level each year. Executives who are promoted, and who have their ownership requirement increased, have three years to achieve the new level from the date of promotion. Given the significant increase in the ownership requirement for an individual who is promoted to CEO, EVP or SVP, those individuals have five years from the date of the promotion to achieve the new level. Ownership credit is given for actual ordinary shares owned, deferred compensation that is invested in ordinary shares within our EDCP Plan, ordinary share equivalents accumulated in our qualified and nonqualified employee savings plans as well as unvested RSUs. Stock options, SARs and unvested PSUs do not count toward meeting the share-ownership target. If executives fall behind their scheduled accumulation level during their applicable accumulation period, or if they fail to maintain their required level of ownership after their applicable accumulation period, their right to exercise stock options will be limited to "buy and hold" transactions and any shares received upon the vesting of RSU and PSU awards must be held until the required ownership level is achieved. As of the Record Date, all of our executives subject to the share-ownership guidelines were in compliance with these requirements.

COMPENSATION COMMITTEE REPORT

We have reviewed and discussed with management the Compensation Discussion and Analysis contained in this Proxy Statement. Based on our review and discussion, we recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Proxy Statement as well as the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

COMPENSATION COMMITTEE

Tony L. White (Chair)

Kirk E. Arnold

John Bruton

Jared L. Cohon

Gary D. Forsee

SUMMARY OF REALIZED COMPENSATION

The table below is a summary of the compensation actually realized by our CEO for 2017, 2016 and 2015. This information is intended as a supplement to and not as a substitute for the information shown on the Summary Compensation Table. The information required to be shown on the Summary Compensation Table includes elements of compensation that may or may not actually be realized by the NEOs at a future date. We believe this table enhances our shareholders' understanding of our CEO's compensation.

Year	Salary (\$)	Performance-based Cash Compensation (\$) ⁽¹⁾	Equity Compensation (\$) ⁽²⁾	Other Compensation (\$) ⁽³⁾	Total Realized Compensation (\$)
2017	\$1,337,500	\$2,500,000	\$22,582,904	\$426,458	\$26,846,862
2016	\$1,300,000	\$2,020,000	\$17,343,821	\$369,310	\$21,033,131
2015	\$1,287,500	\$2,048,200	\$23,865,069	\$377,312	\$27,578,081

(1) Represents the AIM award paid in the applicable year and earned in the immediately previous year.

(2) Represents amount realized upon the exercise of stock options and the vesting of RSUs and PSUs, before payment of applicable withholding taxes and brokerage commissions, and includes the value of dividend equivalents paid on such awards. For 2017, this includes the following amounts from stock options exercised, RSUs vesting and PSUs earned:

	Value Realized	Total Shareholder Return ("TSR") Over the Period Outstanding *
<u>Stock Options Exercised:</u>		
February 16, 2010 Grant	\$2,520,165	TSR for 2010 - 2017 was 211%
February 14, 2011 Grant	\$6,180,343	TSR for 2011 - 2017 was 135%
<u>Restricted Stock Unit Vesting:</u>		
February 25, 2014 Grant	\$1,040,399	TSR for 2014 - 2017 was 53%
February 3, 2015 Grant	\$903,586	TSR for 2015 - 2017 was 47%
February 10, 2016 Grant	<u>\$1,289,121</u>	TSR for 2016 - 2017 was 67%
Total:	\$3,233,106	
<u>Performance Stock Units Earned:</u>		
2014-2016 Performance Period	\$10,112,585	TSR for 2014 - 2016 was 28%

* TSR calculated using closing stock price at the beginning and end of each period.

(3) Represents the amounts imputed as income under applicable IRS rules and regulations.

EXECUTIVE COMPENSATION

The following table provides summary information concerning compensation paid by the Company or accrued on behalf of our NEOs for services rendered during the years ended December 31, 2017, 2016 and 2015.

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary (\$) ^(a)	Bonus (\$)	Stock Awards (\$) ^(b)	Option Awards (\$) ^(c)	Non-Equity Incentive Plan Compensation (\$) ^(d)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$) ^(e)	All Other Compensation (\$) ^(f)	Total (\$)
M. W. Lamach Chairman and Chief Executive Officer	2017	1,337,500	–	8,099,505	2,432,076	2,670,000	3,696,297	562,498	18,797,876
	2016	1,300,000	–	7,445,074	2,280,485	2,500,000	2,355,506	491,249	16,372,314
	2015	1,287,500	–	7,860,622	2,241,176	2,020,000	3,390,703	481,598	17,281,599
S. K. Carter Senior Vice President and Chief Financial Officer	2017	713,750	–	2,018,720	606,157	847,728	463,244	160,707	4,810,306
	2016	690,000	–	1,567,450	480,108	817,862	297,243	147,270	3,999,933
	2015	669,750	–	1,657,199	472,474	686,887	270,747	143,413	3,900,470
D. S. Regnery Executive Vice President	2017	573,571	–	2,712,014	235,724	506,493	1,457,972	118,477	5,604,251
M. J. Avedon Senior Vice President, Human Resources, Communications and Corporate Affairs	2017	618,750	–	1,283,512	385,392	656,768	750,984	114,669	3,810,075
	2016	593,750	–	940,470	288,068	600,158	612,582	101,691	3,136,719
	2015	570,000	–	1,019,759	290,761	497,357	633,107	100,193	3,111,177
M. C. Green Senior Vice President and General Counsel	2017	543,750	–	1,196,270	359,211	518,056	–	136,635	2,753,922
	2016	525,000	500,000	979,656	300,066	494,248	–	80,820	2,879,790
D. P. M. Teirlinck Former Executive Vice President, Climate Segment	2017	718,750	–	2,064,386	619,880	731,246	869,706	168,622	5,172,590
	2016	696,250	–	1,449,891	444,096	814,718	861,907	158,243	4,425,105
	2015	677,500	–	1,487,163	424,016	680,801	1,132,731	135,778	4,537,989
R. G. Zafari Former Executive Vice President, Industrial Segment	2017	585,000	–	1,129,909	339,252	763,584	388,788	706,727	3,913,260
	2016	570,000	–	1,018,843	312,073	358,244	425,348	109,879	2,794,387
	2015	565,000	–	1,062,301	302,865	212,923	609,249	95,904	2,848,242

(a) Pursuant to the EDCP Plan, a portion of a participant's annual salary may be deferred into a number of investment options. In 2017, no NEOs elected to defer salary into the EDCP Plan.

- (b) The amounts in this column reflect the aggregate grant date fair value of PSU awards and any RSU awards granted for the year under Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 718 and do not reflect amounts paid to or realized by the NEOs. For a discussion of the assumptions made in determining the ASC 718 values see Note 12, "Share-Based Compensation," to the Company's consolidated financial statements contained in its 2017 Form 10-K. The ASC grant date fair value of the PSU award is spread over the number of months of service required for the grant to become non-forfeitable, disregarding any adjustments for potential forfeitures. In determining the aggregate grant date fair value of the PSU awards, the awards are valued assuming target level performance achievement. The table below includes the maximum grant date value of the 2017-2019 PSU awards for the persons listed and for Mr. Regnery the maximum grant date value of the 2017-2019 PSU award and his 2018-2020 PSU award that was granted in 2017. If the maximum level performance achievement is assumed, the aggregate grant date fair value of the PSU awards would be as follows:

Name	Maximum Grant Date Value of PSU Awards (\$)
M. W. Lamach	11,323,991
S. K. Carter	2,822,334
D. S. Regnery	2,951,298
M. J. Avedon	1,794,490
M. C. Green	1,672,460
D. P. M. Teirlinck	2,886,237
R. G. Zafari	1,579,680

- (c) The amounts in this column reflect the aggregate grant date fair value of stock option grants for financial reporting purposes for the year under ASC 718 and do not reflect amounts paid to or realized by the NEOs. For a discussion of the assumptions made in determining the ASC 718 values see Note 12, "Share-Based Compensation," to the Company's consolidated financial statements contained in its 2017 Form 10-K. Please see "2017 Grants of Plan-Based Awards" and "Outstanding Equity Awards at December 31, 2017" for additional detail.
- (d) This column reflects the amounts earned as annual awards under the AIM program. Unless deferred into the EDCP Plan, AIM program payments are made in cash. In 2017, Mr. Regnery and Ms. Green elected to defer a percentage (60% and 10% respectively) of their AIM awards into the EDCP Plan. Amounts shown in this column are not reduced to reflect deferrals of AIM awards into the EDCP Plan.
- (e) Amounts reported in this column reflect the aggregate increase in the actuarial present value of the benefits under the qualified Ingersoll Rand Pension Plan Number One (the "Pension Plan"), Supplemental Pension Plans, the KMP and EOSP, as applicable. The change in pension benefits value is attributable to the additional year of service and age, the annual AIM award and any annual salary increase. Amounts are higher for those NEOs who are older and closer to retirement than for those who are younger and further from retirement since the period over which the benefit is discounted to determine its present value for an older NEO is shorter and the impact of discounting is therefore reduced. Ms. Green does not participate in any of these plans and therefore no value is shown for her.

Other external factors, outside the influence of the plan design, also impact the values shown in this column. For all the NEOs, the amounts in this column for 2015 and 2016 were impacted by decreasing interest rates (rates for ten-year Constant Maturities for US Treasury Securities), which caused the value of the lump sum distributions under the EOSP and the KMP to increase. In addition, beginning in 2015, amounts for all NEOs were impacted by a change to the applicable mortality table as defined by the Internal Revenue Code that is used to estimate life expectancy.

There was no above market interest earned by the NEOs in any year.

- (f) The following table summarizes the components of this column for fiscal year 2017:

Name	Company Contributions (\$) ⁽¹⁾	Company Cost for Life Insurance (\$)	Company Cost for Long Term Disability (\$)	Retiree Medical Plan (\$) ⁽²⁾	Tax Assistance (\$) ⁽³⁾	Other Benefits (\$) ⁽⁴⁾	Payment Associated With Retirement (\$) ⁽⁵⁾	Total (\$)
M. W. Lamach	230,250	3,450	1,285	–	119,975	207,538	–	562,498
S. K. Carter	122,529	3,328	2,262	–	–	32,588	–	160,707
D. S. Regnery	63,094	2,322	1,456	8,600	–	43,005	–	118,477
M. J. Avedon	73,134	2,838	1,824	–	–	36,873	–	114,669
M. C. Green	83,040	7,239	2,532	–	–	43,824	–	136,635
D. P. M. Teirlinck	92,008	5,148	2,528	–	4,094	64,844	–	168,622
R. G. Zafari	56,595	2,683	2,029	–	1,023	54,397	590,000	706,727

(1) Represents Company contributions under the Company's ESP and Supplemental ESP plans.

(2) For Mr. Regnery, represents the estimated year-over-year increase in the value of the retiree medical plan, calculated based on the methods used for financial statement reporting purposes. Mr. Regnery is the only NEO eligible for the subsidized retiree medical plan upon retirement.

(3) The amount for Mr. Lamach represents tax equalization payments related to Irish taxes owed on \$315,000, which is the portion of his income that is allocated to his role as a director of the Company. Without these payments, Mr. Lamach would be subject to double taxation on this amount since he is already paying U.S. taxes on this income. The amounts for Messrs. Teirlinck and Zafari represent payments of taxes on their behalf related to Company contributions made to the Belgium social scheme.

- (4) For Mr. Lamach, this amount includes the incremental cost to the Company of personal use of the Company aircraft (whether leased or owned) by the CEO. For security and safety reasons and to maximize his availability for Company business, the Board of Directors requires the CEO to travel on Company-provided aircraft for business and personal purposes, unless commercial travel is deemed a minimal security risk by the Company. The incremental cost to the Company of personal use of the aircraft is calculated: (i) by taking the hourly average variable operating costs to the Company (including fuel, maintenance, on board catering and landing fees) multiplied by the amount of time flown for personal use in the case of leased aircraft; and (ii) by multiplying the flight time by a variable fuel charge and the average fuel price per gallon and adding any ground costs such as landing and parking fees as well as crew charges for travel expenses in the case of the Company owned aircraft. Both methodologies exclude fixed costs that do not change based on usage, such as pilots' and other employees' salaries, management fees and training, hangar and insurance expenses. We impose an annual limit of \$150,000 on the CEO's non-business use of Company-provided aircraft. For 2017, the amount for Mr. Lamach includes \$150,000 for personal use of Company-provided aircraft. Under the Company's aircraft use policy, the Compensation Committee has determined that business use includes travel that is related to the Company's business or benefits the Company, such as travel to meetings of other boards on which the CEO sits. For 2017, the amount for Mr. Lamach includes \$22,915 for such business-related travel.

These amounts also include: (i) the following incremental cost of the Company-leased cars, calculated based on the lease, insurance, fuel and maintenance costs to the Company: Mr. Lamach, \$22,196; Ms. Carter \$19,627; Mr. Regnery, \$22,288; Mr. Teirlinck, \$17,973; Mr. Zafari, \$20,397; Ms. Avedon, \$18,232; and Ms. Green, \$22,447; (ii) the following costs for financial counseling services, which may include tax preparation and estate planning services: Mr. Lamach, \$10,746; Ms. Carter \$8,950; Mr. Regnery, \$9,000; Mr. Teirlinck, \$16,666; Mr. Zafari, \$18,166; Ms. Avedon \$9,135; and Ms. Green \$7,500; (iii) the following costs for medical services provided through an on-site physician under the Executive Health Program: Mr. Lamach, \$0; Ms. Carter, \$3,985; Mr. Regnery, \$3,493; Mr. Teirlinck, \$3,503; Mr. Zafari, \$3,805; Ms. Avedon \$1,893 and Ms. Green, \$3,691; (iv) the payments of \$20,336 and \$5,083 to permit Messrs. Teirlinck and Zafari to remain covered under the Belgium social scheme and have access to the country's health plan should they return to Europe; (v) the following amount for product rebates that are available to all U.S. employees: Mr. Lamach, \$1,655 ; and (vi) amounts for spousal travel costs to Ireland in connection with the June 2017 board meeting as well as the value of certain benefits in kind received while in Ireland i.e., non-board related tours and activities, gifts, non-board meeting related local transportation and, when applicable, spousal meals: Mr. Lamach, \$26; Ms. Carter, \$26, Mr. Regnery, \$8,224; Ms. Avedon \$7,613, Ms. Green, \$10,186, Mr. Teirlinck, \$6,366 and Mr. Zafari, \$6,946.

- (5) Represents a payment made or accrued to Mr. Zafari in connection with his retirement from the company.

2017 GRANTS OF PLAN-BASED AWARDS

The following table shows all plan-based awards granted to the NEOs during fiscal 2017. This table is supplemental to the Summary Compensation Table and is intended to complement the disclosure of equity awards and grants made under non-equity incentive plans in the Summary Compensation Table.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Plan Awards			Estimated Future Payouts Under Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares of Stock or Units (#) ^(c)	All Other Option Awards: Number of Securities Underlying Options (#) ^(c)	Exercise or Base Price of Option Awards (\$/Sh) ^(d)	Grant Date Fair Value of Stock and Option Awards (\$) ^(e)
		Threshold (\$) ^(a)	Target (\$) ^(a)	Maximum (\$) ^(a)	Threshold (#) ^(b)	Target (#) ^(b)	Maximum (#) ^(b)				
M. W. Lamach											
AIM	2/7/2017	648,000	2,160,000	4,320,000	—	—	—	—	—	—	—
PSUs (2017-19)	2/7/2017	—	—	—	15,196	60,782	121,564	—	—	—	5,661,995
Options	2/7/2017	—	—	—	—	—	—	—	180,958	80.205	2,432,076
RSUs	2/7/2017	—	—	—	—	—	—	30,391	—	—	2,437,510
S. K. Carter											
AIM	2/7/2017	216,000	720,000	1,440,000	—	—	—	—	—	—	—
PSUs (2017-19)	2/7/2017	—	—	—	3,788	15,149	30,298	—	—	—	1,411,167
Options	2/7/2017	—	—	—	—	—	—	—	45,101	80.205	606,157
RSUs	2/7/2017	—	—	—	—	—	—	7,575	—	—	607,553
D. S. Regnery											
AIM	2/7/2017	152,344	507,814	1,015,628	—	—	—	—	—	—	—
PSUs (2017-19)	2/7/2017	—	—	—	936	3,741	7,482	—	—	—	348,484
PSUs (2018-20)	10/3/2017	—	—	—	2,785	11,138	22,276	—	—	—	1,127,166
Options	2/7/2017	—	—	—	—	—	—	—	17,539	80.205	235,724
RSUs	2/7/2017	—	—	—	—	—	—	2,946	—	—	236,284
RSUs	10/3/2017	—	—	—	—	—	—	11,138	—	—	1,000,081
M. J. Avedon											
AIM	2/7/2017	159,375	531,250	1,062,500	—	—	—	—	—	—	—
PSUs (2017-19)	2/7/2017	—	—	—	2,408	9,632	19,264	—	—	—	897,245
Options	2/7/2017	—	—	—	—	—	—	—	28,675	80.205	385,392
RSUs	2/7/2017	—	—	—	—	—	—	4,816	—	—	386,267
M. C. Green											
AIM	2/7/2017	132,000	440,000	880,000	—	—	—	—	—	—	—
PSUs (2017-19)	2/7/2017	—	—	—	2,245	8,977	17,954	—	—	—	836,230
Options	2/7/2017	—	—	—	—	—	—	—	26,727	80.205	359,211
RSUs	2/7/2017	—	—	—	—	—	—	4,489	—	—	360,040
D. P. M. Teirlinck											
AIM	2/7/2017	206,625	688,750	1,377,500	—	—	—	—	—	—	—
PSUs (2017-19)	2/7/2017	—	—	—	3,873	15,492	30,984	—	—	—	1,443,119
Options	2/7/2017	—	—	—	—	—	—	—	46,122	80.205	619,880
RSUs	2/7/2017	—	—	—	—	—	—	7,746	—	—	621,268
R. G. Zafari											
AIM	2/7/2017	150,450	501,500	1,003,000	—	—	—	—	—	—	—
PSUs (2017-19)	2/7/2017	—	—	—	2,120	8,479	16,958	—	—	—	789,840
Options	2/7/2017	—	—	—	—	—	—	—	25,242	80.205	339,252
RSUs	2/7/2017	—	—	—	—	—	—	4,240	—	—	340,069

(a) The target award levels established for the AIM program are established annually in February and are expressed as a percentage of the NEO's base salary. Refer to Compensation Discussion and Analysis under the heading "Annual Incentive Matrix Program" for a description of the Compensation Committee's process for establishing AIM program target award levels. The amounts reflected in the "Estimated Future Payouts Under Non-Equity Incentive Plan Awards" columns represent the threshold, target and maximum amounts for awards under the AIM program that were paid in February 2018, based on performance in 2017. Thus, the amounts shown in the "threshold," "target" and "maximum" columns reflect the range of potential payouts when the target award levels were established in February 2017 for all NEOs other than Mr. Regnery (Mr. Regnery's target award is prorated between the two positions he held in 2017). The AIM program pays \$0 for performance below threshold. The actual amounts paid pursuant to those awards are reflected in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table.

- (b) The amounts reflected in the "Estimated Future Payouts Under Equity Incentive Plan Awards" columns represent the threshold, target and maximum amounts for PSU awards. The PSP pays \$0 for performance below threshold. For a description of the Compensation Committee's process for establishing PSP target award levels and the terms of PSU awards, please refer to Compensation Discussion and Analysis under the heading "Long-Term Incentive Program" and the "Post-Employment Benefits" section below.
- (c) The amounts in these columns reflect the stock option and RSU awards. For a description of the Compensation Committee's process for determining stock option and RSU awards and the terms of such awards, see Compensation Discussion and Analysis under the heading "Long-Term Incentive Program" and the "Post-Employment Benefits" section below.
- (d) Stock options were granted under the Company's Incentive Stock Plan of 2013 (the "2013 Plan"), which requires options to be granted at an exercise price equal to or greater than the fair market value of the Company's ordinary shares on the date of grant. The fair market value is defined in the 2013 Plan as the average of the high and low trading price of the Company's ordinary shares listed on the NYSE on the grant date. The closing price on the NYSE of the Company's ordinary shares was \$79.85 on the February 2017 grant date.
- (e) Amounts in this column include the grant date fair value of the equity awards calculated in accordance with ASC 718. The Company cautions that the actual amount ultimately realized by each NEO from the stock option awards will likely vary based on a number of factors, including stock price fluctuations, differences from the valuation assumptions used and timing of exercise or applicable vesting. For a description of the assumptions made in valuing the equity awards see Note 12, "Share-Based Compensation" to the Company's consolidated financial statements contained in its 2017 Form 10-K. For PSUs, the grant date fair value has been determined based on achievement of target level performance, which is the performance threshold the Company believes is the most likely to be achieved under the grants.

OUTSTANDING EQUITY AWARDS AT DECEMBER 31, 2017

Name	Grant Date	Option Awards				Stock Awards			
		Number of Securities Underlying Unexercised Options (#)	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date (b)	Number of Shares or Units of Stock that have Not Vested (#) (c)	Market Value of Shares or Units of Stock that have Not Vested (\$) (d)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights that have Not Vested (#) (e)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights that have Not Vested (\$) (d)
M. W. Lamach	2/14/2011	65,351	–	37.7420	2/13/2021	–	–	–	–
	2/24/2012	41,351	–	32.4643	2/23/2022	–	–	–	–
	2/24/2012	103,806	–	32.4256	2/23/2022	–	–	–	–
	2/22/2013	166,407	–	41.9062	2/21/2023	–	–	–	–
	2/25/2014	146,733	–	59.8250	2/24/2024	–	–	–	–
	2/3/2015	105,666	52,833	67.0550	2/2/2025	11,496	1,025,328	68,974	6,151,791
	2/10/2016	80,782	161,565	50.0025	2/9/2026	31,666	2,824,291	94,996	8,472,693
	2/7/2017	–	180,958	80.2050	2/6/2027	30,391	2,710,573	60,782	5,421,147
S. K. Carter	10/1/2013	4,016	–	51.9167	9/30/2023	–	–	–	–
	2/25/2014	30,140	–	59.8250	2/24/2024	–	–	–	–
	2/3/2015	22,276	11,138	67.0550	2/2/2025	2,424	216,197	14,541	1,296,912
	2/10/2016	17,007	34,014	50.0025	2/9/2026	6,667	594,630	20,000	1,783,800
	2/7/2017	–	45,101	80.2050	2/6/2027	7,575	675,614	15,149	1,351,139
D. S. Regnery	2/16/2010	12,098	–	25.2192	2/15/2020	–	–	–	–
	2/14/2011	3,068	–	37.7116	2/13/2021	–	–	–	–
	2/14/2011	4,889	–	37.7420	2/13/2021	–	–	–	–
	2/24/2012	7,613	–	32.4256	2/23/2022	–	–	–	–
	2/24/2012	3,032	–	32.4643	2/23/2022	–	–	–	–
	2/22/2013	11,045	–	41.9062	2/21/2023	–	–	–	–
	2/25/2014	11,422	–	59.8250	2/24/2024	–	–	–	–
	2/3/2015	9,140	4,570	67.0550	2/2/2025	995	88,744	3,788	337,852
	2/10/2016	7,653	15,307	50.0025	2/9/2026	3,000	267,570	6,000	535,140
	2/7/2017	–	17,539	80.2050	2/6/2027	2,946	262,754	3,741	333,660
	10/3/2017	–	–	–	–	11,138	993,398	11,138	993,398
M. J. Avedon	2/22/2013	10,460	–	41.9062	2/21/2023	–	–	–	–
	2/25/2014	17,450	–	59.8250	2/24/2024	–	–	–	–
	2/3/2015	13,708	6,855	67.0550	2/2/2025	1,492	133,071	8,948	798,072
	2/10/2016	10,204	20,409	50.0025	2/9/2026	4,000	356,760	12,000	1,070,280
	2/7/2017	–	28,675	80.2050	2/6/2027	4,816	429,539	9,632	859,078
M. C. Green	12/3/2015	14,620	7,310	57.6350	12/2/2025	1,938	172,850	7,201	642,257
	2/10/2016	10,629	21,259	50.0025	2/9/2026	4,167	371,655	12,500	1,114,875
	2/7/2017	–	26,727	80.2050	2/6/2027	4,489	400,374	8,977	800,659

Name	Grant Date	Option Awards				Stock Awards			
		Number of Securities Underlying Unexercised Options (#)	Number of Securities Underlying Unexercised Options (#)	Option Exercise Price (\$)	Option Expiration Date (b)	Number of Shares or Units of Stock that have Not Vested (c)	Market Value of Shares or Units of Stock that have Not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Rights that have Not Vested (e)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Rights that have Not Vested (\$)
D. P. M. Teirlinck	2/3/2015	–	9,996	67.0550	2/2/2025	2,175	193,988	13,049	1,163,840
	2/10/2016	–	31,463	50.0025	2/9/2026	6,167	550,035	18,500	1,650,015
	2/7/2017	–	46,122	80.2050	2/6/2027	7,746	690,866	15,492	1,381,731
R. G. Zafari	2/22/2013	8,157	–	41.9062	2/21/2023	–	–	–	–
	2/25/2014	19,036	–	59.8250	2/24/2024	–	–	–	–
	2/3/2015	14,279	7,140	67.0550	2/2/2025	1,554	138,601	9,321	831,340
	2/10/2016	11,054	22,110	50.0025	2/9/2026	4,334	386,549	13,000	1,159,470
	2/7/2017	–	25,242	80.2050	2/6/2027	4,240	378,166	8,479	756,242

(a) These columns represent stock option awards. Except as noted in the following sentence, these awards generally become exercisable in three equal annual installments beginning on the first anniversary after the date of grant, subject to continued employment or retirement. Ms. Carter's option grant dated October 1, 2013 vested and became exercisable on the 3rd anniversary of the grant date.

(b) All of the options granted to the NEOs expire on the tenth anniversary (less one day) of the grant date.

(c) This column represents unvested RSUs. Except as noted in the following sentence, RSUs generally become exercisable in three equal annual installments beginning on the first anniversary after the date of grant, subject to continued employment or retirement. Mr. Regnery's RSU grant dated October 3, 2017 will vest and become exercisable on the 3rd anniversary of the grant date.

(d) The market value was computed based on \$89.19, the closing market price of the Company's ordinary shares on the NYSE at December 31, 2017.

(e) This column represents the target number of unvested and unearned PSUs. PSUs vest upon the completion of a three-year performance period. The actual number of shares an NEO will receive, if any, is subject to achievement of the performance goals as certified by the Compensation Committee, and continued employment.

2017 OPTION EXERCISES AND STOCK VESTED

The following table provides information regarding the amounts received by each NEO upon exercise of stock options, the vesting of RSUs or the vesting of PSUs during the fiscal year ended December 31, 2017:

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
M. W. Lamach (b)	213,083	8,700,508	165,454	13,345,690
S. K. Carter (b)	–	–	34,130	2,752,894
D. S. Regnery (b)	8,283	483,650	9,997	806,096
M. J. Avedon (b)	50,340	2,589,439	19,919	1,606,521
M. C. Green (c)	–	–	9,925	813,722
D. P. M. Teirlinck (b)	61,896	1,643,723	29,899	2,411,626
R. G. Zafari (d)(e)	13,000	718,138	20,016	1,614,331

(a) This column reflects the aggregate dollar amount realized by the NEO upon the exercise of the stock options by determining the difference between the market price of the Company's ordinary shares at exercise and the exercise price of the stock options.

(b) Reflects the value of the RSUs that vested on February 3, 2017, February 10, 2017 and February 25, 2017 and PSUs that vested on February 24, 2017, based on the average of the high and low stock price of the Company's ordinary shares on the vesting date.

(c) Reflects the value of the RSUs that vested on February 10, 2017 and December 3, 2017 and PSUs that vested on February 24, 2017, based on the average of the high and low stock price of the Company's ordinary shares on the vesting date.

(d) Reflects the value of the RSUs that vested on February 3, 2017, February 10, 2017 and February 25, 2017 and PSUs that vested on February 24, 2017 (other than with respect to shares that were deferred as described in footnote (e) below), based on the average of the high and low stock price of the Company's ordinary shares on the vesting date.

(e) Mr. Zafari elected to defer a portion of the shares acquired upon the vesting of his PSU award on February 24, 2017 into the Company's EDCP II. Mr. Zafari deferred 1,625 shares having a value of \$131,211. Mr. Zafari's cash dividends of \$5,720.00 that had accrued on the PSU award were also deferred under the EDCP II. Please see "2017 Nonqualified Deferred Compensation" for more information about the terms of the Company's EDCP Plans.

2017 PENSION BENEFITS

The NEOs, with the exception of Ms. Green, participate in one or more, but not in all, of the following defined benefit plans:

- the Pension Plan;
- the Supplemental Pension Plans; and
- the EOSP or the KMP.

The Pension Plan is a funded, tax qualified, non-contributory (for all but a small subset of participants) defined benefit plan that covers the majority of the Company's salaried and non-union hourly U.S. employees who were hired or re-hired prior to June 30, 2012. The Pension Plan provides for normal retirement at age 65. The formula to determine the lump sum benefit under the Pension Plan is: 5% of final average pay (the five consecutive years with the highest compensation out of the last ten years of eligible compensation) multiplied by years of credited service (as defined in the Pension Plan). A choice for distribution between an annuity and a lump sum option is available. The Pension Plan was closed to new participants after June 30, 2012 and no further benefits will accrue to any Pension Plan participant for service performed after December 31, 2022. In addition, any employee who was a Pension Plan participant on June 30, 2012 was provided the option to waive participation in the Pension Plan effective January 1, 2013, and, in lieu of participation in the Pension Plan, receive an annual non-elective employer contribution equal to 2% of eligible compensation in the ESP.

The Supplemental Pension Plans are unfunded, nonqualified, non-contributory defined benefit restoration plans. The Supplemental Pension Plans restore what is lost in the Pension Plan due to limitations under the Internal Revenue Code (the "Code") on the annual compensation and benefits recognized when calculating benefits under the qualified Pension Plan. The Supplemental Pension Plans cover all employees of the Company who participate in the Pension Plan and who are impacted by the Code compensation and benefits limits. A participant must meet the vesting requirements of the qualified Pension Plan to vest in benefits under the Supplemental Pension Plans. Benefits under the Supplemental Pension Plans are available only as a lump sum distribution after termination and paid in accordance with Section 409A of the Code. As a result of the 2012 changes to the Pension Plan, the Supplemental Pension Plans were closed to employees hired on or after June 30, 2012, and no further benefits will accrue to any Supplemental Plan participant for service performed after December 31, 2022.

The EOSP, which was closed to new participants effective April 2011, is an unfunded, nonqualified, non-contributory defined benefit plan designed to replace a percentage of an officer's final average pay based on his or her age and years of service at the time of retirement. Final average pay is defined as the sum of the officer's current annual base salary plus the average of his or her three highest AIM awards during the most recent six years. No other elements of compensation (other than base salary and AIM awards) are included in final average pay. The EOSP provides a benefit pursuant to a formula in which 1.9% of an officer's final average pay is multiplied by the officer's years of service (up to a maximum of 35 years) and then reduced by the value of other retirement benefits the officer will receive from the Company under certain qualified and nonqualified retirement plans as well as Social Security. If additional years of service were granted to an officer as part of his or her employment agreement, those additional years of service are reflected in the Pension Benefits table below. Vesting occurs, while the officer is employed by the Company, at the earlier of the attainment of age 55 and the completion of 5 years of service or age 62. Unreduced benefits under the EOSP are available at age 62 and benefits are only available as a lump sum after termination and paid in accordance with Section 409A of the Code. Messrs. Lamach, Teirlinck and Zafari and Ms. Avedon participate in the EOSP.

The KMP is an unfunded, nonqualified, non-contributory defined benefit plan available to certain key management employees on a highly selective basis. The KMP is designed to replace a percentage of a key employee's final average pay based on his or her age and years of service at the time of retirement. Final average pay is defined as the sum of the key employee's current annual base salary plus the average of the employee's three highest AIM awards during the most recent six years. No other elements of compensation (other than base salary and AIM awards) are included in final average pay. The KMP provides a benefit pursuant to a formula in which 1.7% of a key employee's final average pay is multiplied by years of service (up to a maximum of 30 years) and then reduced by the value of other retirement benefits the key employee will receive that are provided by the Company under certain qualified and nonqualified retirement plans as well as Social Security. Vesting occurs at the earlier of the attainment of age 55 and the completion of 5 years of service or age 65. For employees who begin participating on or after June 2015, there is a minimum 5 year service requirement from date of participation to date of retirement. Benefits are only available as a lump sum after termination and paid in accordance with Section 409A of the Code. Ms. Carter and Mr. Regnery participate in the KMP.

The table below represents the estimated present value of defined benefits for the plans in which each NEO participates. Ms. Green does not participate in a defined benefit plan.

Name	Plan Name	Number of Years Credited Service (#) ^(a)	Present Value of Accumulated Benefit (\$) ^(b)	Payments During Last Fiscal Year (\$) ^(c)
M.W. Lamach ^(c)	Pension Plan	13.92	188,411	–
	Supplemental Pension Plan	13.92	2,076,605	–
	EOSP	31	28,226,261	–
S.K. Carter	KMP	4.33	1,229,062	–
D. S. Regnery ^(d)	Pension Plan	32.42	449,230	–
	Supplemental Pension Plan I	17.42	358,364	–
	Supplemental Pension Plan II	32.42	673,567	–
	KMP	30	5,611,511	–
M. J. Avedon ^(e)	Pension Plan	10.92	164,632	–
	Supplemental Pension Plan	10.92	442,698	–
	EOSP	11.00	4,695,354	–
D.P.M. Teirlinck ^{(f),(g)}	Pension Plan	9.33	160,956	–
	Supplemental Pension Plan	9.33	596,231	–
	EOSP	13	5,866,096	–
R. G. Zafari ^{(f),(g)}	Pension Plan	7.42	119,611	–
	Supplemental Pension Plan	7.42	265,765	–
	EOSP	17.75	5,058,413	–

(a) Under the EOSP or the KMP, for officers covered prior to May 19, 2009, a full year of service is credited for any year in which they work at least one day. In the Pension Plan, the Supplemental Pension Plans as well as the EOSP and the KMP for officers covered on or after May 19, 2009, the number of years of credited service is based on elapsed time (i.e., credit is given for each month in which a participant works at least one day). The years of credited service used for calculating benefits under all plans are the years of credited service through December 31, 2017. The years of credited service used for calculating benefits under the Supplemental Pension Plan I are the years of credited service through December 31, 2004 and the benefits earned under this plan serve as offsets to the benefits earned under the Supplemental Pension Plan II.

(b) The amounts in this column reflect the estimated present value of each NEO's accumulated benefit under the plans indicated. The calculations reflect the value of the benefits assuming that each NEO was fully vested under each plan. The benefits were computed as of December 31, 2017, consistent with the assumptions described in Note 10, "Pensions and Postretirement Benefits Other than Pensions," to the consolidated financial statements in the 2017 Form 10-K.

(c) Mr. Lamach's credited years of service exceed his actual years of service by 17 years pursuant to the provisions of his employment arrangement. Crediting additional years of service to a nonqualified pension program such as the EOSP was not uncommon in 2004 when Mr. Lamach joined the Company and was used to compensate him for benefits he was forfeiting at his prior employer. Mr. Lamach's benefit under the EOSP is reduced by the pension benefit he received from his former employer in July 2013, updated with interest. The increase in present value of benefits due to those additional years of credited service is \$16,539,511.

(d) Under the provisions of the KMP, Mr. Regnery's service is capped at 30 years.

(e) Ms. Avedon, pursuant to the provisions of her employment arrangement, receives double credit for the first five years of employment (3.8% versus 1.9%) in determining her benefit. The increase in present value of benefits due to this provision is \$1,684,458.

(f) Service in the Pension Plan and the Supplemental Pension Plan for Messrs. Teirlinck and Zafari began in September 2008 and August 2010, respectively, when they transferred to the United States.

(g) Benefits for Messrs. Teirlinck and Zafari under the EOSP use all their service with the Company, not just the service in the United States. The benefit will be reduced by any and all benefits accrued or accumulated while covered under any non-U.S. plan in respect to any period of service that is counted as a year of service in this plan. The value of these non-U.S. benefits is not readily accessible until retirement, and therefore the amount shown for EOSP reflects the value of this benefit prior to these reductions.

2017 NONQUALIFIED DEFERRED COMPENSATION

The Company's EDCP Plan is an unfunded, nonqualified plan that permit certain employees, including the NEOs, to defer receipt of up to 50% of their annual salary and up to 100% of their AIM awards, PSP awards and RSUs received upon commencement of employment. Elections to defer must be made prior to the beginning of the performance period. The Company has established a nonqualified grantor trust with a bank as the trustee to hold certain assets as a funding vehicle for the Company's obligations under the EDCP Plan. These assets are considered general assets of the Company and are available to its creditors in the event of the Company's insolvency. Amounts held in the trust are invested by the trustee using various investment vehicles.

Participants are offered certain investment options (approximately 60 mutual fund investments and ordinary share equivalents), and can choose how they wish to allocate their cash deferrals among those investment options. Participants are 100% vested in all amounts deferred, and bear the risk of any earnings and losses on such deferred amounts.

Generally, deferred amounts may be distributed following termination of employment or at the time of a scheduled in-service distribution date chosen by the participant. If a participant has completed five or more years of service at the time of termination, or is terminated due to long-term disability, death or retirement, the distribution is paid in accordance with the participant's election. If a participant terminates without meeting these requirements, the account balance for all plan years will be paid in a lump sum in the year following the year of termination. A participant can elect to receive distributions at termination over a period of 5, 10, or 15 annual installments, or in a single lump sum. A participant can elect to receive scheduled in-service distributions in future years that are at least two years after the end of the plan year for which they are deferring. In-service distributions can be received in two to five annual installments, or if no election is made, in a lump sum. For those participants who have investments in ordinary shares, the distribution of these assets will be in the form of ordinary shares, not cash.

The following table provides information regarding contributions, distributions, earnings and balances for each NEO under our nonqualified deferred compensation plans.

Name	Plan Name	Executive Contributions in Last Fiscal Year (\$) ^(a)	Registrant Contributions in Last Fiscal Year (\$) ^(b)	Aggregate Earnings in Last Fiscal Year (\$) ^(c)	Aggregate Withdrawals/Distributions (\$)	Aggregate Balance at Last Fiscal Year End (\$) ^(d)
M. W. Lamach	EDCP Plan II	—	—	975,934	—	5,584,233
	Supplemental ESP	—	214,050	322,984	—	3,080,731
S.K. Carter	Supplemental ESP	—	100,929	46,240	—	388,106
D. S. Regnery	EDCP Plan I	—	—	42,112	(57,210)	262,964
	EDCP Plan II	286,801	—	535,451	—	3,997,833
	Supplemental ESP	—	46,894	91,946	—	885,634
M. J. Avedon	EDPC Plan II	—	—	951,337	(933,378)	5,153,404
	Supplemental ESP	—	56,934	112,765	—	674,119
M. Green	EDCP Plan II	98,850	—	21,809	—	175,548
	Supplemental ESP	—	61,440	6,116	—	89,995
D. P. M. Teirlinck	EDCP Plan II	—	—	1,399,218	—	8,006,238
	Supplemental ESP	—	75,808	96,160	—	834,129
R. Gs. Zafari	EDCP Plan II	191,602	—	146,641	—	935,598
	Supplemental ESP	—	40,395	58,315	—	448,222

(a) The annual deferrals (salary, AIM & PSP) are all reflected in the Salary column, the Non-Equity Incentive Plan column and the Stock Awards column, respectively of the Summary Compensation Table.

(b) All of the amounts reflected in this column are included in the All Other Compensation column of the Summary Compensation Table.

(c) Amounts in this column include gains and losses on investments, as well as dividends on ordinary shares or ordinary share equivalents. None of the earnings or losses reported in this column are included in the Summary Compensation Table.

(d) The following table reflects the amounts reported in this column as compensation to the NEOs in the Company's Summary Compensation Table in proxy statements for prior years. Each of Messrs. Lamach, Regnery, Teirlinck and Zafari and Ms. Carter, Ms. Green and Ms. Avedon first became NEOs and therefore had their compensation reported in the Company's proxy statements beginning with fiscal years 2005 (Lamach), 2017 (Regnery), 2014 (Carter), 2010 (Teirlinck), 2012 (Zafari), 2010 (Avedon), and 2016 (Green).

Name	EDCP Plan (\$)	Supplemental ESP (\$)
M. W. Lamach	1,529,086	1,356,975
S. K. Carter	–	223,496
D. S. Regnery	–	–
M. J. Avedon	376,016	300,008
M. C. Green	151,350	20,800
D. P. M. Teirlinck	3,213,525	384,885
R. G. Zafari	635,239	227,222

POST-EMPLOYMENT BENEFITS

The following discussion describes the compensation to which each NEO would be entitled in the event of termination of such executive's employment.

EMPLOYMENT ARRANGEMENTS AND SEVERANCE NOT IN CONNECTION WITH A CHANGE IN CONTROL

Mr. Lamach, Ms. Carter and Ms. Avedon are entitled to severance in the event of their involuntary termination without cause pursuant to the terms of their employment agreements. Under the terms of his employment agreement, Mr. Lamach is eligible for 24 months of base annual salary plus a prorated AIM award earned for the year of termination as determined and paid at the conclusion of the full performance year in accordance with the terms of the AIM program. In addition, Mr. Lamach would receive prorated PSP awards (up to target) for the outstanding performance periods. These pro-rated awards would be earned based on actual performance and delivered in accordance with the terms of the PSP program. Under the terms of her employment agreement, Ms. Carter is eligible for 12 months of base salary plus a prorated AIM award (not to exceed target) earned for the year of termination as determined and paid at the conclusion of the full performance year in accordance with the terms of the AIM program. Ms. Avedon is eligible for 12 months of base salary and an AIM award equal to her target.

Although the Company does not have a formal severance policy for officers, NEOs who do not have employment agreements providing for severance and who are terminated by the Company other than for cause will generally be considered for severance benefits up to 12 months' base salary. Depending on the circumstances and timing of the termination, they may also be eligible for a pro-rated portion of their AIM award earned for the year of termination as determined and paid at the conclusion of the full performance year in accordance with the terms of the AIM program.

In addition, the Company's equity award agreements provide for the following treatment upon the occurrence of one of the specified events in the table below:

	Stocks Options	RSUs	PSUs
Retirement	Continue to vest on the same basis as active employees and remain exercisable for a period of up to five years following retirement.	Continue to vest on the same basis as active employees.	Vest pro-rata based on the time worked during the performance period and the achievement of performance goals through the end of the performance period.
Group Termination	Immediately vest in the portion of the awards that would have vested within twelve months of termination and remain exercisable for a period of up to three years following termination of employment.	Immediately vest in the portion of the awards that would have vested within twelve months of termination.	
Job Elimination	Unvested awards are forfeited and vested awards remain exercisable for a period of up to one year following termination.	Unvested awards are forfeited.	
Death or Disability	Immediately vest in unvested awards and the stock options remain exercisable for a period of up to three years following death or disability.	Immediately vest in unvested awards.	Vest pro-rata based on the time worked during the performance period and the achievement of performance goals from the beginning of the performance period through the end of the calendar quarter in which employment terminated.

In the event of a change in control or termination due to a Major Restructuring, severance would be determined pursuant to the terms of the change-in-control agreements or the Major Restructuring Severance Plan described below in lieu of severance under the terms of the employment agreements or the severance guidelines described above.

CHANGE IN CONTROL

The Company has entered into a change-in-control agreement with each NEO. The change-in-control agreement provides for certain payments if the employment is terminated by the Company without "cause" (as defined in the change-in-control agreements) or by the NEO for "good reason" (as defined in the change-in-control agreements), in each case, within two years following a change in control of the Company. For officers who first became eligible for a change-in-control agreement on or after May 19, 2009, including Ms. Carter, Mr. Regnery, Ms. Green and Mr. Zafari, the Company eliminated a severance payment based on outstanding PSP awards and eliminated a payment to cover the impact to the executive of certain incremental taxes incurred in connection with the payments made following a change in control.

Following a change in control, each NEO is entitled to continue receiving his or her current base salary and is entitled to an annual bonus in an amount not less than the highest annual bonus paid during the prior three full fiscal years.

If an NEO's employment is terminated "without cause" or by the NEO for "good reason" within two years following a change in control, the NEO is entitled to the following:

- any base salary and annual bonus for a completed fiscal year that had not been paid;
- an amount equal to the NEO's annual bonus for the last completed fiscal year pro-rated for the number of full months employed in the current fiscal year;
- an amount equal to the NEO's base salary pro-rated for any unused vacation days;

- a lump sum severance payment from the Company equal to the three times (for the CEO) or two and one-half times (for other NEOs) the sum of:
 - the NEO's annual salary in effect on the termination date, or, if higher, the annual salary in effect immediately prior to the reduction of the NEO's annual salary after the change in control; and
 - the NEO's target AIM award for the year of termination or, if higher, the average of the AIM award amounts beginning three years immediately preceding the change in control and ending on the termination date; and
 - for Messrs. Lamach and Teirlinck and Ms. Avedon, a lump sum payment equal to three times for Mr. Lamach and two and one-half times for Ms. Avedon and Mr. Teirlinck of: (a) the cash value of the target amount of the most recent PSU award; or (b) if higher, the average amounts of the last three PSU awards granted and paid to the NEO immediately preceding termination. This payment is in lieu of any rights the individual might have with respect to unvested PSU awards.

In addition to the foregoing, the NEOs would also be eligible to participate in the Company's welfare employee benefit programs for the severance period (three years for the CEO and two and one-half years for the other NEOs). For purposes of determining eligibility for applicable post-retirement welfare benefits, the NEO would be credited with any combination of additional years of service and age, not exceeding 10 years, to the extent necessary to qualify for such benefits. Mr. Regnery is the only active NEO eligible for retiree medical benefits due to his age and service as of January 1, 2003, when eligibility for the retiree medical benefit was frozen. The Company would also provide each NEO up to \$100,000 of outplacement services.

In the event of a change in control, participants in the EOSP and KMP would be immediately vested. A termination within two years following a change in control also triggers the payment of an enhanced benefit, whereby three years would be added to both age and service with the Company under the EOSP or KMP. In addition, the "final average pay" under the EOSP or KMP would be calculated as 33.33% of his or her severance benefit under the change-in-control agreement in the case of Mr. Lamach and 40% of the severance benefit under the applicable change-in-control agreement in the case of Ms. Carter, Mr. Regnery, Mr. Teirlinck, Mr. Zafari, and Ms. Avedon. These percentages reflect an annualized value of severance payments that would be provided in accordance with their respective agreements. Ms. Green does not participate in either the EOSP or KMP.

Under the Company's incentive plans, outstanding unvested stock options and RSUs immediately vest and become exercisable or payable, as applicable, following a change in control. PSUs will be deemed to have earned a pro-rata award based on the target award opportunity and total number of months worked in the applicable performance period. The proposed 2018 Incentive Stock Plan, to be voted on by shareholders in June 2018, will discontinue single-trigger vesting of equity for time-based awards granted under its terms.

A "change in control" is defined as the occurrence of any of the following events: (i) any person unrelated to the Company becomes the beneficial owner of 30% or more of the combined voting power of the Company's voting stock; (ii) the directors serving at the time the change-in-control agreements were executed (or the directors subsequently elected by the shareholders of the Company whose election or nomination was duly approved by at least two-thirds of the then serving directors) fail to constitute a majority of the Board of Directors; (iii) the consummation of a merger or consolidation of the Company with any other corporation in which the Company's voting securities outstanding immediately prior to such merger or consolidation represent 50% or less of the combined voting securities of the Company immediately after such merger or consolidation; (iv) any sale or transfer of all or substantially all of the Company's assets, other than a sale or transfer with a corporation where the Company owns at least 80% of the combined voting power of such corporation or its parent after such transfer; or (v) any other event that the continuing directors determine to be a change in control; provided however, with respect to (i), (iii) and (iv) above, there shall be no change in control if shareholders of the Company own more than 50% of the combined voting power of the voting securities of the Company or the surviving entity or any parent immediately following such transaction in substantially the same proportion to each other as prior to such transaction.

MAJOR RESTRUCTURING

The Company has adopted a Severance Plan that provides a cash severance payment in the event a participant's employment is terminated due to an involuntary loss of job without Cause (as defined in the Severance Plan) or a Good Reason (as defined in the Severance Plan), provided that the termination is substantially related to or a result of a Major Restructuring. The cash severance payment would be equal to two and one-half times (for the CEO) or two times (for other NEOs) (a) current base salary, and (b) current target AIM award. As of December 31, 2017, the value of cash severance for NEOs was: Mr. Lamach, \$8,775,000; Ms. Carter, \$2,880,000; Mr. Regnery, \$2,800,000; Mr. Teirlinck, \$2,827,500; Mr. Zafari, \$2,183,000; Ms. Avedon, \$2,312,500; and Ms. Green, \$1,980,000.

Participants would also receive a pro-rated portion of their target AIM award, based on actual Company and individual performance during the fiscal year in which termination of employment occurred. Participants in the EOSP or KMP who are not vested in such plans would also receive a cash payment equal to the amount of the benefit to which they would have been entitled if they were vested.

In addition, the Company's equity awards provide that employees who terminate employment due to an involuntary loss of job without Cause (as defined in the applicable award agreement) or for Good Reason (as defined in the applicable award agreement) within one year of completion of a Major Restructuring will, provided that the termination is substantially related to the Major Restructuring, (i) immediately vest in all unvested stock options and may exercise all vested stock options at any time within the following three-year period (five years if retirement eligible) or the remaining term of the stock option, if shorter, (ii) immediately vest in all RSUs, except that retirement eligible participants with at least five years of service would continue their existing vesting schedule, and (iii) receive a prorated payout of outstanding PSUs based on actual performance at the end of performance period. As of December 31, 2017, the value of unvested equity awards was: Mr. Lamach, \$29,295,318; Ms. Carter, \$6,407,895; Mr. Regnery, \$3,277,064; Ms. Avedon, \$3,926,599; Ms. Green, \$3,901,377; Mr. Teirlinck, \$6,028,178; Mr. Zafari, \$4,011,353.

A "Major Restructuring" is defined as a reorganization, recapitalization, extraordinary stock dividend, merger, sale, spin-off or other similar transaction or series of transactions, which individually or in the aggregate, has the effect of resulting in the elimination of all, or the majority of, any one or more of the Company's two business segments (i.e., Climate and Industrial), so long as such transaction or transactions do not constitute a Change in Control (as defined in the applicable plan).

2017 POST-EMPLOYMENT BENEFITS TABLE

The following table describes the compensation to which each of the NEOs would be entitled in the event of termination of such executive's employment on December 31, 2017, including termination following a change in control. The potential payments were determined under the terms of our plans and arrangements in effect on December 31, 2017. The table does not include the pension benefits or nonqualified deferred compensation amounts that would be paid to an NEO, which are set forth in the Pension Benefits table and the Nonqualified Deferred Compensation table above, except to the extent that the NEO is entitled to an additional benefit as a result of the termination. Mr. Zafari is excluded from the table as his termination date was January 1, 2018 and we have shown his benefit entitlements in earlier sections.

Name	Voluntary Resignation/ Retirement (\$)	Involuntary without Cause (\$)	Involuntary with Cause (\$)	Change in Control (\$)	Disability (\$)	Death (\$)
M. W. Lamach						
Severance ^(a)	–	2,700,000	–	10,618,200	–	–
Earned but Unpaid AIM Award(s) ^(b)	–	2,670,000	–	2,670,000	–	–
PSP Award Payout ^(c)	–	13,608,432	–	34,615,666	13,608,432	13,608,432
Value of Unvested Equity Awards ^(d)	–	–	–	15,686,887	15,686,887	15,686,887
Enhanced Retirement Benefits ^(e)	–	–	–	5,849,276	–	–
Outplacement ^(f)	–	11,400	–	100,000	–	–
Health Benefits ^(g)	–	–	–	25,152	–	–
Tax Assistance ^(h)	–	–	–	–	–	–
Total	–	18,989,832	–	69,565,181	29,295,319	29,295,319
S. K. Carter						
Severance ^(a)	–	720,000	–	3,612,092	–	–
Earned but Unpaid AIM Award(s) ^(b)	–	720,000	–	847,728	–	–
PSP Award Payout ^(c)	–	–	–	2,936,581	2,936,759	2,936,759
Value of Unvested Equity Awards ^(d)	–	–	–	3,471,136	3,471,136	3,471,136
Enhanced Retirement Benefits ^(e)	–	–	–	1,478,425	–	–
Outplacement ^(f)	–	11,400	–	100,000	–	–
Health Benefits ^(g)	–	–	–	21,104	–	–
Tax Assistance ^(h)	–	–	–	–	–	–
Total	–	1,451,400	–	12,467,066	6,407,895	6,407,895

Name	Voluntary Resignation/ Retirement (\$)	Involuntary without Cause (\$)	Involuntary with Cause (\$)	Change in Control (\$)	Disability (\$)	Death (\$)
D. S. Regnery						
Severance ^(a)	–	700,000	–	3,500,000	–	–
Earned but Unpaid AIM Award(s) ^(b)	–	506,493	–	506,493	–	–
PSP Award Payout ^(c)	806,010	806,010	–	805,921	806,010	806,010
Value of Unvested Equity Awards ^(d)	1,477,656	1,477,656	–	2,471,054	2,471,054	2,471,054
Enhanced Retirement Benefits ^(e)	–	–	–	3,711,183	–	–
Outplacement ^(f)	–	11,400	–	100,000	–	–
Health Benefits ^(g)	–	–	–	113,104	–	–
Tax Assistance ^(h)	–	–	–	–	–	–
Total	2,283,666	3,501,559	–	11,207,755	3,277,064	3,277,064
M. J. Avedon						
Severance ^(a)	–	625,000	–	2,890,625	–	–
Earned but Unpaid AIM Award(s) ^(b)	–	531,250	–	656,768	–	–
PSP Award Payout ^(c)	1,798,070	1,798,070	–	3,913,113	1,798,070	1,798,070
Value of Unvested Equity Awards ^(d)	2,128,529	2,128,529	–	2,128,529	2,128,529	2,128,529
Enhanced Retirement Benefits ^(e)	–	–	–	1,753,580	–	–
Outplacement ^(f)	–	11,400	–	100,000	–	–
Health Benefits ^(g)	–	–	–	21,104	–	–
Tax Assistance ^(h)	–	–	–	–	–	–
Total	3,926,599	5,094,249	–	11,463,719	3,926,599	3,926,599
M. C. Green						
Severance ^(a)	–	444,231	–	2,610,620	–	–
Earned but Unpaid AIM Award(s) ^(b)	–	440,000	–	518,056	–	–
PSP Award Payout ^(c)	1,652,602	1,652,602	–	1,652,512	1,652,602	1,652,602
Value of Unvested Equity Awards ^(d)	2,248,775	2,248,775	–	2,248,775	2,248,775	2,248,775
Enhanced Retirement Benefits ^(e)	–	–	–	–	–	–
Outplacement ^(f)	–	11,400	–	100,000	–	–
Health Benefits ^(g)	–	–	–	21,104	–	–
Tax Assistance ^(h)	–	–	–	–	–	–
Total	3,901,377	4,797,008	–	7,151,067	3,901,377	3,901,377
D. P. M. Teirlinck						
Severance ^(a)	–	725,000	–	3,714,633	–	–
Earned but Unpaid AIM Award(s) ^(b)	–	688,750	–	731,246	–	–
PSP Award Payout ^(c)	2,724,665	2,724,665	–	5,163,981	2,724,665	2,724,665
Value of Unvested Equity Awards ^(d)	3,303,513	3,303,513	–	3,303,513	3,303,513	3,303,513
Enhanced Retirement Benefits ^(e)	–	–	–	1,116,739	–	–
Outplacement ^(f)	–	11,400	–	100,000	–	–
Health Benefits ^(g)	–	–	–	21,104	–	–
Tax Assistance ^(h)	–	–	–	–	–	–
Total	6,028,178	7,453,328	–	14,151,216	6,028,178	6,028,178

(a) For the "Involuntary without Cause" column, for those NEOs who do not have a formal separation agreement, the current severance guidelines permit payment of up to one year's base salary provided that such termination was not eligible for severance benefits under the Major Restructuring Severance Plan. Because of her service, Ms. Green's severance is equal to 42 weeks rather than 52. For the amounts shown under the "Change in Control" columns, refer to the description of how severance is calculated in the section above, entitled Post-Employment Benefits. For Mr. Lamach and Ms. Avedon, severance amounts in 2017 would be reduced per the cut-back provision in their change-in-control agreement. The reduction in severance would have been \$1,613,960 for Mr. Lamach and \$65,122 for Ms. Avedon. The amounts shown above reflect the severance prior to these reductions.

- (b) For the "Involuntary without Cause" column, these amounts represent the (i) AIM award earned by Mr. Lamach, Ms. Carter and Ms. Avedon in 2017 and paid pursuant to the terms of their employment agreements and (ii) prorated AIM awards (up to target) that may be paid to the other NEOs depending on the circumstances and timing of the termination. For the amounts under "Change in Control," these amounts represent the actual award earned for the 2017 performance period, which may be more or less than the target award.
- (c) For the "Involuntary without Cause" column, these amounts represent the cash value of the prorated PSU award payout to Messrs. Lamach, Regnery, Avedon, Green and Teirlinck by existing employment agreement or because they were retirement eligible at December 31, 2017. For the "Change in Control" column for Messrs. Lamach and Teirlinck and Ms. Avedon, these amounts represent the cash value of the PSU award payout, based on the appropriate multiple. For the "Change in Control" column for Mr. Regnery, Ms. Carter and Ms. Green, these values represent what would be provided under the terms of the 2013 Plan, which provide a pro-rated payment for all outstanding awards at target. For the "Retirement," "Disability" and "Death" columns, amounts represent the cash value of the prorated portion of their PSUs that vest upon such events assuming performance at target. Amounts for each column are based on the closing stock price of the ordinary shares on December 31, 2017 (\$89.19).
- (d) The amounts shown for "Retirement," "Involuntary without Cause," "Change in Control," "Death" and "Disability" represent (i) the value of the unvested RSUs, which is calculated based on the number of unvested RSUs multiplied by the closing stock price of the ordinary shares on December 31, 2017 (\$89.19), and (ii) the intrinsic value of the unvested stock options, which is calculated based on the difference between the closing stock price of the ordinary shares on December 31, 2017 (\$89.19) and the relevant exercise price. However, only in the event of termination following a "Change in Control" or, beginning with the 2013 awards, termination due to "Death" or "Disability" is there accelerated vesting of unvested awards. For "Retirement," "Disability" (before 2013 grant) and "Death" (before 2013 grant), the awards do not accelerate but continue to vest on the same basis as active employees. Because Messrs. Regnery and Teirlinck and Ms. Avedon were retirement eligible, they would continue to vest in stock options and RSUs after termination of employment for any reason other than cause.
- (e) In the event of a change in control of the Company and termination of the NEOs, the present value of the pension benefits under the EOSP, KMP and Supplemental Pension Plan would be paid out as lump sums. While there is no additional benefit to the NEOs as a result of either voluntary retirement/resignation and/or involuntary resignation without cause, there are differences (based on the methodology mandated by the SEC) between the numbers that are shown in the Pension Benefits Table and those that would actually be payable to the NEO under these termination scenarios.
- (f) For the "Involuntary without Cause" column, each NEO is eligible for outplacement services for a twelve month period, not to exceed \$11,400. For the "Change in Control" column, the amount represents the maximum expenses the Company would reimburse the NEO for professional outplacement services.
- (g) Represents the Company cost of health and welfare coverage. The cost for "Change in Control" represents continued active coverage for the severance period. For Mr. Regnery, the value shown includes the cost for retiree coverage.
- (h) Pursuant to the change-in-control agreements for Messrs. Lamach and Teirlinck and Ms. Avedon, if any payment or distribution by the Company to these NEOs creates certain incremental taxes, they would be entitled to receive from the Company a payment in an amount sufficient to place them in the same after-tax financial position as if such taxes had not been imposed. For 2017, as a result of a cut-back provision in the change-in-control agreements, these three NEOs were not eligible for this payment, and therefore no value is shown in the table above.

CEO PAY RATIO

The ratio of our median employee's total compensation to our CEO's total compensation (the "CEO Pay Ratio") is a reasonable estimate calculated in a manner consistent with Item 402(u) of Regulation S-K. Due to the flexibility afforded by Item 402(u) in calculating the CEO Pay Ratio, the ratio may not be comparable to CEO pay ratios presented by other companies.

We identified our median employee using our global employee population as of October 31, 2017. We have employees in over 60 countries including 18,415 non-U.S. employees. As part of our methodology, and in compliance with the pay ratio rule under Item 402(u), we employed the de minimis exemption for non-U.S. employees and excluded all employees in 35 countries totaling 1,034 employees (approximately 2.4% of our total workforce of 43,277). Employees in the following countries were excluded:

Country	Number of Employees	Country	Number of Employees	Country	Number of Employees
Vietnam	101	South Africa	97	Indonesia	95
Sweden	60	Turkey	59	Russia	57
Israel	44	Panama	40	Hungary	37
Egypt	36	Slovenia	32	Romania	31
Venezuela	29	Qatar	29	Greece	28
Chile	25	Austria	23	Saudi Arabia	21
Portugal	21	Costa Rica	21	Australia	19
Peru	17	Kuwait	17	Lebanon	16
Hong Kong	16	Dominican Republic	15	Guam	14
Macao	11	Finland	7	Slovakia	6
Denmark	4	Luxembourg	3	Croatia	1
Norway	1	Ukraine	1		

As a result, the population used to identify our median employee included 42,243 of our 43,277 employees. Our in-scope employees consisted of our full-time, part-time, seasonal and temporary employees and excluded independent contractors and leased workers. As permitted under SEC rules, to determine our median employee, we used annual total direct compensation (which includes annual base pay rate, overtime, incentive/bonus, commissions and long-term incentives), as our consistently applied compensation measure. In identifying our median employee, we further annualized pay for those full-time and part-time employees (but not seasonal and temporary employees) who commenced work during 2017. We believe that annual total direct compensation encompasses all of the principal methods of compensation we use for our employees and provides a reasonable estimate of annual compensation of our employees.

After identifying the median employee, we calculated the median employee's total annual compensation in accordance with the requirements of the Summary Compensation Table. Based on such calculation, our median employee's total compensation was \$56,115, while our CEO's compensation was \$18,797,876. Accordingly, our CEO Pay Ratio was 335:1.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides information as of December 31, 2017, with respect to the Company's ordinary shares that may be issued under equity compensation plans:

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in First Column)
Equity compensation plans approved by security holders ⁽¹⁾	8,523,117	\$56.51	6,787,260
Equity compensation plans not approved by security holders ⁽²⁾	1,119,204	—	—
Total	9,642,321	\$56.51	6,787,260

(1) Consists of the 2007 Plan and the 2013 Plan.

(2) Consists of the EDCP Plans, the Ingersoll Rand Directors Deferred Compensation Plan (the "DDCP I"), the Ingersoll Rand Directors Deferred Compensation and Stock Award Plan II (the "DDCP II" and, together with the DDCP I, the "DDCP Plans"), and the Trane Deferred Compensation Plan (the "TDCP"). Plan participants acquire Company shares under these plans as a result of the deferral of salary, AIM awards and PSUs.

As of the Calculation Date (February 28, 2018), there were 969,866 awards outstanding under equity compensation plans not approved by security holders (the EDCP Plans, the DDCP Plans and the TDCP).

INFORMATION CONCERNING VOTING AND SOLICITATION

WHY DID I RECEIVE THIS PROXY STATEMENT?

We sent you this Proxy Statement or a Notice of Internet Availability of Proxy Materials ("Notice") because our Board of Directors is soliciting your proxy to vote at the Annual General Meeting. This Proxy Statement summarizes the information you need to know to vote on an informed basis.

WHY ARE THERE TWO SETS OF FINANCIAL STATEMENTS COVERING THE SAME FISCAL PERIOD?

U.S. securities laws require us to send you our 2017 Form 10-K, which includes our financial statements prepared in accordance with GAAP. These financial statements are included in the mailing of this Proxy Statement. Irish law also requires us to provide you with our Irish Financial Statements for our 2017 fiscal year, including the reports of our Directors and auditors thereon, which accounts have been prepared in accordance with Irish law. The Irish Financial Statements are available on the Company's website at www.ingersollrand.com/irishstatutoryaccounts and will be laid before the Annual General Meeting.

HOW DO I ATTEND THE ANNUAL GENERAL MEETING?

All shareholders are invited to attend the Annual General Meeting. **In order to be admitted, you must present a form of personal identification and evidence of share ownership.**

If you are a shareholder of record, evidence of share ownership will be either (1) an admission ticket, which is attached to the proxy card and must be separated from the proxy card and kept for presentation at the meeting if you vote your proxy by mail, or (2) a Notice.

If you own your shares through a bank, broker or other holder of record ("street name holders"), evidence of share ownership will be either (1) your most recent bank or brokerage account statement, or (2) a Notice. If you would rather have an admission ticket, you can obtain one in advance by mailing a written request, **along with proof of your ownership of the Company's ordinary shares**, to:

Secretary
Ingersoll-Rand plc
170/175 Lakeview Dr.
Airside Business Park
Swords, Co. Dublin
Ireland

No cameras, recording equipment, electronic devices, large bags, briefcases or packages will be permitted at the Annual General Meeting.

WHO MAY VOTE?

You are entitled to vote if you beneficially owned the Company's ordinary shares at the close of business on April 9, 2018, the Record Date. At that time, there were 247,963,902 of the Company's ordinary shares outstanding and entitled to vote. Each ordinary share that you own entitles you to one vote on all matters to be voted on a poll at the Annual General Meeting.

HOW DO I VOTE?

Shareholders of record can cast their votes by proxy by:

- using the Internet and voting at www.proxyvote.com;
- calling 1-800-690-6903 and following the telephone prompts; or
- completing, signing and returning a proxy card by mail. If you received a Notice and did not receive a proxy card, you may request one at sendmaterial@proxyvote.com.

The Notice is not a proxy card and it cannot be used to vote your shares.

If you are a shareholder of record and you choose to submit your proxy by telephone by calling the toll-free number on your proxy card, your use of that telephone system and in particular the entry of your pin number/other unique identifier, will be deemed to constitute your appointment, in writing and under hand, and for all purposes of the Companies Act 2014, of the persons named on the proxy card as your proxy to vote your shares on your behalf in accordance with your telephone instructions.

Shareholders of record may also vote their shares directly by attending the Annual General Meeting and casting their vote in person or appointing a proxy (who does not have to be a shareholder) to attend the Annual General Meeting and casting votes on their behalf in accordance with their instructions.

Street name holders must vote their shares in the manner prescribed by their bank, brokerage firm or nominee. Street name holders who wish to vote in person at the Annual General Meeting must obtain a legal proxy from their bank, brokerage firm or nominee. Street name holders will need to bring the legal proxy with them to the Annual General Meeting and hand it in with a signed ballot that is available upon request at the meeting. Street name holders will not be able to vote their shares at the Annual General Meeting without a legal proxy and a signed ballot.

Even if you plan to attend the Annual General Meeting, we recommend that you vote by proxy as described above so that your vote will be counted if you later decide not to attend the meeting.

In order to be timely processed, your vote must be received by 11:59 p.m. Eastern Time on June 6, 2018 (or, if you are a street name holder, such earlier time as your bank, brokerage firm or nominee may require).

HOW MAY EMPLOYEES VOTE UNDER OUR EMPLOYEE PLANS?

If you participate in the ESP, the Ingersoll-Rand Company Employee Savings Plan for Bargained Employees, the Ingersoll-Rand Retirement Savings Plan for Participating Affiliates in Puerto Rico, the Ingersoll-Rand Individual Account Retirement Plan for Bargaining Unit Employees at the Buffalo, New York Plant or the Trane 401(k) and Thrift Plan, then you may be receiving these materials because of shares held for you in those plans. In that case, you may use the enclosed proxy card to instruct the plan trustees of those plans how to vote your shares, or give those instructions by telephone or over the Internet. They will vote these shares in accordance with your instructions and the terms of the plan.

To allow plan administrators to properly process your vote, your voting instructions must be received by 11:59 p.m. Eastern Time on June 3, 2018.

If you do not provide voting instructions for shares held for you in any of these plans, the plan trustees will vote these shares in the same ratio as the shares for which voting instructions are provided.

MAY I REVOKE MY PROXY?

You may revoke your proxy at any time **before it is voted at the Annual General Meeting** in any of the following ways:

- by notifying the Company's Secretary in writing: c/o Ingersoll-Rand plc, 170/175 Lakeview Dr., Airside Business Park, Swords, Co. Dublin, Ireland;
- by submitting another properly signed proxy card with a later date or another Internet or telephone proxy at a later date but prior to the close of voting described above; or
- by voting in person at the Annual General Meeting.

Merely attending the Annual General Meeting does not revoke your proxy. To revoke a proxy, you must take one of the actions described above.

HOW WILL MY PROXY GET VOTED?

If your proxy is properly submitted, your proxy holder (one of the individuals named on the proxy card) will vote your shares as you have directed. If you are a street name holder, the rules of the NYSE permit your bank, brokerage firm or nominee to vote your shares on Items 3, 5, 6 and 7 (routine matters) if it does not receive instructions from you. However, your bank, brokerage firm or nominee may not vote your shares on Items 1, 2 and 4 (non-routine matters) if it does not receive instructions from you ("broker non-votes"). Broker non-votes will not be counted as votes for or against the non-routine matters, but rather will be regarded as votes withheld and will not be counted in the calculation of votes for or against the resolution.

If you are a shareholder of record and you do not specify on the proxy card you send to the Company (or when giving your proxy over the Internet or telephone) how you want to vote your shares, then the Company-designated proxy holders will vote your shares in the manner recommended by our Board of Directors on all matters presented in this Proxy Statement and as the proxy holders may determine in their discretion regarding any other matters properly presented for a vote at the meeting.

WHAT CONSTITUTES A QUORUM?

The presence (in person or by proxy) of shareholders entitled to exercise a majority of the voting power of the Company on the Record Date is necessary to constitute a quorum for the conduct of business. Abstentions and broker non-votes are treated as "shares present" for the purposes of determining whether a quorum exists.

WHAT VOTE IS REQUIRED TO APPROVE EACH PROPOSAL?

A majority of the votes cast at the Annual General Meeting is required to approve each of Items 1, 2, 3, 4 and 5. A majority of the votes cast means that the number of votes cast "for" an Item must exceed the number of votes cast "against" that Item. Items 6 and 7 are considered special resolutions under Irish law and require 75% of the votes cast for approval.

Although abstentions and broker non-votes are counted as "shares present" at the Annual General Meeting for the purpose of determining whether a quorum exists, they are not counted as votes cast either "for" or "against" the resolution and, accordingly, will not affect the outcome of the vote.

WHO PAYS THE EXPENSES OF THIS PROXY STATEMENT?

We have hired Alliance Advisors, LLC to assist in the distribution of proxy materials and the solicitation of proxies for a fee estimated at \$15,000 plus out-of-pocket expenses. Proxies will be solicited on behalf of our Board of Directors by mail, in person, by telephone and through the Internet. We will bear the cost of soliciting proxies. We will also reimburse brokers and other custodians, nominees and fiduciaries for their reasonable out-of-pocket expenses for forwarding proxy materials to the persons for whom they hold shares.

HOW WILL VOTING ON ANY OTHER MATTER BE CONDUCTED?

Although we do not know of any matters to be presented or acted upon at the Annual General Meeting other than the items described in this Proxy Statement, if any other matter is proposed and properly presented at the Annual General Meeting, the proxy holders will vote on such matters in accordance with their best judgment.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth as of the Record Date, the beneficial ownership of our ordinary shares by (i) each director of the Company, (ii) each executive officer of the Company named in the Summary Compensation Table below, and (iii) all directors and executive officers of the Company as a group:

Name	Ordinary Shares ⁽¹⁾	Notional Shares ⁽²⁾	Options Exercisable Within 60 Days ⁽³⁾
K. E. Arnold	—	—	—
A. C. Berzin	27,067	34,105	—
J. Bruton	8,509	—	—
J. L. Cohon	25,778	—	—
G. D. Forsee	27,358	—	—
L. P. Hudson	3,897	—	—
M. P. Lee	3,648	—	—
K. B. Peetz	230	—	—
J. P. Surma	8,155	—	—
R. J. Swift	3,327	63,571	—
T. L. White	26,815	48,161	—
M.W. Lamach	175,287	62,940	693,522
S.K. Carter	71,932	—	116,617
D. S. Regnery	22,598	956	88,029
M. J. Avedon	52,382	52,171	78,439
M. C. Green	16,602	—	44,787
D. P. M. Teirlinck	4	90,238	41,101
R. G. Zafari	37,116	7,746	79,135
All directors and executive officers as a group (21 persons) ⁽⁴⁾	547,811	412,861	1,196,253

(1) Represents (i) ordinary shares held directly; (ii) ordinary shares held indirectly through a trust; (iii) unvested shares, including any RSUs or PSUs, and ordinary shares and ordinary share equivalents notionally held under the Trane Deferred Compensation Plan (the "TDCP") that may vest or are distributable within 60 days of the Record Date; and (iv) ordinary shares held by the trustee under the ESP for the benefit of executive officers. No director or executive officer of the Company beneficially owns 1% or more of the Company's ordinary shares.

(2) Represents ordinary shares and ordinary share equivalents notionally held under the Ingersoll Rand Directors Deferred Compensation Plan (the "DDCP I") and the Ingersoll Rand Directors Deferred Compensation and Stock Award Plan II (the "DDCP II" and, together with the DDCP I, referred to as the "DDCP Plans"), and the EDCP Plans that are not distributable within 60 days of the Record Date.

(3) Represents ordinary shares as to which directors and executive officers had stock options exercisable within 60 days of the Record Date, under the Company's Incentive Stock Plans.

(4) The Company's ordinary shares beneficially owned by all directors and executive officers as a group (including shares issuable under exercisable options) aggregated approximately 0.70% of the total outstanding ordinary shares. Ordinary shares and ordinary share equivalents notionally held under the DDCP Plans, the EDCP Plans and the TDCP and ordinary share equivalents resulting from dividends on deferred stock awards are not counted as outstanding shares in calculating these percentages because they are not beneficially owned; the directors and executive officers have no voting or investment power with respect to these shares or share equivalents.

The following table sets forth each shareholder which is known by us to be the beneficial owner of more than 5% of the outstanding ordinary shares of the Company based solely on the information filed by such shareholder on Schedule 13D or filed by such shareholder in 2018 for the year ended December 31, 2017 on Schedule 13G under the Securities Exchange Act of 1934:

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class ⁽¹⁾
BlackRock, Inc. ⁽²⁾ 55 East 52nd Street New York, New York 10022	17,305,530	6.98%
Vanguard Group ⁽³⁾ 100 Vanguard Blvd. Malvern, PA 19355	16,703,664	6.74%

(1) The ownership percentages set forth in this column are based on the Company's outstanding ordinary shares on the Record Date and assumes that each of the beneficial owners continued to own the number of shares reflected in the table above on such date.

(2) Information regarding BlackRock, Inc. and its stockholdings was obtained from a Schedule 13G filed with the SEC on January 30, 2018. The filing indicated that, as of December 31, 2017, BlackRock, Inc. had sole voting power as to 14,679,739 of such shares and sole dispositive power as to 17,305,530 of such shares.

(3) Information regarding Vanguard Group and its stockholdings was obtained from a Schedule 13G filed with the SEC on February 8, 2018. The filing indicated that, as of December 31, 2017, Vanguard Group Inc. had sole voting power as to 355,277 of such shares and sole dispositive power as to 16,307,507 of such shares.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

The Company does not generally engage in transactions in which its executive officers, directors or nominees for directors, any of their immediate family members or any of its 5% shareholders have a material interest. Pursuant to the Company's written related person transaction policy, any such transaction must be reported to management, which will prepare a summary of the transaction and refer it to the Corporate Governance and Nominating Committee for consideration and approval by the disinterested directors. The Corporate Governance and Nominating Committee reviews the material terms of the related person transaction, including the dollar values involved, the relationships and interests of the parties to the transaction and the impact, if any, to a director's independence. The Corporate Governance and Nominating Committee only approves those transactions that are in the best interest of the Company. In addition, the Company's Code of Conduct, which sets forth standards applicable to all employees, officers and directors of the Company, generally proscribes transactions that could result in a conflict of interest for the Company. Any waiver of the Code of Conduct for any executive officer or director requires the approval of the Company's Board of Directors. Any such waiver will, to the extent required by law or the NYSE, be disclosed on the Company's website at www.ingersollrand.com or on a current report on Form 8-K. No such waivers were requested or granted in 2017.

We have not made payments to directors other than the fees to which they are entitled as directors (described under the heading "Compensation of Directors") and the reimbursement of expenses related to their services as directors. We have made no loans to any director or officer nor have we purchased any shares of the Company from any director or officer.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires our directors and officers, and persons who beneficially own more than ten percent of the Company's ordinary shares, to file reports of ownership and reports of changes in ownership with the SEC and the NYSE. To the Company's knowledge, based solely on its review of such forms received by the Company and written representations that no other reports were required, all Section 16(a) filing requirements were complied with for the year 2017.

SHAREHOLDER PROPOSALS AND NOMINATIONS

Any proposal by a shareholder intended to be presented at the 2019 Annual General Meeting of shareholders of the Company must be received by the Company at its registered office at 170/175 Lakeview Drive, Airside Business Park, Swords, Co. Dublin, Ireland, Attn: Secretary, no later than December 26, 2018, for inclusion in the proxy materials relating to that meeting. Any such proposal must meet the requirements set forth in the rules and regulations of the SEC, including Rule 14a-8, in order for such proposals to be eligible for inclusion in our 2018 proxy statement.

The Company's Articles of Association set forth procedures to be followed by shareholders who wish to nominate candidates for election to the Board of Directors in connection with Annual General Meetings of shareholders or pursuant to written shareholder consents or who wish to bring other business before a shareholders' general meeting. All such nominations must be accompanied by certain background and other information specified in the Articles of Association. In connection with the 2019 Annual General Meeting, written notice of a shareholder's intention to make such nominations or bring business before the Annual General Meeting must be given to the Secretary of the Company not later than March 9, 2019. If the date of the 2019 Annual General Meeting occurs more than 30 days before, or 60 days after, the anniversary of the 2018 Annual General Meeting, then the written notice must be provided to the Secretary of the Company not later than the seventh day after the date on which notice of such Annual General Meeting is given.

In addition, the Company's Articles of Association separately provide shareholders representing 3% or more of the voting power of the Company's shares with the right, subject to certain terms and conditions, to nominate candidates for election to the Board of Directors and have such candidate included in our proxy materials for the applicable Annual General Meeting ("proxy access"). All such nominations must be accompanied by certain background and other information specified in the Articles of Association. In connection with the 2019 Annual General Meeting, written notice of proxy access nominations must be given to the Secretary of the Company not earlier than November 26, 2018 and not later than December 26, 2018. If the date of the 2019 Annual General Meeting occurs more than 30 days before, or 60 days after, the anniversary of the 2018 Annual General Meeting, then the written notice must be provided to the Secretary of the Company not earlier than 120 days prior to the 2018 Annual General Meeting and not later than the close of business on the later of (x) the 90th day prior to the 2019 Annual General Meeting or (y) the 10th day following the day on which public announcement of the date of the 2019 Annual General Meeting is first made.

The Corporate Governance and Nominating Committee will consider all shareholder recommendations for candidates for Board membership, which should be sent to the Committee, care of the Secretary of the Company, at the address set forth above. In addition to considering candidates recommended by shareholders, the Committee considers potential candidates recommended by current directors, Company officers, employees and others. As stated in the Company's Corporate Governance Guidelines, all candidates for Board membership are selected based upon their judgment, character, achievements and experience in matters affecting business and industry. Candidates recommended by shareholders are evaluated in the same manner as director candidates identified by any other means.

In order for you to bring other business before a shareholder general meeting, timely notice must be received by the Secretary of the Company within the time limits described above. The notice must include a description of the proposed item, the reasons you believe support your position concerning the item, and other specified matters. These requirements are separate from and in addition to the requirements you must meet to have a proposal included in our Proxy Statement. The foregoing time limits also apply in determining whether notice is timely for purposes of rules adopted by the SEC relating to the exercise of discretionary voting authority.

If a shareholder wishes to communicate with the Board of Directors for any other reason, all such communications should be sent in writing, care of the Secretary of the Company, or by email at irboard@irco.com.

HOUSEHOLDING

SEC rules permit a single set of annual reports and proxy statements to be sent to any household at which two or more shareholders reside if they appear to be members of the same family. Each shareholder continues to receive a separate proxy card. This procedure is referred to as householding. While the Company does not household in mailings to its shareholders of record, a number of brokerage firms with account holders who are Company shareholders have instituted householding. In these cases, a single proxy statement and annual report will be delivered to multiple shareholders sharing an address unless contrary instructions have been received from the affected shareholders. Once a shareholder has received notice from his or her broker that the broker will be householding communications to the shareholder's address, householding will continue until the shareholder is notified otherwise or until the shareholder revokes his or her consent. If at any time a shareholder no longer wishes to participate in householding and would prefer to receive a separate proxy statement and annual report, he or she should notify his or her broker. Any shareholder can receive a copy of the Company's proxy statement and annual report by contacting the Company at its registered office at 170/175 Lakeview Drive, Airside Business Park, Swords, Co. Dublin, Ireland, Attention: Secretary or by accessing it on the Company's website at www.ingersollrand.com.

Shareholders who hold their shares through a broker or other nominee who currently receive multiple copies of the proxy statement and annual report at their address and would like to request householding of their communications should contact their broker.

Dated: April 25, 2018

Directions to the Annual General Meeting

DIRECTIONS FROM DUBLIN TO ADARE MANOR HOTEL & GOLF RESORT (3 HOURS)

- Take the N7 from Dublin to Nenagh (in Co. Tipperary).
- From Nenagh, continue along the N7 until you reach Limerick City.
- Once you reach Limerick City, look for the signs for the N21 (South Side of Limerick City), follow this road which runs through the village of Adare.
- Adare Manor Hotel & Golf Resort is on the left-hand side as you approach the village.

DIRECTIONS FROM SHANNON AIRPORT TO ADARE MANOR HOTEL & GOLF RESORT (25 MINS)

- Follow the N18 from Shannon Airport to Limerick City.
- Continue through the Limerick Tunnel, this is a Toll road, there is a charge of €1.80 for all cars.
- Leave the N18 at Junction 1 (signposted Cork)
- Continue on the N21 (signposted Tralee) to the Village of Adare.
- Adare Manor Hotel & Golf Resort is on the left-hand side as you approach the village.

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INGERSOLL-RAND PLC INCENTIVE STOCK PLAN OF 2018

1. Purpose of the Plan

The purpose of the Plan is to aid the Company and its Affiliates in recruiting and retaining key Employees and Directors and to motivate such Employees and Directors to exert their best efforts on behalf of the Company and its Affiliates by providing incentives through the granting of Awards. The Company expects that it will benefit from the added interest which such key Employees and Directors will have in the welfare of the Company as a result of their proprietary interest in the Company's success.

2. Definitions

The following capitalized terms used in the Plan have the respective meanings set forth in this Section 2, unless the context clearly indicates otherwise. The singular pronoun shall include the plural where the context so indicates.

- (a) Act: the Companies Act 2014 of Ireland.
- (b) Affiliate: With respect to the Company, any Person or entity directly or indirectly controlling, controlled by, or under common control with, the Company or any other Person or entity designated by the Board in which the Company or an Affiliate has an interest. The Board shall have the authority to determine the time or times at which "Affiliate" status is determined within the foregoing definition.
- (c) Applicable Accounting Standards: Generally Accepted Accounting Principles in the United States, International Financial Reporting Standards or such other accounting principles or standards as may apply to the Company's financial statements under United States federal securities laws from time to time.
- (d) Applicable Laws: The requirements relating to the administration of equity-based and cash-based awards, as applicable, and the related issuance of Shares under U.S. state corporate laws, U.S. federal and state and Irish or other non-U.S. corporate and securities laws, the Code, any stock exchange or quotation system on which the Shares are listed or quoted and the applicable laws of any non-U.S. country or jurisdiction where Awards are, or will be, granted under the Plan.
- (e) Associate: With respect to a specified Person, means:
 - (i) any company, corporation, partnership, or other organization of which such specified Person is an officer or partner;
 - (ii) any trust or other estate in which such specified Person has a substantial beneficial interest or as to which such specified Person serves as trustee or in a similar fiduciary capacity;
 - (iii) any relative or spouse of such specified Person, or any relative of such spouse who has the same home as such specified Person, or who is a director or officer of the Company or any of its Subsidiaries; and
 - (iv) any Person who is a director, officer, or partner of such specified Person or of any company (other than the Company or any wholly-owned Subsidiary), corporation, partnership or other entity which is an Affiliate of such specified person.
- (f) Award: An Option, an award of Restricted Shares, Restricted Share Unit, Share Appreciation Right, Other Share-Based Award or Performance-Based Award granted pursuant to the Plan.
- (g) Award Agreement: Any written agreement, contract, or other instrument or document evidencing the terms and conditions of an Award, including through electronic medium.

- (h) Beneficial Owner: A "beneficial owner", as such term is defined in Rule 13d-3 under the Exchange Act (or any successor rule thereto) provided, however, that any individual, corporation, partnership, group, association or other Person or entity which has the right to acquire any of the Company's outstanding securities entitled to vote generally in election of directors at any time in the future, whether such right is contingent or absolute, pursuant to any agreement, arrangement or understanding or upon exercise of conversion rights, warrants or options, or otherwise, shall be deemed the Beneficial Owner of such securities.
- (i) Board: The Board of Directors of the Company.
- (j) Change in Control: The date:
- (i) any individual, company, corporation, partnership, group, association or other person or entity, together with its Affiliates and Associates (other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company or Ingersoll-Rand Company, a New Jersey corporation), is or becomes the Beneficial Owner of securities of the Company representing 30% or more of the combined voting power of the Company's Voting Securities;
 - (ii) the Continuing Directors fail to constitute a majority of the members of the Board;
 - (iii) of consummation of any transaction or series of transactions under which the Company is merged or consolidated with any other company which is not an Affiliate; or
 - (iv) of any sale, lease, exchange or other transfer, in one transaction or a series of related transactions, of all, or substantially all, of the assets of the Company, other than any sale, lease, exchange or other transfer to any Person or entity where the Company owns, directly or indirectly, at least 80% of the combined voting power of the Voting Securities of such Person or entity or its parent corporation after any such transfer;
- provided, however*, that in the case of a transaction described in (i) or (iii), above, there shall not be a Change in Control if the shareholders of the Company immediately prior to any such transaction own (or continue to own by remaining outstanding or by being converted into Voting Securities of the surviving entity or parent entity) more than 50% of the combined voting power of the Voting Securities of the Company, the surviving entity or any parent of either immediately following such transaction, in substantially the same proportion to each other as prior to such transaction.
- A transaction shall not constitute a Change in Control if it is effected for the purpose of changing the place of incorporation, tax residency or form of organization of the ultimate parent entity (including where the ultimate parent entity is succeeded by an entity incorporated under the laws of another state, country or foreign government for such purpose and whether or not the former ultimate parent entity remains in existence following such transaction) and where the shareholders of the Company immediately prior to any such transaction own (or continue to own by remaining outstanding or by being converted into Voting Securities of the successor parent entity) more than 50% of the combined voting power of the former ultimate parent entity or the successor ultimate parent entity immediately following such transaction, in substantially the same proportion to each other as prior to such transaction.
- Notwithstanding the foregoing, if a Change in Control constitutes a payment event with respect to any Award (or any portion of an Award) that provides for the deferral of compensation that is subject to Section 409A of the Code, to the extent required to avoid the imposition of additional taxes under Section 409A of the Code, the transaction or event described in this Section 2(g) with respect to such Award (or portion thereof) shall only constitute a Change in Control for purposes of the payment timing of such Award if such transaction also constitutes a "change in control event," as defined in Treasury Regulation Section 1.409A-3(i)(5).
- (k) Code: The U.S. Internal Revenue Code of 1986, as amended, or any successor thereto.
- (l) Committee: The Compensation Committee of the Board (or a subcommittee thereof), or the delegate to which the Board or the Compensation Committee has delegated its authority pursuant to Section 4(a) hereof, or such other committee of the Board to which the Board has delegated power to act under or pursuant to the provisions of the Plan.
- (m) Company: Ingersoll-Rand plc, an Irish public limited company and any successor thereto.

- (n) Continuing Directors: A director who either was a member of the Board on the Effective Date or who became a member of the Board subsequent to such date and whose election, or nomination for election by the Company's shareholders, was Duly Approved by the Continuing Directors on the Board at the time of such nomination or election, either by a specific vote or by approval of the proxy statement issued by the Company on behalf of the Board in which such person is named as nominee for director, without due objection to such nomination, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of a person or entity other than the Board.
- (o) Director: A member of the Board.
- (p) Disability: Unless otherwise provided in an Award Agreement or determined by the Committee, the Participant would qualify to receive benefit payments under the long-term disability plan or policy, as it may be amended from time to time, of the Company or the Affiliate to which the Participant provides Service, regardless of whether the Participant is covered by such plan or policy, or the plan or policy of the Company, if an Affiliate does not maintain such a plan or policy. A Participant shall not be considered to have incurred a Disability unless he or she furnishes proof of such impairment sufficient to satisfy the Committee in its discretion. Notwithstanding the foregoing, for purposes of ISOs granted under the Plan, "Disability" means that the Participant is disabled within the meaning of Section 22(e)(3) of the Code. Notwithstanding the foregoing, with respect to an Award that is subject to Section 409A of the Code where the Award will be paid by reference to the Participant's Disability, solely for purposes of determining the timing of payment, no such event will constitute a Disability for purposes of the Plan or any Award Agreement unless such event also constitutes a "disability" as defined under Section 409A.
- (q) Dividend Equivalent Right: A right to receive the equivalent value of dividends paid on the Shares with respect to Shares underlying Restricted Share Units or an Other Share-Based Award that is a Full Value Award prior to vesting of the Award, subject to the additional requirements of Section 10(b) hereof. Such Dividend Equivalent Right shall be converted to cash or additional Shares, or a combination of cash and Shares, by such formula and at such time and subject to such limitations as may be determined by the Committee.
- (r) Duly Approved by the Continuing Directors: An action approved by the vote of at least two-thirds of the Continuing Directors then on the Board.
- (s) Effective Date: June 7, 2018.
- (t) Employee: A full-time or part-time employee of the Company or any Affiliate, including an officer or Director, who is treated as an employee in the personnel records of the Company or Affiliate for the relevant period. Neither services as a Director nor payment of a director's fee by the Company or an Affiliate shall be sufficient to constitute "employment" by the Company or an Affiliate.
- (u) Exchange Act: The U.S. Securities Exchange Act of 1934, as amended, or any successor thereto.
- (v) Fair Market Value: On a given date, (i) if there should be a public market for the Shares on such date, the closing price of the Shares as reported on such date on the principal national securities exchange on which such Shares are listed or admitted to trading, or, if no sale occurred on such date, the first trading date immediately prior to such date during which a sale occurred; or (ii) if the Shares are not listed or admitted on any national securities exchange but are regularly quoted on a national market or other quotation system, the arithmetic mean of the per Share closing bid price and per Share closing asked price on such date as quoted on such market or system, or, if no sale occurred on such date, then on the immediately preceding date on which sales have been so reported or quoted; or (iii) if there should not be a public market for the Shares on such date, the Fair Market Value shall be the value established by the Committee in good faith under a reasonable methodology and reasonable application in compliance with Section 409A of the Code to the extent such determination is necessary for Awards under the Plan to comply with, or be exempt from, Section 409A of the Code.

Notwithstanding the foregoing, for income tax reporting purposes under U.S. federal, state, local or non-US law and for such other purposes as the Committee deems appropriate, including, without limitation, where Fair Market Value is used in reference to exercise, vesting, settlement or payout of an Award, the Fair Market Value shall be determined by the Company in accordance with uniform and nondiscriminatory standards adopted by it from time to time.

- (w) Full Value Awards: Any Award other than an (i) Option, (ii) Share Appreciation Right or (iii) other Award for which the Participant pays (or the value or amount payable under the Award is reduced by) an amount equal to or exceeding the Fair Market Value of the Shares, determined as of the date of grant.
- (x) ISO: An Option that is also an incentive stock option granted pursuant to Section 7(e) of the Plan.
- (y) Option: An option granted pursuant to Section 7 of the Plan.
- (z) Option Price: The purchase price per Share of an Option, as determined pursuant to Section 7(b) of the Plan.
- (aa) Other Share-Based Awards: Awards granted pursuant to Section 9 of the Plan.
- (bb) Participant: An Employee or Director who is selected by the Committee to participate in the Plan.
- (cc) Performance-Based Award: A Full-Value Award that vests, in whole or in part, based on the attainment of a Performance Goal.
- (dd) Performance Criteria: The criteria that the Committee selects for purposes of establishing the Performance Goal(s) for a Participant during a Performance Period. The Performance Criteria that will be used to establish Performance Goals may include, but are not limited to, the following: (i) consolidated earnings before or after taxes (including earnings before interest, taxes, depreciation and amortization); (ii) net income; (iii) operating income; (iv) operating income margin; (v) gross margin; (vi) earnings per Share; (vii) book value per Share; (viii) return on shareholders' equity; (ix) expense management; (x) return on invested capital; (xi) improvements in capital structure; (xii) profitability of an identifiable business unit or product; (xiii) maintenance or improvement of profit margins or revenue; (xiv) Share price; (xv) market share; (xvi) revenues or sales; (xvii) costs; (xviii) available cash flow; (xix) working capital; (xx) return on assets; (xxi) total shareholder return, (xxii) productivity ratios, and (xxiii) economic value added. The Performance Criteria may be calculated in accordance with Applicable Accounting Standards or on an adjusted basis.
- (ee) Performance Goals: For a performance period, the goals established in writing by the Committee for the performance period based upon the Performance Criteria. Depending on the Performance Criteria used to establish such Performance Goals, the Performance Goals may be expressed in terms of overall Company performance, the performance of an Affiliate, the performance of a division or a business unit of the Company or an Affiliate, or the performance of an individual or team. The Performance Goals may be measured either in absolute or relative terms. The Committee, in its sole discretion, may provide that one or more adjustments shall be made to one or more of the Performance Goals.
- (ff) Performance Period: One or more periods of time, which may be of varying and overlapping durations, as the Committee may select, over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to, and the payment of, a Performance-Based Award.
- (gg) Person: A "person," as such term is used for purposes of Section 13(d) or 14(d) of the Exchange Act (or any successor section thereto), including any Affiliate or Associate of the Company.
- (hh) Plan: This Ingersoll-Rand plc Incentive Stock Plan of 2018, as from time to time amended and then in effect.
- (ii) Restricted Shares: Shares awarded to a Participant pursuant to Section 6 of the Plan that are subject to certain restrictions and may be subject to risk of forfeiture.
- (jj) Restricted Share Unit: An Award granted pursuant to Section 5 of the Plan that shall be evidenced by a bookkeeping entry representing the equivalent of one Share.
- (kk) Securities Act: The U.S. Securities Act of 1933, as amended, or any successor thereto.
- (ll) Service: Except as otherwise determined by the Committee in its sole discretion, a Participant's Service terminates when the Participant ceases to actively provide services to the Company or an Affiliate. The Committee shall determine which leaves shall count toward Service and when Service terminates for all purposes under the Plan. Further, unless otherwise determined by the Committee, a Participant's Service shall not be deemed to have terminated merely because of a change in the capacity in which the Participant provides Service to the Company or

an Affiliate, or a transfer between entities (i.e., the Company or any Affiliates), provided that there is no interruption or other termination of Service in connection with the Participant's change in capacity or transfer between entities (except as may be required to effect the change in capacity or transfer between entities). For purposes of determining whether an Option is entitled to ISO status, an Employee's Service shall be treated as terminated ninety (90) days after such Employee goes on leave, unless such Employee's right to return to active work is guaranteed by law or by a contract.

- (mm) Shares: Ordinary shares in the capital of the Company, par value US \$1.00 per Share, and such other securities of the Company that may be substituted for the Shares pursuant to Section 11 of the Plan.
- (nn) Share Appreciation Right: A share appreciation right granted pursuant to Section 8 of the Plan.
- (oo) Subsidiary: A subsidiary corporation, as defined in Section 424(f) of the Code (or any successor section thereto) or Section 7 of the Act.
- (pp) Substitute Award: An Award granted under the Plan in assumption of, or in substitution for, outstanding awards previously granted by an entity directly or indirectly acquired by the Company or with which the Company combines.
- (qq) Tax-Related Items: Any U.S. federal, state, and/or local taxes and any taxes imposed by a jurisdiction outside of the United States (including, without limitation, income tax, social insurance contributions, payment on account, employment tax obligations, stamp taxes and any other taxes required by law to be withheld and any employer tax liability for which the Participant is liable).
- (rr) Voting Securities: The outstanding securities entitled to vote generally in election of directors.

3. Shares Subject to the Plan and Limitation on Issuable Shares

(a) Number of Shares

Subject to Section 11, the total number of Shares which may be issued under the Plan is 23,000,000, and the maximum number of Shares for which ISOs may be granted is 20% of the total number of Shares which may be issued under the Plan. Except as provided below in Section 3(b) or 3(c), the number of Shares remaining available for issuance shall be reduced by the number of Shares subject to Awards that are granted hereunder. For Awards of Options and Share Appreciation Rights, each outstanding Option or Share Appreciation Right shall reduce the number of remaining of Shares under the Plan by 1 Share. For Full Value Awards, the number of remaining available Shares shall be reduced by the product of 4.64 Shares multiplied by the number of Shares subject to the Award. The Shares may consist, in whole or in part, of authorized and unissued Shares or treasury Shares or a combination thereof.

(b) Shares Reissuable Under Plan

The following Shares shall again be available for the grant of an Award pursuant to the Plan: (i) Shares that are not issued as a result of the termination, cancellation, expiration or lapsing of any Award for any reason; (ii) Shares subject to a Full Value Award that are not issued because the Award is settled in cash; (iii) Shares covered by a Full Value Award that are retained or are otherwise not issued by the Company in order to satisfy tax withholding obligations in connection with Full Value Awards.

(c) Shares Not Reissuable Under Plan

Notwithstanding the foregoing, the following Shares shall be counted against the maximum number of Shares available for issuance pursuant to Section 3(a) and shall not be returned to the Plan: (i) Shares subject to an Option or Share Appreciation Right that are retained or otherwise not issued by the Company in order to satisfy tax withholding obligations in connection with Options or Share Appreciation Rights or in payment of the exercise or purchase price of Options; (ii) Shares that are not issued or delivered as a result of the net-settlement of an outstanding Option or Share Appreciation Right; or (iii) Shares that are repurchased or redeemed on the open market with the proceeds of the exercise of an Option.

(d) Shares Not Counted Against Share Pool Reserve

Notwithstanding anything contained in Section 3 to the contrary, (i) Substitute Awards shall not reduce the overall limit on Shares available for grant under the Plan; provided, that Substitute Awards issued in connection with the assumption of, or in substitution for, outstanding options intended to qualify as ISOs shall reduce the aggregate number of Shares available for Awards of ISOs under the Plan; and (ii) subject to applicable stock exchange requirements, available shares under a shareholder approved plan of an entity directly or indirectly acquired by the Company or with which the Company combines (as appropriately adjusted to reflect the acquisition or combination transaction) may be used for Awards under the Plan and shall not reduce the number of Shares available for delivery under the Plan.

(e) Non-Employee Director Award Limit

Notwithstanding any provision to the contrary in the Plan or in any policy of the Company regarding compensation payable to a non-Employee Director, the sum of the grant date fair value (determined as of the grant date in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, or any successor thereto) of all Awards payable in Shares and the maximum amount that may become payable pursuant to all cash-based Awards that may be granted under the Plan to an individual as compensation for services as a non-Employee Director, together with cash compensation paid to the non-Employee Director, shall not exceed \$1,000,000 in any calendar year.

(f) Award Limits for Employees.

The maximum number of shares of Common Stock that may be subject to Options or Share Appreciation Awards that are granted to any Employee during any calendar year shall not exceed 750,000 Shares, subject to adjustment as provided in Section 11 hereof. The maximum amount with respect to one or more Performance-Based Awards that may be granted to any Employee during any calendar year shall not exceed \$15 million, calculated based on the Fair Market Value of the number of Shares subject to the Performance-Based Award on the date of grant.

4. Administration(a) Committee

The Plan shall be administered by the Committee, which may delegate its duties and powers in whole or in part to any subcommittee thereof consisting solely of at least two individuals who are intended to qualify as "Non-Employee Directors" within the meaning of Rule 16b-3 under the Exchange Act (or any successor rule thereto) and "independent directors" within the meaning of The New York Stock Exchange's listed company rules. Additionally, the Committee may delegate the authority to take any of the actions set forth in Section 4(b), including the authority to grant Awards under the Plan to any Employee or group of Employees of the Company or an Affiliate; provided, however, that such delegation, including to grant awards, is consistent with Applicable Laws and guidelines established by the Committee from time to time. Notwithstanding the foregoing, the full Board, acting by a majority of its members in office, shall conduct the general administration of the Plan with respect to all Awards granted to Non-Employee Directors and for purposes of such Awards the term "Committee" as used in this Plan shall be deemed to refer to the Board. In its sole discretion, the Board may at any time and from time to time exercise any and all rights and duties of the Committee under the Plan, except with respect to matters which under Rule 16b-3 under the Exchange Act or any regulations or rules issued thereunder, are required to be determined in the sole discretion of the Committee. The Committee may appoint such agents as it deems necessary or advisable for the proper administration of the Plan; provided, however, that such appointment is consistent with Applicable Laws and guidelines established by the Committee from time to time.

(b) Authority of Committee

The Committee has the exclusive power, authority and discretion to:

- (i) Designate Participants to receive Awards;
- (ii) Determine the type or types of Awards to be granted to each Participant;
- (iii) Determine the number of Awards to be granted and the number of Shares to which an Award will relate;
- (iv) Determine the terms and conditions of any Award granted pursuant to the Plan, including, without limitation, the Option Price, grant price, or purchase price, any restrictions or limitations on the Award, any schedule for lapse of forfeiture restrictions or restrictions on the exercisability of an Award, and accelerations or waivers thereof, and any provisions related to non-competition and recapture of gain on an Award, based in each case on such considerations as the Committee in its sole discretion determines;

- (v) Determine whether, to what extent, and pursuant to what circumstances (A) an Award may be settled in, or the exercise price of an Award may be paid in, cash, Shares, other Awards, or other property, (B) the vesting, exercisability or forfeiture restrictions applicable to an Award may be accelerated or waived, including, without limitation, in connection with the Participant's retirement or other termination or other event, (C) or an Award may be cancelled, forfeited, or surrendered;
 - (vi) Prescribe the form of each Award Agreement, which need not be identical for each Participant and may vary for Participants within and outside of the United States;
 - (vii) Decide all other matters that must be determined in connection with an Award;
 - (viii) Establish, adopt, or revise any rules and regulations including adopting sub-plans to the Plan for the purposes of complying with foreign laws and/or taking advantage of tax-favorable treatment for Awards granted to Participants outside the United States, as it may deem necessary or advisable to administer the Plan;
 - (ix) Interpret the terms of, and any matter arising pursuant to, the Plan or any Award Agreement;
 - (x) Correct any defect or supply any omission or reconcile any inconsistency in the Plan in the manner and to the extent the Committee deems necessary or desirable; and
 - (xi) Make all other decisions and determinations that may be required pursuant to the Plan or as the Committee deems necessary or advisable to administer the Plan.
- (c) Decisions Binding

Any decision of the Committee or its delegate pursuant to Section 4(a) hereof shall lie within its sole and absolute discretion and shall be final, conclusive and binding on all parties concerned (including, but not limited to, Participants and their beneficiaries or successors).

5. Terms and Conditions of Restricted Share Units

(a) Restricted Share Units

The Committee is authorized to grant Restricted Share Units to Participants in such amounts and subject to such terms and conditions not inconsistent with the Plan as the Committee shall impose.

(b) Vesting Restrictions

The Committee shall specify the date or dates on which the Restricted Share Units shall become fully vested and non-forfeitable, and may specify such conditions to vesting, if any, as it deems appropriate. The vesting conditions, if any, may be based on, among other conditions, a Participant's continued Service or the attainment of Performance Goals.

(c) Form and Timing of Payment

The Committee shall specify the settlement date applicable to each grant of Restricted Share Units, which date shall not be earlier than the date or dates on which the Restricted Share Units shall become fully vested and non-forfeitable, or such settlement date may be deferred to any later date, subject to compliance with Section 409A of the Code, as applicable. On the settlement date, the Company shall, subject to satisfaction of applicable Tax-Related Items (as further set forth in Section 20 hereof), deliver to the Participant one Share for each Restricted Share Unit scheduled to be paid out on such date and not previously forfeited. Alternatively, settlement of a Restricted Share Unit may be made in cash (in an amount reflecting the Fair Market Value of the Shares that otherwise would have been issued) or any combination of cash and Shares, as determined by the Committee, in its sole discretion, in either case, less applicable Tax-Related Items (as further set forth in Section 20 hereof). Until a Restricted Share Unit is settled, the number of Restricted Share Units shall be subject to adjustment pursuant to Section 11 hereof.

(d) Forfeiture

Except as otherwise determined by the Committee at the time of the grant of the Award or thereafter, any Restricted Share Units that are not vested as of the date of the Participant's termination of service shall be forfeited.

(e) General Creditors

A Participant who has been granted Restricted Share Units shall have no rights other than those of a general creditor of the Company. Restricted Share Units represent an unfunded and unsecured obligation of the Company, subject to the terms and conditions of the applicable Award Agreement evidencing the grant of the Restricted Share Units.

6. Terms and Conditions of Restricted Share Awards(a) Grant of Restricted Shares

The Committee is authorized to grant Restricted Shares to Employees or Directors selected by the Committee in such amounts and subject to such terms and conditions not inconsistent with the Plan as the Committee shall impose.

(b) Purchase Price

At the time of the grant of Restricted Shares, the Committee shall determine the price, if any, to be paid by the Participant for each Share subject to the Award. The purchase price of Shares acquired pursuant to the Award shall be paid either: (i) in cash at the time of purchase; (ii) at the sole discretion of the Committee, by Service rendered or to be rendered to the Company or an Affiliate; or (iii) in any other form of legal consideration that may be acceptable to the Committee in its sole discretion and in compliance with Applicable Laws.

(c) Issuance and Restrictions

Restricted Shares shall be subject to such restrictions, if any, on transferability and other restrictions as the Committee may impose (including, without limitation, limitations on the right to vote Restricted Shares or the right to receive dividends or repayment of capital on the Restricted Shares). The restrictions, if any, may be based on, among other conditions, a Participant's continued Service or the attainment of Performance Goals. These restrictions, if any, may lapse separately or in combination at such times, pursuant to such circumstances, in such installments, or otherwise, as the Committee determines at the time of the grant of the Award or thereafter.

(d) Dividends

Any dividends that are distributed with respect to Restricted Shares shall be paid in accordance with the applicable Award Agreement, subject to the provisions of Section 10(b)(ii) hereof.

(e) Forfeiture

Except as otherwise determined by the Committee at the time of the grant of the Award or thereafter, upon termination of Service during the applicable restriction period, Restricted Shares that are at that time subject to restrictions shall be forfeited.

(f) Certificates for Restricted Shares

Restricted Shares granted pursuant to the Plan may be evidenced in such manner as the Committee shall determine. If certificates representing Restricted Shares are registered in the name of the Participant, certificates shall bear an appropriate legend referring to the terms, conditions, and restrictions applicable to such Restricted Shares, and the Company may, at its discretion, retain physical possession of the certificate until such time as all applicable restrictions lapse.

7. Terms and Conditions of Options(a) Option Type

Options granted under the Plan shall be, as determined by the Committee, non-qualified or ISOs, as evidenced by the related Award Agreements, and shall be subject to the foregoing and the following terms and conditions and to such other terms and conditions, not inconsistent therewith, as the Committee shall determine:

(b) Option Price

The Option Price per Share shall be determined by the Committee, but shall not be less than 100% of the Fair Market Value of a Share on the date an Option is granted (other than in the case of Substitute Awards).

(c) Exercisability

Options granted under the Plan shall be exercisable at such time and upon such terms and conditions as may be determined by the Committee, but in no event shall an Option be exercisable more than ten years after the date it is granted. The Committee shall specify the date or dates on which the Options shall become fully vested, and may specify such conditions to vesting, if any, as it deems appropriate. The vesting conditions, if any, may be based on, among other conditions, a Participant's continued Service or the attainment of Performance Goals.

(d) Exercise of Options

Except as otherwise provided in the Plan or in an Award Agreement, an Option may be exercised for all, or from time to time any part, of the Shares for which it is then exercisable. For purposes of Section 7 of the Plan, the exercise date of an Option shall be the later of the date a notice of exercise is received by the Company or its designee or administrative agent in the form and manner satisfactory to the Company and, if applicable, the date payment is received by the Company or its designee or administrative agent in accordance with the following sentence. The purchase price for the Shares as to which an Option is exercised shall be paid to the Company as designated by the Committee, pursuant to one or more of the following methods: (i) in cash or its equivalent (e.g., by personal check), (ii) if there is a public market for the Shares underlying the Options at such time, through the delivery of irrevocable instructions to a broker to sell Shares obtained upon the exercise of the Option and to deliver promptly to the Company an amount out of the proceeds of such sale equal to the aggregate Option Price for the Shares being purchased, or (iii) any other method of payment authorized by the Committee. No fractional Shares will be issued upon exercise of an Option, but instead the number of Shares will be rounded downward to the next whole Share.

(e) ISOs

The Committee may grant Options under the Plan that are intended to be ISOs. Such ISOs shall comply with the requirements of Section 422 of the Code (or any successor section thereto). ISOs shall be granted only to Participants who are employees of the Company and its Subsidiaries. No ISO may be granted to any Participant who at the time of such grant, owns more than ten percent of the total combined voting power of all classes of stock of the Company or of any Subsidiary, unless (i) the Option Price for such ISO is at least 110% of the Fair Market Value of a Share on the date the ISO is granted and (ii) the date on which such ISO terminates is a date not later than the day preceding the fifth anniversary of the date on which the ISO is granted. Any Participant who disposes of Shares acquired upon the exercise of an ISO either (A) within two years after the date of grant of such ISO or (B) within one year after the transfer of such Shares to the Participant, shall notify the Company of such disposition and of the amount realized upon such disposition. All Options granted under the Plan are intended to be nonqualified options, unless the applicable Award Agreement expressly states that the Option is intended to be an ISO. If an Option is intended to be an ISO, and if for any reason such Option (or portion thereof) shall not qualify as an ISO, then, to the extent of such nonqualification, such Option (or portion thereof) shall be regarded as a nonqualified option granted under the Plan; provided that such Option (or portion thereof) otherwise complies with the Plan's requirements relating to nonqualified options. In no event shall any member of the Committee, the Company or any of its Affiliates (or their respective employees, officers or directors) have any liability to any Participant (or any other Person) due to the failure of an Option to qualify for any reason as an ISO.

(f) Rights with Respect to Shares

No Participant shall have any rights to dividends or other rights of a shareholder with respect to Shares subject to an Option until the Participant has given written notice of exercise of the Option, paid in full for such Shares and, if applicable, has satisfied any other conditions imposed by the Committee pursuant to the Plan.

8. Terms and Conditions of Share Appreciation Rights(a) Grants

The Committee may grant (i) a Share Appreciation Right independent of an Option or (ii) a Share Appreciation Right in connection with an Option, or a portion thereof. A Share Appreciation Right granted pursuant to clause (ii) of the preceding sentence (A) may only be granted at the time the related Option is granted, (B) shall cover the same number of Shares covered by an Option (or such lesser number of Shares as the Committee may determine) and (C) shall be subject to the same terms and conditions as such Option except for such additional limitations as are contemplated by this Section 8 (or such additional limitations as may be included in an Award Agreement). Payment shall be made in Shares or cash, at the discretion of the Committee.

(b) Terms

The exercise price per Share of a Share Appreciation Right shall be an amount determined by the Committee but in no event shall such amount be less than the Fair Market Value of a Share on the date the Share Appreciation Right is granted (other than in the case of Substitute Awards); provided, however, that in the case of a Share Appreciation Right granted in conjunction with an Option, or a portion thereof, the exercise price may not be less than the Option Price of the related Option. Each Share Appreciation Right granted independent of an Option shall entitle a Participant upon exercise to a number of Shares equal to an amount that is (i) the excess of (A) the opening price of the Shares on the exercise date of one Share (the "Opening Price") over (B) the exercise price per Share, multiplied by (ii) the number of Shares covered by the Share Appreciation Right; provided, however, that if the Share Appreciation Right is settled in Shares, such amount shall be divided by the Opening Price. Each Share Appreciation Right granted in conjunction with an Option, or a portion thereof, shall entitle a Participant to surrender to the Company the unexercised Option, or any portion thereof, and to receive from the Company in exchange therefore a number of Shares equal to an amount that is (i) the excess of (A) the Opening Price over (B) the Option Price per Share, multiplied by (ii) the number of Shares covered by the Option, or portion thereof, which is surrendered; provided, however, that if the Share Appreciation Right is settled in Shares, such amount shall be divided by the Opening Price. Share Appreciation Rights may be exercised from time to time upon actual receipt by the Company or its designee or administrative agent of written notice of exercise in the form and manner satisfactory to the Company stating the number of Shares with respect to which the Share Appreciation Right is being exercised. The date a notice of exercise is received by the Company shall be the exercise date. No fractional Shares will be issued in payment for Share Appreciation Rights, but instead the number of Shares will be rounded downward to the next whole Share. The Committee shall specify the date or dates on which the Share Appreciation Rights shall become fully vested, and may specify such conditions to vesting, if any, as it deems appropriate. The vesting conditions, if any, may be based on, among other conditions, a Participant's continued Service or the attainment of Performance Goals.

(c) Limitations

The Committee may impose, in its discretion, such conditions regarding the exercisability of Share Appreciation Rights as it may deem fit, but in no event shall a Share Appreciation Right be exercisable more than ten years after the date it is granted.

9. Other Share-Based Awards(a) Grants of Other Share-Based Awards and Performance-Based Awards

Subject to limitation under Applicable Laws, the Committee is authorized under the Plan to grant Awards (other than Options, Restricted Share Units, Restricted Shares and Share Appreciation Rights) to Employees or Directors subject to the terms and conditions set forth in this Section 9 and such other terms and conditions as may be specified by the Committee that are not inconsistent with the provisions of the Plan and that, by their terms, involve or might involve the issuance of, consist of, or are denominated in, payable in, valued in whole or in part by reference to, or otherwise relate to, Shares. The Committee may also grant Shares as a bonus, or may grant other Awards in lieu of obligations of the Company or an Affiliate to pay cash or other property under the Plan or other plans or compensatory arrangements. The terms and conditions applicable to such other Awards shall be determined from time to time by the Committee and set forth in an applicable Award Agreement. The Committee may establish one or more separate programs under the Plan for the purpose of issuing particular forms of Awards to one or more classes of Participants on such terms and conditions as determined by the Committee from time to time.

(b) Form of Payment

Payments with respect to any Awards granted under Section 9 shall be made in cash or cash equivalent, in Shares or any combination of the foregoing, as determined by the Committee.

(c) Vesting Conditions

The Committee shall specify the date or dates on which the Awards granted pursuant to this Section 9 shall become fully vested and nonforfeitable, and may specify such conditions to vesting as it deems appropriate. The vesting conditions may be based on, among other vesting conditions, a Participant's Continued Service or the attainment of Performance Goals.

(d) Term

Except as otherwise provided herein, the term of any Award granted pursuant to this Section 9 shall be set by the Committee in its discretion; *provided* that the term of any Award granted pursuant to this Section 9 shall not exceed ten (10) years.

10. Provisions Applicable to All Awards

(a) Award Agreement

Awards under the Plan shall be evidenced by Award Agreements that set forth the terms, conditions and limitations for each Award, not inconsistent with the Plan, which may include, without limitation, the term of an Award, the provisions applicable in the event the Participant's Service terminates, and the Company's authority to unilaterally or bilaterally amend, modify, suspend, cancel or rescind an Award.

(b) Dividends and Dividend Equivalent Rights

- (i) The Committee in its sole discretion may provide a Participant as part of an RSU or Other Share-Based Award that is a Full Value Award with Dividend Equivalent Rights, on such terms and conditions as may be determined by the Committee in its sole discretion.
- (ii) Any Dividend Equivalent Rights provided in connection with an Award that is subject to vesting shall either (i) not be paid or credited or (ii) be accumulated and subject to vesting restrictions applicable to the underlying Award. For Restricted Shares subject to vesting, dividends shall be accumulated and subject to any restrictions and risk of forfeiture to which the underlying Restricted Share is subject.

(c) Limits on Transfer

Each Award shall be exercisable only by a Participant during the Participant's lifetime, or, if permissible under Applicable Laws, by the Participant's legal guardian or representative. No Award may be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered by a Participant other than by will or by the laws of descent and distribution and any such purported assignment, alienation, pledge, attachment, sale, transfer or encumbrance shall be void and unenforceable against the Company or an Affiliate.

Notwithstanding the foregoing, the Committee may, in its sole discretion, permit Awards (other than ISOs) to be transferred by a Participant, without consideration, in connection with estate planning or charitable transfers, subject to compliance with Applicable Laws and such rules as the Committee may adopt consistent with any applicable Award Agreement to preserve the purposes of the Plan; provided that the Participant gives the Committee advance written notice describing the terms and conditions of the proposed transfer and the Committee notifies the Participant in writing that such a transfer would comply with the requirements of the Plan.

(d) Paperless Administration

In the event that the Company establishes, for itself or using the services of a third party, an automated system for the documentation, granting or exercise of Awards, such as a system using an internet website, intranet or interactive voice response, then the paperless documentation, granting or exercise of Awards by a Participant may be permitted through the use of such an automated system.

11. Adjustments Upon Certain Events

Notwithstanding any other provisions in the Plan to the contrary, the following provisions shall apply to all Awards granted under the Plan:

(a) Generally

In the event of any change in the outstanding Shares (including to the price of the Shares) after the Effective Date by reason of any reorganization, recapitalization, merger, consolidation, spin-off, combination, or transaction or exchange of Shares or other corporate exchange, or any distribution to shareholders of Shares other than regular cash dividends, bonus issue, share split or any transaction similar to the foregoing, the Committee shall make such substitution or adjustment, as it deems, in its sole discretion and without liability to any person, to be equitable, as to (i) the number or kind of Shares or other securities issued or reserved for issuance pursuant to the Plan or pursuant to outstanding Awards, (ii) the Option Price or exercise price of any Share Appreciation Right and/or (iii) any other affected terms of such Awards, including, without limitation, any affected Performance Goals. In the event of any change in the outstanding Shares after the Effective Date by reason of any share split (forward or reverse) or any share dividend, all adjustments described in the preceding sentence shall occur automatically in accordance with the ratio of the bonus issue, share split or share dividend, unless otherwise determined by the Committee.

(b) Change in Control

The provisions of this Section 11(b) shall apply in the event of a Change in Control.

- (i) Additional Vesting of Time-Based Awards Notwithstanding Section 11(a) hereof, if a Change in Control occurs and a Participant's Awards that vest based on the Participant's continued Service are not converted, assumed, substituted or replaced by a successor or survivor corporation, or a parent or subsidiary thereof, then immediately prior to the Change in Control such Awards shall become fully vested and, to the extent applicable, exercisable and all forfeiture restrictions on such Awards shall lapse. Where Awards described in the foregoing sentence are assumed or continued after a Change in Control, the Committee may provide that one or more Awards will automatically accelerate upon an involuntary termination of the Participant's employment or service within a designated period following the effective date of such Change in Control. Any such Award shall, accordingly, upon an involuntary termination of the Participant's employment or service following a Change in Control, become fully vested and, to the extent applicable, exercisable and all forfeiture restrictions on such Award shall lapse. With respect to any ISOs, the portion of any ISO accelerated in connection with a Change in Control shall remain exercisable as an ISO only to the extent the applicable \$100,000 limitation is not exceeded. To the extent such U.S. dollar limitation is exceeded, the accelerated portion of such Option shall not be exercisable as an ISO under the U.S. federal tax laws.
- (ii) Additional Vesting of Performance-Based Awards With respect to Awards that vest based on the attainment of performance-based conditions, in the Committee's sole and absolute discretion, and on such terms and conditions as it deems appropriate, either by the terms of Award Agreement or by action taken in connection with the Change of Control, the Award shall vest (A) at the target level, pro-rated to reflect the period the Participant was in Service during the performance period or (B) the actual performance level attained, as determined on the most recent practicable date as of which performance may be measured prior to the date of the Change in Control. Unless otherwise converted, assumed, substituted or replaced by a successor or survivor corporation, or a parent or subsidiary thereof, any such Performance-Based Awards that have not either previously vested in accordance with the terms of such Award or in accordance with this Section 11(b) (ii) shall terminate and cease to be outstanding as of the Change in Control.
- (iii) Cancellation of Awards In connection with any Change in Control, the Committee may, in its sole discretion, but shall not be obligated to, provide for cancellation of any one or more outstanding Awards and payment to the holders of such Awards that are vested as of such cancellation (including, without limitation, any Awards that would vest in accordance with the terms of such Award or in accordance with this Section 11(b) (i) or (ii) hereof, as applicable), the value of such Awards, if any, as determined by the Committee (which value, if applicable, may be based upon the price per Share received or to be received by other shareholders of the Company in such event), including, without limitation, in the case of an outstanding Option or Share Appreciation Right, a cash payment in an amount equal to the excess, if any, of the Fair Market Value (as of a date specified by the Committee) of the Shares subject to such Option or Share Appreciation Right over the aggregate exercise price of such Option or Share Appreciation Right (it being understood that, in such event, any Option or Share Appreciation Right having a per share exercise price equal to, or in excess of, the Fair Market Value of a Share subject thereto may be canceled and terminated without any payment or consideration therefor). Payments to holders pursuant to this Section 11(iii) above shall be made in cash or, in the sole discretion of the Committee, in the form of such other consideration necessary for a Participant to receive property, cash, or securities (or combination thereof) as such Participant would have been entitled to receive upon the occurrence of the transaction if the Participant had been, immediately prior to such transaction, the holder of the number of Shares covered by the Award at such time (less any applicable exercise price).

(c) Other Requirements

Prior to any payment or adjustment contemplated under this Section 11, the Committee may require a Participant to (i) represent and warrant as to the unencumbered title to the Participant's Awards; (ii) bear such Participant's pro rata share of any post-closing indemnity obligations, and be subject to the same post-closing purchase price adjustments, escrow terms, offset rights, holdback terms, and similar conditions as the other holders of Shares, subject to any limitations or reductions as may be necessary to comply with Section 409A of the Code; and (iii) deliver customary transfer documentation as reasonably determined by the Committee.

(d) Fractional Shares

Any adjustment provided under this Section 11 may provide for the elimination of any fractional share that might otherwise become subject to an Award.

12. No Right to Employment or Awards

The granting of an Award under the Plan shall impose no obligation on the Company or any Affiliate to continue the employment or service of a Participant and shall not lessen or affect the Company's or Affiliate's right to terminate the employment or service of such Participant. No Participant or other Person shall have any claim to be granted any Award, and there is no obligation for uniformity of treatment of Participants, or holders or beneficiaries of Awards. The terms and conditions of Awards and the Committee's determinations and interpretations with respect thereto need not be the same with respect to each Participant (whether or not such Participants are similarly situated).

13. Successors and Assigns

The Plan shall be binding on all successors and assigns of the Company and a Participant, including without limitation, the estate of such Participant and the executor, administrator or trustee of such estate, or any receiver or trustee in bankruptcy or representative of the Participant's creditors.

14. Amendments or Termination(a) Amendment and Termination of the Plan

The Board may amend, alter, suspend, discontinue, or terminate the Plan or any portion thereof at any time; provided that no such amendment, alteration, suspension, discontinuation or termination shall be made without shareholder approval if (i) it would materially increase the number of securities which may be issued under the Plan or granted to any Participant (except for increases pursuant to Section 11 hereof), (ii) it materially expands the types of Awards available under the Plan or materially expands the class of persons eligible to receive Awards under the Plan, (iii) such approval is necessary to comply with any regulatory requirement applicable to the Plan (including, without limitation, as necessary to comply with any rules or regulations of any securities exchange or inter-dealer quotation system on which the securities of the Company may be listed or quoted), or (iv) the Committee determines that such approval is otherwise required or advisable to facilitate compliance with Applicable Laws; provided, however, that, subject to Section 18 of the Plan or unless required or advisable to facilitate compliance with Applicable Laws, as determined in the sole discretion of the Committee, any such amendment, alteration, suspension, discontinuance or termination that would materially and adversely affect the rights of any Participant or any holder of any Award theretofore granted shall not to that extent be effective without the consent of the affected Participant.

(b) Amendment of Award Agreements

The Committee may, to the extent consistent with the terms of any applicable Award Agreement, waive any conditions or rights under, amend any terms of, or alter, suspend, discontinue, cancel or terminate, any Award theretofore granted or the associated Award Agreement, prospectively or retroactively (including after a Participant's termination of employment or service with the Company); *provided that*, subject to Section 18 of the Plan or unless required or advisable to facilitate compliance with Applicable Laws, as determined in the sole discretion of the Committee, any such waiver, amendment, alteration, suspension, discontinuance, cancellation or termination that would materially and adversely affect the rights of any Participant with respect to any Award theretofore granted shall not to that extent be effective without the consent of the affected Participant.

(c) No Repricing of Awards

Subject to Section 11 of the Plan, in no event shall the Committee or the Board take any action without approval of the shareholders of the Company that would (i) reduce the exercise price of any Option or Share Appreciation Right, (ii) result in the cancellation of any outstanding Option or Share Appreciation Right and replacement with a new Option or Share Appreciation Right with a lower exercise price or with a cash payment or other Award at a time when the Option or Share Appreciation Right has a per Share exercise price that is higher than the Fair Market Value of a Share on the date of the replacement (iii) result in any other action that would be considered a "repricing" for purposes of the shareholder approval rules of any securities exchange or inter-dealer quotation system on which the securities of the Company are listed or quoted.

15. Choice of Law

The Plan shall be governed by and construed in accordance with the laws of the State of North Carolina without regard to conflicts of laws.

16. Severability

If any provision of the Plan or the application of any provision hereof to any person or circumstance is held to be invalid or unenforceable, the remainder of the Plan and the application of such provision to any other person or circumstance shall not be affected, and the provisions so held to be unenforceable shall be reformed to the extent (and only to the extent) necessary to make it enforceable and valid.

17. Effectiveness of the Plan

The Plan shall be effective as of the Effective Date, subject to the approval of the shareholders of the Company.

18. Section 409A

Notwithstanding other provisions of the Plan or any Award Agreement thereunder, no Award shall be granted, deferred, accelerated, extended, paid out or modified under this Plan in a manner that would result in the imposition of an additional tax under Section 409A of the Code upon a Participant. In the event that it is reasonably determined by the Committee that, as a result of Section 409A of the Code, payments in respect of any Award under the Plan may not be made at the time contemplated by the terms of the Plan or the relevant Award Agreement, as the case may be, without causing the Participant holding such Award to be subject to taxation under Section 409A of the Code, the Company will make such payment on the first day that would not result in the Participant incurring any tax liability under Section 409A of the Code.

Without limiting the generality of the foregoing, to the extent applicable, notwithstanding anything herein to the contrary, this Plan and Awards issued hereunder shall be interpreted in accordance with Section 409A of the Code and Department of Treasury regulations and other interpretative guidance issued thereunder, including without limitation any such regulations or other guidance that may be issued after the Effective Date. Notwithstanding any provision of the Plan to the contrary, in the event that the Committee determines that any amounts payable hereunder will be taxable to a Participant under Section 409A of the Code and related Department of Treasury guidance prior to payment to such Participant of such amount, the Company may (a) adopt such amendments to the Plan and Awards and appropriate policies and procedures, including amendments and policies with retroactive effect, that the Committee determines necessary or appropriate to preserve the intended tax treatment of the benefits provided by the Plan and Awards hereunder and/or (b) take such other actions as the Committee determines necessary or appropriate to avoid the imposition of an additional tax under Section 409A of the Code.

19. Clawback/Recoupment Policy.

Notwithstanding anything contained herein to the contrary, all Awards granted under the Plan shall be and remain subject to any incentive compensation clawback or recoupment policy currently in effect or as may be adopted by the Board and, in each case, as may be amended from time to time. No such policy adoption or amendment shall in any event require the prior consent of any Participant.

20. Tax-Related Items

The Company or any Affiliate, as applicable, shall have the authority and the right to deduct or withhold, or to require a Participant to remit to the Company, an amount sufficient to satisfy the obligation for Tax-Related Items with respect to any taxable or tax withholding event concerning a Participant arising as a result of the Participant's participation in the Plan or to take such other action as may be necessary or appropriate in the opinion of the Company or an Affiliate, as applicable, to satisfy withholding obligations for the payment of Tax-Related Items by one or a combination of the following: (a) withholding from the Participant's wages or other cash compensation; (b) withholding from the proceeds of sale of Shares underlying an Award, either through a voluntary sale or a mandatory sale arranged by the Company on the Participant's behalf, without need of further authorization; or (c) in the Committee's sole discretion, by withholding Shares otherwise issuable under an Award (or allowing the return of Shares) sufficient, as determined by the Committee in its sole discretion, to satisfy such Tax-Related Items. No Shares shall be delivered pursuant to an Award to any Participant or other person until the Participant or such other person has made arrangements acceptable to the Committee to satisfy the obligations for Tax-Related Items with respect to any taxable or tax withholding event concerning the Participant or such other person arising as a result of an Award.

21. Government and Other Regulations

The obligation of the Company to make payment of Awards in Shares or otherwise shall be subject to all Applicable Laws, and to such approvals by government agencies, including government agencies in jurisdictions outside of the United States, in each case as may be required or as the Company deems necessary or advisable. Without limiting the foregoing, the Company shall have no obligation to issue or deliver evidence of title for Shares subject to Awards granted hereunder prior to: (i) obtaining any approvals from governmental agencies that the Company determines are necessary or advisable, and (ii) completion of any registration or other qualification with respect to the Shares under any Applicable Law or ruling of any governmental body that the Company determines to be necessary or advisable or at a time when any such registration or qualification is not current, has been suspended or otherwise has ceased to be effective. The inability or impracticability of the Company to obtain or maintain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained and shall constitute circumstances in which the Committee may determine to amend or cancel Awards pertaining to such Shares, with or without consideration to the affected Participant. The Company shall be under no obligation to register pursuant to the Securities Act any of the Shares paid pursuant to the Plan. If the Shares paid pursuant to the Plan may in certain circumstances be exempt from registration pursuant to the Securities Act, the Company may restrict the transfer of such Shares in such manner as it deems advisable to ensure the availability of any such exemption.

22. No Shareholders Rights

Except as otherwise provided herein, a Participant shall have none of the rights of a shareholder with respect to Shares covered by any Award, including the right to vote or receive dividends, until the Participant or its nominee/broker becomes the record owner of such Shares, notwithstanding the exercise of an Option or Share Appreciation Right or vesting of another Award.

* * *

As adopted by the Board of Directors of the Company on April 4, 2018, subject to shareholder approval.

2017 Financials

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2017

or

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File No. 001-34400

INGERSOLL-RAND PUBLIC LIMITED COMPANY

(Exact name of registrant as specified in its charter)

Ireland

(State or other jurisdiction of incorporation or organization)

98-0626632

(I.R.S. Employer Identification No.)

**170/175 Lakeview Dr.
Airside Business Park
Swords, Co. Dublin
Ireland**

(Address of principal executive offices)

Registrant's telephone number, including area code: +(353) (0) 18707400

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Ordinary Shares,
Par Value \$1.00 per Share

Name of each exchange on which registered

New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES ☒ NO ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES ☐ NO ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES ☒ NO ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.:

Large accelerated filer ☒

Accelerated filer ☐

Non-accelerated filer ☐

Smaller reporting company ☐

(Do not check if a smaller reporting company)

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). YES ☐ NO ☒

The aggregate market value of ordinary shares held by nonaffiliates on June 30, 2017 was approximately \$23.1 billion based on the closing price of such stock on the New York Stock Exchange.

The number of ordinary shares outstanding as of February 1, 2018 was 249,889,299.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement to be filed within 120 days of the close of the registrant's fiscal year in connection with the registrant's Annual General Meeting of Shareholders to be held June 7, 2018 are incorporated by reference into Part II and Part III of this Form 10-K.

INGERSOLL-RAND PLC

Form 10-K For the Fiscal Year Ended December 31, 2017

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CAUTIONARY STATEMENT FOR FORWARD LOOKING STATEMENTS

Certain statements in this report, other than purely historical information, are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements generally are identified by the words "believe," "project," "expect," "anticipate," "estimate," "forecast," "outlook," "intend," "strategy," "plan," "may," "could," "should," "will," "would," "will be," "will continue," "will likely result," or the negative thereof or variations thereon or similar terminology generally intended to identify forward-looking statements.

Forward-looking statements may relate to such matters as projections of revenue, margins, expenses, tax provisions, earnings, cash flows, benefit obligations, share or debt repurchases or other financial items; any statements of the plans, strategies and objectives of management for future operations, including those relating to any statements concerning expected development, performance or market share relating to our products and services; any statements regarding future economic conditions or our performance; any statements regarding pending investigations, claims or disputes; any statements of expectation or belief; and any statements of assumptions underlying any of the foregoing. 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 reliance on our forward-looking statements. You are advised to review any further disclosures we make on related subjects in materials we file with or furnish to the SEC. 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. We do not undertake to update any forward-looking statements.

Factors that might affect our forward-looking statements include, among other things:

- overall economic, political and business conditions in the markets in which we operate;
- the demand for our products and services;
- competitive factors in the industries in which we compete;
- changes in tax laws and requirements (including tax rate changes, new tax laws, new and/or revised tax law interpretations and any legislation that may limit or eliminate potential tax benefits resulting from our incorporation in a non-U.S. jurisdiction, such as Ireland);
- the outcome of any litigation, governmental investigations, claims or proceedings;
- the outcome of any income tax audits or settlements;
- interest rate fluctuations and other changes in borrowing costs;
- other capital market conditions, including availability of funding sources;
- currency exchange rate fluctuations, exchange controls and currency devaluations;
- availability of and fluctuations in the prices of key commodities;
- impairment of our goodwill, indefinite-lived intangible assets and/or our long-lived assets;
- climate change, changes in weather patterns, natural disasters and seasonal fluctuations;
- the impact of potential information technology or data security breaches; and
- the strategic acquisition or divestiture of businesses, product lines and joint ventures;

Some of the significant risks and uncertainties that could cause actual results to differ materially from our expectations and projections are described more fully in Part I, Item 1A "Risk Factors." You should read that information in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of this report and our Consolidated Financial Statements and related notes in Part II, Item 8 "Financial Statements and Supplementary Data" of this report. We note such information for investors as permitted by the Private Securities Litigation Reform Act of 1995.

PART I

ITEM 1. BUSINESS

OVERVIEW

Ingersoll-Rand plc (Plc or Parent Company), a public limited company incorporated in Ireland in 2009, and its consolidated subsidiaries (collectively, we, our, the Company) is a diversified, global company that provides products, services and solutions to enhance the quality, energy efficiency and comfort of air in homes and buildings, transport and protect food and perishables and increase industrial productivity and efficiency. Our business segments consist of Climate and Industrial, both with strong brands and highly differentiated products within their respective markets. We generate revenue and cash primarily through the design, manufacture, sale and service of a diverse portfolio of industrial and commercial products that include well-recognized, premium brand names such as Ingersoll-Rand®, Trane®, Thermo King®, American Standard®, ARO®, and Club Car®.

To achieve our mission of being a world leader in creating comfortable, sustainable and efficient environments, we continue to focus on growth by increasing our recurring revenue stream from parts, service, controls, used equipment and rentals; and to continuously improve the efficiencies and capabilities of the products and services of our businesses. We also continue to focus on operational excellence strategies as a central theme to improving our earnings and cash flow.

BUSINESS SEGMENTS

Our business segments provide products, services and solutions used to increase the efficiency and productivity of both industrial and commercial operations and homes, as well as improve the health and comfort of people around the world.

Our business segments are as follows:

Climate

Our Climate segment delivers energy-efficient products and innovative energy services. It includes Trane® and American Standard® Heating & 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 through Trane Building Advantage and Nexia; and Thermo King® transport temperature control solutions. This segment had 2017 net revenues of \$11.2 billion.

Industrial

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® fluid management equipment, as well as Club Car® golf, utility and consumer low-speed vehicles. This segment had 2017 net revenues of \$3.0 billion.

Segment Revenue and profit information and additional financial data and commentary on recent financial results for operating segments are provided in the Results of Operations section in Part II, Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" and in Note 18 to the Consolidated Financial Statements in Part II, Item 8 "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

PRODUCTS AND SERVICES

Our principal products and services by business segment include the following:

Climate	
Aftermarket and OEM parts and supplies	Ice energy storage solutions
Air conditioners	Indoor air quality
Air exchangers	Industrial refrigeration
Air handlers	Installation contracting
Airside and terminal devices	Large commercial unitary
Auxiliary power units	Light commercial unitary
Building management systems	Motor replacements
Bus and rail HVAC systems	Multi-pipe HVAC systems
Chillers	Package heating and cooling systems
Coils and condensers	Performance contracting
Container refrigeration systems and gensets	Rail refrigeration systems
Control systems	Refrigerant reclamation
Cryogenic refrigeration systems	Repair and maintenance services
Diesel-powered refrigeration systems	Rental services
Ductless systems	Self-powered truck refrigeration systems
Energy management services	Service agreements
Facility management services	Temporary heating and cooling systems
Furnaces	Thermostats/controls
Geothermal systems	Trailer refrigeration systems
Heat pumps	Transport heater products
Home automation	Unitary systems (light and large)
Humidifiers	Vehicle-powered truck refrigeration systems
Hybrid and non-diesel transport refrigeration solutions	Water source heat pumps
Industrial	
Compressors (centrifugal, reciprocating, and rotary)	Fluid power components
Air treatment and air separation systems	Installation contracting
Aftermarket and OEM parts and supplies	Power tools (air, cordless and electric)
Aftermarket controls, parts, accessories and consumables	Precision fastening systems
Airends	Pumps (diaphragm and piston)
Blowers	Rental services
Dryers	Rough terrain (AWD) vehicles
Engine starting systems	Service agreements
Ergonomic material handling systems	Service break/fix
Filters	Utility and consumer low-speed vehicles
Fluid handling systems	Visage® mobile golf information systems
Golf vehicles	Winches (air, electric and hydraulic)
Hoists (air, electric and manual)	

These products are sold primarily under our name and under other names including American Standard, ARO, Club Car, Nexia, Thermo King and Trane.

ACQUISITIONS

On January 17, 2018, we entered into an agreement with Mitsubishi Electric Corporation (Mitsubishi) to establish a joint venture, pending regulatory review and approval, and customary closing conditions. The joint venture will focus on marketing, selling and supporting variable refrigerant flow (VRF) and ductless heating and air conditioning systems through Trane, American Standard and Mitsubishi channels in the U.S. and select Latin American countries. Both companies will have equal ownership in the joint venture. It is expected to be operational in the first half of 2018.

On January 18, 2018, we acquired 100% of the outstanding stock of ICS Group Holdings Limited (ICS Cool Energy) for approximately £142 million, net of cash acquired. The acquired business specializes in the temporary rental of energy efficient chillers for commercial and industrial buildings across Europe. It also sells, permanently installs and services high performance temperature control systems for all types of industrial processes. The acquisition was funded through cash on hand. The results of ICS Cool Energy will be included in the Company's consolidated financial statements as of the date of the acquisition and reported within our Climate segment.

During 2017, we acquired several businesses, including channel acquisitions, that complement existing products and services. The aggregate cash paid, net of cash acquired, totaled \$157.6 million and was funded through cash on hand. Acquisitions within the Climate segment primarily consisted of independent dealers which support the ongoing strategy to expand our distribution network in North America. Other acquisitions within the segment strengthen our product portfolio. Acquisitions within the Industrial segment primarily consisted of a telematics business which builds upon our growing portfolio of connected assets. In addition, other acquisitions within the segment expand sales and service channels across the globe.

On January 1, 2015, we completed the acquisition of the assets of Cameron International Corporation's Centrifugal Compression (Engineered Centrifugal Compression) business for approximately \$850 million. The acquired business manufactures centrifugal compression equipment and provides aftermarket parts and services for global industrial applications, air separation, gas transmission and process gas. The acquisition was funded through a combination of cash on hand and debt. The results of the Engineered Centrifugal Compression business have been included in our consolidated financial statements since the date of the acquisition and reported within our Industrial segment.

On March 4, 2015, we acquired 100% of the outstanding stock of FRIGOBLOCK for approximately €100 million (approximately \$113 million). The acquisition was funded through a combination of cash on hand and debt. The acquired business manufactures and designs transport refrigeration units for trucks and trailers, which it sells primarily in Western Europe. The results of the FRIGOBLOCK business have been included in our consolidated financial statements since the date of the acquisition and reported within our Climate segment.

COMPETITIVE CONDITIONS

Our products and services are sold in highly competitive markets throughout the world. Due to the diversity of these products and services and the variety of markets served, we encounter a wide variety of competitors that vary by product line and services. They include well-established regional or specialized competitors, as well as larger U.S. and non-U.S. corporations or divisions of larger companies.

The principal methods of competition in these markets relate to price, quality, delivery, service and support, technology and innovation. We believe that we are one of the leading manufacturers in the world of HVAC systems and services, air compression systems, transport temperature control products, power tools, and golf, utility and consumer low-speed vehicles.

DISTRIBUTION

Our products are distributed by a number of methods, which we believe are appropriate to the type of product. U.S. sales 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 throughout the world.

OPERATIONS BY GEOGRAPHIC AREA

Approximately 35% of our net revenues in 2017 were derived outside the U.S. and we sold products in more than 100 countries. Therefore, the attendant risks of manufacturing or selling in a particular country, such as currency devaluation, nationalization and establishment of common markets, may have an adverse impact on our non-U.S. operations. For a discussion of risks associated with our non-U.S. operations, see "Risk Factors – Our global operations subject us to economic risks," and "Risk Factors – Currency exchange rate fluctuations and other related risks may adversely affect our results," in Item 1A and "Quantitative and Qualitative Disclosure about Market Risk" in Item 7A. Additional geographic data is provided in Note 18 to the Consolidated Financial Statements.

CUSTOMERS

We have no customer that accounted for more than 10% of our consolidated net revenues in 2017, 2016 or 2015. No material part of our business is dependent upon a single customer or a small group of customers; therefore, the loss of any one customer would not have a material adverse effect on our results of operations or cash flows.

RAW MATERIALS

We manufacture many of the components included in our products, which requires us to employ a wide variety of commodities. Principal commodities, such as steel, copper and aluminum, are purchased from a large number of independent sources around the world. In the past, variability in prices for some commodities, particularly steel and non-ferrous metals, have caused margin pressure in some of our businesses. We have historically been able to adjust pricing with customers to maintain our margins; however, we may not always be able to offset these cost changes with price changes.

We believe that available sources of supply will generally be sufficient for the foreseeable future. There have been no commodity shortages which have had a material adverse effect on our businesses. However, significant changes in certain material costs may have an adverse impact on our costs and operating margins. To mitigate this potential impact, we enter into long-term supply contracts in order to manage our exposure to potential supply disruptions.

WORKING CAPITAL

We manufacture products that must be readily available to meet our customers' rapid delivery requirements. Therefore, we maintain an adequate level of working capital to support our business needs and our customers' requirements. Such working capital requirements are not, however, in the opinion of management, materially different from those experienced by our major competitors. We believe our sales and payment terms are competitive in and appropriate for the markets in which we compete.

SEASONALITY

Demand for certain of our products and services is influenced by weather conditions. For instance, sales in our commercial and residential HVAC businesses historically tend to be seasonally higher in the second and third quarters of the year because this represents summer in the U.S. and other northern hemisphere markets, which is the peak season for sales of air conditioning systems and services. Therefore, results of any quarterly period may not be indicative of expected results for a full year and unusual weather patterns or events could negatively or positively affect certain segments of our business and impact overall results of operations.

RESEARCH AND DEVELOPMENT

We engage in research and development activities in an effort to introduce new products, enhance existing product effectiveness, improve ease of use and reliability as well as expand the various applications for which our products may be appropriate. In addition, we continually evaluate developing technologies in areas that we believe will enhance our business for possible investment or acquisition. We anticipate that we will continue to make significant expenditures for research and development activities as we look to maintain and improve our competitive position.

PATENTS AND LICENSES

We own numerous patents and patent applications, and are licensed under others. Although in aggregate we consider our patents and licenses to be valuable to our operations, we do not believe that our business is materially dependent on a single patent or license or any group of them. In our opinion, engineering, production skills and experience are more responsible for our market position than our patents and/or licenses.

BACKLOG

Our approximate backlog of orders, believed to be firm, at December 31, was as follows:

<i>In millions</i>	2017	2016
Climate	\$ 1,972.4	\$ 1,754.4
Industrial	525.6	443.2
Total	\$2,498.0	\$2,197.6

These backlog figures are based on orders received. While the major portion of our products are built in advance of order and either shipped or assembled from stock, orders for specialized machinery or specific customer application are submitted with extensive lead times and are often subject to revision and deferral, and to a lesser extent cancellation or termination. We expect to ship substantially all of the December 31, 2017 backlog during 2018.

ENVIRONMENTAL MATTERS

We continue to be dedicated to environmental and sustainability programs to minimize the use of natural resources, and reduce the utilization and generation of hazardous materials from our manufacturing processes and to remediate identified environmental concerns. As to the latter, we are currently engaged in site investigations and remediation activities to address environmental cleanup from past operations at current and former manufacturing facilities.

We are sometimes a party to environmental lawsuits and claims and have received notices of potential violations of environmental laws and regulations from the Environmental Protection Agency and similar state authorities. We have also been identified as a potentially responsible party (PRP) for cleanup costs associated with off-site waste disposal at federal Superfund and state remediation sites. For all such sites, there are other PRPs and, in most instances, our involvement is minimal.

In estimating our liability, we have assumed that we will not bear the entire cost of remediation of any site to the exclusion of other PRPs who may be jointly and severally liable. The ability of other PRPs to participate has been taken into account, based on our understanding of the parties' financial condition and probable contributions on a per site basis. Additional lawsuits and claims involving environmental matters are likely to arise from time to time in the future.

For a further discussion of our potential environmental liabilities, see Note 19 to the Consolidated Financial Statements.

ASBESTOS-RELATED MATTERS

Certain of our wholly-owned subsidiaries and former companies are named as defendants in asbestos-related lawsuits in state and federal courts. In many of the lawsuits, a large number of other companies have also been named as defendants. The vast majority of those claims allege injury caused by exposure to asbestos contained in certain historical products, primarily pumps, boilers and railroad brake shoes. None of our existing or previously-owned businesses were a producer or manufacturer of asbestos.

See also the discussion under Part I, Item 3, "Legal Proceedings," and Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Contingent Liabilities," as well as further detail in Note 19 to the Consolidated Financial Statements.

EMPLOYEES

As of December 31, 2017, we employed approximately 46,000 people throughout the world.

AVAILABLE INFORMATION

We file annual, quarterly, and current reports, proxy statements, and other documents with the SEC under the Securities Exchange Act of 1934.

This Annual Report on Form 10-K, as well as our quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to all of the foregoing reports, are made available free of charge on our Internet website (<http://www.ingersollrand.com>) as soon as reasonably practicable after such reports are electronically filed with or furnished to the SEC. The Board of Directors of the Company has also adopted and posted in the Investor Relations section of the Company's website our Corporate Governance Guidelines and charters for each of the Board's standing committees. The contents of the Company's website are not incorporated by reference in this report.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following is a list of executive officers of the Company as of February 12, 2018.

Name and Age	Date of Service as an Executive Officer	Principal Occupation and Other Information for Past Five Years
Michael W. Lamach (54)	2/16/2004	Chairman of the Board (since June 2010) and Chief Executive Officer (since February 2010); President and Chief Operating Officer (2009-2010); Senior Vice President and President, Trane Commercial Systems (2008-2009); Senior Vice President and President, Security Technologies (2004-2008)
Susan K. Carter (59)	10/2/2013	Senior Vice President and Chief Financial Officer (since October 2013); Executive Vice President and Chief Financial Officer, KBR Inc. (a global engineering, construction and services business), (2009-2013); Executive Vice President and Chief Financial Officer, Lennox International Inc. (a heating, air conditioning and refrigeration company), (2004 to 2009)
David S. Regnery (55)	9/5/2017	Executive Vice President (since September 2017); Vice President, President of Commercial HVAC, North America and EMEA (2013 to 2017)
Marcia J. Avedon (56)	2/7/2007	Senior Vice President, Human Resources, Communications and Corporate Affairs (since June 2013); Senior Vice President, Human Resources and Communications (2007 - 2013)
Paul A. Camuti (56)	8/1/2011	Senior Vice President, Innovation and Chief Technology Officer (since August 2011); President, Smart Grid Applications, Siemens Energy, Inc. (an energy technology subsidiary of Siemens Corporation) (2010 -2011); President, Research Division, Siemens Corporation (a diversified global technology company) (2009 - 2010); President and Chief Executive Officer, Siemens Corporate Research, Inc. (the research subsidiary of Siemens Corporation) (2005 - 2009)
Maria C. Green (65)	11/2/2015	Senior Vice President and General Counsel (since November 2015); Senior Vice President, General Counsel and Secretary, Illinois Tool Works Inc. (a global manufacturer of a diversified range of industrial products and equipment), (2012-2015); Vice President, General Counsel & Secretary, Illinois Tool Works Inc. (2011-2012)
Keith A. Sultana (48)	10/12/2015	Senior Vice President, Global Operations and Integrated Supply Chain (since October 2015); Vice President, Global Procurement (January 2015 to October 2015); Vice President, Global Integrated Supply Chain (GISC) for Climate Solutions (2010 to 2014)
Christopher J. Kuehn (45)	6/1/2015	Vice President and Chief Accounting Officer (since June 2015); Vice President, Corporate Controller and Chief Accounting Officer, Whirlpool Corporation (a global manufacturer and marketer of major home appliances), (2012-2015); Vice President, Global CFO Thermal Equipment and Services Segment, SPX Corporation (a global supplier of infrastructure equipment platforms in heating, ventilation and air conditioning (HVAC)), (2008-2012)

No family relationship exists between any of the above-listed executive officers of the Company. All officers are elected to hold office for one year or until their successors are elected and qualified.

ITEM 1A. RISK FACTORS

Our business, financial condition, results of operations, and cash flows are subject to a number of risks that could cause the actual results and conditions to differ materially from those projected in forward-looking statements contained in this Annual Report on Form 10-K. The risks set forth below are those we consider most significant. We face other risks, however, that we do not currently perceive to be material which could cause actual results and conditions to differ materially from our expectations. You should evaluate all risks before you invest in our securities. If any of the risks actually occur, our business, financial condition, results of operations or cash flows could be adversely impacted. In that case, the trading price of our ordinary shares could decline, and you may lose all or part of your investment.

Our global operations subject us to economic risks.

Our global operations are dependent upon products manufactured, purchased and sold in the U.S. and internationally, including Europe, China, Brazil, Middle East, Africa, India, Argentina, Mexico and Russia. These activities are subject to risks that are inherent in operating globally, including:

- changes in local laws and regulations or imposition of currency restrictions and other restraints;
- limitation of ownership rights, including expropriation of assets by a local government, and limitation on the ability to repatriate earnings;
- sovereign debt crises and currency instability in developed and developing countries;
- trade protection measures such as import or export restrictions and requirements, the imposition of burdensome tariffs and quotas or revocation or material modification of trade agreements;
- difficulty in staffing and managing global operations;
- difficulty of enforcing agreements, collecting receivables and protecting assets through non-U.S. legal systems;
- national and international conflict, including war, civil disturbances and terrorist acts; and
- recessions, economic downturns, slowing economic growth and social and political instability.

These risks could increase our cost of doing business internationally, increase our counterparty risk, disrupt our operations, disrupt the ability of suppliers and customers to fulfill their obligations, limit our ability to sell products in certain markets and have a material adverse impact on our results of operations, financial condition, and cash flows.

We face significant competition in the markets that we serve and our growth is dependent, in part, on the development, commercialization and acceptance of new products and services.

The markets that we serve are highly competitive. We compete worldwide with a number of other manufacturers and distributors that produce and sell similar products. There has been consolidation and new entrants (including non-traditional competitors) within our industries and there may be future consolidation and new entrants which could result in increased competition and significantly alter the dynamics of the competitive landscape in which we operate. Due to our global footprint we are competing worldwide with large companies and with smaller, local operators who may have customer, regulatory or economic advantages in the geographies in which they are located. In addition, some of our competitors may employ pricing and other strategies that are not traditional.

In addition, we must develop and commercialize new products and services in a rapidly changing technological and business environment in order to remain competitive in our current and future markets and in order to continue to grow our business. The development and commercialization of new products and services require a significant investment of resources and an anticipation of the impact of new technologies and the ability to compete with others who may have superior resources. We cannot provide any assurance that any new product or service will be successfully commercialized in a timely manner, if ever, or, if commercialized, will result in returns greater than our investment. Investment in a product or service could divert our attention and resources from other projects that become more commercially viable in the market. We also cannot provide any assurance that any new product or service will be accepted by our current and future markets. Failure to develop new products and services that are accepted by these markets could have a material adverse impact on our competitive position, results of operations, financial condition, and cash flows.

The capital and credit markets are important to our business.

Instability in U.S. and global capital and credit markets, including market disruptions, limited liquidity and interest rate volatility, or reductions in the credit ratings assigned to us by independent rating agencies could reduce our access to capital markets or increase the cost of funding our short and long term credit requirements. In particular, if we are unable to access capital and credit markets on terms that are acceptable to us, we may not be able to make certain investments or fully execute our business plans and strategies.

Our suppliers and customers are also dependent upon the capital and credit markets. Limitations on the ability of customers, suppliers or financial counterparties to access credit at interest rates and on terms that are acceptable to them could lead to insolvencies of key suppliers and customers, limit or prevent customers from obtaining credit to finance purchases of our products and services and cause delays in the delivery of key products from suppliers.

Currency exchange rate fluctuations and other related risks may adversely affect our results.

We are exposed to a variety of market risks, including the effects of changes in currency exchange rates. See Part II Item 7A, "Quantitative and Qualitative Disclosure About Market Risk."

We have operations throughout the world that manufacture and sell products in various international markets. As a result, we are exposed to movements in exchange rates of various currencies against the U.S. dollar as well as against other currencies throughout the world.

Many of our non-U.S. operations have a functional currency other than the U.S. dollar, and their results are translated into U.S. dollars for reporting purposes. Therefore, our reported results will be higher or lower depending on the weakening or strengthening of the U.S. dollar against the respective foreign currency.

We use derivative instruments to hedge those material exposures that cannot be naturally offset. The instruments utilized are viewed as risk management tools, involve little complexity and are not used for trading or speculative purposes. To minimize the risk of counter party non-performance, derivative instrument agreements are made only through major financial institutions with significant experience in such derivative instruments.

We also face risks arising from the imposition of exchange controls and currency devaluations. Exchange controls may limit our ability to convert foreign currencies into U.S. dollars or to remit dividends and other payments by our foreign subsidiaries or businesses located in or conducted within a country imposing controls. Currency devaluations result in a diminished value of funds denominated in the currency of the country instituting the devaluation.

Material adverse legal judgments, fines, penalties or settlements could adversely affect our results of operations or financial condition.

We are currently and may in the future become involved in legal proceedings and disputes incidental to the operation of our business or the business operations of previously-owned entities. Our business may be adversely affected by the outcome of these proceedings and other contingencies (including, without limitation, contract claims or other commercial disputes, product liability, product defects and asbestos-related matters) that cannot be predicted with certainty. Moreover, any insurance or indemnification rights that we may have may be insufficient or unavailable to protect us against the total aggregate amount of losses sustained as a result of such proceedings and contingencies. As required by generally accepted accounting principles in the United States, we establish reserves based on our assessment of contingencies. Subsequent developments in legal proceedings and other events could affect our assessment and estimates of the loss contingency recorded as a reserve and we may be required to make additional material payments, which could have a material adverse impact on our liquidity, results of operations, financial condition, and cash flows.

Our reputation, ability to do business and results of operations could be impaired by improper conduct by any of our employees, agents or business partners.

We are subject to regulation under a wide variety of U.S. federal and state and non-U.S. laws, regulations and policies, including laws related to anti-corruption, export and import compliance, anti-trust and money laundering, due to our global operations. We cannot provide assurance our internal controls will always protect us from the improper conduct of our employees, agents and business partners. Any violations of law or improper conduct could damage our reputation and, depending on the circumstances, subject us to, among other things, civil and criminal penalties, material fines, equitable remedies (including profit disgorgement and injunctions on future conduct), securities litigation and a general loss of investor confidence, any one of which could have a material adverse impact on our business prospects, financial condition, results of operations, cash flows, and the market value of our stock.

We may be subject to risks relating to our information technology systems.

We rely extensively on information technology systems, some of which are supported by third party vendors including cloud services, to manage and operate our business. We are also investing in new information technology systems that are designed to continue improving our operations. If these systems cease to function properly, if these systems experience security breaches or disruptions or if these systems do not provide the anticipated benefits, our ability to manage our operations could be impaired, which could have a material adverse impact on our results of operations, financial condition, and cash flows.

Security breaches or disruptions of our technology systems, infrastructure or products could negatively impact our business and financial results.

Our information technology systems and infrastructure and technology embedded in certain of our control products may be subject to cyber attacks and unauthorized security intrusions. It is possible for such vulnerabilities to remain undetected for an extended period. In addition, hardware, software or applications we develop or obtain from third parties may contain defects in design or manufacture or other problems that could unexpectedly result in security breaches or disruptions. The methods used to obtain unauthorized access, disable or degrade service, or sabotage systems are constantly changing and evolving. Despite having instituted security policies and business continuity plans, and implementing and regularly reviewing and updating processes and procedures to protect against unauthorized access, the ever-evolving threats mean we must continually evaluate and adapt our systems and processes, and there is no guarantee that they will be adequate to safeguard against all data security breaches or misuses of data. Our systems, networks and certain of our control products may be vulnerable to system damage, malicious attacks from hackers, employee errors or misconduct, viruses, power and utility outages, and other catastrophic events that could cause significant harm to our business by negatively impacting our business operations, compromising the security of our proprietary information or the personally identifiable data relating to our customers, employees and business partners and exposing us to litigation that could adversely affect our reputation. Such events could have a material adverse impact on our results of operations, financial condition and cash flows. Our insurance coverage may not be adequate to cover all the costs related to a cybersecurity attack or disruptions resulting from such attacks.

Commodity shortages and price increases could adversely affect our financial results.

We rely on suppliers to secure commodities, particularly steel and non-ferrous metals, required for the manufacture of our products. A disruption in deliveries from our suppliers or decreased availability of commodities could have an adverse effect on our ability to meet our commitments to customers or increase our operating costs. We believe that available sources of supply will generally be sufficient for our needs for the foreseeable future. Nonetheless, the unavailability of some commodities could have a material adverse impact on our results of operations and cash flows.

Volatility in the prices of these commodities or the impact of inflationary increases could increase the costs of our products and services. We may not be able to pass on these costs to our customers and this could have a material adverse impact on our results of operations and cash flows. Conversely, in the event there is deflation, we may experience pressure from our customers to reduce prices. There can be no assurance that we would be able to reduce our costs (through negotiations with suppliers or other measures) to offset any such price concessions which could adversely impact results of operations and cash flows. We do not currently use financial derivatives to hedge against this volatility. While we use fixed price contracts to mitigate this exposure, we expect any future hedging activity to seek to minimize near-term volatility of the commodity prices which would not protect us from long-term commodity price increases.

Some of our purchases are from sole or limited source suppliers for reasons of cost effectiveness, uniqueness of design or product quality. If these suppliers encounter financial or operating difficulties, we might not be able to quickly establish or qualify replacement sources of supply.

We may be required to recognize impairment charges for our goodwill and other indefinite-lived intangible assets.

At December 31, 2017, the net carrying value of our goodwill and other indefinite-lived intangible assets totaled \$5.9 billion and \$2.7 billion, respectively. In accordance with generally accepted accounting principles, we periodically assess these assets to determine if they are impaired. Significant negative industry or economic trends, disruptions to our business, unexpected significant changes or planned changes in use of the assets, divestitures and sustained market capitalization declines may result in recognition of impairments to goodwill or other indefinite-lived assets. Any charges relating to such impairments could have a material adverse impact on our results of operations in the periods recognized.

Global climate change and related regulations could negatively affect our business.

Refrigerants are essential to many of our products and there is a growing awareness and concern regarding global warming potential of such materials. As such, 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 have committed to increase energy efficiency and reduce our climate impact with operational and product-related climate targets, including among other initiatives: (i) 50 percent reduction in the greenhouse gas emissions refrigerant footprint of our products for our customers by 2020 and lower global warming potential alternatives across our portfolio by 2030; (ii) \$500 million investment in product-related research and development from 2015-2020 to fund the long-term reduction of greenhouse gas emissions; and (iii) 35 percent reduction in the greenhouse gas footprint of our office

buildings, manufacturing facilities and fleet by 2020. While we are committed to pursuing these sustainable solutions, there can be no assurance that our commitments will be successful, that our products will be accepted by the market, that proposed regulation or deregulation will not have a negative competitive impact or that economic returns will match the investment that we are making in new product development.

Concerns regarding global climate change have resulted in the Kigali amendment to the Montreal Protocol, pursuant to which countries have agreed to a scheduled phase down of certain high global warming potential refrigerants. National regulations are expected to be set globally to reduce the use of these refrigerants. These regulations could be even more restrictive than the international agreement. Some countries including the U.S. have not yet ratified the amendment and there could be lower customer demand for next generation products in these countries. There continues to be a lack of consistent climate legislation, which creates economic and regulatory uncertainty. In addition, the U.S. withdrawal from the Paris Accord could affect our competitiveness in certain markets. Such regulatory uncertainty extends to future incentives for energy efficient buildings and vehicles and costs of compliance, which may impact the demand for our products, obsolescence of our products and our results of operations.

Natural disasters or other unexpected events may disrupt our operations, adversely affect our results of operations and financial condition, and may not be covered by insurance.

The occurrence of one or more unexpected events, including hurricanes, fires, earthquakes, floods and other forms of severe weather in the U.S. or in other countries in which we operate or are located could adversely affect our operations and financial performance. Natural disasters, power outages or other unexpected events could result in physical damage to and complete or partial closure of one or more of our plants, temporary or long-term disruption of our operations by causing business interruptions or by impacting the availability and cost of materials needed for manufacturing. Existing insurance arrangements may not provide protection for the costs that may arise from such events, particularly if such events are catastrophic in nature or occur in combination. The occurrence of any of these events could increase our insurance and other operating costs.

Some of the markets in which we operate are cyclical and seasonal and demand for our products and services could be adversely affected by downturns in these industries.

Demand for most of our products and services depends on the level of new capital investment and planned maintenance expenditures by our customers. The level of capital expenditures by our customers fluctuates based on planned expansions, new builds, repairs, commodity prices, general economic conditions, availability of credit, inflation, interest rates, market forecasts, tax and regulatory developments, trade policies, fiscal spending and sociopolitical factors among others.

Our commercial and residential HVAC businesses, which collectively represent 64% of our 2017 net revenues, provide products and services to a wide range of markets, including significant sales to the commercial and residential construction markets. Weakness in either or both of these construction markets may negatively impact the demand for our products and services.

Demand for our commercial and residential HVAC business is also influenced by weather conditions. For instance, sales in our commercial and residential HVAC businesses historically tend to be seasonally higher in the second and third quarters of the year because, in the U.S. and other northern hemisphere markets, summer is the peak season for sales of air conditioning systems and services. The results of any quarterly period may not be indicative of expected results for a full year and unusual weather patterns or events could negatively or positively affect our business and impact overall results of operations.

The business of many of our industrial customers, particularly oil and gas companies are to varying degrees cyclical and have experienced periodic downturns. During such economic downturns, customers in these industries historically have tended to delay major capital projects, maintenance projects and upgrades.

Decrease in the demand for our products and services could have a material adverse impact on our results of operations and cash flow.

Our business strategy includes acquiring and divesting companies, product lines, plants and assets, entering into joint ventures and making investments that complement our existing businesses. We may not identify acquisition, disposition or joint venture candidates at the same rate as the past. Acquisitions, dispositions, joint ventures and investments that we identify could be unsuccessful or consume significant resources, which could adversely affect our operating results.

We continue to analyze and evaluate the acquisition and divestiture of strategic businesses and product lines, technologies and capabilities, plants and assets, joint ventures and investments with the potential to strengthen our industry position, enhance our existing set of product and services offerings, to increase productivity and efficiencies, or to grow or protect revenues, earnings and cash flow or to reduce costs. There can be no assurance that we will identify or successfully complete transactions with suitable

candidates in the future, that we will consummate these transactions at rates similar to the past or that completed transactions will be successful. Strategic transactions may involve significant cash expenditures, debt incurrence, operating losses and expenses that could have a material adverse effect on our business, financial condition, results of operations and cash flows. Such transactions involve numerous other risks, including:

- diversion of management time and attention from daily operations;
- difficulties integrating acquired businesses, technologies and personnel into our business;
- difficulties in obtaining and verifying the financial statements and other business information of acquired businesses;
- inability to obtain required regulatory approvals and/or required financing on favorable terms;
- potential loss of key employees, key contractual relationships or key customers of either acquired businesses or our business;
- assumption of the liabilities and exposure to unforeseen or undisclosed liabilities of acquired businesses and exposure to regulatory sanctions;
- inheriting internal control deficiencies;
- dilution of interests of holders of our common shares through the issuance of equity securities or equity-linked securities; and
- in the case of joint ventures and other investments, interests that diverge from those of our partners without the ability to direct the management and operations of the joint venture or investment in the manner we believe most appropriate.

It may be difficult for us to complete transactions quickly and to integrate acquired operations efficiently into our business operations. Any acquisitions, divestitures, joint ventures or investments may ultimately harm our business, financial condition, results of operations and cash flows, as such transactions may not be successful and may ultimately result in impairment charges.

Our operations are subject to regulatory risks.

Our U.S. and non-U.S. operations are subject to a number of laws and regulations, including among others, laws related to the environment and health and safety. We have made, and will be required to continue to make, significant expenditures to comply with these laws and regulations. Any violations of applicable laws and regulations could lead to significant penalties, fines or other sanctions. Changes in current laws and regulations could require us to increase our compliance expenditures, cause us to significantly alter or discontinue offering existing products and services or cause us to develop new products and services. Altering current products and services or developing new products and services to comply with changes in the applicable laws and regulations could require significant research and development investments, increase the cost of providing the products and services and adversely affect the demand for our products and services. The U.S. federal government and various states and municipalities have enacted or may enact legislation intended to deny government contracts to U.S. companies that reincorporate outside of the U.S. or have reincorporated outside of the U.S. or may take other actions negatively impacting such companies. If we are unable to effectively respond to changes to applicable laws and regulations, interpretations of applicable laws and regulations, or comply with existing and future laws and regulations, our competitive position, results of operations, financial condition and cash flows could be materially adversely impacted.

RISKS RELATING TO OUR PAST SPIN-OFF TRANSACTION

In December 2013, we completed the spin-off of our former commercial and residential security businesses to our shareholders (the spin-off) pursuant to which each shareholder as of the record date for the spin-off received one ordinary share of Allegion plc (Allegion) for every three Ingersoll-Rand plc ordinary shares. Allegion is now an independent public company. This spin-off exposed us and our shareholders to the risks described below. In addition, we cannot be assured that all of the anticipated benefits of the spin-off and subsequent to the spin-off will be realized.

If the distribution or certain internal transactions undertaken in anticipation of the spin-off are determined to be taxable for U.S. federal income tax purposes, we, our shareholders as of the time of the distribution that are subject to U.S. federal income tax and/or Allegion could incur significant U.S. federal income tax liabilities.

We received a ruling from the U.S. Internal Revenue Service (IRS) substantially to the effect that, among other things, the distribution of Allegion plc's ordinary shares, together with certain related transactions, will qualify for tax-free treatment under Sections 355 and 368(a) of the U.S. Internal Revenue Code of 1986, as amended (the Code), with the result that we and our shareholders will not recognize any taxable income, gain or loss for U.S. federal income tax purposes as a result of the spin-off, except to the extent of cash received in lieu of fractional shares (the IRS Ruling). The IRS Ruling also provides that specified internal transactions undertaken in anticipation of the distribution will qualify for favorable treatment under the Code. In addition, we received opinions from the law firm of Simpson Thacher & Bartlett LLP substantially to the effect that specified requirements, including certain requirements that the IRS will not rule on, necessary to obtain tax-free treatment have been satisfied, such that the distribution for U.S. federal income tax purposes and certain other matters relating to the distribution, including certain internal

transactions undertaken in anticipation of the distribution, will receive tax-free treatment under Section 355 of the Code. The IRS Ruling and the opinions relied on certain facts and assumptions and certain representations and undertakings from us and Allegion regarding the past and future conduct of our respective businesses and other matters.

Notwithstanding the IRS Ruling and the opinions, the IRS could determine on audit that the distribution or the internal transactions should be treated as taxable transactions if it determines that any of these facts, assumptions, representations or undertakings is not correct or has been violated, or that the distribution or the internal transactions should be taxable for other reasons, including as a result of significant changes in shares or asset ownership after the distribution. A legal opinion represents the tax adviser's best legal judgment and is not binding on the IRS or the courts, and the IRS or the courts may not agree with the opinion. In addition, the opinion is based on current law and cannot be relied upon if current law changes with retroactive effect. If the distribution, and/or internal transactions, ultimately is determined to be taxable, we or Allegion could incur significant U.S. federal income tax liabilities, which could cause a material adverse impact on our business, financial condition, results of operations and cash flows in future reporting periods.

Furthermore, if, notwithstanding receipt of the IRS Ruling and opinions, the spin-off were determined to be a taxable transaction, each shareholder subject to U.S. federal income tax who received shares of Allegion in the spin-off would generally be treated as receiving a taxable distribution of property in an amount equal to the fair market value of the Allegion shares received. That distribution would be taxable as a dividend to the extent of our then-current and accumulated earnings and profits. Any amount that exceeded our earnings and profits would be treated first as a non-taxable return of capital to the extent of the applicable shareholder's tax basis in our ordinary shares with any remaining amount being taxed as a capital gain.

Under the terms of the Tax Matters Agreement between us and Allegion executed in connection with the spin-off, in the event the distribution or the internal transactions were determined to be taxable as a result of actions taken after the distribution by us or Allegion, the party responsible for such failure would be responsible for all taxes imposed on us or Allegion as a result thereof. If such failure is not the result of actions taken after the distribution by us or Allegion, then Allegion would be responsible for any taxes imposed on us or Allegion as a result of such determination. Such tax amounts could be significant. If Allegion were to default in its obligation to us to pay such taxes, we could be legally liable under applicable tax law for such liabilities and required to make additional tax payments. Accordingly, under certain circumstances, we may be obligated to pay amounts in excess of our agreed-upon share of tax liabilities. To the extent we are responsible for any liability under the Tax Matters Agreement, there could be a material adverse impact on our business, financial condition, results of operations and cash flows in future reporting periods.

If the distribution is determined to be taxable for Irish tax purposes, significant Irish tax liabilities may arise.

We received an opinion of Irish Revenue regarding the Irish tax consequences of the distribution to the effect that certain reliefs and exemptions for corporate reorganizations apply. In addition to obtaining the opinion from Irish Revenue, we also received opinions from the law firm of Arthur Cox confirming the applicability of the relevant exemptions and reliefs to the distribution as well as received opinions from other external advisers that certain internal transactions will not trigger Irish tax costs as well. These opinions relied on certain facts and assumptions and certain representations and undertakings from us and Allegion regarding the past and future conduct of our respective businesses and other matters. Notwithstanding the opinions, Irish Revenue could determine on audit that the distribution or the internal transactions do not qualify for the relevant exemptions or reliefs if it determines that any of these facts, assumptions, representations or undertakings is not correct or has been violated. A legal opinion represents the tax adviser's best legal judgment and is not binding on Irish Revenue or the courts and Irish Revenue or the courts may not agree with the legal opinion. In addition, the legal opinion is based on current law and cannot be relied upon if current law changes with retroactive effect. If the distribution ultimately is determined not to fall within certain exemptions or reliefs, the distribution could result in certain of our shareholders having an Irish tax liability as a result of the distribution, or we or Allegion could incur Irish tax liabilities. To the extent we are responsible for any such liability under the Tax Matters Agreement, there could be a material adverse impact on our business, financial condition, results of operations and cash flows in future reporting periods.

RISKS RELATING TO OUR OPERATIONS AND CORPORATE STRUCTURE

Our corporate structure has resulted from prior corporate reorganizations and related transactions. These various transactions exposed us and our shareholders to the risks described below. In addition, we cannot be assured that all of the anticipated benefits of our operations and corporate structure will be realized.

Changes in tax or other laws, regulations or treaties, including the recent enactment of the U.S. Tax Cuts and Jobs Act, changes in our status under U.S. or non-U.S. laws or adverse determinations by taxing or other governmental authorities could increase our tax burden or otherwise affect our financial condition or operating results, as well as subject our shareholders to additional taxes.

The realization of any tax benefit related to our operations and corporate structure could be impacted by changes in tax or other laws, treaties or regulations or the interpretation or enforcement thereof by the U.S. or non-U.S. tax or other governmental authorities. Recently enacted comprehensive tax reform legislation known as the Tax Cuts and Jobs Act (TCJA) makes broad and complex changes to the U.S. tax code. As part of the migration from a worldwide system of taxation to a modified territorial system for corporations, the TCJA imposes a transition tax on certain unrepatriated earnings of non-U.S. subsidiaries. We have taken a charge in connection with the mandatory deemed repatriation of earnings of certain of our non-U.S. subsidiaries, and we have recorded other charges and benefits, set forth in greater detail in Note 15 to the Consolidated Financial Statements. We are also continuing to evaluate any additional impact on the Company from the TCJA. The full impact of the changes is not currently determinable, as we are expecting future guidance to be issued by the U.S. Department of Treasury and/or the IRS, which we expect will provide better clarity regarding the interpretation and application of these rules; however, the new law's substantial limitations on, and/or elimination of, certain tax deductions and the introduction of new taxing provisions, among other items, may increase our overall tax burden or otherwise negatively impact the Company. Moreover, our overall tax burden may also be adversely impacted by any tax law changes implemented by other countries.

Notwithstanding this change in U.S. tax law, we continue to monitor for other tax changes, U.S. and non-U.S. related. From time to time, proposals have been made and/or legislation has been introduced to change the tax laws, regulations or interpretations thereof of various jurisdictions or limit tax treaty benefits that if enacted or implemented could materially increase our tax burden and/or effective tax rate and could have a material adverse impact on our financial condition and results of operations. Moreover, the Organisation for Economic Co-operation and Development has released proposals to create an agreed set of international rules for fighting base erosion and profit shifting, such that tax laws in countries in which we do business could change on a prospective or retroactive basis, and any such changes could adversely impact us. Finally, the European Commission has been very active in investigating whether various tax regimes or private tax rulings provided by a country to particular taxpayers may constitute State Aid. We cannot predict the outcome of any of these potential changes or investigations in any of the jurisdictions, but if any of the above occurs and impacts us, this could materially increase our tax burden and/or effective tax rate and could have a material adverse impact on our financial condition and results of operations.

While we monitor proposals and other developments that would materially impact our tax burden and/or effective tax rate and investigate our options, we could still be subject to increased taxation on a going forward basis no matter what action we undertake if certain legislative proposals or regulatory changes are enacted, certain tax treaties are amended and/or our interpretation of applicable tax or other laws is challenged and determined to be incorrect. In particular, any changes and/or differing interpretations of applicable tax law that have the effect of disregarding the shareholders' decision to reorganize in Ireland, limiting our ability to take advantage of tax treaties between jurisdictions, modifying or eliminating the deductibility of various currently deductible payments, or increasing the tax burden of operating or being resident in a particular country, could subject us to increased taxation.

While our U.S. operations are subject to U.S. tax, we believe that a significant portion of our non-U.S. operations are generally not subject to U.S. tax other than withholding taxes. For pre-TCJA years, the IRS or a court, however, may not concur with our conclusions including our determination that we, and a significant number of our foreign subsidiaries, are not controlled foreign corporations (CFC) within the meaning of the U.S. tax laws. A contrary determination could also potentially cause U.S. holders (direct, indirect or constructive owners) of 10% or more of our stock (or the voting stock of our non-U.S. subsidiaries) to include in their gross income their pro rata share of certain of our and our non-U.S. subsidiary income for the period during which we (and our non-U.S. subsidiaries) were a CFC. In addition, a gain (or a portion of such gain) realized on CFC shares sold by such shareholders may be treated as ordinary income depending on certain facts. Treatment of us or any of our non-U.S. subsidiaries as a CFC for such years could have a material adverse impact on our results of operations, financial condition, and cash flows.

The inability to realize any anticipated tax benefits related to our operations and corporate structure could have a material adverse impact on our results of operations, financial condition, and cash flows.

In addition, tax authorities periodically review income tax returns filed by us and can raise issues regarding our filing positions, timing and amount of income or deductions, and the allocation of income among the jurisdictions in which we operate. These examinations on their own, or any subsequent litigation related to the examinations, may result in additional taxes or penalties against us. If the ultimate result of these audits differ from our original or adjusted estimates, they could have a material impact on our tax provision.

Irish law differs from the laws in effect in the United States and may afford less protection to holders of our securities.

The United States currently does not have a treaty with Ireland providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. As such, there is some uncertainty as to whether the courts of Ireland would recognize or enforce judgments of U.S. courts obtained against us or our directors or officers based on U.S. federal or state civil liability laws, including the civil liability provisions of the U.S. federal or state securities laws, or hear actions against us or those persons based on those laws.

As an Irish company, we are governed by the Irish Companies Act, which differs in some material respects from laws generally applicable to U.S. corporations and shareholders, including, among others, differences relating to interested director and officer transactions and shareholder lawsuits. Likewise, the duties of directors and officers of an Irish company generally are owed to the company only. Shareholders of Irish companies generally do not have a personal right of action against directors or officers of the company and may exercise such rights of action on behalf of the company only in limited circumstances. Accordingly, holders of our securities may have more difficulty protecting their interests than would holders of securities of a corporation incorporated in a jurisdiction of the United States.

In addition, Irish law allows shareholders to authorize share capital which then can be issued by a board of directors without shareholder approval. Also, subject to specified exceptions, Irish law grants statutory pre-emptive rights to existing shareholders to subscribe for new issuances of shares for cash, but allows shareholders to authorize the waiver of the statutory pre-emptive rights with respect to any particular allotment of shares. Under Irish law, we must have authority from our shareholders to issue any shares, including shares that are part of the Company's authorized but unissued share capital. In addition, unless otherwise authorized by its shareholders, when an Irish company issues shares for cash to new shareholders, it is required first to offer those shares on the same or more favorable terms to existing shareholders on a pro-rata basis. If we are unable to obtain these authorizations from our shareholders, or are otherwise limited by the terms of our authorizations, our ability to issue shares or otherwise raise capital could be adversely affected.

Dividends received by our shareholders may be subject to Irish dividend withholding tax.

In certain circumstances, we are required to deduct Irish dividend withholding tax (currently at the rate of 20%) from dividends paid to our shareholders. In the majority of cases, shareholders resident in the United States will not be subject to Irish withholding tax, and shareholders resident in a number of other countries will not be subject to Irish withholding tax provided that they complete certain Irish dividend withholding tax forms. However, some shareholders may be subject to withholding tax, which could have an adverse impact on the price of our shares.

Dividends received by our shareholders could be subject to Irish income tax.

Dividends paid in respect of our shares will generally not be subject to Irish income tax where the beneficial owner of these dividends is exempt from dividend withholding tax, unless the beneficial owner of the dividend has some connection with Ireland other than his or her shareholding in Ingersoll-Rand plc.

Our shareholders who receive their dividends subject to Irish dividend withholding tax will generally have no further liability to Irish income tax on the dividends unless the beneficial owner of the dividend has some connection with Ireland other than his or her shareholding in Ingersoll-Rand plc.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

As of December 31, 2017, we owned or leased a total of approximately 31 million square feet of space worldwide. Manufacturing and assembly operations are conducted in 53 plants across the world. We also maintain various warehouses, offices and repair centers throughout the world. The majority of our plant facilities are owned by us with the remainder under long-term lease arrangements. We believe that our plants have been well maintained, are generally in good condition and are suitable for the conduct of our business.

The locations by segment of our principal plant facilities at December 31, 2017 were as follows:

Climate		
Americas	Europe and Middle East	Asia Pacific and India
Arecibo, Puerto Rico	Barcelona, Spain	Bangkok, Thailand
Charlotte, North Carolina	Bari, Italy	Penang, Malaysia
Clarksville, Tennessee	Charmes, France	Taicang, China
Columbia, South Carolina	Essen, Germany	Zhongshan, China
Curitiba, Brazil	Galway, Ireland	
Fairlawn, New Jersey	Golbey, France	
Fort Smith, Arkansas	King Abdullah Economic City, Saudi Arabia	
Grand Rapids, Michigan	Kolin, Czech Republic	
Hastings, Nebraska		
La Crosse, Wisconsin		
Lexington, Kentucky		
Lynn Haven, Florida		
Macon, Georgia		
Monterrey, Mexico		
Pueblo, Colorado		
Rushville, Indiana		
St. Paul, Minnesota		
Trenton, New Jersey		
Tyler, Texas		
Vidalia, Georgia		
Waco, Texas		

Industrial		
Americas	Europe and Middle East	Asia Pacific and India
Augusta, Georgia	Fogliano Redipuglia, Italy	Changzhou, China
Buffalo, New York	Logatec, Slovenia	Guilin, China
Campbellsville, Kentucky	Oberhausen, Germany	Naroda, India
Dorval, Canada	Sin le Noble, France	Sahibabad, India
Kent, Washington	Vignate, Italy	Wujiang, China
Mocksville, North Carolina	Wasquehal, France	
Sarasota, Florida		
Southern Pines, North Carolina		
West Chester, Pennsylvania		

ITEM 3. LEGAL PROCEEDINGS

In the normal course of business, we are involved in a variety of lawsuits, claims and legal proceedings, including commercial and contract disputes, employment matters, product liability and product defect claims, asbestos-related claims, environmental liabilities, intellectual property disputes, and tax-related matters. In our opinion, pending legal matters are not expected to have a material adverse impact on our results of operations, financial condition, liquidity or cash flows.

ASBESTOS-RELATED MATTERS

Certain of our wholly-owned subsidiaries and former companies are named as defendants in asbestos-related lawsuits in state and federal courts. In virtually all of the suits, a large number of other companies have also been named as defendants. The vast majority of those claims allege injury caused by exposure to asbestos contained in certain historical products, primarily pumps, boilers and railroad brake shoes. None of our existing or previously-owned businesses were a producer or manufacturer of asbestos.

See also the discussion under Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Contingent Liabilities," and also Note 19 to the Consolidated Financial Statements.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Information regarding the principal market for our ordinary shares and related shareholder matters is as follows:

Our ordinary shares are traded on the New York Stock Exchange under the symbol IR. As of February 1, 2018, the approximate number of record holders of ordinary shares was 3,272.

The high and low sales price per share and the dividend declared per share for the following periods were as follows:

	Ordinary shares		
	High	Low	Dividend
2017			
First quarter	\$82.17	\$74.35	\$0.40
Second quarter	93.17	80.48	0.40
Third quarter	94.39	83.07	0.45
Fourth quarter	96.23	83.30	0.45
2016	High	Low	Dividend
First quarter	\$62.48	\$47.08	\$0.32
Second quarter	67.48	59.10	0.32
Third quarter	68.97	62.40	0.32
Fourth quarter	79.21	63.87	0.40

Future dividends on our ordinary shares, if any, will be at the discretion of our Board of Directors and will depend on, among other things, our results of operations, cash requirements and surplus, financial condition, contractual restrictions and other factors that the Board of Directors may deem relevant, as well as our ability to pay dividends in compliance with the Irish Companies Act 2014. Under the Irish Companies Act 2014, dividends and distributions may only be made from distributable reserves. Distributable reserves, broadly, means the accumulated realized profits (so far as not previously distributed or capitalized) less its accumulated, realized losses (so far as not previously written off in a reduction or reorganization of its share capital) of Ingersoll-Rand plc. In addition, no distribution or dividend may be made unless the net assets of Ingersoll-Rand plc are equal to, or in excess of, the aggregate of Ingersoll-Rand plc's called up share capital plus undistributable reserves and the distribution does not reduce Ingersoll-Rand plc's net assets below such aggregate.

Information regarding equity compensation plans required to be disclosed pursuant to this Item is incorporated by reference from our definitive proxy statement for the Annual General Meeting of Shareholders.

ISSUER PURCHASES OF EQUITY SECURITIES

The following table provides information with respect to purchases by us of our ordinary shares during the quarter ended December 31, 2017:

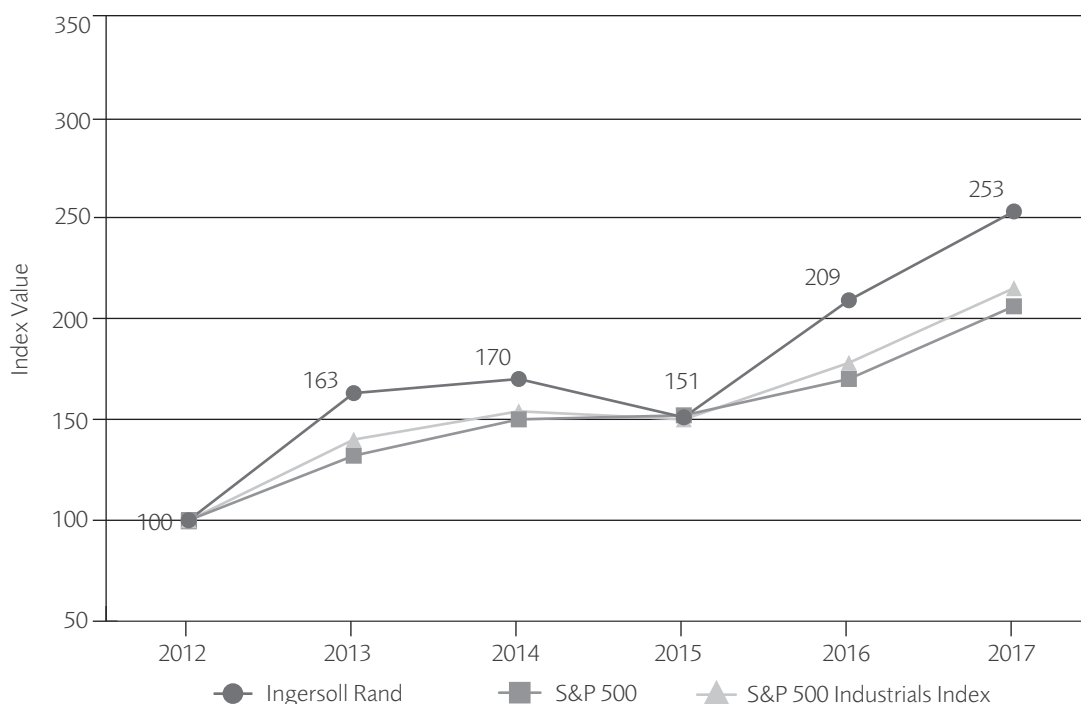
Period	Total number of shares purchased (000's) ^(a) ^(b)	Average price paid per share ^(a) ^(b)	Total number of shares purchased as part of program (000's) ^(a)	Approximate dollar value of shares still available to be purchased under the program (\$000's) ^(a)
October 1 - October 31	1,157.7	\$ 91.25	1,156.8	\$900,020
November 1 - November 30	0.2	86.38	—	\$900,020
December 1 - December 31	1.1	86.51	—	\$900,020
Total	1,159.0	\$91.25	1,156.8	

(a) In February 2017, our Board of Directors authorized the repurchase of up to \$1.5 billion of our ordinary shares under a new share repurchase program upon completion of the prior authorized share repurchase program. Repurchases under the new share repurchase program began in May 2017. Share repurchases are made from time to time in accordance with management's capital allocation strategy, subject to market conditions and regulatory requirements. The repurchase program does not have a prescribed expiration date.

(b) We may also reacquire shares outside of the repurchase program from time to time in connection with the surrender of shares to cover taxes on vesting of share based awards. We reacquired 912 shares in October, 160 shares in November, and 1,120 shares in December in transactions outside the repurchase programs.

PERFORMANCE GRAPH

The following graph compares the cumulative total shareholder return on our ordinary shares with the cumulative total return on (i) the Standard & Poor's 500 Stock Index and (ii) the Standard & Poor's 500 Industrial Index for the five years ended December 31, 2017. The graph assumes an investment of \$100 in our ordinary shares, the Standard & Poor's 500 Stock Index and the Standard & Poor's 500 Industrial Index on December 31, 2012 and assumes the reinvestment of dividends.



Company/Index	2012	2013	2014	2015	2016	2017
Ingersoll Rand	100	163	170	151	209	253
S&P 500	100	132	150	152	170	206
S&P 500 Industrials Index	100	140	154	150	178	215

ITEM 6. SELECTED FINANCIAL DATA

In millions, except per share amounts:

<i>At and for the years ended December 31,</i>	2017	2016	2015	2014	2013
Net revenues	\$ 14,197.6	\$ 13,508.9	\$ 13,300.7	\$ 12,891.4	\$ 12,350.5
Net earnings (loss) attributable to Ingersoll-Rand plc ordinary shareholders:					
Continuing operations	1,328.0	1,443.3	688.9	897.0	620.1
Discontinued operations	(25.4)	32.9	(24.3)	34.7	(1.3)
Total assets	18,173.3	17,397.4	16,717.6	17,274.6	17,641.5
Total debt	4,064.0	4,070.2	4,217.8	4,200.5	3,504.6
Total Ingersoll-Rand plc shareholders' equity	7,140.3	6,643.8	5,816.7	5,987.4	7,068.9
Earnings (loss) per share attributable to Ingersoll-Rand plc ordinary shareholders:					
Basic:					
Continuing operations	\$ 5.21	\$ 5.57	\$ 2.60	\$ 3.32	\$ 2.11
Discontinued operations	(0.10)	0.13	(0.09)	0.12	—
Diluted:					
Continuing operations	\$ 5.14	\$ 5.52	\$ 2.57	\$ 3.27	\$ 2.08
Discontinued operations	(0.09)	0.13	(0.09)	0.13	(0.01)
Dividends declared per ordinary share	\$ 1.70	\$ 1.36	\$ 1.16	\$ 1.00	\$ 0.63

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from the results discussed in the forward-looking statements. Factors that might cause a difference include, but are not limited to, those discussed under Item 1A. Risk Factors in this Annual Report on Form 10-K. The following section is qualified in its entirety by the more detailed information, including our financial statements and the notes thereto, which appears elsewhere in this Annual Report.

OVERVIEW

Organization

We are a diversified, global company that provides products, services and solutions to enhance the quality, energy efficiency and comfort of air in homes and buildings, transport and protect food and perishables and increase industrial productivity and efficiency. Our business segments consist of Climate and Industrial, both with strong brands and highly differentiated products within their respective markets. We generate revenue and cash primarily through the design, manufacture, sale and service of a diverse portfolio of industrial and commercial products that include well-recognized, premium brand names such as Ingersoll-Rand®, Trane®, Thermo King®, American Standard®, ARO®, and Club Car®.

To achieve our mission of being a world leader in creating comfortable, sustainable and efficient environments, we continue to focus on growth by increasing our recurring revenue stream from parts, service, controls, used equipment and rentals; and to continuously improve the efficiencies and capabilities of the products and services of our businesses. We also continue to focus on operational excellence strategies as a central theme to improving our earnings and cash flows.

Trends and Economic Events

We are a global corporation with worldwide operations. As a global business, our operations are affected by worldwide, regional and industry-specific economic factors, as well as political factors, wherever we operate or do business. Our geographic and industry diversity, and the breadth of our product and services portfolios, have helped mitigate the impact of any one industry or the economy of any single country on our consolidated operating results.

Given the broad range of products manufactured and geographic markets served, management uses a variety of factors to predict the outlook for the Company. We monitor key competitors and customers in order to gauge relative performance and the outlook for the future. We regularly perform detailed evaluations of the different market segments we are serving to proactively detect trends and to adapt our strategies accordingly. In addition, we believe our order rates are indicative of future revenue and thus a key measure of anticipated performance. In those industry segments where we are a capital equipment provider, revenues depend on the capital expenditure budgets and spending patterns of our customers, who may delay or accelerate purchases in reaction to changes in their businesses and in the economy.

Current economic conditions continue to show mixed trends in each of the segments in which we participate. Heating, Ventilation, and Air Conditioning (HVAC) equipment replacement and aftermarket continue to experience strong demand. In addition, Residential and Commercial new construction have seen continued momentum in the United States which is positively impacting the results of our HVAC businesses. However, non-residential markets in both Europe and Asia remain mixed. Global Industrial markets appear to be improving with positive signs in our shorter-cycle businesses. Going forward, we expect moderate growth within our Climate segment and market improvements in our Industrial segment, each benefiting from operational excellence initiatives, new product launches and continued productivity programs.

We believe we have a solid foundation of global brands that are highly differentiated in all of our major product lines. Our growing geographic and industry diversity coupled with our large installed product base provides growth opportunities within our service, parts and replacement revenue streams. In addition, we are investing substantial resources to innovate and develop new products and services which we expect will drive our future growth.

Significant Events

Tax Cuts and Job Act

In December 2017, the U.S. enacted the Tax Cuts and Jobs Act (the "Act") which makes widespread changes to the Internal Revenue Code. The Act, among other things, reduced the U.S. federal corporate tax rate from 35% to 21%, requires companies to pay a transition tax on earnings of certain foreign subsidiaries that were previously not subject to U.S. tax and creates new income taxes on certain foreign sourced earnings. The SEC issued Staff Accounting Bulletin No. 118 (SAB 118) which provides guidance on accounting for the tax effects of the Act and allows for adjustments to provisional amounts during a measurement

period of up to one year. In accordance with SAB 118, we have made reasonable estimates related to (1) the remeasurement of U.S. deferred tax balances for the reduction in the tax rate (2) the liability for the transition tax and (3) the taxes accrued relating to the change in permanent reinvestment assertion for unremitted earnings of certain foreign subsidiaries. As a result, we recognized a net provisional income tax benefit of \$21.0 million associated with these items in 2017. We are continuing to evaluate how the provisions of the Act will be accounted for under ASC 740, "Income Taxes" (ASC 740). The analysis is provisional and is subject to change due to the additional time required to accurately calculate and review the complex tax law. Any measurement period adjustments will be reported as a component of *Provision for income taxes* in the reporting period the amounts are determined. The final accounting will be completed no later than one year from the enactment of the Act.

Share Repurchase Program and Dividends

Share repurchases are made from time to time in accordance with management's capital allocation strategy, subject to market conditions and regulatory requirements. In February 2014, our Board of Directors authorized the repurchase of up to \$1.5 billion of our ordinary shares under a share repurchase program that began in April 2014 and was completed in the second quarter of 2017.

In February 2017, our Board of Directors authorized the repurchase of up to \$1.5 billion of our ordinary shares under a new share repurchase program upon completion of the prior share repurchase program. Repurchases under this program began in May 2017 and total approximately \$600 million at December 31, 2017. As a result, we have approximately \$900 million remaining under this program. We repurchased approximately \$1.0 billion of our ordinary shares during 2017.

In August 2017, we announced an increase in our quarterly share dividend from \$0.40 to \$0.45 per ordinary share. This reflects a 12.5% increase that began with our September 2017 payment and a 55% increase since the beginning of 2016.

Acquisitions

During 2017, we acquired several businesses, including channel acquisitions, that complement existing products and services. The aggregate purchase price, net of cash acquired, totaled \$157.6 million and was funded through cash on hand. Acquisitions within the Climate segment primarily consisted of independent dealers which support the ongoing strategy to expand our distribution network in North America. Other acquisitions within the segment strengthen our product portfolio. Acquisitions within the Industrial segment primarily consisted of a telematics business which builds upon our growing portfolio of connected assets. In addition, other acquisitions within the segment expand sales and service channels across the globe.

On January 1, 2015, we completed the acquisition of the assets of Cameron International Corporation's Centrifugal Compression (Engineered Centrifugal Compression) business for approximately \$850 million. The acquired business manufactures centrifugal compression equipment and provides aftermarket parts and services for global industrial applications, air separation, gas transmission and process gas. The acquisition was funded through a combination of cash on hand and debt. The results of the Engineered Centrifugal Compression business have been included in our consolidated financial statements since the date of the acquisition and reported within our Industrial segment.

On March 4, 2015, we acquired 100% of the outstanding stock of FRIGOBLOCK for approximately €100 million (approximately \$113 million). The acquisition was funded through a combination of cash on hand and debt. The acquired business manufactures and designs transport refrigeration units for trucks and trailers, which it sells primarily in Western Europe. The results of the FRIGOBLOCK business have been included in our consolidated financial statements since the date of the acquisition and reported within our Climate segment.

Sale of Hussmann Equity Investment

During 2011, we completed the sale of a controlling interest of our Hussmann refrigerated display case business (Hussmann) to a newly-formed affiliate of private equity firm Clayton Dubilier & Rice, LLC (CD&R). Per the terms of the agreement, CD&R's ownership interest in Hussmann at the acquisition date was 60% with the remaining 40% being retained by us. As a result, we accounted for our interest in Hussmann using the equity method of accounting.

On December 21, 2015, we announced we would sell our remaining equity interest in Hussmann as part of a transaction in which Panasonic Corporation would acquire 100 percent of Hussmann's outstanding shares. The transaction was completed on April 1, 2016. We received net proceeds of \$422.5 million for our interest and recognized a gain of \$397.8 million on the sale.

IRS Exam Results

In July 2015, we entered into an agreement with the U.S. Internal Revenue Service (IRS) to resolve disputes related to withholding and income taxes for years 2002 through 2011 (the IRS Agreement). The IRS had previously disagreed with our tax treatment of intercompany debt and distributions and asserted we owed income and withholding tax relating to the 2002-2006 period totaling

\$774 million, not including interest and penalties. We also provided a substantial amount of information to the IRS in connection with its audit of the 2007-2011 tax periods. We expected the IRS to propose similar adjustments to these periods, although it was not known how the IRS would apply its position to the different facts presented in these years or whether the IRS would take a similar position to intercompany debt instruments not outstanding in prior years.

The resolution reached in July 2015 covered intercompany debt and related issues for the entire period from 2002 through 2011 and includes all aspects of the dispute with the U.S. Tax Court, the Appeals Division and the Examination Division of the IRS. The resolution was subsequently reported to the Congressional Joint Committee on Taxation (JCT), as required, for its review. The JCT concluded its review without objection in December 2015 and the settlement was finalized with the IRS in December 2015.

Pursuant to the agreement with the IRS, we agreed to pay withholding tax and interest of \$412 million in respect to the 2002-2006 years. We owed no additional tax with respect to intercompany debt and related matters for the years 2007-2011. No penalties were applied to any of the tax years 2002 through 2011. The resolution resulted in a net cash outflow in 2015 of approximately \$364 million, consisting of \$230 million in tax and \$134 million of interest, net of a tax benefit of \$48 million.

RESULTS OF OPERATIONS

Our Climate segment delivers energy-efficient products and innovative energy services. It includes Trane® and American Standard® Heating & 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 through Trane Building Advantage and Nexia; and Thermo King® 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® fluid management equipment, as well as Club Car® golf, utility and consumer low-speed vehicles.

Segment operating income is the measure of profit and loss that our chief operating decision maker uses to evaluate the financial performance of the business and as the basis for performance reviews, compensation and resource allocation. For these reasons, we believe that Segment operating income represents the most relevant measure of segment profit and loss. We define Segment operating margin as Segment operating income as a percentage of *Net revenues*.

On January 1, 2017, we adopted Accounting Standards Update (ASU) No. 2016-09, "Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" (ASU 2016-09) which simplifies several aspects of the accounting for employee share-based payment transactions. The standard makes several modifications to the accounting for forfeitures, employer tax withholding on share-based compensation and the financial statement presentation of excess tax benefits or deficiencies. In addition, ASU 2016-09 clarifies the statement of cash flows presentation for certain components of share-based awards. We applied the cash flow presentation requirements retrospectively.

On January 1, 2017, we adopted ASU No. 2017-07, "Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost" (ASU 2017-07) which requires a company to present the service cost component of net periodic benefit cost in the same income statement line as other employee compensation costs with the remaining components of net periodic benefit cost presented separately from the service cost component and outside of any subtotal of operating income, if one is presented. We applied the presentation requirements retrospectively.

Year Ended December 31, 2017 Compared to the Year Ended December 31, 2016

<i>Dollar amounts in millions</i>	2017	2016	Period Change	2017 % of Revenues	2016 % of Revenues
Net revenues	\$14,197.6	\$13,508.9	\$ 688.7		
Cost of goods sold	(9,811.6)	(9,307.9)	(503.7)	69.1%	68.9%
Selling and administrative expenses	(2,720.7)	(2,597.8)	(122.9)	19.2%	19.2%
Operating income	1,665.3	1,603.2	62.1	11.7%	11.9%
Interest expense	(215.8)	(221.5)	5.7		
Other income/(expense), net	(31.6)	359.6	(391.2)		
Earnings before income taxes	1,417.9	1,741.3	(323.4)		
Provision for income taxes	(80.2)	(281.5)	201.3		
Earnings from continuing operations	1,337.7	1,459.8	(122.1)		
Discontinued operations, net of tax	(25.4)	32.9	(58.3)		
Net earnings	\$ 1,312.3	\$ 1,492.7	\$(180.4)		

Net Revenues

Net revenues for the year ended December 31, 2017 increased by 5.1%, or \$688.7 million, compared with the same period of 2016. The components of the period change are as follows:

Volume/product mix	4.4 %
Pricing	0.3 %
Currency translation	0.4 %
Total	5.1%

The increase was primarily driven by higher volumes in both our Climate and Industrial segments. Additionally, improved pricing and favorable foreign currency exchange rate movements further contributed to the year-over-year increase.

Our Revenues by segment are as follows:

<i>Dollar amounts in millions</i>	2017	2016	% change
Climate	\$ 11,167.5	\$ 10,545.0	5.9%
Industrial	3,030.1	2,963.9	2.2%
Total	\$14,197.6	\$13,508.9	

Climate

Net revenues for the year ended December 31, 2017 increased by 5.9% or \$622.5 million, compared with the same period of 2016. The components of the period change are as follows:

Volume/product mix	5.4%
Pricing	0.2%
Currency translation	0.3%
Total	5.9%

The primary driver of the increase related to incremental volumes from solid order growth in the Commercial HVAC and Residential HVAC businesses. Pricing improvements in these businesses further contributed to segment results. The segment also realized favorable foreign currency exchange rate movements in a majority of our businesses.

Industrial

Net revenues for the year ended December 31, 2017 increased by 2.2% or \$66.2 million, compared with the same period of 2016. The components of the period change are as follows:

Volume/product mix	0.7%
Pricing	1.0%
Currency translation	0.5%
Total	2.2%

The primary driver of the increase related to improved pricing in our Compression Technologies and Small Electric Vehicle businesses. In addition, overall volumes increased but were partially offset by a decline in large compressor volumes in our Compression Technologies business. Segment results were also positively impacted by overall favorable foreign currency exchange rate movements.

Operating Income/Margin

Operating margin decreased to 11.7% for the year ended December 31, 2017, compared to 11.9% for the same period of 2016. The decrease was primarily the result of material inflation in excess of pricing improvements (0.7%) and the timing of investment and restructuring spending (0.7%). These amounts were partially offset by productivity benefits in excess of other inflation (0.6%) and increased volume and favorable product mix (0.6%).

Our *Operating income* and Operating margin by segment are as follows:

<i>Dollar amounts in millions</i>	2017 Operating Income (Expense)	2016 Operating Income (Expense)	Period Change	2017 Operating Margin	2016 Operating Margin
Climate	\$ 1,572.7	\$ 1,537.5	\$ 35.2	14.1%	14.6%
Industrial	357.6	300.3	57.3	11.8%	10.1%
Unallocated corporate expense	(265.0)	(234.6)	(30.4)	N/A	N/A
Total	\$1,665.3	\$1,603.2	\$ 62.1	11.7%	11.9%

Climate

Operating margin decreased to 14.1% for the year ended December 31, 2017, compared to 14.6% for the same period of 2016. The decrease was primarily the result of material inflation in excess of pricing improvements (0.9%) and the timing of investment and restructuring spending (0.8%). These amounts were partially offset by productivity benefits in excess of other inflation (0.9%) and increased volumes and favorable product mix (0.3%).

Industrial

Operating margin increased to 11.8% for the year ended December 31, 2017 compared to 10.1% for the same period of 2016. The increase was primarily due to increased volumes and favorable product mix (0.9%) and productivity benefits in excess of other inflation (0.4%), the non-recurrence of capitalized costs related to new product engineering and development that were reclassified to the income statement (0.4%), pricing improvements in excess of material inflation (0.2%) and favorable foreign currency exchange rate movements (0.1%). These amounts were partially offset by the timing of investment and restructuring spending (0.3%).

Unallocated Corporate Expense

Unallocated corporate expense for the year ended December 31, 2017 increased by 13.0% or \$30.4 million, compared with the same period of 2016. The increase in expenses primarily relates to costs associated with acquisition efforts, higher employee benefit costs and stock-based compensation as well as planned incubator investments in technologies that benefit our business.

Interest Expense

Interest expense for the year ended December 31, 2017 decreased by \$5.7 million compared with the same period of 2016. The decrease relates primarily to changes in short-term financing arrangements and other items.

Other income/(expense), net

The components of *Other income/(expense), net*, for the years ended December 31 are as follows:

<i>In millions</i>	2017	2016	Period Change
Interest income	\$ 9.4	\$ 8.0	\$ 1.4
Exchange gain (loss)	(8.8)	(2.0)	(6.8)
Other components of net periodic benefit cost	(31.0)	(30.1)	(0.9)
Income (loss) from equity investment	—	(0.8)	0.8
Gain on sale of Hussmann equity investment	—	397.8	(397.8)
Other activity, net	(1.2)	(13.3)	12.1
Other income/(expense), net	\$(31.6)	\$359.6	\$(391.2)

Other income/(expense), net includes the results from activities other than normal business operations such as interest income and foreign currency gains and losses on transactions that are denominated in a currency other than an entity's functional currency. In addition, we include the components of net periodic benefit cost for pension and post retirement obligations other than the service cost component as a result of the adoption of ASU 2017-07. Other activity, net include costs associated with Trane U.S. Inc. (Trane) for the settlement and defense of asbestos-related claims, insurance settlements on asbestos-related matters and the revaluation of its liability for potential future claims. Other activity, net for the year ended December 31, 2016 includes a charge of \$16.4 million for the settlement of a lawsuit originally filed by a customer in 2012. The lawsuit related to a commercial HVAC contract entered into in 2001, prior to our acquisition of Trane. The charge represents the settlement and related legal costs recognized during the fourth quarter of 2016.

Provision for Income Taxes

The 2017 effective tax rate was 5.7% which is lower than the U.S. Statutory rate of 35% primarily due to the remeasurement of our net U.S. deferred tax liabilities, the premium paid related to the early retirement of certain intercompany debt obligations, the recognition of a claim for refund related to previously paid interest and the recognition of excess tax benefits from employee

shared based payments as a result of the adoption of ASU 2016-09 on January 1, 2017. In the aggregate, these items decreased the effective tax rate by 37.9%. This decrease was partially offset by the transition tax cost, a change in permanent reinvestment assertion on the unremitted earnings of certain foreign subsidiaries and a non-cash charge related to the establishment of a valuation allowance on certain net deferred tax assets in Brazil. In the aggregate these items increased the effective tax rate by 13.7%. In addition, the reduction was also driven by earnings in non-U.S. jurisdictions, which in aggregate, have a lower effective tax rate. Revenues from non-U.S. jurisdictions account for approximately 35% of our total revenues, such that a material portion of our pretax income is earned and taxed outside the U.S. at rates ranging from 0% to 38%. When comparing the results of multiple reporting periods, among other factors, the mix of earnings between U.S. and foreign jurisdictions can cause variability on our overall effective tax rate.

The 2016 effective tax rate was 16.2% which is lower than the U.S. Statutory rate of 35% primarily due to the tax treatment of the Hussmann gain. The gain, which is not subject to tax under the relevant local tax laws, decreased the effective tax rate by 4.8%. In addition, the reduction was also driven by earnings in non-U.S. jurisdictions, which in aggregate, have a lower effective tax rate. Revenues from non-U.S. jurisdictions account for approximately 35% of our total revenues, such that a material portion of our pretax income is earned and taxed outside the U.S. at rates ranging from 0% to 38%. When comparing the results of multiple reporting periods, among other factors, the mix of earnings between U.S. and foreign jurisdictions can cause variability on our overall effective tax rate.

Discontinued Operations

The components of *Discontinued operations, net of tax* for the years ended December 31 are as follows:

<i>In millions</i>	2017	2016	Period Change
Pre-tax earnings (loss) from discontinued operations	\$(34.0)	\$28.1	\$(62.1)
Tax benefit (expense)	8.6	4.8	3.8
Discontinued operations, net of tax	\$(25.4)	\$32.9	\$(58.3)

Discontinued operations are retained costs from previously sold businesses including postretirement benefits, product liability and legal costs (mostly asbestos-related). In addition, we include costs for the settlement and defense of asbestos-related claims, insurance settlements on asbestos-related matters and the revaluation of its liability for potential future claims. For the year ended December 31, 2016, ongoing costs were more than offset by asbestos-related settlements with various insurance carriers. A portion of the tax benefits (expense) in each period represent adjustments for certain tax matters associated with the 2013 spin-off of our commercial and residential security business, now an independent public company operating under the name of Allegion plc (Allegion).

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

<i>Dollar amounts in millions</i>	2016	2015	Period Change	2016 % of Revenues	2015 % of Revenues
Net revenues	\$13,508.9	\$13,300.7	\$208.2		
Cost of goods sold	(9,307.9)	(9,277.4)	(30.5)	68.9%	69.8%
Selling and administrative expenses	(2,597.8)	(2,531.6)	(66.2)	19.2%	19.0%
Operating income	1,603.2	1,491.7	111.5	11.9%	11.2%
Interest expense	(221.5)	(223.0)	1.5		
Other income/(expense), net	359.6	(20.8)	380.4		
Earnings before income taxes	1,741.3	1,247.9	493.4		
Provision for income taxes	(281.5)	(540.8)	259.3		
Earnings from continuing operations	1,459.8	707.1	752.7		
Discontinued operations, net of tax	32.9	(24.3)	57.2		
Net earnings	\$1,492.7	\$682.8	\$809.9		

Net Revenues

Net revenues for the year ended December 31, 2016 increased by 1.6%, or \$208.2 million, compared with the same period of 2015, which primarily resulted from the following:

Volume/product mix	2.2%
Acquisitions	0.1%
Pricing	0.3%
Currency translation	(1.0)%
Total	1.6%

The increase was primarily driven by higher volumes in our Climate segment. Improved pricing, along with incremental revenues from acquisitions, further contributed to the year-over-year increase. These amounts were partially offset by lower volumes in our Industrial segment and overall unfavorable foreign currency exchange rate movements.

Our Revenues by segment are as follows:

<i>Dollar amounts in millions</i>	2016	2015	% change
Climate	\$ 10,545.0	\$ 10,224.3	3.1%
Industrial	2,963.9	3,076.4	(3.7)%
Total	\$13,508.9	\$13,300.7	

Climate

Net revenues for the year ended December 31, 2016 increased by 3.1% or \$320.7 million, compared with the same period of 2015. The components of the period change are as follows:

Volume/product mix	3.8%
Acquisitions	0.1%
Pricing	0.2%
Currency translation	(1.0)%
Total	3.1%

The primary driver of the increase related to incremental volumes in both the Commercial HVAC and Residential HVAC businesses. Commercial HVAC results reflect continued improvements in equipment, parts and services while Residential HVAC results increased with strong order growth and improved pricing. In addition, revenues associated with acquisitions added incremental volume during the current period. Improvements in price across the majority of our businesses further contributed to segment results. However, overall revenue improvements were partially offset by unfavorable foreign currency exchange rate movements.

Industrial

Net revenues for the year ended December 31, 2016 decreased by 3.7%, or \$112.5 million, compared with the same period of 2015. The components of the period change are as follows:

Volume/product mix	(3.2)%
Acquisitions	0.1%
Pricing	0.6%
Currency translation	(1.2)%
Total	(3.7)%

The primary driver of the decrease related to lower overall volumes in the majority of our businesses due to continued weakness in the industrial markets. Segment results were also negatively impacted by unfavorable foreign currency exchange rate movements. However, the decline was partially offset by improvements in pricing with the majority of our businesses as well as incremental revenue provided by acquisitions.

Operating Income/Margin

Operating margin improved to 11.9% for the year ended December 31, 2016, compared to 11.2% for the same period of 2015.

The increase was primarily the result of pricing improvements in excess of material inflation (0.7%), increased volume and favorable product mix (0.2%), the non-recurrence of acquisition related step-up amortization (0.2%) and productivity benefits in excess of other inflation (0.1%). These amounts were partially offset by increased investment and restructuring spending (0.3%), capitalized costs related to new product engineering and development that were reclassified to the income statement (0.1%) and unfavorable foreign currency exchange rate movements (0.1%).

Our *Operating income* and Operating margin by segment are as follows:

<i>Dollar amounts in millions</i>	2016 Operating Income (Expense)	2015 Operating Income (Expense)	Period Change	2016 Operating Margin	2015 Operating Margin
Climate	\$ 1,537.5	\$ 1,314.4	\$ 223.1	14.6%	12.9%
Industrial	300.3	378.3	(78.0)	10.1%	12.3%
Unallocated corporate expense	(234.6)	(201.0)	\$ (33.6)	N/A	N/A
Total	\$1,603.2	\$1,491.7	\$111.5	11.9%	11.2%

Climate

Operating margin improved to 14.6% for the year ended December 31, 2016, compared to 12.9% for the same period of 2015. The improvement was primarily the result of pricing improvements in excess of material inflation (0.7%), increased volume and favorable product mix (0.7%) and productivity benefits in excess of other inflation (0.5%). These amounts were partially offset by increased investment and restructuring spending (0.2%).

Industrial

Operating margin decreased to 10.1% for the year ended December 31, 2016, compared to 12.3% for the same period of 2015. The decrease was primarily due to lower volume and unfavorable product mix (2.1%). The segment was also impacted by higher investment and restructuring spending (0.4%), lower productivity in excess of other inflation (0.4%), capitalized costs related to new product engineering and development that were reclassified to the income statement (0.3%) and unfavorable foreign currency exchange rate movements (0.2%). These amounts were partially offset by non-recurrence of acquisition related step-up amortization (0.6%) and pricing improvements in excess of material inflation (0.6%).

Unallocated Corporate Expense

Unallocated corporate expense for the year ended December 31, 2016 increased by 16.7% or \$33.6 million, compared with the same period of 2015. The increase in expenses relates to higher compensation and benefit charges related to variable compensation during 2016. In addition, higher restructuring charges impacted the current period.

Interest Expense

Interest expense for the year ended December 31, 2016 decreased by \$1.5 million compared with the same period of 2015. The decrease relates primarily to changes in short-term financing arrangements and other items.

Other income/(expense), net

The components of *Other income/(expense), net*, for the years ended December 31 are as follows:

<i>In millions</i>	2016	2015	Period Change
Interest income	\$ 8.0	\$ 10.6	\$ (2.6)
Exchange gain (loss)	(2.0)	(36.2)	34.2
Other components of net periodic benefit cost	(30.1)	(33.7)	3.6
Income (loss) from equity investment	(0.8)	12.6	(13.4)
Gain on sale of Hussmann equity investment	397.8	—	397.8
Other activity, net	(13.3)	25.9	(39.2)
Other income/(expense), net	\$359.6	\$(20.8)	\$380.4

Other income / (expense), net includes the results from activities other than normal business operations such as interest income and foreign currency gains and losses on transactions that are denominated in a currency other than an entity's functional currency. In addition, we include the components of net periodic benefit cost for pension and post retirement obligations other than the service cost component as a result of the adoption of ASU 2017-07. Other activity, net include costs associated with Trane for the settlement and defense of asbestos-related claims, insurance settlements on asbestos-related matters and the revaluation of its liability for potential future claims. Amounts recorded during 2015 include a settlement with an insurance carrier. In addition, other activity, net for the year ended December 31, 2016 includes \$16.4 million for the settlement of a lawsuit originally filed by a customer in 2012. The lawsuit related to a commercial HVAC contract entered into in 2001, prior to our acquisition of Trane. The charge represents the settlement and related legal costs recognized during 2016.

During the year ended December 31, 2015, we recognized a loss on foreign currency exchange of \$36.2 million. This loss is comprised of a \$42.6 million pre-tax charge recorded in the first quarter related to the remeasurement of net monetary assets denominated in Venezuelan bolivar. This loss was partially offset by \$6.4 million of foreign currency transaction gains resulting from the re-measurement of non-functional balance sheet positions into their functional currency.

Sale of Hussmann Equity Investment

During 2011, we completed the sale of a controlling interest of our Hussmann refrigerated display case business (Hussmann) to a newly-formed affiliate of private equity firm Clayton Dubilier & Rice, LLC (CD&R). Per the terms of the agreement, CD&R's ownership interest in Hussmann at the acquisition date was 60% with the remaining 40% being retained by us. As a result, we accounted for our interest in Hussmann using the equity method of accounting.

On December 21, 2015, we announced we would sell our remaining equity interest in Hussmann as part of a transaction in which Panasonic Corporation would acquire 100 percent of Hussmann's outstanding shares. The transaction was completed on April 1, 2016. We received net proceeds of \$422.5 million for our interest and recognized a gain of \$397.8 million on the sale.

Provision for Income Taxes

The 2016 effective tax rate was 16.2% which is lower than the U.S. Statutory rate of 35% primarily due to the tax treatment of the Hussmann gain. The gain, which is not subject to tax under the relevant local tax laws, decreased the effective tax rate by 4.8%. In addition, the reduction was also driven by earnings in non-U.S. jurisdictions, which in aggregate, have a lower effective tax rate. Revenues from non-U.S. jurisdictions account for approximately 35% of our total revenues, such that a material portion of our pretax income is earned and taxed outside the U.S. at rates ranging from 0% to 38%. When comparing the results of multiple reporting periods, among other factors, the mix of earnings between U.S. and foreign jurisdictions can cause variability on our overall effective tax rate.

The 2015 effective tax rate was 43.3% which is higher than the U.S. Statutory rate of 35% primarily due to the \$227 million charge taken to settle the IRS Agreement, which increased our effective tax rate by 18.1%. This effect was partially offset by a \$65 million benefit from the settlement of an audit in a major tax jurisdiction, less a tax charge of \$52 million from a change in permanent reinvestment assertions on earnings from certain of our subsidiaries in non-U.S. jurisdictions.

Discontinued Operations

The components of *Discontinued operations, net of tax* for the years ended December 31 are as follows:

<i>In millions</i>	2016	2015	Period Change
Pre-tax earnings (loss) from discontinued operations	\$28.1	\$(23.2)	\$51.3
Tax benefit (expense)	4.8	(1.1)	5.9
Discontinued operations, net of tax	\$32.9	\$(24.3)	\$57.2

Discontinued operations are retained costs from previously sold businesses including postretirement benefits, product liability and legal costs (mostly asbestos-related). In addition, we include costs for the settlement and defense of asbestos-related claims, insurance settlements on asbestos-related matters and the revaluation of its liability for potential future claims. For the year ended December 31, 2016, ongoing costs were more than offset by asbestos-related settlements with various insurance carriers. A portion of the tax benefits (expense) in each period represent adjustments for certain tax matters associated with the 2013 spin-off of Allegion.

LIQUIDITY AND CAPITAL RESOURCES

We assess our liquidity in terms of our ability to generate cash to fund our operating, investing and financing activities. In doing so, we review and analyze our current cash on hand, the number of days our sales are outstanding, inventory turns, capital expenditure commitments and income tax payments. Our cash requirements primarily consist of the following:

- Funding of working capital
- Funding of capital expenditures
- Debt service requirements

Our primary sources of liquidity include cash balances on hand, cash flows from operations, proceeds from debt offerings, commercial paper, and borrowing availability under our existing credit facilities. We earn a significant amount of our operating income in jurisdictions where it is deemed to be permanently reinvested. Our most prominent jurisdiction of operation is the U.S. We expect existing cash and cash equivalents available to the U.S. operations, the cash generated by our U.S. operations, our committed credit lines as well as our expected ability to access the capital and debt markets will be sufficient to fund our U.S. operating and capital needs for at least the next twelve months and thereafter for the foreseeable future. In addition, we expect existing non-U.S. cash and cash equivalents and the cash generated by our non-U.S. operations will be sufficient to fund our non-U.S. operating and capital needs for at least the next twelve months and thereafter for the foreseeable future.

As of December 31, 2017, we had approximately \$1.5 billion of cash and cash equivalents on hand, of which approximately \$1.1 billion was held by non-U.S. subsidiaries. Cash and cash equivalents held by our non-U.S. subsidiaries are generally available for use in our U.S. operations via intercompany loans, equity infusions or via distributions from direct or indirectly owned non-U.S. subsidiaries for which we do not elect permanent reinvestment. We currently have no plans to repatriate funds from subsidiaries for which we elect permanent reinvestment to fund our U.S. operations. However, if we decided to repatriate such funds to fund our U.S. operations, we would be required to accrue and pay applicable taxes.

Share repurchases are made from time to time in accordance with management's capital allocation strategy, subject to market conditions and regulatory requirements. In February 2014, our Board of Directors authorized the repurchase of up to \$1.5 billion of our ordinary shares under a share repurchase program that began in April 2014 and was completed in the second quarter of 2017.

In February 2017, our Board of Directors authorized the repurchase of up to \$1.5 billion of our ordinary shares under a share repurchase program upon completion of the prior share repurchase program. Repurchases under this program began in May 2017 and total approximately \$600 million at December 31, 2017. As a result, we have approximately \$900 million remaining under this program. We repurchased approximately \$1.0 billion of our ordinary shares during 2017.

In August 2017, we announced an increase in our quarterly share dividend from \$0.40 to \$0.45 per ordinary share. This reflects a 12.5% increase that began with our September 2017 payment and a 55% increase since the beginning of 2016. In addition, we incur ongoing costs associated with restructuring initiatives intended to result in improved operating performance, profitability and working capital levels. Actions associated with these initiatives may include workforce reduction, improving manufacturing productivity, realignment of management structures and rationalizing certain assets. We continue to be active with acquisitions. During 2017, we acquired several businesses, including channel acquisitions, that complement existing products and services further growing our product portfolio. We expect that our available cash flow, committed credit lines and access to the capital markets will be sufficient to fund share repurchases, the increased dividends, acquisitions and ongoing restructuring actions.

Liquidity

The following table contains several key measures of our financial condition and liquidity at the periods ended December 31:

<i>In millions</i>	2017	2016	2015
Cash and cash equivalents	\$1,549.4	\$1,714.7	\$ 736.8
Short-term borrowings and current maturities of long-term debt ⁽¹⁾	1,107.0	360.8	504.2
Long-term debt	2,957.0	3,709.4	3,713.6
Total debt	4,064.0	4,070.2	4,217.8
Total Ingersoll-Rand plc shareholders' equity	7,140.3	6,643.8	5,816.7
Total equity	7,206.9	6,718.3	5,879.2
Debt-to-total capital ratio	36.1%	37.7%	41.8%

(1) During the third quarter of 2017, we reclassified our 6.875% Senior notes of \$750 million due August 2018 from noncurrent to current. We intend to refinance the notes prior to their maturity date.

Debt and Credit Facilities

Our short-term obligations primarily consists of current maturities of long-term debt. In addition, we have outstanding \$343.0 million of fixed rate debentures that contain a put feature that the holders may exercise on each anniversary of the issuance date. If exercised, we are obligated to repay in whole or in part, at the holder's option, the outstanding principal amount (plus accrued and unpaid interest) of the debentures held by the holder. We also maintain a commercial paper program which is used for general corporate purposes. Under the program, the maximum aggregate amount of unsecured commercial paper notes available to be issued, on a private placement basis, is \$2.0 billion as of December 31, 2017. We had no commercial paper outstanding at December 31, 2017 and December 31, 2016. See Note 7 to the Consolidated Financial Statements for additional information regarding the terms of our short-term obligations.

Our long-term obligations primarily consist of long-term debt with final maturity dates ranging between 2019 and 2044. In addition, we maintain two 5-year, \$1.0 billion revolving credit facilities. Each senior unsecured credit facility, one of which matures in March 2019 and the other in March 2021, provides support for our commercial paper program and can be used for working capital and other general corporate purposes. Total commitments of \$2.0 billion were unused at December 31, 2017 and December 31, 2016. See Note 7 and Note 20 to the Consolidated Financial Statements for additional information regarding the terms of our long-term obligations and their related guarantees.

Pension Plans

Our investment objective in managing defined benefit plan assets is to ensure that all present and future benefit obligations are met as they come due. We seek to achieve this goal while trying to mitigate volatility in plan funded status, contribution and expense by better matching the characteristics of the plan assets to that of the plan liabilities. Our approach to asset allocation is to increase fixed income assets as the plan's funded status improves. We monitor plan funded status and asset allocation regularly in addition to investment manager performance. In addition, we monitor the impact of market conditions on our defined benefit plans on a regular basis. None of our defined benefit pension plans have experienced a significant impact on their liquidity due to the volatility in the markets. See Note 10 to the Consolidated Financial Statements for additional information regarding pensions.

Cash Flows

The following table reflects the major categories of cash flows for the years ended December 31, respectively. For additional details, please see the Consolidated Statements of Cash Flows in the Consolidated Financial Statements.

<i>In millions</i>	2017	2016	2015
Net cash provided by (used in) continuing operating activities	\$ 1,561.6	\$1,433.0	\$ 923.5
Net cash provided by (used in) investing activities	(374.7)	240.1	(1,192.9)
Net cash provided by (used in) financing activities	(1,432.5)	(726.9)	(527.6)

Operating Activities

Net cash provided by continuing operating activities for the year ended December 31, 2017 was \$1,561.6 million, of which net income provided \$1,642.1 million after adjusting for non-cash transactions. *Changes in other assets and liabilities* used \$80.5 million. Improvements in accounts payable were offset by higher accounts receivable and inventory balances. Net cash provided by continuing operating activities for the year ended December 31, 2016 was \$1,433.0 million, of which net income provided \$1,449.8 million after adjusting for non-cash transactions. *Changes in other assets and liabilities* used \$16.8 million. Improvements in accounts payable were offset by higher accounts receivable balances. Net cash provided by continuing operating activities for the year ended December 31, 2015 was \$923.5 million, of which net income provided \$1,228.9 million after adjusting for non-cash transactions. *Changes in other assets and liabilities* used \$305.4 million which was primarily driven by the net cash outflow for the IRS Agreement of approximately \$364 million and higher working capital balances.

Investing Activities

Cash flows from investing activities represents inflows and outflows regarding the purchase and sale of assets. Primary activities associated with these items include capital expenditures, proceeds from the sale of property, plant and equipment, acquisitions and divestitures. During the year ended December 31, 2017, net cash used in investing activities from continuing operations was \$374.7 million. The primary driver of the outflow is attributable to capital expenditures of \$221.3 million. In addition, we acquired several businesses that complement existing products and services. Cash paid for acquisitions, net of cash acquired, was \$157.6 million during the year. Net cash provided by investing activities from continuing operations for the year ended December 31, 2016 was \$240.1 million. The primary driver of the balance is attributable to the proceeds of \$422.5 million received from the sale of our Hussmann equity interest during the year. This amount was partially offset by capital expenditures

during the year. During the year ended December 31, 2015, net cash used in investing activities from continuing operations was \$1,192.9 million. The primary driver of the outflow related to the acquisition of the Engineered Centrifugal Compression business for approximately \$850 million and the acquisition of FRIGOBLOCK for approximately €100 million (approximately \$113 million). In addition, capital expenditures contributed to the outflow during the year.

Financing Activities

Cash flows from financing activities represent inflows and outflows that account for external activities affecting equity and debt. Primary activities associated with these actions include paying dividends to shareholders, repurchasing our own shares, issuing our stock and debt transactions. During the year ended December 31, 2017, net cash used in financing activities from continuing operations was \$1,432.5 million. Primary drivers of the cash outflow related to the repurchase of 11.8 million ordinary shares and dividends paid to ordinary shareholders. During the year ended December 31, 2016, net cash used in financing activities from continuing operations was \$726.9 million. Primary drivers of the cash outflow related to the repurchase of 4.9 million ordinary shares and dividends paid to ordinary shareholders. In addition, we repaid our outstanding commercial paper balance during the year. Net cash used in financing activities from continuing operations for the year ended December 31, 2015 was \$527.6 million. Primary drivers of the cash outflow includes dividends paid to ordinary shareholders and the repurchase of 4.4 million ordinary shares.

Discontinued Operations

Cash flows from discontinued operations primarily represent costs associated with postretirement benefits, product liability and legal costs (mostly asbestos-related) from previously sold businesses. Net cash used in discontinued operating activities during the year ended December 31, 2017 was \$38.1 million. Ongoing costs were partially offset by asbestos-related settlements reached with various insurance carriers during the year. Net cash provided by discontinued operating activities for the year ended December 31, 2016 was \$88.9 million and included asbestos-related settlements reached with various insurance carriers during the year as well as a realized gain on the sale of property related to a previously sold business. These amounts more than offset ongoing costs. Net cash used in discontinued operating activities during the year ended December 31, 2015 was \$35.1 million and primarily related to ongoing costs.

Capital Resources

Based on historical performance and current expectations, we believe our cash and cash equivalents balance, the cash generated from our operations, our committed credit lines and our expected ability to access capital markets will satisfy our working capital needs, capital expenditures, dividends, share repurchase programs, upcoming debt maturities, and other liquidity requirements associated with our operations for the foreseeable future.

Capital expenditures were \$221.3 million, \$182.7 million and \$249.6 million for the years ended December 31, 2017, 2016 and 2015, respectively. Our investments continue to improve manufacturing productivity, reduce costs, provide environmental enhancements, upgrade information technology infrastructure and security and advanced technologies for existing facilities. The capital expenditure program for 2018 is estimated to be approximately \$300 million, including amounts approved in prior periods. Many of these projects are subject to review and cancellation at our option without incurring substantial charges.

For financial market risk impacting the Company, see Item 7A. "Quantitative and Qualitative Disclosure About Market Risk."

Capitalization

In addition to cash on hand and operating cash flow, we maintain significant credit availability under our Commercial Paper Program. Our ability to borrow at a cost-effective rate under the Commercial Paper Program is contingent upon maintaining an investment-grade credit rating. As of December 31, 2017, our credit ratings were as follows:

	Short-term	Long-term
Moody's	P-2	Baa2
Standard and Poor's	A-2	BBB

The credit ratings set forth above are not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal by the assigning rating organization. Each rating should be evaluated independently of any other rating.

Our public debt does not contain financial covenants and our revolving credit lines have a debt-to-total capital covenant of 65%. As of December 31, 2017, our debt-to-total capital ratio was significantly beneath this limit.

CONTRACTUAL OBLIGATIONS

The following table summarizes our contractual cash obligations by required payment period:

In millions	Less than 1 year	1 - 3 years	3 - 5 years	More than 5 years	Total
Short-term debt	\$ 6.7	\$ —	\$ —	\$ —	\$ 6.7
Long-term debt	1,100.7 ^(a)	665.3	140.1	2,172.2	\$4,078.3
Interest payments on long-term debt	206.4 ^(b)	287.9	257.6	1,082.0	1,833.9
Purchase obligations	866.0	—	—	—	866.0
Operating leases	194.3	255.4	125.8	53.6	629.1
Total contractual cash obligations	\$2,374.1	\$1,208.6	\$523.5	\$3,307.8	\$7,414.0

(a) Includes \$343.0 million of debt redeemable at the option of the holder. The scheduled maturities of these bonds range between 2027 and 2028.

(b) Includes nominal amount related to interest of short-term debt.

Future expected obligations under our pension and postretirement benefit plans, income taxes, environmental, asbestos-related, and product liability matters have not been included in the contractual cash obligations table above.

Pensions

At December 31, 2017, we had a net unfunded liability of \$679.1 million, which consists of noncurrent pension assets of \$61.7 million and current and non-current pension benefit liabilities of \$740.8 million. It is our objective to contribute to the pension plans to ensure adequate funds are available in the plans to make benefit payments to plan participants and beneficiaries when required. We currently project that we will contribute approximately \$75.2 million to our plans worldwide in 2018. The timing and amounts of future contributions are dependent upon the funding status of the plan, which is expected to vary as a result of changes in interest rates, returns on underlying assets, and other factors. Therefore, pension contributions have been excluded from the preceding table. See Note 10 to the Consolidated Financial Statements for additional information regarding pensions.

Postretirement Benefits Other than Pensions

At December 31, 2017, we had postretirement benefit obligations of \$528.0 million. We fund postretirement benefit costs principally on a pay-as-you-go basis as medical costs are incurred by covered retiree populations. Benefit payments, which are net of expected plan participant contributions and Medicare Part D subsidy, are expected to be approximately \$49.4 million in 2018. Because benefit payments are not required to be funded in advance, and the timing and amounts of future payments are dependent on the cost of benefits for retirees covered by the plan, they have been excluded from the preceding table. See Note 10 to the Consolidated Financial Statements for additional information regarding postretirement benefits other than pensions.

Income Taxes

At December 31, 2017, we have total unrecognized tax benefits for uncertain tax positions of \$120.5 million and \$32.5 million of related accrued interest and penalties, net of tax. The liability has been excluded from the preceding table as we are unable to reasonably estimate the amount and period in which these liabilities might be paid. See Note 15 to the Consolidated Financial Statements for additional information regarding income taxes, including unrecognized tax benefits.

Contingent Liabilities

We are involved in various litigation, claims and administrative proceedings, including those related to environmental, asbestos-related, and product liability matters. We believe that these liabilities are subject to the uncertainties inherent in estimating future costs for contingent liabilities, and will likely be resolved over an extended period of time. Because the timing and amounts of potential future cash flows are uncertain, they have been excluded from the preceding table. See Note 19 to the Consolidated Financial Statements for additional information regarding contingent liabilities.

CRITICAL ACCOUNTING POLICIES

Management's Discussion and Analysis of Financial Condition and Results of Operations are based upon our Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the United States (GAAP). The preparation of financial statements in conformity with those accounting principles requires management to use judgment in making estimates and assumptions based on the relevant information available at the end of each period. These estimates and assumptions have a significant effect on reported amounts of assets and liabilities, revenue and expenses as well as the disclosure of contingent assets and liabilities because they result primarily from the need to make estimates and assumptions on matters that are inherently uncertain. Actual results may differ from estimates. If updated information or actual amounts are different from previous estimates, the revisions are included in our results for the period in which they become known.

The following is a summary of certain accounting estimates and assumptions made by management that we consider critical.

- Allowance for doubtful accounts – We maintain an allowance for doubtful accounts receivable which represents our best estimate of probable loss inherent in our accounts receivable portfolio. This estimate is based upon our two step policy that results in the total recorded allowance for doubtful accounts. The first step is to record a portfolio reserve based on the aging of the outstanding accounts receivable portfolio and our historical experience with our end markets, customer base and products. The second step is to create a specific reserve for significant accounts as to which the customer's ability to satisfy their financial obligation to us is in doubt due to circumstances such as bankruptcy, deteriorating operating results or financial position. In these circumstances, management uses its judgment to record an allowance based on the best estimate of probable loss, factoring in such considerations as the market value of collateral, if applicable. Actual results could differ from those estimates. These estimates and assumptions are reviewed periodically, and the effects of changes, if any, are reflected in the statement of operations in the period that they are determined.
- Goodwill and indefinite-lived intangible assets – We have significant goodwill and indefinite-lived intangible assets on our balance sheet related to acquisitions. Our goodwill and other indefinite-lived intangible assets are tested and reviewed annually during the fourth quarter for impairment or when there is a significant change in events or circumstances that indicate that the fair value of an asset is more likely than not less than the carrying amount of the asset.

Impairment of goodwill is assessed at the reporting unit level and begins with a qualitative assessment to determine if it is more likely than not that the fair value of each reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the goodwill impairment test under ASC 350, "Intangibles-Goodwill and Other," (ASC 350). For those reporting units that bypass or fail the qualitative assessment, the test compares the carrying amount of the reporting unit to its estimated fair value. If the estimated fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, an impairment loss will be recognized for the amount by which the reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill in that reporting unit.

As quoted market prices are not available for our reporting units, the calculation of their estimated fair value is determined using three valuation techniques: a discounted cash flow model (an income approach), a market-adjusted multiple of earnings and revenues (a market approach), and a similar transactions method (also a market approach). The discounted cash flow approach relies on our estimates of future cash flows and explicitly addresses factors such as timing, growth and margins, with due consideration given to forecasting risk. The earnings and revenue multiple approach reflects the market's expectations for future growth and risk, with adjustments to account for differences between the guideline publicly traded companies and the subject reporting units. The similar transactions method considers prices paid in transactions that have recently occurred in our industry or in related industries. These methods are weighted 50%, 40% and 10%, respectively.

Impairment of other intangible assets with indefinite useful lives is first assessed using a qualitative assessment to determine whether it is more likely than not that an indefinite-lived intangible asset is impaired. This assessment is used as a basis for determining whether it is necessary to calculate the fair value of an indefinite-lived intangible asset. For those indefinite-lived assets where it is required, a fair value is determined on a relief from royalty methodology (income approach) which is based on the implied royalty paid, at an appropriate discount rate, to license the use of an asset rather than owning the asset. The present value of the after-tax cost savings (i.e. royalty relief) indicates the estimated fair value of the asset. Any excess of the carrying value over the estimated fair value is recognized as an impairment loss equal to that excess.

The determination of the estimated fair value and the implied fair value of goodwill and other indefinite-lived intangible assets requires us to make assumptions about estimated cash flows, including profit margins, long-term forecasts, discount rates and terminal growth rates. We developed these assumptions based on the market and geographic risks unique to each reporting unit.

For our annual impairment testing performed during the fourth quarter of 2017, we calculated the fair value for each of the reporting units and indefinite-lived intangibles. Based on the results of these calculations, we determined that the fair value of the reporting units and indefinite-lived intangible assets exceeded their respective carrying values. The estimates of fair value are based on the best information available as of the date of the assessment, which primarily incorporates management assumptions about expected future cash flows.

Goodwill - Under the income approach, we assumed a forecasted cash flow period of five years with discount rates ranging from 10.0% to 13.0% and terminal growth rates ranging from 3.0% to 3.5%. Under the guideline public company method, we used an adjusted multiple ranging from 6.5 to 13.5 of projected earnings before interest, taxes, depreciation and amortization (EBITDA) based on the market information of comparable companies. Additionally, we compared the estimated aggregate fair value of our reporting units to our overall market capitalization. For all reporting units, the excess of the estimated fair value over carrying value (expressed as a percentage of carrying value) was a minimum of 40%. A significant increase in the discount rate, decrease in the long-term growth rate, or substantial reductions in our end markets and volume assumptions could have a negative impact on the estimated fair value of these reporting units.

Other Indefinite-lived intangible assets - In testing our other indefinite-lived intangible assets for impairment, we assumed forecasted revenues for a period of five years with discount rates ranging from 10.0% to 11.0%, terminal growth rate of 3.0%, and royalty rates ranging from 0.5% to 4.5%. For all tradenames, the excess of the estimated fair value over carrying value (expressed as a percentage of carrying value) was a minimum of 81%, with the exception of a recently acquired tradename.

That tradename, reported within our Climate segment, had an excess of the estimated fair value over carrying value of approximately 9% (5% in 2016) and an approximate carrying value of \$16 million at December 31, 2017. A significant increase in the discount rate, decrease in the long-term growth rate, decrease in the royalty rate or substantial reductions in our end markets and volume assumptions could have a negative impact on the estimated fair values of any of our tradenames.

- Long-lived assets and finite-lived intangibles – Long-lived assets and finite-lived intangibles are reviewed for impairment whenever events or changes in business circumstances indicate that the carrying amount of an asset may not be fully recoverable. Assets are grouped with other assets and liabilities at the lowest level for which identifiable cash flows can be generated. Impairment in the carrying value of an asset would be recognized whenever anticipated future undiscounted cash flows from an asset are less than its carrying value. The impairment is measured as the amount by which the carrying value exceeds the fair value of the asset as determined by an estimate of discounted cash flows. We believe that our use of estimates and assumptions are reasonable and comply with generally accepted accounting principles. Changes in business conditions could potentially require future adjustments to these valuations.
- Loss contingencies – Liabilities are recorded for various contingencies arising in the normal course of business, including litigation and administrative proceedings, environmental and asbestos matters and product liability, product warranty, worker's compensation and other claims. We have recorded reserves in the financial statements related to these matters, which are developed using input derived from actuarial estimates and historical and anticipated experience data depending on the nature of the reserve, and in certain instances with consultation of legal counsel, internal and external consultants and engineers. Subject to the uncertainties inherent in estimating future costs for these types of liabilities, we believe our estimated reserves are reasonable and do not believe the final determination of the liabilities with respect to these matters would have a material effect on our financial condition, results of operations, liquidity or cash flows for any year.
- Asbestos matters – Certain of our wholly-owned subsidiaries and former companies are named as defendants in asbestos-related lawsuits in state and federal courts. We record a liability for our actual and anticipated future claims as well as an asset for anticipated insurance settlements. Asbestos related defense costs are excluded from the asbestos claims liability and are recorded separately as services are incurred. None of our existing or previously-owned businesses were a producer or manufacturer of asbestos. We record certain income and expenses associated with our asbestos liabilities and corresponding insurance recoveries within *Discontinued operations, net of tax*, as they relate to previously divested businesses, except for amounts associated with Trane's asbestos liabilities and corresponding insurance recoveries which are recorded within continuing operations. See Note 19 to the Consolidated Financial Statements for further information regarding asbestos-related matters.
- Revenue recognition – Revenue is recognized and earned when all of the following criteria are satisfied: (a) persuasive evidence of a sales arrangement exists; (b) the price is fixed or determinable; (c) collectability is reasonably assured; and (d) delivery has occurred or service has been rendered. Delivery generally occurs when the title and the risks and rewards of ownership have substantially transferred to the customer. Both the persuasive evidence of a sales arrangement and fixed or determinable price criteria are deemed to be satisfied upon receipt of an executed and legally binding sales agreement or contract that clearly defines the terms and conditions of the transaction including the respective obligations of the parties. If the defined terms and conditions allow variability in all or a component of the price, revenue is not recognized until such time that the price becomes fixed or determinable. At the point of sale, we validate that existence of an enforceable claim that requires payment within a reasonable amount of time and assess the collectability of that claim. If collectability is not deemed to be reasonably assured, then revenue recognition is deferred until such time that collectability becomes probable or cash is received. Delivery is not considered to have occurred until the customer has taken title and assumed the risks and rewards of ownership. Service and installation revenue are recognized when earned. In some instances, customer acceptance provisions are included in sales arrangements to give the buyer the ability to ensure the delivered product or service meets the criteria established in the order. In these instances, revenue recognition is deferred until the acceptance terms specified in the arrangement are fulfilled through customer acceptance or a demonstration that established criteria have been satisfied. If uncertainty exists about customer acceptance, revenue is not recognized until acceptance has occurred.

We offer various sales incentive programs to our customers, dealers, and distributors. Sales incentive programs do not preclude revenue recognition, but do require an accrual for the Company's best estimate of expected activity. Examples of the sales incentives that are accrued for as a contra receivable and sales deduction at the point of sale include, but are not limited to, discounts (i.e. net 30 type), coupons, and rebates where the customer does not have to provide any additional requirements to receive the discount. Sales returns and customer disputes involving a question of quantity or price are also accounted for as a reduction in revenue and a contra receivable. At December 31, 2017 and 2016, we had a customer claim accrual (contra receivable) of \$3.2 million and \$3.7 million, respectively. All other incentives or incentive programs where the customer is required to reach a certain sales level, remain a customer for a certain period of time, provide a rebate form or is subject to additional requirements are accounted for as a reduction of revenue and establishment of a liability. At December 31, 2017 and 2016, we had a sales incentive accrual of \$107.3 million and \$87.5 million, respectively. Each of these accruals represents the best estimate we expect to pay related to previously sold units. These estimates are reviewed regularly for accuracy. If updated information or actual amounts are different from previous estimates, the revisions are included in our results for the period in which they become known. Historically, the aggregate differences, if any, between our estimates and actual amounts in any year have not had a material impact on the Consolidated Financial Statements.

We enter into maintenance and extended warranty contracts with customers. Revenue related to these services is recognized on a straight-line basis over the life of the contract, unless sufficient historical evidence indicates that the cost of providing these services is incurred on an other than straight-line basis. In these circumstances, revenue is recognized over the contract period in proportion to the costs expected to be incurred in performing the service.

We, primarily through our Climate segment, provide equipment (e.g. HVAC, controls), integrated solutions, and installation designed to customer specifications through construction-type contracts. The term of these types of contracts is typically less than one year, but can be as long as three years. Revenues related to these contracts are recognized using the percentage-of-completion method in accordance with GAAP. This measure of progress toward completion, utilized to recognize sales and profits, is based on the proportion of actual cost incurred to date as compared to the total estimate of contract costs at completion. The timing of revenue recognition often differs from the invoicing schedule to the customer, with revenue recognition in advance of customer invoicing recorded to unbilled accounts receivable and invoicing in advance of revenue recognition recorded to deferred revenue. At December 31, 2017, all recorded receivables (billed and unbilled) are due within one year. We re-evaluate our contract estimates periodically and reflect changes in estimates in the current period using the cumulative catch-up method. These periodic reviews have not historically resulted in significant adjustments. If estimated contract costs are in excess of contract revenues, then the excess costs are accrued.

We enter into sales arrangements that contain multiple elements, such as equipment, installation and service revenue. For multiple element arrangements, each element is evaluated to determine the separate units of accounting. The total arrangement consideration is then allocated to the separate units of accounting based on their relative selling price at the inception of the arrangement. The relative selling price is determined using vendor specific objective evidence (VSOE) of selling price, if it exists; otherwise, third-party evidence (TPE) of selling price is used. If neither VSOE nor TPE of selling price exists for a deliverable, a best estimate of the selling price is developed for that deliverable. We primarily utilize VSOE to determine its relative selling price. We recognize revenue for delivered elements when the delivered item has stand-alone value to the customer, the basic revenue recognition criteria have been met, and only customary refund or return rights related to the delivered elements exist.

- **Income taxes** – Deferred tax assets and liabilities are determined based on temporary differences between financial reporting and tax bases of assets and liabilities, applying enacted tax rates expected to be in effect for the year in which the differences are expected to reverse. We recognize future tax benefits, such as net operating losses and non-U.S. tax credits, to the extent that realizing these benefits is considered in our judgment to be more likely than not. We regularly review the recoverability of our deferred tax assets considering our historic profitability, projected future taxable income, timing of the reversals of existing temporary differences and the feasibility of our tax planning strategies. Where appropriate, we record a valuation allowance with respect to a future tax benefit.

The provision for income taxes involves a significant amount of management judgment regarding interpretation of relevant facts and laws in the jurisdictions in which we operate. Future changes in applicable laws, projected levels of taxable income, and tax planning could change the effective tax rate and tax balances recorded by us. In addition, tax authorities periodically review income tax returns filed by us and can raise issues regarding our filing positions, timing and amount of income or deductions, and the allocation of income among the jurisdictions in which we operate. A significant period of time may elapse between the filing of an income tax return and the ultimate resolution of an issue raised by a revenue authority with respect to that return. We believe that we have adequately provided for any reasonably foreseeable resolution of these matters. We will adjust our estimate if significant events so dictate. To the extent that the ultimate results differ from our original or adjusted estimates, the effect will be recorded in the provision for income taxes in the period that the matter is finally resolved.

- **Employee benefit plans** – We provide a range of benefits to eligible employees and retirees, including pensions, postretirement and postemployment benefits. Determining the cost associated with such benefits is dependent on various actuarial assumptions including discount rates, expected return on plan assets, compensation increases, mortality, turnover rates and healthcare cost trend rates. Actuarial valuations are performed to determine expense in accordance with GAAP. Actual results may differ from the actuarial assumptions and are generally accumulated and amortized into earnings over future periods. We review our actuarial assumptions at each measurement date and make modifications to the assumptions based on current rates and trends, if appropriate. The discount rate, the rate of compensation increase and the expected long-term rates of return on plan assets are determined as of each measurement date.

The rate of compensation increase is dependent on expected future compensation levels. The expected long-term rate of return on plan assets reflects the average rate of returns expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation. The expected long-term rate of return on plan assets is based on what is achievable given the plan's investment policy, the types of assets held and the target asset allocation. The expected long-term rate of return is determined as of each measurement date. We believe that the assumptions utilized in recording our obligations under our plans are reasonable based on input from our actuaries, outside investment advisors and information as to assumptions used by plan sponsors.

Changes in any of the assumptions can have an impact on the net periodic pension cost or postretirement benefit cost. Estimated sensitivities to the expected 2018 net periodic pension cost of a 0.25% rate decline in the two basic assumptions are as follows: the decline in the discount rate would increase expense by approximately \$8.4 million and the decline in the estimated return on assets would increase expense by approximately \$7.5 million. A 0.25% rate decrease in the discount rate for postretirement benefits would decrease expected 2018 net periodic postretirement benefit cost by \$0.8 million and a 1.0% increase in the healthcare cost trend rate would increase the service and interest cost by approximately \$0.7 million.

RECENT ACCOUNTING PRONOUNCEMENTS

See Note 2 to the Consolidated Financial Statements for a discussion of recent accounting pronouncements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

We are exposed to fluctuations in currency exchange rates, interest rates and commodity prices which could impact our results of operations and financial condition.

FOREIGN CURRENCY EXPOSURES

We have operations throughout the world that manufacture and sell products in various international markets. As a result, we are exposed to movements in exchange rates of various currencies against the U.S. dollar as well as against other currencies throughout the world.

Many of our non-U.S. operations have a functional currency other than the U.S. dollar, and their results are translated into U.S. dollars for reporting purposes. Therefore, our reported results will be higher or lower depending on the weakening or strengthening of the U.S. dollar against the respective foreign currency. Our largest concentration of revenues from non-U.S. operations as of December 31, 2017 are in Euros and Chinese Yuan. A hypothetical 10% unfavorable change in the average exchange rate used to translate *Net revenues* for the year ended December 31, 2017 from either Euros or Chinese Yuan-based operations into U.S. dollars would not have a material impact on our financial statements.

We use derivative instruments to hedge those material exposures that cannot be naturally offset. The instruments utilized are viewed as risk management tools, involve little complexity and are not used for trading or speculative purposes. To minimize the risk of counter party non-performance, derivative instrument agreements are made only through major financial institutions with significant experience in such derivative instruments.

We evaluate our exposure to changes in currency exchange rates on our foreign currency derivatives using a sensitivity analysis. The sensitivity analysis is a measurement of the potential loss in fair value based on a percentage change in exchange rates. Based on the firmly committed currency derivative instruments in place at December 31, 2017, a hypothetical change in fair value of those derivative instruments assuming a 10% adverse change in exchange rates would result in an unrealized loss of approximately \$58.3 million, as compared with \$81.0 million at December 31, 2016. These amounts, when realized, would be offset by changes in the fair value of the underlying transactions.

COMMODITY PRICE EXPOSURES

We are exposed to volatility in the prices of commodities used in some of our products and we use fixed price contracts to manage this exposure. We do not have committed commodity derivative instruments in place at December 31, 2017.

INTEREST RATE EXPOSURE

Our debt portfolio mainly consists of fixed-rate instruments, and therefore any fluctuation in market interest rates is not expected to have a material effect on our results of operations.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

- (a) The following Consolidated Financial Statements and Financial Statement Schedules and the report thereon of PricewaterhouseCoopers LLP dated February 12, 2018, are presented under Item 16 of this Annual Report on Form 10-K.

Consolidated Financial Statements:

Report of independent registered public accounting firm
 Consolidated Statements of comprehensive income for the years ended December 31, 2017, 2016 and 2015
 Consolidated balance sheets at December 31, 2017 and 2016
 For the years ended December 31, 2017, 2016 and 2015:
 Consolidated statements of equity
 Consolidated statements of cash flows
 Notes to Consolidated Financial Statements

Financial Statement Schedule:

Schedule II – Valuation and Qualifying Accounts for the years ended December 31, 2017, 2016 and 2015

(b) The unaudited selected quarterly financial data for the two years ended December 31, is as follows:

<i>In millions, except per share amounts</i>	2017			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net revenues	\$ 3,000.6	\$ 3,908.4	\$ 3,670.5	\$ 3,618.1
Cost of goods sold	(2,126.1)	(2,653.1)	(2,489.9)	(2,542.5)
Operating income	215.0	557.6	506.1	386.6
Net earnings	121.1	362.2	371.9	457.1
Net earnings attributable to Ingersoll-Rand plc	117.1	358.6	367.0	459.9
Earnings per share attributable to Ingersoll-Rand plc ordinary shareholders:				
Basic	\$ 0.45	\$ 1.40	\$ 1.45	\$ 1.84
Diluted	\$ 0.45	\$ 1.38	\$ 1.43	\$ 1.81

	2016			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Net revenues	\$ 2,894.1	\$ 3,688.2	\$ 3,567.8	\$ 3,358.8
Cost of goods sold	(2,041.2)	(2,506.5)	(2,412.9)	(2,347.3)
Operating income	225.4	513.3	511.7	352.8
Net earnings	155.6	752.4	381.9	202.8
Net earnings attributable to Ingersoll-Rand plc	152.4	747.6	377.4	198.8
Earnings per share attributable to Ingersoll-Rand plc ordinary shareholders:				
Basic	\$ 0.58	\$ 2.88	\$ 1.45	\$ 0.76
Diluted	\$ 0.58	\$ 2.86	\$ 1.44	\$ 0.75

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

The Company's management, including its Chief Executive Officer and Chief Financial Officer, have conducted an evaluation of the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act)), as of the end of the period covered by this Annual Report on Form 10-K. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded as of December 31, 2017, that the Company's disclosure controls and procedures were effective in ensuring that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act has been recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms, and that such information has been accumulated and communicated to the Company's management including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

(b) Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined under Exchange Act Rules 13a-15(f) and 15d-15(f). Internal control over financial reporting is a process designed by, or under the supervision of, the Chief Executive Officer and Chief Financial Officer and effected by the Company's Board of Directors to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate.

Management has assessed the effectiveness of internal control over financial reporting as of December 31, 2017. In making its assessment, management has utilized the criteria set forth by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission in Internal Control - Integrated Framework (2013). Management concluded that based on its assessment, the Company's internal control over financial reporting was effective as of December 31, 2017.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2017 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

(c) Changes in Internal Control Over Financial Reporting

There were no changes in internal control over financial reporting (as defined by Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information regarding our executive officers is included in Part I under the caption "Executive Officers of Registrant."

The other information required by this item is incorporated herein by reference to the information contained under the headings "Item 1. Election of Directors", "Section 16(a) Beneficial Ownership Reporting Compliance" and "Corporate Governance" in our definitive proxy statement for the 2018 annual general meeting of shareholders (2018 Proxy Statement).

ITEM 11. EXECUTIVE COMPENSATION

The other information required by this item is incorporated herein by reference to the information contained under the headings "Compensation Discussion and Analysis," "Compensation of Directors," "Executive Compensation," "Compensation Committee Report" and "Compensation Committee Interlocks and Insider Participation" in our 2018 Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The other information required by this item is incorporated herein by reference to the information contained under the headings "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" of our 2018 Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The other information required by this item is incorporated herein by reference to the information contained under the headings "Corporate Governance" and "Certain Relationships and Related Person Transactions" of our 2018 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated herein by reference to the information contained under the caption "Fees of the Independent Auditors" in our 2018 Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) 1. and 2. Financial statements and financial statement schedule See Item 8.
3. Exhibits
The exhibits listed on the accompanying index to exhibits are filed as part of this Annual Report on Form 10-K.

INGERSOLL-RAND PLC

INDEX TO EXHIBITS

(ITEM 15(a))

DESCRIPTION

Pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"), Ingersoll-Rand plc (the "Company") has filed certain agreements as exhibits to this Annual Report on Form 10-K. These agreements may contain representations and warranties by the parties. These representations and warranties have been made solely for the benefit of the other party or parties to such agreements and (i) may have been qualified by disclosures made to such other party or parties, (ii) were made only as of the date of such agreements or such other date(s) as may be specified in such agreements and are subject to more recent developments, which may not be fully reflected in our public disclosure, (iii) may reflect the allocation of risk among the parties to such agreements and (iv) may apply materiality standards different from what may be viewed as material to investors. Accordingly, these representations and warranties may not describe our actual state of affairs at the date hereof and should not be relied upon.

On July 1, 2009, Ingersoll-Rand Company Limited, a Bermuda company, completed a reorganization to change the jurisdiction of incorporation of the parent company from Bermuda to Ireland. As a result, Ingersoll-Rand plc replaced Ingersoll-Rand Company Limited as the ultimate parent company effective July 1, 2009. All references related to the Company prior to July 1, 2009 relate to Ingersoll-Rand Company Limited.

(a) Exhibits

Exhibit No.	Description	Method of Filing
2.1	Separation and Distribution Agreement between Ingersoll-Rand plc and Allegion plc, dated November 29, 2013.	Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on December 2, 2013.
3.1	Constitution of the Company, as amended and restated on June 2, 2016 The Company and its subsidiaries are parties to several long-term debt instruments under which, in each case, the total amount of securities authorized does not exceed 10% of the total assets of the Company and its subsidiaries on a consolidated basis.	Incorporated by reference to Exhibit 3.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on June 7, 2016. Pursuant to paragraph 4 (iii)(A) of Item 601 (b) of Regulation S-K, the Company agrees to furnish a copy of such instruments to the Securities and Exchange Commission upon request.
4.1	Indenture, dated as of August 12, 2008, among the Company, Ingersoll-Rand Global Holding Company Limited and Wells Fargo Bank, N.A., as Trustee (replacing the Indenture originally filed as Exhibit 4.1 to the Company's Form 10-Q (File No. 001-16831) for the period ended September 30, 2008 as filed with the SEC on November 7, 2008).	Incorporated by reference to Exhibit 4.4 to the Company's Form 10-K for the fiscal year ended 2008 (File No. 001-16831) filed with the SEC on March 2, 2009.
4.2	First Supplemental Indenture, dated as of August 15, 2008, among the Company, Ingersoll-Rand Global Holding Company Limited and Wells Fargo Bank, N.A., as trustee, to that certain Indenture, dated as of August 12, 2008, among the Company, Ingersoll-Rand Global Holding Company Limited and Wells Fargo Bank, N.A., as trustee.	Incorporated by reference to Exhibit 1.1 to the Company's Form 8-K (File No. 001-16831) filed with the SEC on August 18, 2008.
4.3	Second Supplemental Indenture, dated as of April 3, 2009, among the Company, Ingersoll-Rand Global Holding Company Limited and Wells Fargo Bank, N.A., as trustee, to that certain Indenture, dated as of August 12, 2008, among the Company, Ingersoll-Rand Global Holding Company Limited and Wells Fargo Bank, N.A., as trustee.	Incorporated by reference to Exhibit 4.1 to the Company's Form 8-K (File No. 001-16831) filed with the SEC on April 6, 2009.
4.4	Third Supplemental Indenture, dated as of April 6, 2009, among the Company, Ingersoll-Rand Global Holding Company Limited and Wells Fargo Bank, N.A., as trustee, to that certain Indenture, dated as of August 12, 2008, among the Company, Ingersoll-Rand Global Holding Company Limited and Wells Fargo Bank, N.A., as trustee.	Incorporated by reference to Exhibit 4.2 to the Company's Form 8-K (File No. 001-16831) filed with the SEC on April 6, 2009.

Exhibit No.	Description	Method of Filing
4.5	Fourth Supplemental Indenture, dated as of June 29, 2009, among Ingersoll-Rand Global Holding Company Limited, a Bermuda exempted company, Ingersoll-Rand Company Limited, a Bermuda exempted company, Ingersoll-Rand International Holding Limited, a Bermuda exempted company, Ingersoll-Rand plc, an Irish public limited company, and Wells Fargo Bank, N.A., as Trustee, to the Indenture dated as of August 12, 2008.	Incorporated by reference to Exhibit 4.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on July 1, 2009.
4.6	Fifth Supplemental Indenture dated as of November 20, 2013, among Ingersoll-Rand Global Holding Company Limited, a Bermuda company, Ingersoll-Rand International Holding Limited, a Bermuda company, Ingersoll-Rand Company, a New Jersey corporation, and Wells Fargo Bank, N.A., as Trustee, to the Indenture dated as of August 12, 2008.	Incorporated by reference to Exhibit 4.2 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on November 26, 2013.
4.7	Sixth Supplemental Indenture, dated as of October 28, 2014, by and among Ingersoll-Rand Global Holding Company Limited, as issuer, Ingersoll-Rand Company, as co-obligor, Ingersoll-Rand plc, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Luxembourg Finance S.A., as guarantors, and Wells Fargo Bank, N.A., as Trustee, to an Indenture, dated as of August 12, 2008.	Incorporated by reference to Exhibit 4.6 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on October 29, 2014.
4.8	Seventh Supplemental Indenture, dated as of December 18, 2015, by and among Ingersoll-Rand Global Holding Company Limited, as issuer, Ingersoll-Rand Company, Ingersoll-Rand plc, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Luxembourg Finance S.A., and Ingersoll-Rand Lux International Holding Company S.à.r.l. as guarantors, and Wells Fargo Bank, N.A., as Trustee, to an Indenture, dated as of August 12, 2008.	Incorporated by reference to Exhibit 4.8 to the Company's Form 10-K for the fiscal years ended 2015 (File No. 001-34400) filed with the SEC on February 12, 2016.
4.9	Eighth Supplemental Indenture, dated as of April 5, 2016, among Ingersoll-Rand Global Holding Company Limited, as issuer, Ingersoll-Rand Company, Ingersoll-Rand plc, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Luxembourg Finance S.A., and Ingersoll-Rand Lux International Holding Company S.à.r.l., Ingersoll-Rand Irish Holdings Unlimited Company, as guarantors, and Wells Fargo Bank, N.A., as Trustee, to an Indenture, dated as of August 12, 2008.	Incorporated by reference to Exhibit 4.9 to the Company's Form 10-K for the fiscal year ended 2016 (File No. 001-34400) filed with the SEC on February 13, 2017.
4.10	Fifth Supplemental Indenture, dated as of June 29, 2009, among Ingersoll-Rand Company, a New Jersey corporation, Ingersoll-Rand plc, an Irish public limited company, Ingersoll-Rand International Holding Limited, a Bermuda exempted company, and The Bank of New York Mellon, as Trustee, to the Indenture dated as of August 1, 1986.	Incorporated by reference to Exhibit 4.3 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on July 1, 2009.
4.11	Sixth Supplemental Indenture, dated as of October 28, 2014, by and among Ingersoll-Rand Company, as issuer, Ingersoll-Rand plc, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Company Limited, Ingersoll-Rand Luxembourg Finance S.A., as guarantors, and The Bank of New York Mellon, as Trustee, to an Indenture, dated as of August 1, 1986.	Incorporated by reference to Exhibit 4.7 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on October 29, 2014.
4.12	Indenture, dated as of June 20, 2013, by and among Ingersoll-Rand Global Holding Company Limited, as issuer, Ingersoll-Rand plc, Ingersoll-Rand Company Limited and Ingersoll-Rand International Holding Limited, as guarantors and The Bank of New York Mellon, as Trustee.	Incorporated by reference to Exhibit 4.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on June 26, 2013.
4.13	First Supplemental Indenture, dated as of June 20, 2013, by and among Ingersoll-Rand Global Holding Company Limited, as issuer, Ingersoll-Rand plc, Ingersoll-Rand Company Limited and Ingersoll-Rand International Holding Limited, as guarantors and The Bank of New York Mellon, as Trustee, relating to the 2.875% Senior Notes due 2019.	Incorporated by reference to Exhibit 4.2 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on June 26, 2013.

Exhibit No.	Description	Method of Filing
4.14	Second Supplemental Indenture, dated as of June 20, 2013, by and among Ingersoll-Rand Global Holding Company Limited, as issuer, Ingersoll-Rand plc, Ingersoll-Rand Company Limited and Ingersoll-Rand International Holding Limited, as guarantors and The Bank of New York Mellon, as Trustee, relating to the 4.250% Senior Notes due 2023.	Incorporated by reference to Exhibit 4.3 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on June 26, 2013.
4.15	Third Supplemental Indenture, dated as of June 20, 2013, by and among Ingersoll-Rand Global Holding Company Limited, as issuer, Ingersoll-Rand plc, Ingersoll-Rand Company Limited and Ingersoll-Rand International Holding Limited, as guarantors and The Bank of New York Mellon, as Trustee, relating to the 5.750% Senior Notes due 2043.	Incorporated by reference to Exhibit 4.4 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on June 26, 2013.
4.16	Fourth Supplemental Indenture, dated as of November 20, 2013, among Ingersoll-Rand Global Holding Company Limited, a Bermuda company, Ingersoll-Rand Company Limited, a Bermuda company, Ingersoll-Rand International Holding Limited, a Bermuda company, Ingersoll-Rand plc, an Irish public limited company, Ingersoll-Rand Company, a New Jersey corporation, and The Bank of New York Mellon, as Trustee, to the Indenture dated as of June 20, 2013.	Incorporated by reference to Exhibit 4.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on November 26, 2013.
4.17	Fifth Supplemental Indenture, dated as of October 28, 2014, by and among Ingersoll-Rand Global Holding Company Limited, as issuer, Ingersoll-Rand Company, as co-obligor, Ingersoll-Rand plc, Ingersoll-Rand Company Limited, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Luxembourg Finance S.A., as guarantors, and The Bank of New York Mellon, as Trustee, to an Indenture, dated as of June 20, 2013.	Incorporated by reference to Exhibit 4.5 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on October 29, 2014.
4.18	Sixth Supplemental Indenture, dated as of December 18, 2015, by and among Ingersoll-Rand Global Holding Company Limited, as issuer, Ingersoll-Rand Company, as co-obligor, Ingersoll-Rand plc, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Luxembourg Finance S.A., and Ingersoll-Rand Lux International Holding Company S.à.r.l. as guarantors, and The Bank of New York Mellon, as Trustee, to an Indenture, dated as of June 20, 2013.	Incorporated by reference to Exhibit 4.21 to the Company's Form 10-K for the fiscal year ended 2015 (File No. 001-34400) filed with the SEC on February 12, 2016.
4.19	Seventh Supplemental Indenture, dated as of April 5, 2016, by and among Ingersoll-Rand Global Holding company Limited, as issuer, Ingersoll-Rand Company, as co-obligor, Ingersoll-Rand plc, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Luxembourg Finance S.A., Ingersoll-Rand Lux International Holding Company S.à.r.l., and Ingersoll-Rand Irish Holdings Unlimited Company, as guarantors, and The Bank of New York Mellon, as Trustee, to an indenture, dated as of June 20, 2013.	Incorporated by reference to Exhibit 4.19 to the Company's Form 10-K for the fiscal year ended 2016 (File No. 001-34400) filed with the SEC on February 13, 2017.
4.20	Indenture, dated as of October 28, 2014, by and among Ingersoll-Rand Luxembourg Finance S.A., as issuer, and Ingersoll-Rand plc, Ingersoll-Rand Company Limited, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Company and Ingersoll-Rand Global Holding Company Limited, as guarantors, and The Bank of New York Mellon, as Trustee.	Incorporated by reference to Exhibit 4.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on October 29, 2014.
4.21	First Supplemental Indenture, dated as of October 28, 2014, by and among Ingersoll-Rand Luxembourg Finance S.A., as issuer, and Ingersoll-Rand plc, Ingersoll-Rand Company Limited, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Company and Ingersoll-Rand Global Holding Company Limited, as guarantors, and The Bank of New York Mellon, as Trustee, relating to the 2.625% Senior Notes due 2020.	Incorporated by reference to Exhibit 4.2 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on October 29, 2014.

Exhibit No.	Description	Method of Filing
4.22	Second Supplemental Indenture, dated as of October 28, 2014, by and among Ingersoll-Rand Luxembourg Finance S.A., as issuer, and Ingersoll-Rand plc, Ingersoll-Rand Company Limited, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Company and Ingersoll-Rand Global Holding Company Limited, as guarantors, and The Bank of New York Mellon, as Trustee, relating to the 3.550% Senior Notes due 2024.	Incorporated by reference to Exhibit 4.3 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on October 29, 2014.
4.23	Third Supplemental Indenture, dated as of October 28, 2014, by and among Ingersoll-Rand Luxembourg Finance S.A., as issuer, and Ingersoll-Rand plc, Ingersoll-Rand Company Limited, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Company and Ingersoll-Rand Global Holding Company Limited, as guarantors, and The Bank of New York Mellon, as Trustee, relating to the 4.650% Senior Notes due 2044.	Incorporated by reference to Exhibit 4.3 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on October 29, 2014.
4.24	Fourth Supplemental Indenture, dated as of December 18, 2015, by and among Ingersoll-Rand Luxembourg Finance S.A., as issuer, and Ingersoll-Rand plc, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Company, Ingersoll-Rand Global Holding Company Limited, and Ingersoll-Rand Lux International Holding Company S.à.r.l. as guarantors, and The Bank of New York Mellon, as Trustee.	Incorporated by reference to Exhibit 4.27 to the Company's Form 10-K for the fiscal year ended 2015 (File No. 001-34400) filed with the SEC on February 12, 2016.
4.25	Fifth Supplemental Indenture, dated as of April 5, 2016, by and among Ingersoll-Rand Luxembourg Finance S.A., as Issuer, and Ingersoll-Rand plc, Ingersoll-Rand Company Limited, Ingersoll-Rand Company, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Lux International Holding Company S.à.r.l., Ingersoll-Rand Irish Holdings Unlimited Company, as guarantors, and The Bank of New York Mellon, as Trustee.	Incorporated by reference to Exhibit 4.25 to the Company's Form 10-K for the fiscal year ended 2016 (File No. 001-34400) filed with the SEC on February 13, 2017.
4.26	Form of Ordinary Share Certificate of Ingersoll-Rand plc.	Incorporated by reference to Exhibit 4.6 to the Company's Form S-3 (File No. 333-161334) filed with the SEC on August 13, 2009.
10.1*	Form of IR Stock Option Grant Agreement (February 2015).	Incorporated by reference to Exhibit 10.1 to the Company's Form 10-K for the fiscal year ended 2014 (File No. 001-34400) filed with the SEC on February 13, 2015.
10.2*	Form of IR Restricted Stock Unit Grant Agreement (February 2015).	Incorporated by reference to Exhibit 10.2 to the Company's Form 10-K for the fiscal year ended 2014 (File No. 001-34400) filed with the SEC on February 13, 2015.
10.3*	Form of IR Performance Stock Unit Grant Agreement (February 2015).	Incorporated by reference to Exhibit 10.3 to the Company's Form 10-K for the fiscal year ended 2014 (File No. 001-34400) filed with the SEC on February 13, 2015.
10.4	Credit Agreement dated March 20, 2014 among Ingersoll-Rand Global Holding Company Limited, Ingersoll-Rand plc, Ingersoll-Rand Company Limited, Ingersoll-Rand International Holding Limited, Ingersoll-Rand Company, JPMorgan Chase Bank, N.A., as Administrative Agent, Citibank, N.A., as Syndication Agent, Bank of America, N.A., BNP Paribas, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, Mizuho Bank, Ltd., and The Bank of Tokyo-Mitsubishi UFJ, Ltd. as Documentation Agents, and J.P. Morgan Securities LLC and Citigroup Global Markets Inc., as joint lead arrangers and joint bookrunners, and certain lending institutions from time to time parties thereto.	Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on March 26, 2014.
10.5	Supplemental Guarantee dated as of December 18, 2015 made by Ingersoll-Rand Lux International Holding Company S.à.r.l. in favor of JPMorgan Chase Bank, N.A., as Administrative Agent for the Banks that are parties to the Credit Agreement dated as of March 20, 2014.	Incorporated by reference to Exhibit 10.8 to the Company's Form 10-K for the fiscal year ended 2015 (File No. 001-34400) filed with the SEC on February 12, 2016.

Exhibit No.	Description	Method of Filing
10.6	Supplemental Guarantee dated as of April 5, 2016 made by Ingersoll-Rand Irish Holdings Unlimited Company in favor of JPMorgan Chase Bank, N.A., as Administrative Agent for the Banks that are parties to the Credit Agreement dated as of March 20, 2014.	Incorporated by reference to Exhibit 10.6 to the Company's Form 10-K for the fiscal year ended 2016 (File No. 001-34400) filed with the SEC on February 13, 2017.
10.7	Credit Agreement dated March 15, 2016 among Ingersoll-Rand Global Holding Company Limited, Ingersoll-Rand plc, Ingersoll-Rand Luxembourg Finance S.A., Ingersoll-Rand Lux International Holding Company S.à r.l., Ingersoll-Rand International Holding Limited, Ingersoll-Rand Company, JPMorgan Chase Bank, N.A., as Administrative Agent, Citibank, N.A., as Syndication Agent, Bank of America, N.A., BNP Paribas, Deutsche Bank Securities, Inc., Goldman Sachs Bank USA, Mizuho Bank, Ltd., and The Bank of Tokyo-Mitsubishi UFJ, Ltd. as Documentation Agents, and JPMorgan Chase Bank, N.A. and Citigroup Global Markets Inc., as joint lead arrangers and joint bookrunners, and certain lending institutions from time to time parties thereto.	Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on March 17, 2016.
10.8	Supplemental Guarantee dated as of April 5, 2016 made by Ingersoll-Rand Irish Holdings Unlimited Company in favor of JPMorgan Chase Bank, N.A., as Administrative Agent for the Banks that are parties to the Credit Agreement dated as of March 15, 2016.	Incorporated by reference to Exhibit 10.8 to the Company's Form 10-K for the fiscal year ended 2017 (File No. 001-34400) filed with the SEC on February 13, 2017.
10.9	Deed Poll Indemnity of Ingersoll-Rand plc, an Irish public limited company, as to the directors, secretary and officers and senior executives of Ingersoll-Rand plc and the directors and officers of Ingersoll-Rand plc's subsidiaries.	Incorporated by reference to Exhibit 10.5 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on July 1, 2009.
10.10	Tax Sharing Agreement, dated as of July 16, 2007, by and among American Standard Companies Inc. and certain of its subsidiaries and WABCO Holdings Inc. and certain of its subsidiaries.	Incorporated by reference to Exhibit 10.1 to Trane Inc.'s Form 8-K (File No. 001-11415) filed with the SEC on July 20, 2007.
10.11	Tax Matters Agreement between Ingersoll-Rand plc and Allegion plc, dated November 30, 2013.	Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on December 2, 2013.
10.12*	Ingersoll-Rand plc Incentive Stock Plan of 2013.	Incorporated by reference to Exhibit 4.5 to the Company's Form S-8 (File No. 333-189446) filed with the SEC on June 19, 2013.
10.13*	Ingersoll-Rand plc Incentive Stock Plan of 2007 (amended and restated as of December 1, 2010).	Incorporated by reference to Exhibit 10.18 to the Company's Form 10-K for the fiscal year ended 2010 (File No. 001-34400) filed with the SEC on February 22, 2011.
10.14*	IR Executive Deferred Compensation Plan (as amended and restated effective January 1, 2017).	Incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended June 30, 2017 (File No. 001-34400) filed with the SEC on July 26, 2017.
10.15*	IR Executive Deferred Compensation Plan II (as amended and restated effective January 1, 2017).	Incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q for the quarter ended June 30, 2017 (File No. 001-34400) filed with the SEC on July 26, 2017.
10.16*	First Amendment to IR Executive Deferred Compensation Plan II (dated December 22, 2009).	Incorporated by reference to Exhibit 10.19 to the Company's Form 10-K for the fiscal year ended 2011 (File No. 001-34400) filed with the SEC on February 21, 2012.
10.17*	Second Amendment to IR Executive Deferred Compensation Plan II (dated December 23, 2010).	Incorporated by reference to Exhibit 10.20 to the Company's Form 10-K for the fiscal year ended 2011 (File No. 001-16831) filed with the SEC on February 21, 2012.
10.18*	IR-plc Director Deferred Compensation and Stock Award Plan (as amended and restated effective July 1, 2009).	Incorporated by reference to Exhibit 10.11 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on July 1, 2009.
10.19*	IR-plc Director Deferred Compensation and Stock Award Plan II (as amended and restated effective July 1, 2009).	Incorporated by reference to Exhibit 10.12 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on July 1, 2009.

Exhibit No.	Description	Method of Filing
10.20*	Ingersoll-Rand Company Supplemental Employee Savings Plan (amended and restated effective October 1, 2012).	Incorporated by reference to exhibit 10.23 to the Company's Form 10-K for the fiscal year ended 2012 (File No. 001-34400) filed with the SEC on February 14, 2013.
10.21*	Amendment to the Ingersoll-Rand Company Supplemental Employee Savings Plan dated April 6, 2017.	Filed herewith.
10.22*	Ingersoll-Rand Company Supplemental Employee Savings Plan II (effective January 1, 2005 and amended and restated through October 1, 2012).	Incorporated by reference to exhibit 10.24 to the Company's Form 10-K for the fiscal year ended 2012 (File No. 001-34400) filed with the SEC on February 14, 2013.
10.23*	Amendment to the Ingersoll-Rand Company Supplemental Employee Savings Plan II dated April 6, 2017.	Filed herewith.
10.24*	Trane Inc. Deferred Compensation Plan (as amended and restated as of July 1, 2009, except where otherwise stated).	Incorporated by reference to Exhibit 10.19 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on July 1, 2009.
10.25*	Amendment to Trane Inc. Deferred Compensation Plan dated April 6, 2017.	Filed herewith.
10.26*	Ingersoll-Rand Company Supplemental Pension Plan (Amended and Restated Effective January 1, 2005).	Incorporated by reference to Exhibit 10.28 to the Company's Form 10-K for the fiscal year ended 2008 (File No. 001-16831) filed with the SEC on March 2, 2009.
10.27*	First Amendment to the Ingersoll-Rand Company Supplemental Pension Plan, dated as of July 1, 2009.	Incorporated by reference to Exhibit 10.21 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on July 1, 2009.
10.28*	Ingersoll-Rand Company Elected Officers Supplemental Plan (Effective January 1, 2005 and Amended and Restated effective October 1, 2012).	Incorporated by reference to exhibit 10.32 to the Company's Form 10-K for the fiscal year ended 2012 (File No. 001-34400) filed with the SEC on February 14, 2013.
10.29*	Senior Executive Performance Plan.	Incorporated by reference to Exhibit 10.39 to the Company's Form 10-K for the fiscal year ended 2011 (File No. 001-34400) filed with the SEC on February 21, 2012.
10.30*	Description of Annual Incentive Matrix Program.	Filed herewith.
10.31*	Form of Tier 1 Change in Control Agreement (Officers before May 19, 2009).	Incorporated by reference to Exhibit 99.1 to the Company's Form 8-K (File No. 001-16831) filed with the SEC on December 4, 2006.
10.32*	Form of Tier 2 Change in Control Agreement (Officers before May 19, 2009).	Incorporated by reference to Exhibit 99.2 to the Company's Form 8-K (File No. 001-16831) filed with the SEC on December 4, 2006.
10.33*	Form of Tier 1 Change in Control Agreement (New Officers on or after May 19, 2009).	Incorporated by reference to Exhibit 10.32 to the Company's Form 10-Q for the period ended June 30, 2009 (File No. 001-34400) filed with the SEC on August 6, 2009.
10.34*	Form of Tier 2 Change in Control Agreement (New Officers on or after May 19, 2009).	Incorporated by reference to Exhibit 10.33 to the Company's Form 10-Q for the period ended June 30, 2009 (File No. 001-34400) filed with the SEC on August 6, 2009.
10.35*	Amended and Restated Major Restructuring Severance Plan (as amended and restated effective December 31, 2014).	Incorporated by reference to Exhibit 10.35 to the Company's Form 10-K for the fiscal year ended 2014 (File No. 001-34400) filed with the SEC on February 13, 2015.
10.36*	Michael W. Lamach Letter, dated December 24, 2003.	Incorporated by reference to Exhibit 10.35 to the Company's Form 10-K for the fiscal year ended 2003 (File No. 001-16831) filed with the SEC on February 27, 2004.
10.37*	Michael W. Lamach Letter, dated June 4, 2008.	Incorporated by reference to Exhibit 10.2 to the Company's Form 8-K (File No. 001-16831) filed with the SEC on June 10, 2008.
10.38*	Michael W. Lamach Letter, dated February 4, 2009.	Incorporated by reference to Exhibit 10.43 to the Company's Form 10-K for the fiscal year ended 2008 (File No. 001-16831) filed with the SEC on March 2, 2009.
10.39*	Michael W. Lamach Letter, dated February 3, 2010.	Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on February 5, 2010.

Exhibit No.	Description	Method of Filing
10.40*	Michael W. Lamach Letter, dated December 23, 2012.	Incorporated by reference to exhibit 10.48 to the Company's Form 10-K for the fiscal year ended 2012 (File No. 001-34400) filed with the SEC on February 14, 2013.
10.41*	Employment Agreement with Marcia J. Avedon, Senior Vice President, dated January 8, 2007.	Incorporated by reference to Exhibit 10.45 to the Company's Form 10-K for the fiscal year ended December 31, 2006 (File No. 001-16831) filed with the SEC on March 1, 2007.
10.42*	Marcia J. Avedon Letter, dated December 20, 2012.	Incorporated by reference to exhibit 10.53 to the Company's Form 10-K for the fiscal year ended 2012 (File No. 001-34400) filed with the SEC on February 14, 2013.
10.43*	Susan K. Carter Employment Agreement, dated as of August 19, 2013.	Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on October 2, 2013.
10.44	Employee Matters Agreement between Ingersoll-Rand plc and Allegion plc, dated November 30, 2013.	Incorporated by reference to Exhibit 10.1 to the Company's Form 8-K (File No. 001-34400) filed with the SEC on December 2, 2013.
12	Computations of Ratios of Earnings to Fixed Charges.	Filed herewith.
21	List of Subsidiaries of Ingersoll-Rand plc.	Filed herewith.
23.1	Consent of Independent Registered Public Accounting Firm.	Filed herewith.
31.1	Certification of Chief Executive Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith.
31.2	Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) or Rule 15d-14(a), as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Filed herewith.
32	Certifications of Chief Executive Officer and Chief Financial Officer Pursuant to Rule 13a-14(b) or Rule 15d-14(b) and 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Furnished herewith.
101	The following materials from the Company's Annual Report on Form 10-K for the year ended December 31, 2017, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Statements of Comprehensive Income, (ii) the Consolidated Balance Sheets, (iii) the Consolidated Statements of Equity, (iv) the Consolidated Statements of Cash Flows, and (v) Notes to Consolidated Financial Statements.	Furnished herewith.

* Management contract or compensatory plan or arrangement.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

INGERSOLL-RAND PLC
(Registrant)

By: /s/ Michael W. Lamach

Michael W. Lamach

Chief Executive Officer

Date: February 12, 2018

Pursuant to the requirement of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
<u>/s/ Michael W. Lamach</u> (Michael W. Lamach)	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	February 12, 2018
<u>/s/ Susan K. Carter</u> (Susan K. Carter)	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 12, 2018
<u>/s/ Christopher J. Kuehn</u> (Christopher J. Kuehn)	Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 12, 2018
<u>/s/ Kirk E. Arnold</u> (Kirk E. Arnold)	Director	February 12, 2018
<u>/s/ Ann C. Berzin</u> (Ann C. Berzin)	Director	February 12, 2018
<u>/s/ John Bruton</u> (John Bruton)	Director	February 12, 2018
<u>/s/ Jared L. Cohon</u> (Jared L. Cohon)	Director	February 12, 2018
<u>/s/ Gary D. Forsee</u> (Gary D. Forsee)	Director	February 12, 2018
<u>/s/ Linda P. Hudson</u> (Linda P. Hudson)	Director	February 12, 2018
<u>/s/ Myles P. Lee</u> (Myles P. Lee)	Director	February 12, 2018
<u>/s/ John P. Surma</u> (John P. Surma)	Director	February 12, 2018
<u>/s/ Richard J. Swift</u> (Richard J. Swift)	Director	February 12, 2018
<u>/s/ Tony L. White</u> (Tony L. White)	Director	February 12, 2018

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INGERSOLL-RAND PLC
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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Ingersoll-Rand plc

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Ingersoll-Rand plc and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of comprehensive income, of equity and of cash flows for each of the three years in the period ended December 31, 2017, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2017 appearing under Item 16 (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP
Charlotte, North Carolina
February 12, 2018

We have served as the Company's auditor since at least 1906. We have not determined the specific year we began serving as auditor of the Company.

INGERSOLL-RAND PLC

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

In millions, except per share amounts

For the years ended December 31,	2017	2016	2015
Net revenues	\$14,197.6	\$13,508.9	\$13,300.7
Cost of goods sold	(9,811.6)	(9,307.9)	(9,277.4)
Selling and administrative expenses	(2,720.7)	(2,597.8)	(2,531.6)
Operating income	1,665.3	1,603.2	1,491.7
Interest expense	(215.8)	(221.5)	(223.0)
Other income/(expense), net	(31.6)	359.6	(20.8)
Earnings before income taxes	1,417.9	1,741.3	1,247.9
Provision for income taxes	(80.2)	(281.5)	(540.8)
Earnings from continuing operations	1,337.7	1,459.8	707.1
Discontinued operations, net of tax	(25.4)	32.9	(24.3)
Net earnings	1,312.3	1,492.7	682.8
Less: Net earnings attributable to noncontrolling interests	(9.7)	(16.5)	(18.2)
Net earnings attributable to Ingersoll-Rand plc	\$ 1,302.6	\$ 1,476.2	\$ 664.6
Amounts attributable to Ingersoll-Rand plc ordinary shareholders:			
Continuing operations	\$ 1,328.0	\$ 1,443.3	\$ 688.9
Discontinued operations	(25.4)	32.9	(24.3)
Net earnings	\$ 1,302.6	\$ 1,476.2	\$ 664.6
Earnings (loss) per share attributable to Ingersoll-Rand plc ordinary shareholders:			
Basic:			
Continuing operations	\$ 5.21	\$ 5.57	\$ 2.60
Discontinued operations	(0.10)	0.13	(0.09)
Net earnings	\$ 5.11	\$ 5.70	\$ 2.51
Diluted:			
Continuing operations	\$ 5.14	\$ 5.52	\$ 2.57
Discontinued operations	(0.09)	0.13	(0.09)
Net earnings	\$ 5.05	\$ 5.65	\$ 2.48
Net earnings	\$ 1,312.3	\$ 1,492.7	\$ 682.8
Other comprehensive income (loss):			
Currency translation	450.3	(233.8)	(447.6)
Cash flow hedges			
Unrealized net gains (losses) arising during period	(1.8)	2.2	1.2
Net gains (losses) reclassified into earnings	3.6	(4.8)	2.6
Tax (expense) benefit	—	0.4	(1.8)
Total cash flow hedges, net of tax	1.8	(2.2)	2.0
Pension and OPEB adjustments:			
Prior service costs for the period	(3.8)	(6.2)	(6.8)
Net actuarial gains (losses) for the period	39.6	23.6	1.8
Amortization reclassified into earnings	52.1	57.5	55.1
Settlements/curtailments reclassified to earnings	7.7	2.1	0.7
Currency translation and other	(15.4)	22.5	15.9
Tax (expense) benefit	(20.1)	(23.5)	(32.0)
Total pension and OPEB adjustments, net of tax	60.1	76.0	34.7
Other comprehensive income (loss), net of tax	512.2	(160.0)	(410.9)
Comprehensive income, net of tax	\$ 1,824.5	\$ 1,332.7	\$ 271.9
Less: Comprehensive income attributable to noncontrolling interests	(10.2)	(26.1)	(13.9)
Comprehensive income attributable to Ingersoll-Rand plc	\$ 1,814.3	\$ 1,306.6	\$ 258.0

See accompanying notes to Consolidated Financial Statements.

INGERSOLL-RAND PLC

CONSOLIDATED BALANCE SHEETS

In millions, except share amounts

December 31,	2017	2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 1,549.4	\$ 1,714.7
Accounts and notes receivable, net	2,477.4	2,223.0
Inventories, net	1,555.4	1,385.8
Other current assets	536.9	255.8
Total current assets	6,119.1	5,579.3
Property, plant and equipment, net	1,551.3	1,511.0
Goodwill	5,935.7	5,658.4
Intangible assets, net	3,742.9	3,785.1
Other noncurrent assets	824.3	863.6
Total assets	\$18,173.3	\$17,397.4
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	\$ 1,556.1	\$ 1,334.0
Accrued compensation and benefits	509.7	469.8
Accrued expenses and other current liabilities	1,655.2	1,425.7
Short-term borrowings and current maturities of long-term debt	1,107.0	360.8
Total current liabilities	4,828.0	3,590.3
Long-term debt	2,957.0	3,709.4
Postemployment and other benefit liabilities	1,285.3	1,356.5
Deferred and noncurrent income taxes	757.5	884.9
Other noncurrent liabilities	1,138.6	1,138.0
Total liabilities	10,966.4	10,679.1
Equity:		
Ingersoll-Rand plc shareholders' equity		
Ordinary shares, \$1 par value (273,980,824 and 271,673,124 shares issued at December 31, 2017 and 2016, respectively)	274.0	271.7
Ordinary shares held in treasury, at cost (24,501,667 and 12,666,804 shares at December 31, 2017 and 2016, respectively)	(1,719.4)	(702.7)
Capital in excess of par value	461.3	346.5
Retained earnings	8,903.2	8,018.8
Accumulated other comprehensive loss	(778.8)	(1,290.5)
Total Ingersoll-Rand plc shareholders' equity	7,140.3	6,643.8
Noncontrolling interest	66.6	74.5
Total equity	7,206.9	6,718.3
Total liabilities and equity	\$18,173.3	\$17,397.4

See accompanying notes to Consolidated Financial Statements.

INGERSOLL-RAND PLC

CONSOLIDATED STATEMENTS OF EQUITY

	Ingersoll-Rand plc shareholders' equity							
		Ordinary shares		Ordinary shares held in treasury, at cost	Capital in excess of par value	Retained earnings	Accumulated other comprehensive income (loss)	Noncontrolling Interest
<i>In millions, except per share amounts</i>	Total equity	Amount	Shares					
Balance at December 31, 2014	\$ 6,045.4	\$266.3	266.3	\$ (202.5)	\$ 97.1	\$6,540.8	\$ (714.3)	\$ 58.0
Net earnings	682.8	—	—	—	—	664.6	—	18.2
Other comprehensive income (loss)	(410.9)	—	—	—	—	—	(406.6)	(4.3)
Shares issued under incentive stock plans	65.9	2.7	2.7	—	63.2	—	—	—
Repurchase of ordinary shares	(250.1)	—	—	(250.1)	—	—	—	—
Share-based compensation	61.8	—	—	—	63.0	(1.2)	—	—
Dividends declared to noncontrolling interest	(9.4)	—	—	—	—	—	—	(9.4)
Cash dividends, declared (\$1.16 per share)	(305.6)	—	—	—	—	(305.6)	—	—
Other	(0.7)	—	—	—	—	(0.7)	—	—
Balance at December 31, 2015	\$ 5,879.2	\$269.0	269.0	\$ (452.6)	\$ 223.3	\$6,897.9	\$ (1,120.9)	\$ 62.5
Net earnings	1,492.7	—	—	—	—	1,476.2	—	16.5
Other comprehensive income (loss)	(160.0)	—	—	—	—	—	(169.6)	9.6
Shares issued under incentive stock plans	60.4	2.7	2.7	—	57.7	—	—	—
Repurchase of ordinary shares	(250.1)	—	—	(250.1)	—	—	—	—
Share-based compensation	61.6	—	—	—	66.0	(4.4)	—	—
Dividends declared to noncontrolling interest	(14.1)	—	—	—	—	—	—	(14.1)
Cash dividends declared (\$1.36 per share)	(351.0)	—	—	—	—	(351.0)	—	—
Other	(0.4)	—	—	—	(0.5)	0.1	—	—
Balance at December 31, 2016	\$ 6,718.3	\$271.7	271.7	\$ (702.7)	\$ 346.5	\$8,018.8	\$ (1,290.5)	\$ 74.5
Net earnings	1,312.3	—	—	—	—	1,302.6	—	9.7
Other comprehensive income (loss)	512.2	—	—	—	—	—	511.7	0.5
Shares issued under incentive stock plans	51.2	2.3	2.3	—	48.9	—	—	—
Repurchase of ordinary shares	(1,016.9)	—	—	(1,016.9)	—	—	—	—
Share-based compensation	67.9	—	—	—	70.8	(2.9)	—	—
Dividends declared to noncontrolling interest	(15.8)	—	—	—	—	—	—	(15.8)
Adoption of ASU 2016-09 (See Note 2)	15.1	—	—	—	—	15.1	—	—
Acquisition/divestiture of noncontrolling interest	(7.3)	—	—	—	(5.0)	—	—	(2.3)
Cash dividends declared (\$1.70 per share)	(430.2)	—	—	—	—	(430.2)	—	—
Other	0.1	—	—	0.2	0.1	(0.2)	—	—
Balance at December 31, 2017	\$ 7,206.9	\$274.0	274.0	\$ (1,719.4)	\$ 461.3	\$8,903.2	\$ (778.8)	\$ 66.6

See accompanying notes to Consolidated Financial Statements.

INGERSOLL-RAND PLC

CONSOLIDATED STATEMENTS OF CASH FLOWS

In millions

For the years ended December 31,	2017	2016	2015
Cash flows from operating activities:			
Net earnings	\$ 1,312.3	\$1,492.7	\$ 682.8
Discontinued operations, net of tax	25.4	(32.9)	24.3
Adjustments for non-cash transactions:			
Asset impairment	8.4	–	–
Depreciation and amortization	353.3	352.2	364.1
Gain on sale of Hussmann equity investment	–	(397.8)	–
Gain on sale of joint venture	(1.5)	–	–
Other non-cash items, net	(55.8)	35.6	157.7
Changes in other assets and liabilities			
Accounts and notes receivable	(156.7)	(101.3)	(79.8)
Inventories	(112.4)	26.8	(6.3)
Other current and noncurrent assets	(206.8)	(24.5)	248.8
Accounts payable	167.2	103.6	(41.0)
Other current and noncurrent liabilities	228.2	(21.4)	(427.1)
Net cash provided by (used in) continuing operating activities	1,561.6	1,433.0	923.5
Net cash provided by (used in) discontinued operating activities	(38.1)	88.9	(35.1)
Net cash provided by (used in) operating activities	1,523.5	1,521.9	888.4
Cash flows from investing activities:			
Capital expenditures	(221.3)	(182.7)	(249.6)
Acquisition of businesses, net of cash acquired	(157.6)	(9.2)	(961.8)
Proceeds from sale of property, plant and equipment	1.5	9.5	18.5
Proceeds from sale of Hussmann equity investment	–	422.5	–
Proceeds from sale of joint venture	2.7	–	–
Net cash provided by (used in) investing activities	(374.7)	240.1	(1,192.9)
Cash flows from financing activities:			
Short-term borrowings (payments), net	(11.7)	(150.7)	30.3
Payments of long-term debt	–	–	(23.9)
Net proceeds (repayments) of debt	(11.7)	(150.7)	6.4
Debt issuance costs	(0.2)	(2.1)	–
Dividends paid to ordinary shareholders	(430.1)	(348.6)	(303.3)
Dividends paid to noncontrolling interests	(15.8)	(14.1)	(9.3)
Acquisition of noncontrolling interest	(6.8)	–	–
Proceeds from shares issued under incentive plans	76.7	62.9	61.3
Repurchase of ordinary shares	(1,016.9)	(250.1)	(250.1)
Other financing activities, net	(27.7)	(24.2)	(32.6)
Net cash provided by (used in) financing activities	(1,432.5)	(726.9)	(527.6)
Effect of exchange rate changes on cash and cash equivalents	118.4	(57.2)	(136.3)
Net increase (decrease) in cash and cash equivalents	(165.3)	977.9	(968.4)
Cash and cash equivalents – beginning of period	1,714.7	736.8	1,705.2
Cash and cash equivalents – end of period	\$ 1,549.4	\$1,714.7	\$ 736.8
Cash paid during the year for:			
Interest	\$ 170.4	\$ 169.7	\$ 172.4
Income taxes, net of refunds	\$ 286.7	\$ 334.3	\$ 408.6

See accompanying notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. DESCRIPTION OF COMPANY

Ingersoll-Rand plc (Plc or Parent Company), a public limited company incorporated in Ireland in 2009, and its consolidated subsidiaries (collectively, we, our, the Company) is a diversified, global company that provides products, services and solutions to enhance the quality, energy efficiency and comfort of air in homes and buildings, transport and protect food and perishables and increase industrial productivity and efficiency. The Company's business segments consist of Climate and Industrial, both with strong brands and highly differentiated products within their respective markets. The Company generates revenue and cash primarily through the design, manufacture, sale and service of a diverse portfolio of industrial and commercial products that include well-recognized, premium brand names such as Ingersoll-Rand®, Trane®, Thermo King®, American Standard®, ARO®, and Club Car®.

NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A summary of significant accounting policies used in the preparation of the accompanying Consolidated Financial Statements follows:

Basis of Presentation: The accompanying Consolidated Financial Statements reflect the consolidated operations of the Company and have been prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP) as defined by the Financial Accounting Standards Board (FASB) within the FASB Accounting Standards Codification (ASC). Intercompany accounts and transactions have been eliminated. The assets, liabilities, results of operations and cash flows of all discontinued operations have been separately reported as discontinued operations for all periods presented. Certain reclassifications of amounts reported in prior periods have been made to conform with the current period presentation.

The Consolidated Financial Statements include all majority-owned subsidiaries of the Company. A noncontrolling interest in a subsidiary is considered an ownership interest in a majority-owned subsidiary that is not attributable to the parent. The Company includes *Noncontrolling interest* as a component of *Total equity* in the Consolidated Balance Sheet and the *Net earnings attributable to noncontrolling interests* are presented as an adjustment from *Net earnings* used to arrive at *Net earnings attributable to Ingersoll-Rand plc* in the Consolidated Statement of Comprehensive Income. Partially-owned equity affiliates represent 20-50% ownership interests in investments where the Company demonstrates significant influence, but does not have a controlling financial interest. Partially-owned equity affiliates are accounted for under the equity method.

Use of Estimates: The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosures of contingent assets and liabilities at the date of the financial statements as well as the reported amounts of revenues and expenses during the reporting period. Estimates are based on several factors including the facts and circumstances available at the time the estimates are made, historical experience, risk of loss, general economic conditions and trends, and the assessment of the probable future outcome. Actual results could differ from those estimates. Estimates and assumptions are reviewed periodically, and the effects of changes, if any, are reflected in the statement of operations in the period that they are determined.

Currency Translation: Assets and liabilities of non-U.S. subsidiaries, where the functional currency is not the U.S. dollar, have been translated at year-end exchange rates, and income and expense accounts have been translated using average exchange rates throughout the year. Adjustments resulting from the process of translating an entity's financial statements into the U.S. dollar have been recorded in the equity section of the Consolidated Balance Sheet within *Accumulated other comprehensive income (loss)*. Transactions that are denominated in a currency other than an entity's functional currency are subject to changes in exchange rates with the resulting gains and losses recorded within *Net earnings*.

Cash and Cash Equivalents: Cash and cash equivalents include cash on hand, demand deposits and all highly liquid investments with original maturities at the time of purchase of three months or less. The Company maintains amounts on deposit at various financial institutions, which may at times exceed federally insured limits. However, management periodically evaluates the credit-worthiness of those institutions and has not experienced any losses on such deposits.

Inventories: Depending on the business, U.S. inventories are stated at the lower of cost or market using the last-in, first-out (LIFO) method or the lower of cost or market using the first-in, first-out (FIFO) method. Non-U.S. inventories are primarily stated at the lower of cost or market using the FIFO method. At both December 31, 2017 and 2016, approximately 51% of all inventory utilized the LIFO method.

Allowance for Doubtful Accounts: The Company maintains an allowance for doubtful accounts receivable which represents the best estimate of probable loss inherent in the Company's accounts receivable portfolio. This estimate is based upon a two-step policy that results in the total recorded allowance for doubtful accounts. The first step is to record a portfolio reserve based on the aging of the outstanding accounts receivable portfolio and the Company's historical experience with the Company's end markets, customer base and products. The second step is to create a specific reserve for significant accounts as to which the customer's ability to satisfy their financial obligation to the Company is in doubt due to circumstances such as bankruptcy, deteriorating operating results or financial position. In these circumstances, management uses its judgment to record an allowance based on the best estimate of probable loss, factoring in such considerations as the market value of collateral, if applicable. Actual results could differ from those estimates. These estimates and assumptions are reviewed periodically, and the effects of changes, if any, are reflected in the Consolidated Statement of Comprehensive Income in the period that they are determined. The Company reserved \$26.9 million and \$26.0 million for doubtful accounts as of December 31, 2017 and 2016, respectively.

Property, Plant and Equipment: Property, plant and equipment are stated at cost, less accumulated depreciation. Assets placed in service are recorded at cost and depreciated using the straight-line method over the estimated useful life of the asset except for leasehold improvements, which are depreciated over the shorter of their economic useful life or their lease term. The range of useful lives used to depreciate property, plant and equipment is as follows:

Buildings	10	to	50 years
Machinery and equipment	2	to	12 years
Software	2	to	7 years

Major expenditures for replacements and significant improvements that increase asset values and extend useful lives are also capitalized. Capitalized costs are amortized over their estimated useful lives using the straight-line method. Repairs and maintenance expenditures that do not extend the useful life of the asset are charged to expense as incurred. The carrying amounts of assets that are sold or retired and the related accumulated depreciation are removed from the accounts in the year of disposal, and any resulting gain or loss is reflected within current earnings.

Per ASC 360, "Property, Plant, and Equipment," (ASC 360) the Company assesses the recoverability of the carrying value of its property, plant and equipment whenever events or changes in circumstances indicate that the carrying amount of the asset group may not be recoverable. Recoverability is measured by a comparison of the carrying amount of an asset group to the future net undiscounted cash flows expected to be generated by the asset group. If the undiscounted cash flows are less than the carrying amount of the asset group, an impairment loss is recognized for the amount by which the carrying value of the asset group exceeds the fair value of the asset group.

Goodwill and Intangible Assets: The Company records as goodwill the excess of the purchase price over the fair value of the net assets acquired. In accordance with ASC 350, "Intangibles-Goodwill and Other," (ASC 350) goodwill and other indefinite-lived intangible assets are tested and reviewed annually for impairment during the fourth quarter or whenever there is a significant change in events or circumstances that indicate that the fair value of the asset is more likely than not less than the carrying amount of the asset.

Impairment of goodwill is assessed at the reporting unit level and begins with an optional qualitative assessment to determine if it is more likely than not that the fair value of each reporting unit is less than its carrying amount as a basis for determining whether it is necessary to perform the goodwill impairment test under ASC 350. For those reporting units that bypass or fail the qualitative assessment, the test compares the carrying amount of the reporting unit to its estimated fair value. If the estimated fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired. To the extent that the carrying value of the reporting unit exceeds its estimated fair value, an impairment loss will be recognized for the amount by which the reporting unit's carrying amount exceeds its fair value, not to exceed the carrying amount of goodwill in that reporting unit.

Intangible assets such as patents, customer-related intangible assets and other intangible assets with finite useful lives are amortized on a straight-line basis over their estimated economic lives. The weighted-average useful lives approximate the following:

Customer relationships	20 years
Completed technology/patents	10 years
Other	20 years

The Company assesses the recoverability of the carrying value of its intangible assets with finite useful lives whenever events or changes in circumstances indicate that the carrying amount of the asset group may not be recoverable. Recoverability is measured by a comparison of the carrying amount of an asset group to the future net undiscounted cash flows expected to be generated by the asset group. If the undiscounted cash flows are less than the carrying amount of the asset group, an impairment loss is recognized for the amount by which the carrying value of the asset group exceeds the fair value of the asset group.

Income Taxes: Deferred tax assets and liabilities are determined based on temporary differences between financial reporting and tax bases of assets and liabilities, applying enacted tax rates expected to be in effect for the year in which the differences are expected to reverse. The Company recognizes future tax benefits, such as net operating losses and non-U.S. tax credits, to the extent that realizing these benefits is considered in its judgment to be more likely than not. The Company regularly reviews the recoverability of its deferred tax assets considering its historic profitability, projected future taxable income, timing of the reversals of existing temporary differences and the feasibility of its tax planning strategies. Where appropriate, the Company records a valuation allowance with respect to a future tax benefit.

Product Warranties: Standard product warranty accruals are recorded at the time of sale and are estimated based upon product warranty terms and historical experience. The Company assesses the adequacy of its liabilities and will make adjustments as necessary based on known or anticipated warranty claims, or as new information becomes available. The Company's extended warranty liability represents the deferred revenue associated with its extended warranty contracts and is amortized into Revenue on a straight-line basis over the life of the contract, unless another method is more representative of the costs incurred. The Company assesses the adequacy of its liability by evaluating the expected costs under its existing contracts to ensure these expected costs do not exceed the extended warranty liability.

Treasury Stock: The Parent Company has repurchased its common shares from time to time as authorized by the Board of Directors. These repurchases are at the discretion of management subject to market conditions, regulatory requirements and other considerations. Amounts are recorded at cost and included within the *Equity* section of the Consolidated Balance Sheet.

Revenue Recognition: Revenue is recognized and earned when all of the following criteria are satisfied: (a) persuasive evidence of a sales arrangement exists; (b) the price is fixed or determinable; (c) collectability is reasonably assured; and (d) delivery has occurred or service has been rendered. Delivery generally occurs when the title and the risks and rewards of ownership have substantially transferred to the customer. Both the persuasive evidence of a sales arrangement and fixed or determinable price criteria are deemed to be satisfied upon receipt of an executed and legally binding sales agreement or contract that clearly defines the terms and conditions of the transaction including the respective obligations of the parties. If the defined terms and conditions allow variability in all or a component of the price, revenue is not recognized until such time that the price becomes fixed or determinable. At the point of sale, the Company validates that existence of an enforceable claim that requires payment within a reasonable amount of time and assesses the collectability of that claim. If collectability is not deemed to be reasonably assured, then revenue recognition is deferred until such time that collectability becomes probable or cash is received. Delivery is not considered to have occurred until the customer has taken title and assumed the risks and rewards of ownership. Service and installation revenue are recognized when earned. In some instances, customer acceptance provisions are included in sales arrangements to give the buyer the ability to ensure the delivered product or service meets the criteria established in the order. In these instances, revenue recognition is deferred until the acceptance terms specified in the arrangement are fulfilled through customer acceptance or a demonstration that established criteria have been satisfied. If uncertainty exists about customer acceptance, revenue is not recognized until acceptance has occurred.

The Company offers various sales incentive programs to customers, dealers, and distributors. Sales incentive programs do not preclude revenue recognition, but do require an accrual for the Company's best estimate of expected activity. Examples of the sales incentives that are accrued for as a contra receivable and sales deduction at the point of sale include, but are not limited to, discounts (i.e., net 30 type), coupons, and rebates where the customer does not have to provide any additional requirements to receive the discount. Sales returns and customer disputes involving a question of quantity or price are also accounted for as a reduction in revenue and a contra receivable. At December 31, 2017 and 2016, the Company had a customer claim accrual (contra receivable) of \$3.2 million and \$3.7 million, respectively. All other incentives or incentive programs where the customer is required to reach a certain sales level, remain a customer for a certain period of time, provide a rebate form or is subject to additional requirements are accounted for as a reduction of revenue and establishment of a liability. At December 31, 2017 and 2016, the Company had a sales incentive accrual of \$107.3 million and \$87.5 million, respectively. Each of these accruals represents the best estimate the Company expects to pay related to previously sold units. These estimates are reviewed regularly for appropriateness. If updated information or actual amounts are different from previous estimates, the revisions are included in the results for the period in which they become known. Historically, the aggregate differences, if any, between the Company's estimates and actual amounts in any year have not had a material impact on the Consolidated Financial Statements.

The Company enters into maintenance and extended warranty contracts with customers. Revenue related to these services is recognized on a straight-line basis over the life of the contract, unless sufficient historical evidence indicates that the cost of providing these services is incurred on an other than straight-line basis. In these circumstances, revenue is recognized over the contract period in proportion to the costs expected to be incurred in performing the service.

The Company, primarily through its Climate segment, enters into construction-type contracts to design, deliver and build integrated HVAC solutions to meet customer specifications. The term of these types of contracts is typically less than one year, but can be as long as three years. Revenues related to these contracts are recognized using the percentage-of-completion method in accordance with GAAP. This measure of progress toward completion, utilized to recognize sales and profits, is based on the proportion of actual cost incurred to date as compared to the total estimate of contract costs at completion. The timing of revenue recognition often differs from the invoicing schedule to the customer, with revenue recognition in advance of customer invoicing recorded to unbilled accounts receivable and invoicing in advance of revenue recognition recorded to deferred revenue. At December 31, 2017, all recorded receivables (billed and unbilled) are due within one year. The Company re-evaluates its contract estimates periodically and reflects changes in estimates in the current period using the cumulative catch-up method. These periodic reviews have not historically resulted in significant adjustments. If estimated contract costs are in excess of contract revenues, then the excess costs are accrued.

The Company enters into sales arrangements that contain multiple elements, such as equipment, installation and service revenue. For multiple element arrangements, each element is evaluated to determine the separate units of accounting. The total arrangement consideration is then allocated to the separate units of accounting based on their relative selling price at the inception of the arrangement. The relative selling price is determined using vendor specific objective evidence (VSOE) of selling price, if it exists; otherwise, third-party evidence (TPE) of selling price is used. If neither VSOE nor TPE of selling price exists for a deliverable, a best estimate of the selling price is developed for that deliverable. The Company primarily utilizes VSOE to determine its relative selling price. The Company recognizes revenue for delivered elements when the delivered item has stand-alone value to the customer, the basic revenue recognition criteria have been met, and only customary refund or return rights related to the delivered elements exist.

Environmental Costs: The Company is subject to laws and regulations relating to protecting the environment. Environmental expenditures relating to current operations are expensed or capitalized as appropriate. Expenditures relating to existing conditions caused by past operations, which do not contribute to current or future revenues, are expensed. Liabilities for remediation costs are recorded when they are probable and can be reasonably estimated, generally no later than the completion of feasibility studies or the Company's commitment to a plan of action. The assessment of this liability, which is calculated based on existing technology, does not reflect any offset for possible recoveries from insurance companies, and is not discounted.

Asbestos Matters: Certain of the Company's wholly-owned subsidiaries and former companies are named as defendants in asbestos-related lawsuits in state and federal courts. The Company records a liability for actual and anticipated future claims as well as an asset for anticipated insurance settlements. Asbestos related defense costs are excluded from the asbestos claims liability and are recorded separately as services are incurred. None of the Company's existing or previously-owned businesses were a producer or manufacturer of asbestos. The Company records certain income and expenses associated with asbestos liabilities and corresponding insurance recoveries within discontinued operations, net of tax, as they relate to previously divested businesses, except for amounts associated with Trane U.S. Inc.'s asbestos liabilities and corresponding insurance recoveries which are recorded within continuing operations.

Research and Development Costs: The Company conducts research and development activities for the purpose of developing and improving new products and services. These expenditures are expensed when incurred. For the years ended December 31, 2017, 2016 and 2015, these expenditures amounted to approximately \$210.8 million, \$207.9 million and \$205.9 million, respectively.

Software Costs: The Company capitalizes certain qualified internal-use software costs during the application development stage and subsequently amortizes those costs over the software's useful life, which ranges from 2 to 7 years. The Company capitalizes costs, including interest, incurred to develop or acquire internal-use software. These costs are capitalized subsequent to the preliminary project stage once specific criteria are met. Costs incurred in the preliminary project planning stage are expensed. Other costs, such as maintenance and training, are also expensed as incurred. Capitalized costs are amortized over their estimated useful lives using the straight-line method.

Employee Benefit Plans: The Company provides a range of benefits, including pensions, postretirement and postemployment benefits to eligible current and former employees. Determining the cost associated with such benefits is dependent on various actuarial assumptions, including discount rates, expected return on plan assets, compensation increases, mortality, turnover rates, and healthcare cost trend rates. Actuaries perform the required calculations to determine expense in accordance with GAAP. Actual results may differ from the actuarial assumptions and are generally accumulated into *Accumulated other comprehensive income (loss)* and amortized into *Net earnings* over future periods. The Company reviews its actuarial assumptions at each measurement date and makes modifications to the assumptions based on current rates and trends, if appropriate.

Loss Contingencies: Liabilities are recorded for various contingencies arising in the normal course of business, including litigation and administrative proceedings, environmental matters, product liability, product warranty, worker's compensation and other claims. The Company has recorded reserves in the financial statements related to these matters, which are developed using input derived from actuarial estimates and historical and anticipated experience data depending on the nature of the reserve, and in certain instances with consultation of legal counsel, internal and external consultants and engineers. Subject to the uncertainties inherent in estimating future costs for these types of liabilities, the Company believes its estimated reserves are reasonable and does not believe the final determination of the liabilities with respect to these matters would have a material effect on the financial condition, results of operations, liquidity or cash flows of the Company for any year.

Derivative Instruments: The Company periodically enters into cash flow and other derivative transactions to specifically hedge exposure to various risks related to interest rates and currency rates. The Company recognizes all derivatives on the Consolidated Balance Sheet at their fair value as either assets or liabilities. For cash flow designated hedges, the effective portion of the changes in fair value of the derivative contract are recorded in *Accumulated other comprehensive income (loss)*, net of taxes, and are recognized in *Net earnings* at the time earnings are affected by the hedged transaction. For other derivative transactions, the changes in the fair value of the derivative contract are immediately recognized in *Net earnings*.

Recent Accounting Pronouncements

The FASB ASC is the sole source of authoritative GAAP other than the Securities and Exchange Commission (SEC) issued rules and regulations that apply only to SEC registrants. The FASB issues an Accounting Standards Update (ASU) to communicate changes to the codification. The Company considers the applicability and impact of all ASU's. ASU's not listed below were assessed and determined to be either not applicable or are not expected to have a material impact on the consolidated financial statements.

Recently Adopted Accounting Pronouncements

In March 2017, the FASB issued ASU 2017-07, "Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost" (ASU 2017-07) which changes the way employers that sponsor defined benefit pension and/or postretirement benefit plans reflect net periodic benefit costs in the income statement. Under the previous standard, the multiple components of net periodic benefit costs are aggregated and reported within the operating section of the income statement or capitalized into assets when appropriate. The new standard requires a company to present the service cost component of net periodic benefit cost in the same income statement line as other employee compensation costs with the remaining components of net periodic benefit cost presented separately from the service cost component and outside of any subtotal of operating income, if one is presented. In addition, only the service cost component will be eligible for capitalization in assets. The Company adopted this standard on January 1, 2017 applying the presentation requirements retrospectively. Refer to Note 10, "Pensions and Postretirement Benefits Other than Pensions" and Note 14, "Other Income/ (Expense), net" for additional information.

In January 2017, the FASB issued ASU 2017-04, "Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment" (ASU 2017-04) which simplifies the accounting for goodwill impairment by eliminating Step 2 of the current goodwill impairment test which requires a hypothetical purchase price allocation to measure goodwill impairment. Under the new standard, a company will record an impairment charge based on the excess of a reporting unit's carrying amount over its fair value. ASU 2017-04 does not change the guidance on completing Step 1 of the goodwill impairment test and still allows a company to perform the optional qualitative goodwill impairment assessment before determining whether to proceed to Step 1. The Company adopted this standard on January 1, 2017 and will apply its guidance on future impairment assessments.

In November 2016, the FASB issued ASU 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash" (ASU 2016-18). This standard requires restricted cash and restricted cash equivalents to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period amounts shown on the statements of cash flows. In addition, the standard requires disclosure of the nature of restrictions on cash balances and how the statement of cash flows reconciles to the balance sheet in any situation in which the balance sheet includes more than one line item of cash, cash equivalents and restricted cash. The Company adopted this standard on October 1, 2017 with no impact to its financial statements.

In August 2016, the FASB issued ASU 2016-15, "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments" (ASU 2016-15). This standard clarifies how certain cash receipts and cash payments are classified on the statement of cash flows. The following eight specific cash flow issues are addressed: debt prepayment or debt extinguishment costs; settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; contingent consideration payments made after a business combination; proceeds from the settlement of insurance claims; proceeds from the settlement of corporate-owned life insurance policies (including bank-owned life insurance policies); distributions received from equity method investees; beneficial interests in securitization transactions and separately identifiable cash flows. In addition, the standard clarifies how the predominance principle should be applied when cash receipts and cash payments have aspects of more than one class of cash flows. The Company adopted this standard on October 1, 2017 with no impact to its financial statements.

In March 2016, the FASB issued ASU No. 2016-09, "Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" (ASU 2016-09) which simplifies several aspects of the accounting for employee share-based payment transactions. The standard makes several modifications to the accounting for forfeitures, employer tax withholding on share-based compensation and the financial statement presentation of excess tax benefits or deficiencies. In addition, ASU 2016-09 clarifies the statement of cash flows presentation for certain components of share-based awards. The Company adopted this standard on January 1, 2017 and prospectively presented any excess tax benefits or deficiencies in the income statement as a component of *Provision for income taxes* rather than in the Equity section of the Balance Sheet. As part of the adoption, the Company reclassified \$15.1 million of excess tax benefits previously unrecognized on a modified retrospective basis through a cumulative-effect adjustment to increase *Retained earnings* as of January 1, 2017. In addition, the statement of cash flows for the twelve months ended December 31, 2016 and December 31, 2015 was retrospectively adjusted to present \$21.7 million and \$37.3 million, respectively, of excess tax benefits as an operating activity rather than a financing activity.

Recently Issued Accounting Pronouncements

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted improvements to accounting for hedging activities" (ASU 2017-12). This standard more closely aligns the results of cash flow and fair value hedge accounting with risk management activities through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results in the financial statements. This standard also addresses specific limitations in current GAAP by expanding hedge accounting for both nonfinancial and financial risk components and by refining the measurement of hedge results to better reflect an entity's hedging strategies. Additionally, by aligning the timing of recognition of hedge results with the earnings effect of the hedged item for cash flow and net investment hedges, and by including the earnings effect of the hedging instrument in the same income statement line item in which the earnings effect of the hedged item is presented, the results of an entity's hedging program and the cost of executing that program will be more visible to users of financial statements. ASU 2017-12 is effective for annual reporting periods beginning after December 15, 2018 with early adoption permitted. The Company is currently assessing the impact of this ASU on its financial statements and does not expect its adoption to have a material impact.

In October 2016, the FASB issued ASU 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory" (ASU 2016-16) which removes the prohibition in Topic 740 against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. ASU 2016-16 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within those annual periods, with early adoption permitted. The amendments are to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to *Retained earnings* as of the beginning of the period of adoption. The Company adopted this standard on January 1, 2018 and expects to record approximately \$10 million as a cumulative-effect adjustment.

In February 2016, the FASB issued ASU 2016-02, "Leases" (ASU 2016-02) which requires the lease rights and obligations arising from lease contracts, including existing and new arrangements, to be recognized as assets and liabilities on the balance sheet. The standard also requires additional disclosures by lessees and contains targeted changes to accounting by lessors. ASU 2016-02 is effective for annual periods beginning after December 15, 2018, including interim periods within those annual periods, with early adoption permitted. The standard is required to be adopted at the earliest period presented using a modified retrospective approach. The Company is currently developing an implementation plan and gathering data to further assess the impact of the ASU on its financial statements. The adoption on January 1, 2019 is anticipated to have a material impact on assets and liabilities due to the recognition of lease rights and obligations on the Balance Sheet. However, the Company does not expect the adoption to have a material impact to its Statements of Cash Flows or Statements of Comprehensive Income beginning in 2019.

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers" (ASC 606), which creates a comprehensive, five-step model for revenue recognition that requires a company to recognize revenue to depict the transfer of promised goods or services to a customer at an amount that reflects the consideration it expects to receive in exchange for those goods or services. Under the new standard, a company will be required to use more judgment and make more estimates when considering contract terms as well as relevant facts and circumstances when identifying performance obligations, estimating the amount of variable consideration in the transaction price and allocating the transaction price to each separate performance obligation. In addition, ASC 606 enhances disclosures about revenue, provides guidance for transactions that were not previously addressed comprehensively and improves guidance for multiple-element arrangements. ASC 606 is effective for annual reporting periods beginning after December 15, 2017 and is required to be applied retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying it recognized at the date of initial application. Early adoption is permitted, but not before the original effective date of the standard.

In 2014, the Company began to assess the impact of adopting ASC 606 on its revenue recognition practices. Utilizing working sessions and document reviews with each of its reporting units as well as with appropriate functions such as legal and tax, the Company identified potential differences that would result from applying the requirements of the new standard to the Company's revenue contracts. During 2015, the Company drafted preliminary accounting positions addressing identified potential differences and later determined that certain highly engineered products sold to customers within the Industrial segment for which revenue

is currently recognized at a point in time, would meet the criteria of a performance obligation satisfied over time under the new standard. The Company will apply the guidance by recognizing the cumulative effect of initially applying the standard as an opening balance sheet adjustment to retained earnings in the period of initial adoption. The Company refined the estimate of the cumulative effect adjustment to retained earnings to be recognized on January 1, 2018 and determined the impact to be approximately \$2 million with related amounts not materially impacting *Net revenues*, *Operating income* or the Balance Sheet.

NOTE 3. INVENTORIES

Depending on the business, U.S. inventories are stated at the lower of cost or market using the last-in, first-out (LIFO) method or the lower of cost or market using the first-in, first-out (FIFO) method. Non-U.S. inventories are primarily stated at the lower of cost or market using the FIFO method.

At December 31, the major classes of inventory were as follows:

<i>In millions</i>	2017	2016
Raw materials	\$ 502.8	\$ 448.5
Work-in-process	180.5	154.0
Finished goods	941.0	845.6
	1,624.3	1,448.1
LIFO reserve	(68.9)	(62.3)
Total	\$1,555.4	\$1,385.8

The Company performs periodic assessments to determine the existence of obsolete, slow-moving and non-saleable inventories and records necessary provisions to reduce such inventories to net realizable value. Reserve balances, primarily related to obsolete and slow-moving inventories, were \$120.3 million and \$111.7 million at December 31, 2017 and December 31, 2016, respectively.

NOTE 4. PROPERTY, PLANT AND EQUIPMENT

At December 31, the major classes of property, plant and equipment were as follows:

<i>In millions</i>	2017	2016
Land	\$ 52.0	\$ 49.2
Buildings	770.1	708.9
Machinery and equipment	2,019.5	1,831.1
Software	822.7	778.5
	3,664.3	3,367.7
Accumulated depreciation	(2,113.0)	(1,856.7)
Total	\$1,551.3	\$1,511.0

Depreciation expense for the years ended December 31, 2017, 2016 and 2015 was \$217.3 million, \$216.7 million and \$209.5 million, which include amounts for software amortization of \$28.6 million, \$35.9 million and \$41.9 million, respectively.

NOTE 5. GOODWILL

The Company records as goodwill the excess of the purchase price over the fair value of the net assets acquired in an acquisition. Measurement period adjustments may be recorded once a final valuation has been performed. Goodwill is tested and reviewed annually for impairment during the fourth quarter or whenever there is a significant change in events or circumstances that indicate that the fair value of the asset may be less than the carrying amount of the asset.

The changes in the carrying amount of Goodwill are as follows:

<i>In millions</i>	Climate	Industrial	Total
Net balance as of December 31, 2015	\$4,952.6	\$777.6	\$5,730.2
Acquisitions ⁽¹⁾	0.4	12.5	12.9
Currency translation	(73.9)	(10.8)	(84.7)
Net balance as of December 31, 2016	4,879.1	779.3	5,658.4
Acquisitions ⁽²⁾	26.3	60.5	86.8
Currency translation	159.7	30.8	190.5
Net balance as of December 31, 2017	5,065.1	870.6	5,935.7

(1) During 2016, the Company acquired distributors of Industrial products that were previously independently owned. These acquisitions are not considered material for further disclosure.

(2) During 2017, the Company acquired several businesses, including channel acquisitions, that complement existing products and services. Refer to Note 16, "Acquisitions and Divestitures" for more information regarding acquisitions.

The net goodwill balances at December 31, 2017, 2016 and 2015 include \$2,496.0 million of accumulated impairment. The accumulated impairment relates entirely to a charge in the fourth quarter of 2008 associated with the Climate segment.

NOTE 6. INTANGIBLE ASSETS

Indefinite-lived intangible assets are tested and reviewed annually for impairment during the fourth quarter or whenever there is a significant change in events or circumstances that indicate that the fair value of the asset may be less than the carrying amount of the asset. All other intangible assets with finite useful lives are being amortized on a straight-line basis over their estimated useful lives.

The following table sets forth the gross amount and related accumulated amortization of the Company's intangible assets at December 31:

<i>In millions</i>	2017			2016		
	Gross carrying amount	Accumulated amortization	Net carrying amount	Gross carrying amount	Accumulated amortization	Net carrying amount
Completed technologies/patents	\$ 209.4	\$ (177.3)	\$ 32.1	\$ 203.0	\$ (165.6)	\$ 37.4
Customer relationships	2,068.9	(1,056.9)	1,012.0	2,008.9	(926.1)	1,082.8
Other	93.9	(52.7)	41.2	61.1	(48.5)	12.6
Total finite-lived intangible assets	\$2,372.2	\$(1,286.9)	\$1,085.3	\$2,273.0	\$(1,140.2)	\$1,132.8
Trademarks (indefinite-lived)	2,657.6	—	2,657.6	2,652.3	—	2,652.3
Total	\$5,029.8	\$(1,286.9)	\$3,742.9	\$4,925.3	\$(1,140.2)	\$3,785.1

Intangible asset amortization expense for 2017, 2016 and 2015 was \$132.0 million, \$132.0 million and \$150.2 million, respectively. Future estimated amortization expense on existing intangible assets in each of the next five years amounts to approximately \$133 million for 2018, \$132 million for 2019, \$130 million for 2020, \$129 million for 2021, and \$129 million for 2022.

NOTE 7. DEBT AND CREDIT FACILITIES

At December 31, Short-term borrowings and current maturities of long-term debt consisted of the following:

<i>In millions</i>	2017	2016
Debentures with put feature	\$ 343.0	\$343.0
6.875% Senior notes due 2018 ⁽¹⁾	749.6	–
Other current maturities of long-term debt	7.7	7.7
Short-term borrowings	6.7	10.1
Total	\$1,107.0	\$360.8

(1) During the third quarter of 2017, the Company reclassified its 6.875% Senior notes of \$750 million due August 2018 from noncurrent to current.

The Company's short-term obligations primarily consist of current maturities of long-term debt. Other obligations relate to short-term lines of credit used to fund working capital requirements in certain non U.S. countries. The weighted-average interest rate for *Short-term borrowings and current maturities of long-term debt* at December 31, 2017 and 2016 was 6.7% and 6.4%, respectively.

Commercial Paper Program

The Company uses borrowings under its commercial paper program for general corporate purposes. The maximum aggregate amount of unsecured commercial paper notes available to be issued, on a private placement basis, under the commercial paper program is \$2.0 billion as of December 31, 2017. Under the commercial paper program, the Company may issue notes from time to time through Ingersoll-Rand Global Holding Company Limited or Ingersoll-Rand Luxembourg Finance S.A. Each of Ingersoll-Rand plc, Ingersoll-Rand Irish Holdings Unlimited Company, Ingersoll-Rand Lux International Holding Company S.à.r.l., Ingersoll-Rand Global Holding Company Limited and Ingersoll-Rand Company provided irrevocable and unconditional guarantees for any notes issued under the commercial paper program. At December 31, 2017, the Company had no outstanding balance under its commercial paper program.

Debentures with Put Feature

At December 31, 2017 and December 31, 2016, the Company had \$343.0 million of fixed rate debentures outstanding which contain a put feature that the holders may exercise on each anniversary of the issuance date. If exercised, the Company is obligated to repay in whole or in part, at the holder's option, the outstanding principal amount of the debentures plus accrued interest. If these options are not exercised, the final contractual maturity dates would range between 2027 and 2028. Holders of these debentures had the option to exercise the put feature on each of the outstanding debentures in 2017, subject to the notice requirement. No material exercises were made.

At December 31, long-term debt excluding current maturities consisted of:

<i>In millions</i>	2017	2016
6.875% Senior notes due 2018	\$ –	\$ 748.6
2.875% Senior notes due 2019	349.4	348.6
2.625% Senior notes due 2020	298.9	298.5
9.000% Debentures due 2021	124.9	124.8
4.250% Senior notes due 2023	696.5	695.6
7.200% Debentures due 2018-2025	52.3	59.7
3.550% Senior notes due 2024	495.2	494.5
6.48% Debentures due 2025	149.7	149.7
5.750% Senior notes due 2043	494.0	493.6
4.650% Senior notes due 2044	295.6	295.4
Other loans and notes, at end-of-year average interest rates of 5.71% in 2017 and 6.79% in 2016, maturing in various amounts to 2022	0.5	0.4
Total	\$2,957.0	\$3,709.4

Scheduled maturities of long-term debt, including current maturities, as of December 31, 2017 are as follows:

In millions

2018	\$ 1,100.3
2019	357.2
2020	306.6
2021	132.4
2022	7.5
Thereafter	2,153.3
Total	\$4,057.3

Other Credit Facilities

The Company maintains two 5-year, \$1.0 billion revolving credit facilities (the Facilities) through its wholly-owned subsidiaries, Ingersoll-Rand Global Holding Company Limited and Ingersoll-Rand Luxembourg Finance S.A. (collectively, the Borrowers). Each senior unsecured credit facility, one of which matures in March 2019 and the other in March 2021, provides support for the Company's commercial paper program and can be used for working capital and other general corporate purposes. Ingersoll-Rand plc, Ingersoll-Rand Irish Holdings Unlimited Company, Ingersoll-Rand Lux International Holding Company S.à.r.l. and Ingersoll-Rand Company each provide irrevocable and unconditional guarantees for these Facilities. In addition, each Borrower will guarantee the obligations under the Facilities of the other Borrower. Total commitments of \$2.0 billion were unused at December 31, 2017 and December 31, 2016.

Fair Value of Debt

The carrying value of the Company's short-term borrowings is a reasonable estimate of fair value due to the short-term nature of the instruments. The fair value of the Company's debt instruments at December 31, 2017 and December 31, 2016 was \$4,462.2 million and \$4,428.9 million, respectively. The Company measures the fair value of its long-term debt instruments for disclosure purposes based upon observable market prices quoted on public exchanges for similar assets. These fair value inputs are considered Level 2 within the fair value hierarchy. The methodologies used by the Company to determine the fair value of its long-term debt instruments at December 31, 2017 are the same as those used at December 31, 2016.

Guarantees

Along with Ingersoll-Rand plc, certain of the Company's 100% directly or indirectly owned subsidiaries have fully and unconditionally guaranteed, on a joint and several basis, public debt issued by other 100% directly or indirectly owned subsidiaries. Refer to Note 20 for the Company's current guarantor structure.

NOTE 8. FINANCIAL INSTRUMENTS

In the normal course of business, the Company is exposed to certain risks arising from business operations and economic factors. These fluctuations can increase the cost of financing, investing and operating the business. The Company may use various financial instruments, including derivative instruments, to manage the risks associated with interest rate and currency rate exposures. These financial instruments are not used for trading or speculative purposes.

On the date a derivative contract is entered into, the Company designates the derivative instrument as a cash flow hedge of a forecasted transaction or as an undesignated derivative. The Company formally documents its hedge relationships, including identification of the derivative instruments and the hedged items, as well as its risk management objectives and strategies for undertaking the hedge transaction. This process includes linking derivative instruments that are designated as hedges to specific assets, liabilities or forecasted transactions.

The Company assesses at inception and at least quarterly thereafter, whether the derivatives used in cash flow hedging transactions are highly effective in offsetting the changes in the cash flows of the hedged item. To the extent the derivative is deemed to be a highly effective hedge, the fair market value changes of the instrument are recorded to *Accumulated other comprehensive income* (AOCI). Any ineffective portion of a derivative instrument's change in fair value is recorded in *Net earnings* in the period of change. If the hedging relationship ceases to be highly effective, or it becomes probable that a forecasted transaction is no longer expected to occur, the hedging relationship will be undesignated and any future gains and losses on the derivative instrument will be recorded in *Net earnings*.

The fair values of derivative instruments included within the Consolidated Balance Sheet as of December 31 were as follows:

<i>In millions</i>	Derivative assets		Derivative liabilities	
	2017	2016	2017	2016
Derivatives designated as hedges:				
Currency derivatives	\$ –	\$ 0.3	\$ 1.3	\$ 2.9
Derivatives not designated as hedges:				
Currency derivatives	7.2	0.3	1.2	17.9
Total derivatives	\$7.2	\$0.6	\$2.5	\$20.8

Asset and liability derivatives included in the table above are recorded within *Other current assets* and *Accrued expenses and other current liabilities*, respectively.

Currency Hedging Instruments

The notional amount of the Company's currency derivatives was \$0.7 billion and \$1.1 billion at December 31, 2017 and 2016, respectively. At December 31, 2017 and 2016, a net gain of \$1.2 million and \$2.4 million, net of tax, respectively, was included in AOCI related to the fair value of the Company's currency derivatives designated as accounting hedges. The amount expected to be reclassified into *Net earnings* over the next twelve months is a gain of \$1.2 million. The actual amounts that will be reclassified to *Net earnings* may vary from this amount as a result of changes in market conditions. Gains and losses associated with the Company's currency derivatives not designated as hedges are recorded in *Net earnings* as changes in fair value occur. At December 31, 2017, the maximum term of the Company's currency derivatives was approximately 12 months.

Other Derivative Instruments

The Company has utilized forward-starting interest rate swaps and interest rate locks to manage interest rate exposure in periods prior to the anticipated issuance of fixed-rate debt. These instruments were designated as cash flow hedges and had a notional amount of \$1.3 billion at December 31, 2017 and 2016. Consequently, when the contracts were settled upon the issuance of the underlying debt, any realized gains or losses in the fair values of the instruments were deferred into *Accumulated other comprehensive income*. These deferred gains or losses are subsequently recognized into *Interest expense* over the term of the related notes. The net unrecognized gain in AOCI was \$6.6 million and \$6.0 million at December 31, 2017 and at December 31, 2016. The deferred gain at December 31, 2017 will be amortized over the term of notes with maturities ranging from 2018 to 2044. The amount expected to be amortized over the next twelve months is a net loss of \$0.1 million. The Company has no forward-starting interest rate swaps or interest rate lock contracts outstanding at December 31, 2017 or 2016.

The following table represents the amounts associated with derivatives designated as hedges affecting *Net earnings* and AOCI for the years ended December 31:

<i>In millions</i>	Amount of gain (loss) recognized in AOCI			Location of gain (loss) reclassified from AOCI and recognized into Net earnings	Amount of gain (loss) reclassified from AOCI and recognized into Net earnings		
	2017	2016	2015		2017	2016	2015
Currency derivatives designated as hedges	\$ (1.8)	\$ 2.2	\$ 1.2	Cost of goods sold	\$ (3.1)	\$ 5.3	\$ (2.1)
Interest rate swaps & locks	–	–	–	Interest expense	(0.5)	(0.5)	(0.5)
Total	\$ (1.8)	\$ 2.2	\$ 1.2		\$ (3.6)	\$ 4.8	\$ (2.6)

The following table represents the amounts associated with derivatives not designated as hedges affecting *Net earnings* for the years ended December 31:

<i>In millions</i>	Location of gain (loss) recognized in Net earnings	Amount of gain (loss) recognized in Net earnings		
		2017	2016	2015
Currency derivatives	Other income/(expense), net	\$ 58.0	\$ (39.2)	\$ 0.1
Total		\$58.0	\$ (39.2)	\$0.1

The gains and losses associated with the Company's undesignated currency derivatives are materially offset in *Other income/(expense)*, net by changes in the fair value of the underlying transactions.

Concentration of Credit Risk

The counterparties to the Company's forward contracts consist of a number of investment grade major international financial institutions. The Company could be exposed to losses in the event of nonperformance by the counterparties. However, the credit ratings and the concentration of risk in these financial institutions are monitored on a continuous basis and present no significant credit risk to the Company.

NOTE 9. FAIR VALUE MEASUREMENTS

ASC 820, "Fair Value Measurement," (ASC 820) defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. ASC 820 also establishes a three-level fair value hierarchy that prioritizes information used in developing assumptions when pricing an asset or liability as follows:

- *Level 1*: Observable inputs such as quoted prices in active markets;
- *Level 2*: Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and
- *Level 3*: Unobservable inputs where there is little or no market data, which requires the reporting entity to develop its own assumptions.

ASC 820 requires the use of observable market data, when available, in making fair value measurements. When inputs used to measure fair value fall within different levels of the hierarchy, the level within which the fair value measurement is categorized is based on the lowest level input that is significant to the fair value measurement.

The following table presents the Company's fair value hierarchy for those assets and liabilities measured at fair value on a recurring basis as of December 31, 2017:

In millions	Fair Value	Fair value measurements			
		Level 1	Level 2	Level 3	
Assets:					
Derivative instruments	\$7.2	\$—	\$7.2	\$—	
Liabilities:					
Derivative instruments	\$2.5	\$—	\$2.5	\$—	

The following table presents the Company's fair value hierarchy for those assets and liabilities measured at fair value on a recurring basis as of December 31, 2016:

In millions	Fair Value	Fair value measurements		
		Level 1	Level 2	Level 3
Assets:				
Derivative instruments	\$ 0.6	\$—	\$ 0.6	\$—
Liabilities:				
Derivative instruments	\$20.8	\$—	\$20.8	\$—

Derivative instruments include forward foreign currency contracts and instruments related to non-functional currency balance sheet exposures. The fair value of the derivative instruments are determined based on a pricing model that uses spot rates and forward prices from actively quoted currency markets that are readily accessible and observable.

The carrying values of cash and cash equivalents, accounts receivable and accounts payable are a reasonable estimate of their fair value due to the short-term nature of these instruments. These methodologies used by the Company to determine the fair value of its financial assets and liabilities at December 31, 2017 are the same as those used at December 31, 2016. There have been no transfers between levels of the fair value hierarchy.

NOTE 10. PENSIONS AND POSTRETIREMENT BENEFITS OTHER THAN PENSIONS

The Company sponsors several U.S. defined benefit and defined contribution plans covering substantially all of the Company's U.S. employees. Additionally, the Company has many non-U.S. defined benefit and defined contribution plans covering eligible non-U.S. employees. Postretirement benefits other than pensions (OPEB) provide healthcare benefits, and in some instances, life insurance benefits for certain eligible employees.

On January 1, 2017, the Company adopted ASU 2017-07 which requires the Company to present the service cost component of net periodic benefit cost in the same income statement line as other employee compensation costs with the remaining components of net periodic benefit cost presented separately from the service cost component and outside of any subtotal of operating income, if one is presented. The Company applied the presentation requirements retrospectively.

Pension Plans

The noncontributory defined benefit pension plans covering non-collectively bargained U.S. employees provide benefits on a final average pay formula while plans for most collectively bargained U.S. employees provide benefits on a flat dollar benefit formula or a percentage of pay formula. The non-U.S. pension plans generally provide benefits based on earnings and years of service. The Company also maintains additional other supplemental plans for officers and other key or highly compensated employees.

The following table details information regarding the Company's pension plans at December 31:

<i>In millions</i>	2017	2016
Change in benefit obligations:		
Benefit obligation at beginning of year	\$3,531.9	\$3,523.8
Service cost	70.8	72.1
Interest cost	109.0	110.2
Employee contributions	1.1	1.0
Amendments	3.8	6.2
Actuarial (gains) losses	175.8	129.6
Benefits paid	(194.8)	(203.5)
Currency translation	69.6	(89.4)
Curtailments, settlements and special termination benefits	(13.1)	(1.6)
Other, including expenses paid	(11.9)	(16.5)
Benefit obligation at end of year	\$3,742.2	\$3,531.9
Change in plan assets:		
Fair value at beginning of year	\$2,797.1	\$2,772.0
Actual return on assets	326.9	274.9
Company contributions	101.4	56.4
Employee contributions	1.1	1.0
Benefits paid	(194.8)	(203.5)
Currency translation	59.0	(85.6)
Settlements	(13.5)	(1.6)
Other, including expenses paid	(14.1)	(16.5)
Fair value of assets end of year	\$3,063.1	\$2,797.1
Net unfunded liability	\$ (679.1)	\$ (734.8)
Amounts included in the balance sheet:		
Other noncurrent assets	\$ 61.7	\$ 19.2
Accrued compensation and benefits	(15.3)	(6.4)
Postemployment and other benefit liabilities	(725.5)	(747.6)
Net amount recognized	\$ (679.1)	\$ (734.8)

It is the Company's objective to contribute to the pension plans to ensure adequate funds, and no less than required by law, are available in the plans to make benefit payments to plan participants and beneficiaries when required. However, certain plans are not or cannot be funded due to either legal, accounting, or tax requirements in certain jurisdictions. As of December 31, 2017, approximately seven percent of the Company's projected benefit obligation relates to plans that cannot be funded.

The pretax amounts recognized in Accumulated other comprehensive income (loss) are as follows:

<i>In millions</i>	Prior service benefit (cost)	Net actuarial gains (losses)	Total
December 31, 2016	\$(25.5)	\$(886.8)	\$(912.3)
Current year changes recorded to AOCI	(3.8)	9.4	5.6
Amortization reclassified to earnings	3.8	56.8	60.6
Settlements/curtailments reclassified to earnings ⁽¹⁾	4.7	3.0	7.7
Currency translation and other	0.6	(15.9)	(15.3)
December 31, 2017	\$(20.2)	\$(833.5)	\$(853.7)

(1) Includes \$2.5 million recorded in restructuring charges.

Weighted-average assumptions used to determine the benefit obligation at December 31 are as follows:

	2017	2016
Discount rate:		
U.S. plans	3.54%	3.97%
Non-U.S. plans	2.29%	2.40%
Rate of compensation increase:		
U.S. plans	4.00%	4.00%
Non-U.S. plans	4.00%	4.00%

The accumulated benefit obligation for all defined benefit pension plans was \$3,626.7 million and \$3,418.2 million at December 31, 2017 and 2016, respectively. The projected benefit obligation, accumulated benefit obligation, and fair value of plan assets for pension plans with accumulated benefit obligations more than plan assets were \$3,291.4 million, \$3,194.7 million and \$2,554.0 million, respectively, as of December 31, 2017, and \$3,095.1 million, \$3,002.0 million and \$2,346.4 million, respectively, as of December 31, 2016.

Pension benefit payments are expected to be paid as follows:

<i>In millions</i>	
2018	\$ 215.2
2019	209.0
2020	218.7
2021	218.4
2022	220.7
2023 — 2027	1,136.9

The components of the Company's net periodic pension benefit costs for the years ended December 31 include the following:

<i>In millions</i>	2017	2016	2015
Service cost	\$ 70.8	\$ 72.1	\$ 75.2
Interest cost	109.0	110.2	129.5
Expected return on plan assets	(141.7)	(146.1)	(158.3)
Net amortization of:			
Prior service costs (benefits)	3.8	4.7	3.2
Plan net actuarial (gains) losses	56.8	61.6	60.7
Net periodic pension benefit cost	98.7	102.5	110.3
Net curtailment, settlement, and special termination benefits (gains) losses	5.6	2.1	0.7
Net periodic pension benefit cost after net curtailment and settlement (gains) losses	\$ 104.3	\$ 104.6	\$ 111.0
Amounts recorded in continuing operations:			
Operating income	\$ 68.2	\$ 69.3	\$ 73.6
Other income/(expense), net	25.4	25.5	27.1
Amounts recorded in discontinued operations	10.7	9.8	10.3
Total	\$104.3	\$104.6	\$111.0

During 2017, the Company recognized a curtailment loss associated with certain defined benefit plan freezes that is effective January 1, 2022. As a result, projected benefit obligations for these plans were remeasured as of January 31, 2017. Also during 2017, the Company recognized settlement losses associated with lump sum distributions of non-U.S. defined benefit plans.

Net periodic pension benefit cost for 2018 is projected to be approximately \$86.1 million. The amounts expected to be recognized in net periodic pension benefit cost during the year ended 2018 for prior service cost and plan net actuarial losses are \$4.2 million and \$49.9 million, respectively.

Weighted-average assumptions used to determine net periodic pension cost for the years ended December 31 are as follows:

	2017	2016	2015
Discount rate:			
U.S. plans			
Service cost	4.18%	4.25%	3.75%
Interest cost	3.36%	3.29%	3.75%
Non-U.S. plans			
Service cost	2.66%	3.05%	3.25%
Interest cost	2.50%	3.18%	3.25%
Rate of compensation increase:			
U.S. plans	4.00%	4.00%	4.00%
Non-U.S. plans	4.00%	4.00%	4.00%
Expected return on plan assets:			
U.S. plans	5.50%	5.75%	5.75%
Non-U.S. plans	3.25%	3.75%	4.25%

The expected long-term rate of return on plan assets reflects the average rate of returns expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation. The expected long-term rate of return on plan assets is based on what is achievable given the plan's investment policy, the types of assets held and target asset allocations. The expected long-term rate of return is determined as of the measurement date. The Company reviews each plan and its historical returns and target asset allocations to determine the appropriate expected long-term rate of return on plan assets to be used.

The Company's objective in managing its defined benefit plan assets is to ensure that all present and future benefit obligations are met as they come due. It seeks to achieve this goal while trying to mitigate volatility in plan funded status, contribution, and expense by better matching the characteristics of the plan assets to that of the plan liabilities. The Company utilizes a dynamic approach to asset allocation whereby a plan's allocation to fixed income assets increases as the plan's funded status improves. The Company monitors plan funded status and asset allocation regularly in addition to investment manager performance.

The fair values of the Company's pension plan assets at December 31, 2017 by asset category are as follows:

<i>In millions</i>	Fair value measurements			Net asset value	Total fair value
	Level 1	Level 2	Level 3		
Cash and cash equivalents	\$4.8	\$ 35.4	\$ –	\$ –	\$ 40.2
Equity investments:					
Registered mutual funds – equity specialty	–	–	–	77.6	77.6
Commingled funds – equity specialty	–	–	–	674.7	674.7
	–	–	–	752.3	752.3
Fixed income investments:					
U.S. government and agency obligations	–	517.5	–	–	517.5
Corporate and non-U.S. bonds ^(a)	–	1,336.8	–	–	1,336.8
Asset-backed and mortgage-backed securities	–	69.0	–	–	69.0
Registered mutual funds – fixed income specialty	–	–	–	111.0	111.0
Commingled funds – fixed income specialty	–	–	–	131.8	131.8
Other fixed income ^(b)	–	–	26.3	–	26.3
	–	1,923.3	26.3	242.8	2,192.4
Derivatives	–	(0.3)	–	–	(0.3)
Real estate ^(c)	–	–	4.9	–	4.9
Other ^(d)	–	–	79.0	–	79.0
Total assets at fair value	\$4.8	\$1,958.4	\$110.2	\$995.1	\$3,068.5
Receivables and payables, net					(5.4)
Net assets available for benefits					\$3,063.1

The fair values of the Company's pension plan assets at December 31, 2016 by asset category are as follows:

<i>In millions</i>	Fair value measurements			Net asset value	Total fair value
	Level 1	Level 2	Level 3		
Cash and cash equivalents	\$11.8	\$ 17.0	\$ –	\$ –	\$ 28.8
Equity investments:					
Registered mutual funds – equity specialty	–	–	–	73.9	73.9
Commingled funds – equity specialty	–	–	–	640.8	640.8
	–	–	–	714.7	714.7
Fixed income investments:					
U.S. government and agency obligations	–	460.0	–	–	460.0
Corporate and non-U.S. bonds ^(a)	–	1,178.3	–	–	1,178.3
Asset-backed and mortgage-backed securities	–	74.0	–	–	74.0
Registered mutual funds – fixed income specialty	–	–	–	132.4	132.4
Commingled funds – fixed income specialty	–	–	–	96.0	96.0
Other fixed income ^(b)	–	–	25.4	–	25.4
	–	1,712.3	25.4	228.4	1,966.1
Derivatives	–	(0.9)	–	–	(0.9)
Real estate ^(c)	–	–	7.3	–	7.3
Other ^(d)	–	–	64.3	–	64.3
Total assets at fair value	\$11.8	\$1,728.4	\$97.0	\$943.1	\$2,780.3
Receivables and payables, net					16.8
Net assets available for benefits					\$2,797.1

(a) This class includes state and municipal bonds.

(b) This class includes group annuity and guaranteed interest contracts.

(c) This class includes a private equity fund that invests in real estate.

(d) This investment comprises the Company's non-significant, non-US pension plan assets. It primarily includes insurance contracts.

Cash equivalents are valued using a market approach with inputs including quoted market prices for either identical or similar instruments. Fixed income securities are valued through a market approach with inputs including, but not limited to, benchmark yields, reported trades, broker quotes and issuer spreads. Commingled funds are valued at their daily net asset value (NAV) per share or the equivalent. NAV per share or the equivalent is used for fair value purposes as a practical expedient. NAVs are calculated by the investment manager or sponsor of the fund. Private real estate fund values are reported by the fund manager and are based on valuation or appraisal of the underlying investments. Refer to Note 9, "Fair Value Measurements" for additional information related to the fair value hierarchy defined by ASC 820. There have been no significant transfers between levels of the fair value hierarchy.

The Company made required and discretionary contributions to its pension plans of \$101.4 million in 2017, \$56.4 million in 2016, and \$35.6 million in 2015 and currently projects that it will contribute approximately \$75.2 million to its plans worldwide in 2018. The Company's policy allows it to fund an amount, which could be in excess of or less than the pension cost expensed, subject to the limitations imposed by current tax regulations. However, the Company anticipates funding the plans in 2018 in accordance with contributions required by funding regulations or the laws of each jurisdiction. In October 2017, the U.S. Internal Revenue Service (IRS) issued final mortality regulations effective for plan years beginning in 2018 with the option to defer recognition for one year under certain exemption criteria. The Company has chosen to defer recognition of new IRS mortality rates for one year.

Most of the Company's U.S. employees are covered by defined contribution plans. Employer contributions are determined based on criteria specific to the individual plans and amounted to approximately \$118.7 million, \$108.3 million, and \$98.1 million in 2017, 2016 and 2015, respectively. The Company's contributions relating to non-U.S. defined contribution plans and other non-U.S. benefit plans were \$47.7 million, \$39.9 million and \$30.5 million in 2017, 2016 and 2015, respectively.

Multiemployer Pension Plans

The Company also participates in a number of multiemployer defined benefit pension plans related to collectively bargained U.S. employees of Trane. The Company's contributions, and the administration of the fixed retirement payments, are determined by the terms of the related collective-bargaining agreements. These multiemployer plans pose different risks to the Company than single-employer plans, including:

1. The Company's contributions to multiemployer plans may be used to provide benefits to all participating employees of the program, including employees of other employers.
2. In the event that another participating employer ceases contributions to a plan, the Company may be responsible for any unfunded obligations along with the remaining participating employers.
3. If the Company chooses to withdraw from any of the multiemployer plans, the Company may be required to pay a withdrawal liability, based on the underfunded status of the plan.

As of December 31, 2017, the Company does not participate in any plans that are individually significant, nor is the Company an individually significant participant to any of these plans. Total contributions to multiemployer plans for the years ended December 31 were as follows:

<i>In millions</i>	2017	2016	2015
Total contributions	\$9.0	\$7.7	\$6.7

Contributions to these plans may increase in the event that any of these plans are underfunded.

Postretirement Benefits Other Than Pensions

The Company sponsors several postretirement plans that provide for healthcare benefits, and in some instances, life insurance benefits that cover certain eligible employees. These plans are unfunded and have no plan assets, but are instead funded by the Company on a pay-as-you-go basis in the form of direct benefit payments. Generally, postretirement health benefits are contributory with contributions adjusted annually. Life insurance plans for retirees are primarily noncontributory.

The following table details changes in the Company's postretirement plan benefit obligations for the years ended December 31:

<i>In millions</i>	2017	2016
Benefit obligation at beginning of year	\$578.6	\$624.1
Service cost	3.1	3.7
Interest cost	15.7	17.5
Plan participants' contributions	9.8	10.2
Actuarial (gains) losses	(30.2)	(24.4)
Benefits paid, net of Medicare Part D subsidy ⁽¹⁾	(55.4)	(55.7)
Special termination benefits recorded in restructuring	5.9	—
Other	0.5	3.2
Benefit obligations at end of year	\$528.0	\$578.6

(1) Amounts are net of Medicare Part D subsidy of \$1.1 million and \$2.5 million in 2017 and 2016, respectively.

The benefit plan obligations are reflected in the Consolidated Balance Sheets as follows:

<i>In millions</i>	December 31, 2017	December 31, 2016
Accrued compensation and benefits	\$ (48.5)	\$ (53.3)
Postemployment and other benefit liabilities	(479.5)	(525.3)
Total	\$ (528.0)	\$ (578.6)

The pre-tax amounts recognized in *Accumulated other comprehensive income (loss)* were as follows:

<i>In millions</i>	Prior service benefit (cost)	Net actuarial gains (losses)	Total
Balance at December 31, 2016	\$ 12.7	\$ 0.8	\$ 13.5
Gain (loss) in current period	—	30.2	30.2
Amortization reclassified to earnings	(8.6)	0.1	(8.5)
Currency translation and other	—	(0.1)	(0.1)
Balance at December 31, 2017	\$ 4.1	\$ 31.0	\$ 35.1

The components of net periodic postretirement benefit (income) cost for the years ended December 31 were as follows:

<i>In millions</i>	2017	2016	2015
Service cost	\$ 3.1	\$ 3.7	\$ 4.4
Interest cost	15.7	17.5	22.6
Net amortization of:			
Prior service costs (benefits)	(8.6)	(8.9)	(8.9)
Net actuarial (gains) losses	0.1	0.1	0.1
Net periodic postretirement benefit cost	\$ 10.3	\$ 12.4	\$ 18.2
Amounts recorded in continuing operations:			
Operating income	\$ 3.1	\$ 3.7	\$ 4.4
Other income/(expense), net	5.6	4.6	6.6
Amounts recorded in discontinued operations	1.6	4.1	7.2
Total	\$10.3	\$12.4	\$18.2

Postretirement cost for 2018 is projected to be \$14.1 million. The amount expected to be recognized in net periodic postretirement benefits cost in 2018 for prior service gains is \$3.8 million.

Weighted-average assumptions used to determine net periodic benefit cost for the years ended December 31 are as follows:

	2017	2016	2015
Discount rate:			
Benefit obligations at December 31	3.38%	3.73%	3.88%
Net periodic benefit cost			
Service cost	3.82%	3.97%	3.50%
Interest cost	2.99%	2.99%	3.50%
Assumed health-care cost trend rates at December 31:			
Current year medical inflation	6.85%	7.25%	7.25%
Ultimate inflation rate	5.00%	5.00%	5.00%
Year that the rate reaches the ultimate trend rate	2023	2023	2023

A 1% change in the assumed medical trend rate would have the following effects as of and for the year ended December 31, 2017:

<i>In millions</i>	1% Increase	1% Decrease
Effect on total of service and interest cost components of current year benefit cost	\$ 0.7	\$ (0.6)
Effect on benefit obligation at year-end	18.5	(16.1)

Benefit payments for postretirement benefits, which are net of expected plan participant contributions and Medicare Part D subsidy, are expected to be paid as follows:

<i>In millions</i>	
2018	\$ 49.4
2019	47.7
2020	45.8
2021	44.3
2022	42.3
2023 — 2026	178.7

NOTE 11. EQUITY

The authorized share capital of Ingersoll Rand plc is 1,185,040,000 shares, consisting of (1) 1,175,000,000 ordinary shares, par value \$1.00 per share, (2) 40,000 ordinary shares, par value EUR 1.00 and (3) 10,000,000 preference shares, par value \$0.001 per share. There were no preference shares or Euro-denominated ordinary shares outstanding at December 31, 2017 or 2016.

The changes in ordinary shares and treasury shares for the year ended December 31, 2017 are as follows:

<i>In millions</i>	Ordinary shares issued	Ordinary shares held in treasury
December 31, 2016	271.7	12.7
Shares issued under incentive plans	2.3	—
Repurchase of ordinary shares	—	11.8
December 31, 2017	274.0	24.5

Share repurchases are made from time to time in accordance with management's capital allocation strategy, subject to market conditions and regulatory requirements. In February 2014, the Company's Board of Directors authorized the repurchase of up to \$1.5 billion of our ordinary shares under a share repurchase program that began in April 2014. Shares repurchased prior to October 2014 were canceled upon repurchase and accounted for as a reduction of *Ordinary shares* and *Capital in excess of par value*, or *Retained earnings* to the extent *Capital in excess of par value* was exhausted. Beginning in October 2014, repurchased shares were held in treasury and recognized at cost. Ordinary shares held in treasury are presented separately on the balance sheet as a reduction to *Equity*. This repurchase program was completed in the second quarter of 2017.

In February 2017, the Company's Board of Directors authorized the repurchase of up to 1.5 billion of its ordinary shares under a new share repurchase program upon completion of the prior authorized share repurchase program. Repurchases under this program began in May 2017 and total approximately \$600 million at December 31, 2017. As a result, the Company has approximately \$900 million remaining under this program. The Company repurchased approximately \$1.0 billion of its ordinary shares during 2017.

Other Comprehensive Income (Loss)

The changes in *Accumulated other comprehensive income (loss)* are as follows:

<i>In millions</i>	Derivative Instruments	Pension and OPEB Items	Foreign Currency Translation	Total
December 31, 2015	\$ 5.1	\$(630.4)	\$(495.6)	\$(1,120.9)
Other comprehensive income (loss) attributable to Ingersoll-Rand plc	(2.2)	76.0	(243.4)	(169.6)
December 31, 2016	\$ 2.9	\$(554.4)	\$(739.0)	\$(1,290.5)
Other comprehensive income (loss) attributable to Ingersoll-Rand plc	1.8	60.1	449.8	511.7
December 31, 2017	\$ 4.7	\$(494.3)	\$(289.2)	\$ (778.8)

The amounts of *Other comprehensive income (loss) attributable to noncontrolling interests* for 2017, 2016 and 2015 were \$0.5 million, \$9.6 million and (\$4.3 million), respectively, related to currency translation.

NOTE 12. SHARE-BASED COMPENSATION

The Company accounts for stock-based compensation plans in accordance with ASC 718, "Compensation - Stock Compensation" (ASC 718), which requires a fair-value based method for measuring the value of stock-based compensation. Fair value is measured once at the date of grant and is not adjusted for subsequent changes. The Company's share-based compensation plans include programs for stock options, restricted stock units (RSUs), performance share units (PSUs), and deferred compensation. Under the Company's incentive stock plan, the total number of ordinary shares authorized by the shareholders is 20.0 million, of which 6.8 million remains available as of December 31, 2017 for future incentive awards.

Compensation Expense

Share-based compensation expense related to continuing operations is included in *Selling and administrative expenses*. The following table summarizes the expenses recognized:

<i>In millions</i>	2017	2016	2015
Stock options	\$ 19.5	\$ 18.1	\$ 16.3
RSUs	26.4	26.3	24.7
PSUs	23.0	19.9	20.5
Deferred compensation	3.1	3.2	1.7
Other	1.6	2.1	(0.5)
Pre-tax expense	73.6	69.6	62.7
Tax benefit	28.2	26.6	24.0
After-tax expense	\$ 45.4	\$ 43.0	\$ 38.7
Amounts recorded in continuing operations	\$ 45.4	\$ 43.0	\$ 38.7
Amounts recorded in discontinued operations	—	—	—
Total	\$45.4	\$43.0	\$38.7

Stock Options / RSUs

Eligible participants may receive (i) stock options, (ii) RSUs or (iii) a combination of both stock options and RSUs. The fair value of each of the Company's stock option and RSU awards is expensed on a straight-line basis over the required service period, which is generally the 3-year vesting period. However, for stock options and RSUs granted to retirement eligible employees, the Company recognizes expense for the fair value at the grant date.

The weighted average fair value of the stock options granted for the year ended December 31, 2017 and 2016 was estimated to be \$13.46 per share and \$9.42 per share, respectively, using the Black-Scholes option-pricing model. The following assumptions were used:

	2017	2016
Dividend yield	2.00%	2.55%
Volatility	22.46%	28.60%
Risk-free rate of return	1.80%	1.12%
Expected life in years	4.8	4.8

A description of the significant assumptions used to estimate the fair value of the stock option awards is as follows:

- *Volatility* - The expected volatility is based on a weighted average of the Company's implied volatility and the most recent historical volatility of the Company's stock commensurate with the expected life.
- *Risk-free rate of return* - The Company applies a yield curve of continuous risk-free rates based upon the published US Treasury spot rates on the grant date.
- *Expected life* - The expected life of the Company's stock option awards represents the weighted-average of the actual period since the grant date for all exercised or cancelled options and an expected period for all outstanding options.
- *Dividend yield* - The Company determines the dividend yield based upon the expected quarterly dividend payments as of the grant date and the current fair market value of the Company's stock.
- *Forfeiture Rate* - The Company analyzes historical data of forfeited options to develop a reasonable expectation of the number of options to forfeit prior to vesting per year. This expected forfeiture rate is applied to the Company's ongoing compensation expense; however, all expense is adjusted to reflect actual vestings and forfeitures.

Changes in options outstanding under the plans for the years 2017, 2016 and 2015 are as follows:

	Shares subject to option	Weighted- average exercise price	Aggregate intrinsic value (millions)	Weighted- average remaining life (years)
December 31, 2014	7,502,613	\$36.21		
Granted	1,457,523	66.25		
Exercised	(1,968,725)	31.33		
Cancelled	(155,382)	61.03		
December 31, 2015	6,836,029	43.46		
Granted	1,958,476	50.04		
Exercised	(1,854,058)	33.71		
Cancelled	(93,552)	56.22		
December 31, 2016	6,846,895	47.81		
Granted	1,518,335	80.27		
Exercised	(1,789,615)	42.79		
Cancelled	(220,733)	61.91		
Outstanding December 31, 2017	6,354,882	\$56.49	\$207.8	6.6
Exercisable December 31, 2017	3,287,183	\$47.05	\$138.5	5.1

The following table summarizes information concerning currently outstanding and exercisable options:

			Options outstanding			Options exercisable		
Range of exercise price			Number outstanding at December 31, 2017	Weighted-average remaining life (years)	Weighted-average exercise price	Number outstanding at December 31, 2017	Weighted-average remaining life (years)	Weighted-average exercise price
\$10.01	–	\$20.00	114,014	1.1	\$13.41	114,014	1.1	\$13.41
20.01	–	30.00	192,486	2.4	25.50	192,486	2.4	25.50
30.01	–	40.00	766,181	3.2	34.24	766,181	3.2	34.24
40.01	–	50.00	2,191,425	7.1	47.84	994,766	6.0	45.24
50.01	–	60.00	683,184	5.9	59.60	662,087	5.9	59.72
60.01	–	70.00	944,661	6.8	67.05	553,808	6.7	67.09
70.01	–	80.00	14,031	9.0	75.67	–	0.0	–
80.01	–	90.00	1,448,900	9.0	80.31	3,841	2.6	80.21
\$10.74	–	\$88.46	6,354,882	6.6	\$56.49	3,287,183	5.1	\$47.05

At December 31, 2017, there was \$12.6 million of total unrecognized compensation cost from stock option arrangements granted under the plan, which is primarily related to unvested shares of non-retirement eligible employees. The aggregate intrinsic value of options exercised during the year ended December 31, 2017 and 2016 was \$72.7 million and \$61.4 million, respectively. Generally, stock options expire ten years from their date of grant.

The following table summarizes RSU activity for the years 2017, 2016 and 2015:

	RSUs	Weighted-average grant date fair value
Outstanding and unvested at December 31, 2014	1,047,749	\$ 47.60
Granted	429,828	66.42
Vested	(510,600)	43.32
Cancelled	(44,366)	59.98
Outstanding and unvested at December 31, 2015	922,611	\$ 58.14
Granted	486,401	51.28
Vested	(545,437)	53.84
Cancelled	(27,826)	58.19
Outstanding and unvested at December 31, 2016	835,749	\$ 56.95
Granted	372,443	81.09
Vested	(370,397)	58.56
Cancelled	(34,096)	63.79
Outstanding and unvested at December 31, 2017	803,699	\$ 67.09

At December 31, 2017, there was \$18.8 million of total unrecognized compensation cost from RSU arrangements granted under the plan, which is related to unvested shares of non-retirement eligible employees.

Performance Shares

The Company has a Performance Share Program (PSP) for key employees. The program provides awards in the form of PSUs based on performance against pre-established objectives. The annual target award level is expressed as a number of the Company's ordinary shares. All PSUs are settled in the form of ordinary shares.

Beginning with the 2012 grant year, PSU awards are earned based 50% upon a performance condition, measured at each reporting period by relative EPS growth to the industrial group of companies in the S&P 500 Index and the fair market value of the Company's stock on the date of grant, and 50% upon a market condition, measured by the Company's relative total shareholder return (TSR) as compared to the TSR of the industrial group of companies in the S&P 500 Index over the 3-year performance period. The fair value of the market condition is estimated using a Monte Carlo Simulation approach in a risk-neutral framework based upon historical volatility, risk-free rates and correlation matrix. Awards granted prior to 2012 were earned based upon the Company's relative earnings-per-share (EPS) growth as compared to the industrial group of companies in the S&P 500 Index over the 3-year performance period.

The following table summarizes PSU activity for the maximum number of shares that may be issued for the years 2017, 2016 and 2015:

	PSUs	Weighted-average grant date fair value
Outstanding and unvested at December 31, 2014	1,784,998	\$50.12
Granted	456,592	79.09
Vested	(723,250)	41.03
Forfeited	(70,108)	62.76
Outstanding and unvested at December 31, 2015	1,448,232	\$63.18
Granted	597,088	53.82
Vested	(462,035)	46.81
Forfeited	(159,489)	56.25
Outstanding and unvested at December 31, 2016	1,423,796	\$65.34
Granted	419,404	93.68
Vested	(353,834)	65.35
Forfeited	(124,830)	73.40
Outstanding and unvested at December 31, 2017	1,364,536	\$73.31

At December 31, 2017, there was \$18.9 million of total unrecognized compensation cost from PSU arrangements based on current performance, which is related to unvested shares. This compensation will be recognized over the required service period, which is generally the three-year vesting period.

Deferred Compensation

The Company allows key employees to defer a portion of their eligible compensation into a number of investment choices, including its ordinary share equivalents. Any amounts invested in ordinary share equivalents will be settled in ordinary shares of the Company at the time of distribution.

NOTE 13. RESTRUCTURING ACTIVITIES

The Company incurs costs associated with restructuring initiatives intended to result in improved operating performance, profitability and working capital levels. Actions associated with these initiatives include workforce reduction, improving manufacturing productivity, realignment of management structures and rationalizing certain assets. The following table details restructuring charges recorded during the years ended December 31 were as follows:

<i>In millions</i>	2017	2016	2015
Climate	\$ 42.3	\$ 6.2	\$ 11.9
Industrial	14.5	20.5	15.6
Corporate and Other	4.9	8.8	6.6
Total	\$ 61.7	\$ 35.5	\$ 34.1
Cost of goods sold	\$ 46.8	\$ 9.8	\$ 12.5
Selling and administrative expenses	14.9	25.7	21.6
Total	\$61.7	\$35.5	\$34.1

The changes in the restructuring reserve were as follows:

<i>In millions</i>	Climate	Industrial	Corporate and Other	Total
December 31, 2015	\$ 3.7	\$ 1.9	\$ 0.2	\$ 5.8
Additions, net of reversals ⁽¹⁾	6.8	20.5	2.8	30.1
Cash paid	(7.1)	(18.1)	(2.4)	(27.6)
December 31, 2016	3.4	4.3	0.6	8.3
Additions, net of reversals ⁽²⁾	25.6	14.5	4.9	45.0
Cash paid/Other	(21.6)	(12.7)	(3.0)	(37.3)
December 31, 2017	\$ 7.4	\$ 6.1	\$ 2.5	\$ 16.0

(1) Excludes the non-cash costs of asset rationalizations (\$5.4 million).

(2) Excludes the non-cash costs of asset rationalizations (\$8.4 million). In addition, a non-cash pension curtailment (\$2.5 million) and an enhanced retiree medical benefit (\$5.8 million) which were triggered upon announcement of the restructuring plan, impacted the Company's outstanding benefit obligations and are excluded from this table.

Ongoing restructuring actions primarily include workforce reductions as well as the closure and consolidation of multiple manufacturing facilities in an effort to improve the Company's cost structure. As of December 31, 2017, the Company had \$16.0 million accrued for costs associated with its ongoing restructuring actions, of which a majority is expected to be paid within one year. These actions primarily relate to workforce reduction benefits. In addition, the Company incurred \$1.9 million of non-qualified restructuring charges. These charges represent costs that are directly attributable to restructuring activities but do not fall into the severance, exit or disposal categories. However, they are incurred to improve the Company's cost structure.

In January 2018, the Company announced plans to close a non-U.S. manufacturing facility within its Industrial segment and relocate production to other U.S. and non-U.S. facilities. The cost of this restructuring action is not expected to have a material impact on the Company's financial statements.

NOTE 14. OTHER INCOME/(EXPENSE), NET

The components of *Other income/(expense), net* for the years ended December 31, 2017, 2016 and 2015 are as follows:

<i>In millions</i>	2017	2016	2015
Interest income	\$ 9.4	\$ 8.0	\$ 10.6
Exchange gain (loss)	(8.8)	(2.0)	(36.2)
Other components of net periodic benefit cost	(31.0)	(30.1)	(33.7)
Income (loss) from equity investment	—	(0.8)	12.6
Gain on sale of Hussmann equity investment	—	397.8	—
Other activity, net	(1.2)	(13.3)	25.9
Other income/(expense), net	\$ (31.6)	\$ 359.6	\$ (20.8)

Other income/(expense), net includes the results from activities other than normal business operations such as interest income and foreign currency gains and losses on transactions that are denominated in a currency other than an entity's functional currency. In addition, the Company includes the components of net periodic benefit cost for pension and post retirement obligations other than the service cost component as a result of the adoption of ASU 2017-07. Other activity, net include costs associated with Trane U.S. Inc. (Trane) for the settlement and defense of asbestos-related claims, insurance settlements on asbestos-related matters and the revaluation of its liability for potential future claims. Refer to Note 19, "Commitments and Contingencies," for more information regarding asbestos-related matters. In addition, other activity, net for the year ended December 31, 2016 includes \$16.4 million for the settlement of a lawsuit originally filed by a customer in 2012. The lawsuit related to a commercial HVAC contract entered into in 2001, prior to our acquisition of Trane. The charge represents the settlement and related legal costs recognized during 2016.

During the year ended December 31, 2015, the Company recognized a loss on foreign currency exchange of \$36.2 million. This loss is comprised of a \$42.6 million pre-tax charge related to the remeasurement of net monetary assets denominated in Venezuelan bolivar. This loss was partially offset by \$6.4 million of foreign currency transaction gains resulting from the remeasurement of non-functional balance sheet positions into their functional currency.

Sale of Hussmann Equity Investment

During 2011, the Company completed the sale of a controlling interest of its Hussmann refrigerated display case business (Hussmann) to a newly-formed affiliate of private equity firm Clayton Dubilier & Rice, LLC (CD&R). Per the terms of the agreement, CD&R's ownership interest in Hussmann at the acquisition date was 60% with the remaining 40% being retained by the Company. As a result, the Company accounted for its interest in Hussmann using the equity method of accounting.

On December 21, 2015, the Company announced it would sell its remaining equity interest in Hussmann as part of a transaction in which Panasonic Corporation would acquire 100 percent of Hussmann's outstanding shares. The transaction was completed on April 1, 2016. The Company received net proceeds of \$422.5 million, for its interest and recognized a gain of \$397.8 million on the sale.

NOTE 15. INCOME TAXES

In December 2017, the U.S. enacted the Tax Cuts and Jobs Act (the "Act") which makes widespread changes to the Internal Revenue Code. The Act, among other things, reduced the U.S. federal corporate tax rate from 35% to 21%, requires companies to pay a transition tax on earnings of certain foreign subsidiaries that were previously not subject to U.S. tax and creates new income taxes on certain foreign sourced earnings.

The SEC issued Staff Accounting Bulletin No. 118 (SAB 118) which provides guidance on accounting for the tax effects of the Act and allows for adjustments to provisional amounts during a measurement period of up to one year. In accordance with SAB 118, the Company has made reasonable estimates related to (1) the remeasurement of U.S. deferred tax balances for the reduction in the tax rate (2) the liability for the transition tax and (3) the taxes accrued relating to the change in permanent reinvestment assertion for unremitted earnings of certain foreign subsidiaries. As a result, the Company recognized a net provisional income tax benefit of \$21.0 million associated with these items in 2017.

The components of the provisional amounts recognized as part of the Act is as follows:

<i>In millions</i>	2017
Remeasurement of deferred tax balances	\$(300.6)
Transition tax	160.7
Change in permanent reinvestment assertion	118.9
Income tax benefit, net	\$ (21.0)

The Company is continuing to evaluate how the provisions of the Act will be accounted for under ASC 740, "Income Taxes" (ASC 740). The analysis is provisional and is subject to change due to the additional time required to accurately calculate and review the complex tax law. The Company will assess any regulatory guidance that may be issued which could have an impact on the provisional estimates. The Company will continue to gather information and perform additional analysis on these estimates, including, but not limited to, the amount of earnings and profits subject to the transition tax, the calculation of foreign tax credits, the local tax treatment of future distributions of unremitted earnings and in regard to the remeasurement of U.S. deferred taxes, the filing of its 2017 federal and state income tax returns. Any measurement period adjustments will be reported as a component of *Provision for income taxes* in the reporting period the amounts are determined. The final accounting will be completed no later than one year from the enactment of the Act.

Current and deferred provision for income taxes

Earnings before income taxes for the years ended December 31 were taxed within the following jurisdictions:

<i>In millions</i>	2017	2016	2015
United States ⁽¹⁾	\$ (17.6)	\$ 419.8	\$ 451.6
Non-U.S.	1,435.5	1,321.5	796.3
Total	\$1,417.9	\$1,741.3	\$1,247.9

(1) Amount reported in 2017 includes the impact of a premium paid of approximately \$520 million related to the early retirement of certain intercompany debt obligations

The components of the *Provision for income taxes* for the years ended December 31 were as follows:

<i>In millions</i>	2017	2016	2015
Current tax expense (benefit):			
United States	\$ 102.2	\$ 179.6	\$ 300.1
Non-U.S.	95.4	135.7	132.9
Total:	197.6	315.3	433.0
Deferred tax expense (benefit):			
United States	(234.7)	(6.7)	69.0
Non-U.S.	117.3	(27.1)	38.8
Total:	(117.4)	(33.8)	107.8
Total tax expense (benefit):			
United States	(132.5)	172.9	369.1
Non-U.S.	212.7	108.6	171.7
Total	\$ 80.2	\$ 281.5	\$ 540.8

The *Provision for income taxes* differs from the amount of income taxes determined by applying the applicable U.S. statutory income tax rate to pretax income, as a result of the following differences:

	Percent of pretax income		
	2017	2016	2015
Statutory U.S. rate	35.0%	35.0%	35.0%
Increase (decrease) in rates resulting from:			
Non-U.S. tax rate differential ^(a)	(28.8)	(14.7)	(17.2)
Tax on U.S. subsidiaries on non-U.S. earnings	0.8	0.9	1.3
State and local income taxes ^(b)	1.2	1.4	1.5
Valuation allowances ^(c)	2.8	0.1	1.7
Change in permanent reinvestment assertion ^{(d), (f)}	8.4	—	3.9
Transition tax ^(f)	11.3	—	—
Remeasurement of deferred tax balances ^(f)	(21.2)	—	—
Stock based compensation	(1.7)	—	—
Reserves for uncertain tax positions	(0.9)	0.1	14.1
Husmann gain ^(e)	—	(5.7)	—
Provision to return and other true-up adjustments	(1.7)	(0.6)	0.7
Other adjustments	0.5	(0.3)	2.3
Effective tax rate	5.7%	16.2%	43.3%

(a) Amount reported in 2017 includes the impact of a premium paid of approximately \$520 million related to the early retirement of certain intercompany debt obligations

(b) Net of changes in state valuation allowances

(c) Primarily federal and non-U.S., excludes state valuation allowances

(d) Net of foreign tax credits

(e) Gain from sale of Husmann equity investment

(f) Amounts included in 2017 are provisional and relate to the Act

Tax incentives, in the form of tax holidays, have been granted to the Company in certain jurisdictions to encourage industrial development. The expiration of these tax holidays varies by country. The tax holidays are conditional on the Company meeting certain employment and investment thresholds. The most significant tax holidays relate to the Company's qualifying locations in China, Puerto Rico, Panama and Singapore. The benefit for the tax holidays for the years ended December 31, 2017, 2016 and 2015 was \$19.7 million, \$23.3 million and \$22.6 million, respectively.

IRS Exam Results

In July 2015, the Company entered into an agreement with the U.S. Internal Revenue Service (IRS) to resolve disputes related to withholding and income taxes for years 2002 through 2011 (the IRS Agreement). The IRS had previously disagreed with the Company's tax treatment of intercompany debt and distributions and asserted the Company owed income and withholding tax relating to the 2002-2006 period totaling \$774 million, not including interest and penalties. The Company also provided a substantial amount of information to the IRS in connection with its audit of the 2007-2011 tax periods. The Company expected the IRS to propose similar adjustments to these periods, although it was not known how the IRS would apply its position to the different facts presented in these years or whether the IRS would take a similar position to intercompany debt instruments not outstanding in prior years.

The resolution reached in July 2015 covered intercompany debt and related issues for the entire period from 2002 through 2011 and includes all aspects of the dispute with the U.S. Tax Court, the Appeals Division and the Examination Division of the IRS. The resolution was subsequently reported to the Congressional Joint Committee on Taxation (JCT), as required, for its review. The JCT concluded its review without objection in December 2015 and the settlement was finalized with the IRS in December 2015.

Pursuant to the agreement with the IRS, the Company agreed to pay withholding tax and interest of \$412 million in respect to the 2002-2006 years. The Company owed no additional tax with respect to intercompany debt and related matters for the years 2007-2011. No penalties were applied to any of the tax years 2002 through 2011. The resolution resulted in a net cash outflow in 2015 of approximately \$364 million, consisting of \$230 million in tax and \$134 million of interest, net of a tax benefit of \$48 million.

Deferred tax assets and liabilities

A summary of the deferred tax accounts at December 31 are as follows:

<i>In millions</i>	2017	2016
Deferred tax assets:		
Inventory and accounts receivable	\$ 17.4	\$ 18.2
Fixed assets and intangibles	10.4	16.2
Postemployment and other benefit liabilities	396.5	652.5
Product liability	95.4	151.3
Other reserves and accruals	134.8	192.8
Net operating losses and credit carryforwards	589.0	528.5
Other	22.7	38.6
Gross deferred tax assets	1,266.2	1,598.1
Less: deferred tax valuation allowances	(344.6)	(184.5)
Deferred tax assets net of valuation allowances	\$ 921.6	\$ 1,413.6
Deferred tax liabilities:		
Inventory and accounts receivable	\$ (24.1)	\$ (38.8)
Fixed assets and intangibles	(1,237.4)	(1,949.7)
Postemployment and other benefit liabilities	(9.6)	(7.0)
Other reserves and accruals	(1.5)	(1.9)
Product liability	(1.4)	—
Undistributed earnings	(137.7)	(24.0)
Other	(11.1)	(8.4)
Gross deferred tax liabilities	(1,422.8)	(2,029.8)
Net deferred tax assets (liabilities)	\$ (501.2)	\$ (616.2)

At December 31, 2017, no deferred taxes have been provided for earnings of certain of the Company's subsidiaries, since these earnings have been, and under current plans will continue to be permanently reinvested in these subsidiaries. These earnings amount to approximately \$1.0 billion which if distributed would result in additional taxes, which may be payable upon distribution, of approximately \$110.0 million.

At December 31, 2017, the Company had the following operating loss and tax credit carryforwards available to offset taxable income in prior and future years:

<i>In millions</i>	Amount	Expiration Period
U.S. Federal net operating loss carryforwards	\$ 680.0	2018-2036
U.S. Federal credit carryforwards	121.5	2022-Unlimited
U.S. State net operating loss carryforwards	3,484.2	2018-2037
U.S. State credit carryforwards	34.7	2018-Unlimited
Non-U.S. net operating loss carryforwards	752.0	2018-Unlimited
Non-U.S. credit carryforwards	8.0	Unlimited

The U.S. state net operating loss carryforwards were incurred in various jurisdictions. The non-U.S. net operating loss carryforwards were incurred in various jurisdictions, predominantly in Belgium, Brazil, China, India, Luxembourg, Spain, and the United Kingdom.

Activity associated with the Company's valuation allowance is as follows:

<i>In millions</i>	2017	2016	2015
Beginning balance	\$184.5	\$213.1	\$210.7
Increase to valuation allowance	176.5	19.4	40.7
Decrease to valuation allowance	(19.1)	(43.5)	(34.0)
Accumulated other comprehensive income (loss)	2.7	(4.5)	(4.3)
Ending balance	\$344.6	\$184.5	\$213.1

During 2017, the Company recorded a valuation allowance of approximately \$30 million on certain net deferred tax assets in Brazil that were no longer expected to be realized. In addition, the Company recorded a valuation allowance of approximately \$100 million related to excess foreign tax credits generated as a result of the Act.

Unrecognized tax benefits

The Company has total unrecognized tax benefits of \$120.5 million and \$107.1 million as of December 31, 2017, and December 31, 2016, respectively. The amount of unrecognized tax benefits that, if recognized, would affect the continuing operations effective tax rate are \$80.4 million as of December 31, 2017. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

<i>In millions</i>	2017	2016	2015
Beginning balance	\$107.1	\$174.9	\$ 343.8
Additions based on tax positions related to the current year	6.2	5.9	8.7
Additions based on tax positions related to prior years	16.8	29.1	186.5
Reductions based on tax positions related to prior years	(8.6)	(37.6)	(102.2)
Reductions related to settlements with tax authorities	(4.8)	(60.9)	(251.0)
Reductions related to lapses of statute of limitations	(1.3)	(2.8)	(3.7)
Translation (gain) loss	5.1	(1.5)	(7.2)
Ending balance	\$120.5	\$107.1	\$ 174.9

The Company records interest and penalties associated with the uncertain tax positions within its *Provision for income taxes*. The Company had reserves associated with interest and penalties, net of tax, of \$32.5 million and \$33.7 million at December 31, 2017 and December 31, 2016, respectively. For the year ended December 31, 2017 and December 31, 2016, the Company recognized \$1.9 million and \$2.3 million, respectively, in interest and penalties net of tax in continuing operations related to these uncertain tax positions.

In the second quarter of 2015, the Company recorded a tax charge of approximately \$227 million to continuing operations related to the increase in the liability for unrecognized tax benefits as a result of the proposed IRS settlement. Pursuant to the agreement with the IRS, the Company reduced its liability for unrecognized tax benefits for all related amounts at December 31, 2015. In addition, the Company recorded a tax benefit of approximately \$65 million within continuing operations as a result of the settlement of an audit in a major tax jurisdiction.

The total amount of unrecognized tax benefits relating to the Company's tax positions is subject to change based on future events including, but not limited to, the settlements of ongoing audits and/or the expiration of applicable statutes of limitations. Although the outcomes and timing of such events are highly uncertain, it is reasonably possible that the balance of gross unrecognized tax benefits, excluding interest and penalties, could potentially be reduced by up to approximately \$1.0 million during the next 12 months.

The provision for income taxes involves a significant amount of management judgment regarding interpretation of relevant facts and laws in the jurisdictions in which the Company operates. Future changes in applicable laws, projected levels of taxable income and tax planning could change the effective tax rate and tax balances recorded by the Company. In addition, tax authorities periodically review income tax returns filed by the Company and can raise issues regarding its filing positions, timing and amount of income or deductions, and the allocation of income among the jurisdictions in which the Company operates. A significant period of time may elapse between the filing of an income tax return and the ultimate resolution of an issue raised by a revenue authority with respect to that return. In the normal course of business the Company is subject to examination by taxing authorities throughout the world, including such major jurisdictions as Brazil, Canada, China, France, Germany, Ireland, Italy, Mexico, Spain, the Netherlands, the United Kingdom and the United States. These examinations on their own, or any subsequent litigation related to the examinations, may result in additional taxes or penalties against the Company. If the ultimate result of these audits differ from original or adjusted estimates, they could have a material impact on the Company's tax provision. In general, the examination of the Company's material tax returns are complete or effectively settled for the years prior to 2008, with certain matters prior to 2008 being resolved through appeals and litigation and also unilateral procedures as provided for under double tax treaties.

NOTE 16. ACQUISITIONS AND DIVESTITURES

Acquisitions

During 2017, the Company acquired several businesses, including channel acquisitions, that complement existing products and services. The aggregate cash paid, net of cash acquired, totaled \$157.6 million and was funded through cash on hand. These acquisitions were recorded using the acquisition method of accounting in accordance with the accounting guidance for business acquisitions. As a result, the aggregate price has been allocated to assets acquired and liabilities assumed based on the estimate of fair market value of such assets and liabilities at the date of acquisition.

The allocation of the aggregate purchase price is as follows:

<i>In millions</i>	Climate	Industrial	Total
Other current assets	\$ 19.2	\$ 17.0	\$ 36.2
Intangibles	26.0	35.6	61.6
Goodwill	26.3	60.5	86.8
Other noncurrent assets	6.4	5.9	12.3
Accounts payable, accrued expenses and other liabilities	(20.0)	(19.3)	(39.3)
Total purchase price, net of cash acquired	\$ 57.9	\$ 99.7	\$157.6

Cash, accounts receivable and current liabilities were stated at their historical carrying values, which approximates fair value given the short nature of these assets and liabilities. The estimate of fair value for inventory and property, plant and equipment are based on an assessment of the acquired assets condition as well as an evaluation of the current market value for such assets. Intangible assets associated with these acquisitions primarily relate to technology, trademarks and/or customer relationships. The valuations were primarily determined using an income approach methodology. Any excess of the purchase price is recognized as goodwill. The Company is in the process of allocating the purchase price and valuing the acquired assets and liabilities assumed for certain of these acquisitions.

Engineered Centrifugal Compression Business

On January 1, 2015, the Company completed the acquisition of the assets of Cameron International Corporation's Centrifugal Compression (Engineered Centrifugal Compression) business for approximately \$850 million. The acquired business manufactures centrifugal compression equipment and provides aftermarket parts and services for global industrial applications, air separation, gas transmission and process gas. The acquisition was funded through a combination of cash on hand and debt.

The results of the Engineered Centrifugal Compression business have been included in the Company's consolidated financial statements since the date of the acquisition and are reported within the Company's Industrial segment. The aggregate value, net of cash acquired, was allocated to tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values at the acquisition date. The excess of the purchase price over the estimated fair values of identifiable assets acquired was recorded as goodwill and equal to \$431 million. Intangible assets were identified and recorded at their estimated fair value of \$272 million and primarily consisted of customer relationships, completed technologies/patents and indefinite-lived trademarks.

FRIGOBLOCK

On March 4, 2015, the Company acquired 100% of the outstanding stock of FRIGOBLOCK for approximately €100 million (approximately \$113 million). The acquired business manufactures and designs transport refrigeration units for trucks and trailers, which it sells primarily in Western Europe. The acquisition was funded through a combination of cash on hand and debt.

The results of the FRIGOBLOCK business have been included in the Company's consolidated financial statements as of the date of acquisition and reported within the Company's Climate segment. The aggregate value, net of cash acquired, was allocated to tangible and identifiable intangible assets acquired and liabilities assumed based on their estimated fair values at the acquisition date. The excess of the purchase price over the estimated fair values of identifiable assets acquired was recorded as goodwill and equal to \$64.3 million. Intangible assets were identified and recorded at their estimated fair value of \$43.9 million, and primarily consisted of customer relationships, completed technologies/patents and an indefinite-lived trademark.

Divestitures

The Company has retained costs from previously sold businesses that primarily include expenses related to postretirement benefits, product liability and legal costs (mostly asbestos related). In addition, the Company includes amounts related to the 2013 spin-off of our commercial and residential security business, now an independent public company operating under the name of Allegion plc (Allegion). The components of *Discontinued operations, net of tax* for the years ended December 31 are as follows:

<i>In millions</i>	2017	2016	2015
Pre-tax earnings (loss) from discontinued operations	\$(34.0)	\$28.1	\$(23.2)
Tax benefit (expense)	8.6	4.8	(1.1)
Discontinued operations, net of tax	\$(25.4)	\$32.9	\$(24.3)

Pre-tax earnings (loss) from discontinued operations includes costs associated with Ingersoll Rand Company for the settlement and defense of asbestos-related claims, insurance settlements on asbestos-related matters and the revaluation of its liability for potential future claims. Refer to Note 19, "Commitments and Contingencies," for more information related to asbestos. A portion of the tax benefit (expense) in each period represent adjustments for certain tax matters associated with Allegion.

NOTE 17. EARNINGS PER SHARE (EPS)

Basic EPS is calculated by dividing Net earnings attributable to Ingersoll-Rand plc by the weighted-average number of ordinary shares outstanding for the applicable period. Diluted EPS is calculated after adjusting the denominator of the basic EPS calculation for the effect of all potentially dilutive ordinary shares, which in the Company's case, includes shares issuable under share-based compensation plans. The following table summarizes the weighted-average number of ordinary shares outstanding for basic and diluted earnings per share calculations:

<i>In millions</i>	2017	2016	2015
Weighted-average number of basic shares outstanding	254.9	259.2	265.1
Shares issuable under incentive stock plans	3.2	2.5	2.7
Weighted-average number of diluted shares outstanding	258.1	261.7	267.8
Anti-dilutive shares	1.6	1.2	2.1

NOTE 18. BUSINESS SEGMENT INFORMATION

The accounting policies of the operating segments are the same as those described in the summary of significant accounting policies except that the operating segments' results are prepared on a management basis that is consistent with the manner in which the Company prepares financial information for internal review and decision making. The Company largely evaluates performance based on Segment operating income and Segment operating margins. Intercompany sales between segments are considered immaterial.

The Company's Climate segment delivers energy-efficient products and innovative energy services. It includes Trane® and American Standard® Heating & 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 through Trane Building Advantage and Nexia; and Thermo King® transport temperature control solutions.

The Company's 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® fluid management equipment, as well as Club Car® golf, utility and rough terrain vehicles.

Segment operating income is the measure of profit and loss that the Company's chief operating decision maker uses to evaluate the financial performance of the business and as the basis for performance reviews, compensation and resource allocation. For these reasons, the Company believes that Segment operating income represents the most relevant measure of segment profit and loss.

A summary of operations by reportable segments for the years ended December 31 were as follows:

<i>Dollar amounts in millions</i>	2017	2016	2015
Climate			
Net revenues	\$ 11,167.5	\$ 10,545.0	\$ 10,224.3
Segment operating income	1,572.7	1,537.5	1,314.4
Segment operating income as a percentage of revenues	14.1%	14.6%	12.9%
Depreciation and amortization	247.6	225.2	246.3
Capital expenditures	103.8	78.2	83.9
Industrial			
Net revenues	3,030.1	2,963.9	3,076.4
Segment operating income	357.6	300.3	378.3
Segment operating income as a percentage of revenues	11.8%	10.1%	12.3%
Depreciation and amortization	77.3	67.2	67.5
Capital expenditures	57.4	36.3	51.8
Total net revenues	\$14,197.6	\$13,508.9	\$13,300.7
Reconciliation to Operating Income			
Segment operating income from reportable segments	1,930.3	1,837.8	1,692.7
Unallocated corporate expense	(265.0)	(234.6)	(201.0)
Total operating income	\$ 1,665.3	\$ 1,603.2	\$ 1,491.7
Total operating income as a percentage of revenues	11.7%	11.9%	11.2%
Depreciation and Amortization			
Depreciation and amortization from reportable segments	324.9	292.4	313.8
Unallocated depreciation and amortization	28.4	59.8	50.3
Total depreciation and amortization	\$ 353.3	\$ 352.2	\$ 364.1
Capital Expenditures			
Capital expenditures from reportable segments	161.2	114.5	135.7
Corporate capital expenditures	60.1	68.2	113.9
Total capital expenditures	\$ 221.3	\$ 182.7	\$ 249.6

A summary of *Net revenues* by destination and by major product/solution for the years ended December 31 were as follows:

<i>In millions</i>	2017	2016	2015
United States	\$ 9,215.3	\$ 8,720.7	\$ 8,291.2
Non-U.S.	4,982.3	4,788.2	5,009.5
Total	\$14,197.6	\$13,508.9	\$13,300.7

<i>In millions</i>	2017	2016	2015
Commercial HVAC	\$ 6,849.4	\$ 6,479.4	\$ 6,233.8
Transport Refrigeration	2,090.7	2,050.1	2,147.8
Residential HVAC	2,227.4	2,015.5	1,842.6
Compression Technologies and Services	1,889.2	1,885.1	1,932.5
Other Industrial	1,140.9	1,078.8	1,144.0
Total	\$14,197.6	\$13,508.9	\$13,300.7

In fiscal years 2017, 2016 and 2015, no customer exceeded 10% of consolidated net revenues.

At December 31, summary of long-lived assets by geographic area were as follows:

<i>In millions</i>	2017	2016
United States	\$ 984.8	\$2,040.7
Non-U.S.	1,651.8	603.1
Total	\$2,636.6	\$2,643.8

NOTE 19. COMMITMENTS AND CONTINGENCIES

The Company is involved in various litigations, claims and administrative proceedings, including those related to environmental, asbestos, and product liability matters. In accordance with ASC 450, "Contingencies," the Company records accruals for loss contingencies when it is both probable that a liability will be incurred and the amount of the loss can be reasonably estimated. Amounts recorded for identified contingent liabilities are estimates, which are reviewed periodically and adjusted to reflect additional information when it becomes available. Subject to the uncertainties inherent in estimating future costs for contingent liabilities, except as expressly set forth in this note, management believes that any liability which may result from these legal matters would not have a material adverse effect on the financial condition, results of operations, liquidity or cash flows of the Company.

Environmental Matters

The Company continues to be dedicated to environmental and sustainability programs to minimize the use of natural resources, and reduce the utilization and generation of hazardous materials from our manufacturing processes and to remediate identified environmental concerns. As to the latter, the Company is currently engaged in site investigations and remediation activities to address environmental cleanup from past operations at current and former manufacturing facilities.

The Company is sometimes a party to environmental lawsuits and claims and has received notices of potential violations of environmental laws and regulations from the Environmental Protection Agency and similar state authorities. It has also been identified as a potentially responsible party (PRP) for cleanup costs associated with off-site waste disposal at federal Superfund and state remediation sites. For all such sites, there are other PRPs and, in most instances, the Company's involvement is minimal.

In estimating its liability, the Company has assumed it will not bear the entire cost of remediation of any site to the exclusion of other PRPs who may be jointly and severally liable. The ability of other PRPs to participate has been taken into account, based on the Company's understanding of the parties' financial condition and probable contributions on a per site basis. Additional lawsuits and claims involving environmental matters are likely to arise from time to time in the future.

As of December 31, 2017 and 2016, the Company has recorded reserves for environmental matters of \$41.9 million and \$41.3 million, respectively. Of these amounts \$36.8 million and \$37.2 million, respectively, relate to remediation of sites previously disposed by the Company.

Asbestos-Related Matters

Certain wholly-owned subsidiaries and former companies of ours are named as defendants in asbestos-related lawsuits in state and federal courts. In virtually all of the suits, a large number of other companies have also been named as defendants. The vast majority of those claims have been filed against either Ingersoll-Rand Company or Trane U.S. Inc. (Trane) and generally allege injury caused by exposure to asbestos contained in certain historical products sold by Ingersoll-Rand Company or Trane, primarily pumps, boilers and railroad brake shoes. None of our existing or previously-owned businesses were a producer or manufacturer of asbestos.

The Company engages an outside expert to assist in calculating an estimate of the Company's total liability for pending and unasserted future asbestos-related claims and annually performs a detailed analysis with the assistance of an outside expert to update its estimated asbestos-related liability. The methodology used to project the Company's total liability for pending and unasserted potential future asbestos-related claims relied upon and included the following factors, among others:

- the outside expert's interpretation of a widely accepted forecast of the population likely to have been occupationally exposed to asbestos;
- epidemiological studies estimating the number of people likely to develop asbestos-related diseases such as mesothelioma and lung cancer;
- the Company's historical experience with the filing of non-malignancy claims and claims alleging other types of malignant diseases filed against the Company relative to the number of lung cancer claims filed against the Company;

- the outside expert's analysis of the number of people likely to file an asbestos-related personal injury claim against the Company based on such epidemiological and historical data and the Company's most recent three-year claims history;
- an analysis of the Company's pending cases, by type of disease claimed and by year filed;
- an analysis of the Company's most recent three-year history to determine the average settlement and resolution value of claims, by type of disease claimed;
- an adjustment for inflation in the future average settlement value of claims, at a 2.5% annual inflation rate, adjusted downward to 1.5% to take account of the declining value of claims resulting from the aging of the claimant population; and
- an analysis of the period over which the Company has and is likely to resolve asbestos-related claims against it in the future.

At December 31, 2017, over 80 percent of the open claims against the Company are non-malignancy or unspecified disease claims, many of which have been placed on inactive or deferral dockets and the vast majority of which have little or no settlement value against the Company, particularly in light of recent changes in the legal and judicial treatment of such claims.

The Company's liability for asbestos-related matters and the asset for probable asbestos-related insurance recoveries are included in the following balance sheet accounts:

<i>In millions</i>	December 31, 2017	December 31, 2016
Accrued expenses and other current liabilities	\$ 48.2	\$ 61.5
Other noncurrent liabilities	556.6	569.7
Total asbestos-related liabilities	\$604.8	\$631.2
Other current assets	\$ 56.1	\$ 54.0
Other noncurrent assets	210.3	218.5
Total asset for probable asbestos-related insurance recoveries	\$266.4	\$272.5

The Company's asbestos insurance receivable related to Ingersoll-Rand Company and Trane was \$138.5 million and \$127.9 million at December 31, 2017, and \$129.6 million and \$142.9 million at December 31, 2016, respectively. The receivable attributable to Trane for probable insurance recoveries as of December 31, 2017 is entirely supported by settlement agreements between Trane and the respective insurance carriers. Most of these settlement agreements constitute "coverage-in-place" arrangements, in which the insurer signatories agree to reimburse Trane for specified portions of its costs for asbestos bodily injury claims and Trane agrees to certain claims-handling protocols and grants to the insurer signatories certain releases and indemnifications.

The costs associated with the settlement and defense of asbestos-related claims, insurance settlements on asbestos-related matters and the revaluation of the Company's liability for potential future claims are included in the income statement within continuing operations or discontinued operations depending on the business to which they relate. The income (expense) associated with these transactions for the years ended December 31, were as follows:

<i>In millions</i>	2017	2016	2015
Continuing operations	\$ (3.1)	\$ 2.7	\$ 21.0
Discontinued operations	(11.9)	46.3	(8.8)
Total	\$ (15.0)	\$ 49.0	\$ 12.2

Ongoing income and expenses associated with Ingersoll-Rand Company's asbestos-related matters are recorded within discontinued operations as they relate to previously divested businesses, primarily Ingersoll-Dresser Pump, which was sold by the Company in 2000. During the year ended December 31, 2017, the Company recorded an adjustment to update its liability for potential future claims. This amount was partially offset by asbestos-related settlements reached with various insurance carriers during the year. Amounts recorded during the year ended December 31, 2016 and 2015 include asbestos-related settlements with various insurance carriers. Ongoing income and expenses associated with Trane's asbestos-related matters are recorded within *Other income/(expense), net* as part of continuing operations. Amounts recorded during 2015 include a settlement with an insurance carrier.

In 2012 and 2013, Ingersoll-Rand Company filed actions in the Superior Court of New Jersey, Middlesex County, seeking a declaratory judgment and other relief regarding the Company's rights to defense and indemnity for asbestos claims. The defendants were several dozen solvent insurance companies, including companies that had been paying a portion of Ingersoll-Rand Company's asbestos claim defense and indemnity costs. The responding defendants generally challenged the Company's right to recovery, and raised various coverage defenses. Since filing the actions, Ingersoll Rand Company has settled with approximately two-thirds of the insurer defendants, and has dismissed one of the actions in its entirety.

The Company continually monitors the status of pending litigation that could impact the allocation of asbestos claims against the Company's various insurance policies. The Company has concluded that its Ingersoll-Rand Company insurance receivable is probable of recovery because of the following factors:

- Ingersoll-Rand Company has reached favorable settlements regarding asbestos coverage claims for the majority of its recorded asbestos-related insurance receivable;
- a review of other companies in circumstances comparable to Ingersoll-Rand Company, including Trane, and the success of other companies in recovering under their insurance policies, including Trane's favorable settlement discussed above;
- the Company's confidence in its right to recovery under the terms of its policies and pursuant to applicable law; and
- the Company's history of receiving payments under the Ingersoll-Rand Company insurance program, including under policies that had been the subject of prior litigation.

The amounts recorded by the Company for asbestos-related liabilities and insurance-related assets are based on currently available information. The Company's actual liabilities or insurance recoveries could be significantly higher or lower than those recorded if assumptions used in the calculations vary significantly from actual results. Key variables in these assumptions include the number and type of new claims to be filed each year, the average cost of resolution of each such new claim, the resolution of coverage issues with insurance carriers, and the solvency risk with respect to the Company's insurance carriers. Furthermore, predictions with respect to these variables are subject to greater uncertainty as the projection period lengthens. Other factors that may affect the Company's liability include uncertainties surrounding the litigation process from jurisdiction to jurisdiction and from case to case, reforms that may be made by state and federal courts, and the passage of state or federal tort reform legislation.

The aggregate amount of the stated limits in insurance policies available to the Company for asbestos-related claims acquired, over many years and from many different carriers, is substantial. However, limitations in that coverage, primarily due to the considerations described above, are expected to result in the projected total liability to claimants substantially exceeding the probable insurance recovery.

Warranty Liability

Standard product warranty accruals are recorded at the time of sale and are estimated based upon product warranty terms and historical experience. The Company assesses the adequacy of its liabilities and will make adjustments as necessary based on known or anticipated warranty claims, or as new information becomes available.

The changes in the standard product warranty liability for the year ended December 31, were as follows:

<i>In millions</i>	2017	2016
Balance at beginning of period	\$ 261.6	\$ 262.0
Reductions for payments	(140.5)	(142.3)
Accruals for warranties issued during the current period	141.9	141.4
Changes to accruals related to preexisting warranties	2.2	2.5
Translation	5.3	(2.0)
Balance at end of period	\$ 270.5	\$ 261.6

Standard product warranty liabilities are classified as *Accrued expenses and other current liabilities*, or *Other noncurrent liabilities* based on their expected term. The Company's total current standard product warranty reserve at December 31, 2017 and December 31, 2016 was \$144.5 million and \$148.7 million, respectively.

The Company's extended warranty liability represents the deferred revenue associated with its extended warranty contracts and is amortized into *Net revenues* on a straight-line basis over the life of the contract, unless another method is more representative of the costs incurred. The Company assesses the adequacy of its liability by evaluating the expected costs under its existing contracts to ensure these expected costs do not exceed the extended warranty liability.

The changes in the extended warranty liability for the year ended December 31, were as follows:

<i>In millions</i>	2017	2016
Balance at beginning of period	\$ 295.9	\$ 311.6
Amortization of deferred revenue for the period	(107.2)	(111.0)
Additions for extended warranties issued during the period	100.8	97.3
Changes to accruals related to preexisting warranties	1.3)	(1.7)
Translation	2.2	(0.3)
Balance at end of period	\$ 293.0	\$ 295.9

The extended warranty liability is classified as *Accrued expenses and other current liabilities* or *Other noncurrent liabilities* based on the timing of when the deferred revenue is expected to be amortized into *Net revenues*. The Company's total current extended warranty liability at December 31, 2017 and December 31, 2016 was \$100.0 million and \$96.5 million, respectively. For the years ended December 31, 2017 and 2016, the Company incurred costs of \$60.7 million and \$60.1 million, respectively, related to extended warranties.

Other Commitments and Contingencies

Certain office and warehouse facilities, transportation vehicles and data processing equipment are leased by the Company. Total rental expense was \$241.8 million in 2017, \$230.4 million in 2016 and \$166.7 million in 2015. Minimum lease payments required under non-cancelable operating leases with terms in excess of one year for the next five years are as follows: \$194.3 million in 2018, \$143.4 million in 2019, \$112.0 million in 2020, \$76.2 million in 2021, and \$49.6 million in 2022.

Trane has commitments and performance guarantees, including energy savings guarantees, totaling approximately \$400 million extending from 2018-2037. These guarantees are provided under long-term service and maintenance contracts related to its air conditioning equipment and system controls. Through 2017, the Company has experienced no significant losses under such arrangements and considers the probability of any significant future losses to be remote.

Refer to Note 15 for a discussion of income tax-related contingencies.

NOTE 20. GUARANTOR FINANCIAL INFORMATION

Ingersoll-Rand plc (Plc or Parent Company) and certain of its 100% directly or indirectly owned subsidiaries provide guarantees of public debt issued by other 100% directly or indirectly owned subsidiaries. The following condensed consolidating financial information is provided so that separate financial statements of these subsidiary issuer and guarantors are not required to be filed with the U.S. Securities and Exchange Commission.

The following table shows the Company's guarantor relationships as of December 31, 2017:

Parent, issuer or guarantors	Notes issued	Notes guaranteed ⁽³⁾
Ingersoll-Rand plc (Plc)	None	All registered notes and debentures
Ingersoll-Rand Irish Holdings Unlimited Company (Irish Holdings)	None	All notes issued by Global Holding and Lux Finance ⁽⁴⁾
Ingersoll-Rand Lux International Holding Company S.a.r.l. (Lux International)	None	All notes issued by Global Holding and Lux Finance ⁽¹⁾
Ingersoll-Rand Global Holding Company Limited (Global Holding)	6.875% Senior notes due 2018 ⁽²⁾ 2.875% Senior notes due 2019 ⁽²⁾ 4.250% Senior notes due 2023 ⁽²⁾ 5.750% Senior notes due 2043 ⁽²⁾	All notes issued by Lux Finance
Ingersoll-Rand Company (New Jersey)	9.000% Debentures due 2021 7.200% Debentures due 2018-2025 6.48% Debentures due 2025 Puttable debentures due 2027-2028	All notes issued by Global Holding and Lux Finance
Ingersoll-Rand Luxembourg Finance S.A. (Lux Finance)	2.625% Notes due 2020 3.55% Notes due 2024 4.650% Notes due 2044	All notes and debentures issued by Global Holding and New Jersey

(1) In the fourth quarter of 2015, Lux International was added as a guarantor of notes previously issued by Global Holding and Lux Finance

(2) In 2013, New Jersey was added as a co-obligor of notes previously issued by Global Holding

(3) All subsidiary issuers and guarantors provide irrevocable guarantees of borrowings, if any, made under revolving credit facilities

(4) In the second quarter of 2016, Irish Holdings was added as a guarantor of all notes issued by Global Holding and Lux Finance

Each subsidiary debt issuer and guarantor is owned 100% directly or indirectly by the Parent Company. Each guarantee is full and unconditional, and provided on a joint and several basis. There are no significant restrictions of the Parent Company, or any guarantor, to obtain funds from its subsidiaries, such as provisions in debt agreements that prohibit dividend payments, loans or advances to the parent by a subsidiary.

Basis of presentation

The following Condensed Consolidating Financial Statements present the financial position, results of operations and cash flows of each issuer or guarantor on a legal entity basis. The financial information for all periods has been presented based on the Company's legal entity ownerships and guarantees outstanding at December 31, 2017. Assets and liabilities are attributed to each issuer and guarantor generally based on legal entity ownership. Investments in subsidiaries of the Parent Company, subsidiary guarantors and issuers represent the proportionate share of their subsidiaries' net assets. Certain adjustments are needed to consolidate the Parent Company and its subsidiaries, including the elimination of investments in subsidiaries and related activity that occurs between entities in different columns. These adjustments are presented in the Consolidating Adjustments column. This basis of presentation is intended to comply with the specific reporting requirements for subsidiary issuers and guarantors, and is not intended to present the Company's financial position or results of operations or cash flows for any other purpose.

Condensed Consolidating Statement of Comprehensive Income

For the year ended December 31, 2017

<i>In millions</i>	Plc	Irish Holdings	Lux International	Global Holding	New Jersey	Lux Finance	Other Subsidiaries	Consolidating Adjustments	Consolidated
Net revenues	\$ —	\$ —	\$ —	\$ —	\$ 1,336.6	\$ —	\$ 13,216.7	\$ (355.7)	\$ 14,197.6
Cost of goods sold	—	—	—	—	(957.9)	—	(9,209.4)	355.7	(9,811.6)
Selling and administrative expenses	(15.6)	—	(0.1)	(1.2)	(401.7)	(0.2)	(2,301.9)	—	(2,720.7)
Operating income (loss)	(15.6)	—	(0.1)	(1.2)	(23.0)	(0.2)	1,705.4	—	1,665.3
Equity earnings (loss) in subsidiaries, net of tax	1,349.2	1,334.7	982.3	565.3	1,212.5	107.9	—	(5,551.9)	—
Interest expense	—	—	—	(127.0)	(47.2)	(41.0)	(0.6)	—	(215.8)
Intercompany interest and fees	(33.1)	—	253.0	(493.9)	(500.9)	(8.2)	783.1	—	—
Other income/(expense), net	—	—	0.1	—	(5.8)	—	(25.9)	—	(31.6)
Earnings (loss) before income taxes	1,300.5	1,334.7	1,235.3	(56.8)	635.6	58.5	2,462.0	(5,551.9)	1,417.9
Benefit (provision) for income taxes	2.1	—	—	247.2	(42.4)	—	(287.1)	—	(80.2)
Earnings (loss) from continuing operations	1,302.6	1,334.7	1,235.3	190.4	593.2	58.5	2,174.9	(5,551.9)	1,337.7
Gain (loss) from discontinued operations, net of tax	—	—	—	—	(27.9)	—	2.5	—	(25.4)
Net earnings (loss)	1,302.6	1,334.7	1,235.3	190.4	565.3	58.5	2,177.4	(5,551.9)	1,312.3
Less: Net earnings attributable to noncontrolling interests	—	—	—	—	—	—	(9.7)	—	(9.7)
Net earnings attributable to Ingersoll-Rand plc	\$ 1,302.6	\$ 1,334.7	\$ 1,235.3	\$ 190.4	\$ 565.3	\$ 58.5	\$ 2,167.7	\$ (5,551.9)	\$ 1,302.6
Other comprehensive income (loss), net of tax	511.7	510.3	472.5	369.3	368.8	102.1	499.0	(2,322.0)	511.7
Comprehensive income attributable to Ingersoll-Rand plc	\$ 1,814.3	\$ 1,845.0	\$ 1,707.8	\$ 559.7	\$ 934.1	\$ 160.6	\$ 2,666.7	\$ (7,873.9)	\$ 1,814.3

Condensed Consolidating Statement of Comprehensive Income

For the year ended December 31, 2016

<i>In millions</i>	Plc	Irish Holdings	Lux International	Global Holding	New Jersey	Lux Finance	Other Subsidiaries	Consolidating Adjustments	Consolidated
Net revenues	\$ -	\$ -	\$ -	\$ -	\$ 1,327.2	\$ -	\$ 12,533.9	\$ (352.2)	\$ 13,508.9
Cost of goods sold	-	-	-	-	(982.2)	-	(8,677.9)	352.2	(9,307.9)
Selling and administrative expenses	(16.9)	-	(0.2)	(0.1)	(352.5)	(0.5)	(2,227.6)	-	(2,597.8)
Operating income (loss)	(16.9)	-	(0.2)	(0.1)	(7.5)	(0.5)	1,628.4	-	1,603.2
Equity earnings (loss) in subsidiaries, net of tax	1,559.7	1,544.0	1,463.4	609.4	808.7	1,521.1	-	(7,506.3)	-
Interest expense	-	-	-	(127.0)	(47.9)	(42.6)	(4.0)	-	(221.5)
Intercompany interest and fees	(69.2)	-	(46.4)	(164.5)	(277.2)	(6.8)	564.1	-	-
Other income/(expense), net	0.9	-	-	-	(13.8)	-	372.5	-	359.6
Earnings (loss) before income taxes	1,474.5	1,544.0	1,416.8	317.8	462.3	1,471.2	2,561.0	(7,506.3)	1,741.3
Benefit (provision) for income taxes	1.7	-	3.0	115.6	117.3	-	(519.1)	-	(281.5)
Earnings (loss) from continuing operations	1,476.2	1,544.0	1,419.8	433.4	579.6	1,471.2	2,041.9	(7,506.3)	1,459.8
Gain (loss) from discontinued operations, net of tax	-	-	-	-	30.4	-	2.5	-	32.9
Net earnings (loss)	1,476.2	1,544.0	1,419.8	433.4	610.0	1,471.2	2,044.4	(7,506.3)	1,492.7
Less: Net earnings attributable to noncontrolling interests	-	-	-	-	-	-	(16.5)	-	(16.5)
Net earnings attributable to Ingersoll-Rand plc	\$ 1,476.2	\$ 1,544.0	\$ 1,419.8	\$ 433.4	\$ 610.0	\$ 1,471.2	\$ 2,027.9	\$ (7,506.3)	\$ 1,476.2
Other comprehensive income (loss), net of tax	(169.6)	(168.5)	(166.8)	(161.1)	(161.5)	5.0	33.3	619.6	(169.6)
Comprehensive income attributable to Ingersoll-Rand plc	\$ 1,306.6	\$ 1,375.5	\$ 1,253.0	\$ 272.3	\$ 448.5	\$ 1,476.2	\$ 2,061.2	\$ (6,886.7)	\$ 1,306.6

Condensed Consolidating Statement of Comprehensive Income

For the year ended December 31, 2015

<i>In millions</i>	Plc	Irish Holdings	Lux International	Global Holding	New Jersey	Lux Finance	Other Subsidiaries	Consolidating Adjustments	Consolidated
Net revenues	\$ —	\$ —	\$ —	\$ —	\$ 1,427.9	\$ —	\$ 12,259.0	\$ (386.2)	\$ 13,300.7
Cost of goods sold	—	—	—	—	(1,031.7)	—	(8,631.9)	386.2	(9,277.4)
Selling and administrative expenses	(18.9)	—	(0.1)	(0.1)	(303.5)	(0.6)	(2,208.4)	—	(2,531.6)
Operating income (loss)	(18.9)	—	(0.1)	(0.1)	92.7	(0.6)	1,418.7	—	1,491.7
Equity earnings (loss) in subsidiaries, net of tax	706.8	710.6	570.6	301.7	693.7	359.2	—	(3,342.6)	—
Interest expense	—	—	—	(127.6)	(48.3)	(42.8)	(4.3)	—	(223.0)
Intercompany interest and fees	(26.7)	(0.2)	(21.4)	(28.6)	(270.6)	(2.4)	349.9	—	—
Other income/(expense), net	1.4	—	0.1	—	(9.1)	—	(13.2)	—	(20.8)
Earnings (loss) before income taxes	662.6	710.4	549.2	145.4	458.4	313.4	1,751.1	(3,342.6)	1,247.9
Benefit (provision) for income taxes	2.0	—	(9.1)	58.0	(125.5)	—	(466.2)	—	(540.8)
Earnings (loss) from continuing operations	664.6	710.4	540.1	203.4	332.9	313.4	1,284.9	(3,342.6)	707.1
Gain (loss) from discontinued operations, net of tax	—	—	—	—	(31.4)	—	7.1	—	(24.3)
Net earnings (loss)	664.6	710.4	540.1	203.4	301.5	313.4	1,292.0	(3,342.6)	682.8
Less: Net earnings attributable to noncontrolling interests	—	—	—	—	—	—	(18.2)	—	(18.2)
Net earnings attributable to Ingersoll-Rand plc	\$ 664.6	\$ 710.4	\$ 540.1	\$ 203.4	\$ 301.5	\$ 313.4	\$ 1,273.8	\$ (3,342.6)	\$ 664.6
Other comprehensive income (loss), net of tax	(406.6)	(406.0)	(229.1)	(91.4)	(91.9)	(88.0)	(411.7)	1,318.1	(406.6)
Comprehensive income attributable to Ingersoll-Rand plc	\$ 258.0	\$ 304.4	\$ 311.0	\$ 112.0	\$ 209.6	\$ 225.4	\$ 862.1	\$ (2,024.5)	\$ 258.0

Condensed Consolidating Balance Sheet

December 31, 2017

<i>In millions</i>	Plc	Irish Holdings	Lux International	Global Holding	New Jersey	Lux Finance	Other Subsidiaries	Consolidating Adjustments	Consolidated			
ASSETS												
Current assets:												
Cash and cash equivalents	\$	–	\$	0.6	\$	359.3	\$	1,189.5	\$	–	\$	1,549.4
Accounts and notes receivable, net		–	–	–	166.5	–	2,310.9	–	2,477.4			
Inventories, net		–	–	–	168.5	–	1,386.9	–	1,555.4			
Other current assets	0.2	–	5.7	112.6	76.2	–	342.2	–	536.9			
Intercompany receivables	1,819.1	9,912.2	2,036.8	–	1,849.9	–	5,014.8	(20,632.8)	–			
Total current assets	1,819.3	9,912.2	2,043.1	112.6	2,620.4	–	10,244.3	(20,632.8)	6,119.1			
Property, plant and equipment, net		–	–	–	310.6	–	1,240.7	–	1,551.3			
Goodwill and other intangible assets, net		–	–	–	436.0	–	9,242.6	–	9,678.6			
Other noncurrent assets		–	–	185.4	471.1	–	550.8	(383.0)	824.3			
Investments in consolidated subsidiaries	7,318.1	1,684.2	2,953.9	10,480.3	10,923.7	1,150.9	–	(34,511.1)	–			
Total assets	\$9,137.4	\$11,596.4	\$4,997.0	\$10,778.3	\$14,761.8	\$1,150.9	\$21,278.4	\$55,526.9	\$18,173.3			
LIABILITIES AND EQUITY												
Current liabilities:												
Accounts payable and accrued expenses	\$	8.5	\$	0.2	\$	572.3	\$	3,105.8	\$	–	\$	3,721.0
Short-term borrowings and current maturities of long-term debt		–	–	–	749.6	350.4	7.0	–	1,107.0			
Intercompany payables	1,988.3	–	9,316.7	5,481.1	1,790.0	523.3	1,533.4	(20,632.8)	–			
Total current liabilities	1,996.8	–	9,316.9	6,258.0	2,712.7	530.2	4,646.2	(20,632.8)	4,828.0			
Long-term debt		–	–	–	1,539.9	326.8	1,089.7	0.6	2,957.0			
Other noncurrent liabilities	0.3	–	–	92.4	1,251.8	–	2,219.9	(383.0)	3,181.4			
Total liabilities	1,997.1	–	9,316.9	7,890.3	4,291.3	1,619.9	6,866.7	(21,015.8)	10,966.4			
Equity:												
Total equity	7,140.3	11,596.4	(4,319.9)	2,888.0	10,470.5	(469.0)	14,411.7	(34,511.1)	7,206.9			
Total liabilities and equity	\$9,137.4	\$11,596.4	\$4,997.0	\$10,778.3	\$14,761.8	\$1,150.9	\$21,278.4	\$55,526.9	\$18,173.3			

Condensed Consolidating Balance Sheet

December 31, 2016

<i>In millions</i>	Plc	Holdings	International	Holding	New Jersey	Finance	Subsidiaries	Adjustments	Consolidated
ASSETS									
Current assets:									
Cash and cash equivalents	\$	\$	\$	\$	\$	\$	\$	\$	\$
Accounts and notes receivable, net	–	–	–	–	171.0	–	2,052.0	–	2,223.0
Inventories, net	–	–	–	–	165.3	–	1,220.5	–	1,385.8
Other current assets	0.2	–	5.3	0.7	69.4	–	189.3	(9.1)	255.8
Intercompany receivable	122.3	–	5.6	271.6	220.5	–	11,747.9	(12,367.9)	5,579.3
Total current assets	122.5	–	10.9	272.3	1,260.8	–	16,289.8	(12,377.0)	5,579.3
Property, plant and equipment, net	–	–	–	–	445.9	–	1,065.1	–	1,511.0
Goodwill and other intangible assets, net	–	–	–	–	414.7	–	9,028.8	–	9,443.5
Other noncurrent assets	0.2	–	–	262.4	676.3	–	580.1	(655.4)	863.6
Investments in consolidated subsidiaries	7,588.1	1,500.4	3,267.1	7,270.2	15,273.4	1,090.4	–	(35,989.6)	–
Intercompany notes receivable	–	12,560.2	–	–	–	–	3,851.8	(16,412.0)	–
Total assets	\$7,710.8	\$14,060.6	\$3,278.0	\$7,804.9	\$18,071.1	\$1,090.4	\$30,815.6	\$(65,434.0)	\$17,397.4
LIABILITIES AND EQUITY									
Current liabilities:									
Accounts payable and accrued expenses	\$	7.7	\$	36.3	\$	525.1	\$	2,662.3	\$
Short-term borrowings and current maturities of long-term debt	–	–	–	–	350.4	–	10.4	–	360.8
Intercompany payable	1,059.3	–	3,400.1	1,068.2	6,285.6	486.9	67.8	(12,367.9)	–
Total current liabilities	1,067.0	–	3,400.3	1,104.5	7,161.1	493.9	2,740.5	(12,377.0)	3,590.3
Long-term debt	–	–	–	2,286.3	334.2	1,088.3	0.6	–	3,709.4
Other noncurrent liabilities	–	–	–	18.2	1,280.8	–	2,735.8	(655.4)	3,379.4
Intercompany notes payable	–	–	6,376.3	1,817.2	2,034.6	–	6,183.9	(16,412.0)	–
Total liabilities	1,067.0	–	9,776.6	5,226.2	10,810.7	1,582.2	11,660.8	(29,444.4)	10,679.1
Equity:									
Total equity	6,643.8	14,060.6	(6,498.6)	2,578.7	7,260.4	(491.8)	19,154.8	(35,989.6)	6,718.3
Total liabilities and equity	\$7,710.8	\$14,060.6	\$3,278.0	\$7,804.9	\$18,071.1	\$1,090.4	\$30,815.6	\$(65,434.0)	\$17,397.4

Condensed Consolidating Statement of Cash Flows

For the year ended December 31, 2017

<i>In millions</i>	Plc	Irish Holdings	Lux International	Global Holding	New Jersey	Lux Finance	Other Subsidiaries	Consolidating Adjustments	Consolidated
CASH FLOWS FROM OPERATING ACTIVITIES:									
Net cash provided by (used in) continuing operating activities	\$ 83.8	\$ -	\$ (42.8)	\$(284.9)	\$ 438.4	\$(48.0)	\$ 1,415.1	\$ -	\$ 1,561.6
Net cash provided by (used in) discontinued operating activities	-	-	-	-	(36.9)	-	(1.2)	-	(38.1)
Net cash provided by (used in) operating activities	83.8	-	(42.8)	(284.9)	401.5	(48.0)	1,413.9	-	1,523.5
CASH FLOWS FROM INVESTING ACTIVITIES:									
Capital expenditures	-	-	-	-	(74.2)	-	(147.1)	-	(221.3)
Acquisition of businesses, net of cash acquired	-	-	-	-	(2.7)	-	(154.9)	-	(157.6)
Proceeds from sale of property, plant and equipment	-	-	-	-	-	-	1.5	-	1.5
Proceeds from sale of joint venture	-	-	-	-	-	-	2.7	-	2.7
Intercompany investing activities, net	285.1	285.2	2,050.2	270.1	4,899.4	11.7	6,788.3	(14,590.0)	-
Net cash provided by (used in) investing activities	285.1	285.2	2,050.2	270.1	4,822.5	11.7	6,490.5	(14,590.0)	(374.7)
CASH FLOWS FROM FINANCING ACTIVITIES:									
Net proceeds (repayments) of debt	-	-	-	-	(7.5)	-	(4.2)	-	(11.7)
Debt issuance costs	-	-	-	(0.2)	-	-	-	-	(0.2)
Dividends paid to ordinary shareholders	(430.1)	-	-	-	-	-	-	-	(430.1)
Dividends paid to noncontrolling interests	-	-	-	-	-	-	(15.8)	-	(15.8)
Acquisition of noncontrolling interest	-	-	-	-	-	-	(6.8)	-	(6.8)
Proceeds from shares issued under incentive plans	76.7	-	-	-	-	-	-	-	76.7
Repurchase of ordinary shares	(1,016.9)	-	-	-	-	-	-	-	(1,016.9)
Other financing activities, net	(25.4)	-	-	-	(1.7)	-	(0.6)	-	(27.7)
Intercompany financing activities, net	1,026.8	(285.2)	(2,006.8)	15.0	(5,490.1)	36.3	(7,886.0)	14,590.0	-
Net cash provided by (used in) financing activities	(368.9)	(285.2)	(2,006.8)	14.8	(5,499.3)	36.3	(7,913.4)	14,590.0	(1,432.5)
Effect of exchange rate changes on cash and cash equivalents	-	-	-	-	-	-	118.4	-	118.4
Net increase (decrease) in cash and cash equivalents	-	-	0.6	-	(275.3)	-	109.4	-	(165.3)
Cash and cash equivalents - beginning of period	-	-	-	-	634.6	-	1,080.1	-	1,714.7
Cash and cash equivalents - end of period	\$ -	\$ -	\$ 0.6	\$ -	\$ 359.3	\$ -	\$ 1,189.5	\$ -	\$ 1,549.4

Condensed Consolidating Statement of Cash Flows

For the year ended December 31, 2016

<i>In millions</i>	Plc	Irish Holdings	Lux International	Global Holding	New Jersey	Lux Finance	Other Subsidiaries	Consolidating Adjustments	Consolidated
CASH FLOWS FROM OPERATING ACTIVITIES:									
Net cash provided by (used in) continuing operating activities	\$ (80.4)	\$ –	\$ (42.0)	\$ (276.6)	\$ 823.4	\$ (47.3)	\$ 1,055.9	\$ –	\$ 1,433.0
Net cash provided by (used in) discontinued operating activities	–	–	–	–	86.4	–	2.5	–	88.9
Net cash provided by (used in) operating activities	(80.4)	–	(42.0)	(276.6)	909.8	(47.3)	1,058.4	–	1,521.9
CASH FLOWS FROM INVESTING ACTIVITIES:									
Capital expenditures	–	–	–	–	(73.7)	–	(109.0)	–	(182.7)
Acquisition of businesses, net of cash acquired	–	–	–	–	(9.2)	–	–	–	(9.2)
Proceeds from sale of property, plant and equipment	–	–	–	–	–	–	9.5	–	9.5
Proceeds from sale of Hussmann equity investment	–	–	–	–	–	–	422.5	–	422.5
Intercompany investing activities, net	(90.1)	(19,465.7)	6,181.4	(172.9)	65.8	336.1	(2,226.8)	15,372.2	–
Net cash provided by (used in) investing activities	(90.1)	(19,465.7)	6,181.4	(172.9)	(17.1)	336.1	(1,903.8)	15,372.2	240.1
CASH FLOWS FROM FINANCING ACTIVITIES:									
Net proceeds (repayments) of debt	–	–	–	–	(7.7)	(143.0)	–	–	(150.7)
Debt issuance costs	–	–	–	(2.1)	–	–	–	–	(2.1)
Dividends paid to ordinary shareholders	(348.6)	–	–	–	–	–	–	–	(348.6)
Dividends paid to noncontrolling interests	–	–	–	–	–	–	(14.1)	–	(14.1)
Proceeds from shares issued under incentive plans	62.9	–	–	–	–	–	–	–	62.9
Repurchase of ordinary shares	(250.1)	–	–	–	–	–	–	–	(250.1)
Other financing activities, net	(24.2)	–	–	–	–	–	–	–	(24.2)
Intercompany financing activities, net	730.5	19,465.7	(6,139.4)	440.2	(250.4)	(145.9)	1,271.5	(15,372.2)	–
Net cash provided by (used in) financing activities	170.5	19,465.7	(6,139.4)	438.1	(258.1)	(288.9)	1,257.4	(15,372.2)	(726.9)
Effect of exchange rate changes on cash and cash equivalents	–	–	–	–	–	–	(57.2)	–	(57.2)
Net increase (decrease) in cash and cash equivalents	–	–	–	(11.4)	634.6	(0.1)	354.8	–	977.9
Cash and cash equivalents - beginning of period	–	–	–	11.4	–	0.1	725.3	–	736.8
Cash and cash equivalents - end of period	\$ –	\$ –	\$ –	\$ –	\$ 634.6	\$ –	\$ 1,080.1	\$ –	\$ 1,714.7

Condensed Consolidating Statement of Cash Flows

For the year ended December 31, 2015

<i>In millions</i>	Plc	Irish Holdings	Lux International	Global Holding	New Jersey	Lux Finance	Other Subsidiaries	Consolidating Adjustments	Consolidated
CASH FLOWS FROM OPERATING ACTIVITIES:									
Net cash provided by (used in) continuing operating activities	\$ (22.9)	\$ (1.2)	\$ (33.6)	\$ (122.9)	\$ (294.3)	\$ (45.8)	\$ 1,444.2	\$ –	\$ 923.5
Net cash provided by (used in) discontinued operating activities	–	–	–	–	(30.6)	–	(4.5)	–	(35.1)
Net cash provided by (used in) operating activities	(22.9)	(1.2)	(33.6)	(122.9)	(324.9)	(45.8)	1,439.7	–	888.4
CASH FLOWS FROM INVESTING ACTIVITIES:									
Capital expenditures	–	–	–	–	(122.9)	–	(126.7)	–	(249.6)
Acquisition of businesses, net of cash acquired	–	–	–	–	(443.5)	–	(518.3)	–	(961.8)
Proceeds from sale of property, plant and equipment	–	–	–	–	3.0	–	15.5	–	18.5
Intercompany investing activities, net	–	3.5	1,963.3	339.0	125.4	(228.0)	(1,012.6)	(1,190.6)	–
Net cash provided by (used in) investing activities	–	3.5	1,963.3	339.0	(438.0)	(228.0)	(1,642.1)	(1,190.6)	(1,192.9)
CASH FLOWS FROM FINANCING ACTIVITIES:									
Net proceeds (repayments) of debt	–	–	–	(0.1)	(7.6)	43.0	(28.9)	–	6.4
Dividends paid to ordinary shareholders	(303.3)	–	–	–	–	–	–	–	(303.3)
Dividends paid to noncontrolling interests	–	–	–	–	–	–	(9.3)	–	(9.3)
Proceeds from shares issued under incentive plans	61.3	–	–	–	–	–	–	–	61.3
Repurchase of ordinary shares	(250.1)	–	–	–	–	–	–	–	(250.1)
Other financing activities, net	(32.6)	–	–	–	–	–	–	–	(32.6)
Intercompany financing activities, net	547.6	(2.3)	(1,930.8)	(204.6)	345.1	230.9	(176.5)	1,190.6	–
Net cash provided by (used in) financing activities	22.9	(2.3)	(1,930.8)	(204.7)	337.5	273.9	(214.7)	1,190.6	(527.6)
Effect of exchange rate changes on cash and cash equivalents	–	–	–	–	–	–	(136.3)	–	(136.3)
Net increase (decrease) in cash and cash equivalents	–	–	(1.1)	11.4	(425.4)	0.1	(553.4)	–	(968.4)
Cash and cash equivalents - beginning of period	–	–	1.1	–	425.4	–	1,278.7	–	1,705.2
Cash and cash equivalents - end of period	\$ –	\$ –	\$ –	\$ 11.4	\$ –	\$ 0.1	\$ 725.3	\$ –	\$ 736.8

NOTE 21. SUBSEQUENT EVENTS

On January 17, 2018, the Company entered into an agreement with Mitsubishi Electric Corporation (Mitsubishi) to establish a joint venture, pending regulatory review and approval, and customary closing conditions. The joint venture will focus on marketing, selling and supporting variable refrigerant flow (VRF) and ductless heating and air conditioning systems through Trane, American Standard and Mitsubishi channels in the U.S. and select Latin American countries. The Company and Mitsubishi will have equal ownership in the joint venture. It is expected to be operational in the first half of 2018.

On January 18, 2018, the Company acquired 100% of the outstanding stock of ICS Group Holdings Limited (ICS Cool Energy) for approximately £142 million, net of cash acquired. The acquired business specializes in the temporary rental of energy efficient chillers for commercial and industrial buildings across Europe. It also sells, permanently installs and services high performance temperature control systems for all types of industrial processes. The acquisition was funded through cash on hand. ICS Cool Energy is headquartered in Southampton, England and has an extensive footprint in the United Kingdom, France, Germany, The Netherlands and Switzerland. The results of ICS Cool Energy will be included in the Company's consolidated financial statements as of the date of the acquisition and reported within our Climate segment.

SCHEDULE II

INGERSOLL-RAND PLC
VALUATION AND QUALIFYING ACCOUNTS
FOR THE YEARS ENDED DECEMBER 31, 2017, 2016 AND 2015
(Amounts in millions)

Allowances for Doubtful Accounts:

Balance December 31, 2014	\$34.1
Additions charged to costs and expenses	1.4
Deductions ^(a)	(5.3)
Business acquisitions and divestitures, net	0.3
Currency translation	(2.2)
Balance December 31, 2015	28.3
Additions charged to costs and expenses	7.9
Deductions ^(a)	(9.5)
Business acquisitions and divestitures, net	–
Currency translation	(0.7)
Balance December 31, 2016	26.0
Additions charged to costs and expenses	9.7
Deductions ^(a)	(9.7)
Business acquisitions and divestitures, net	–
Currency translation	1.3
Other	(0.4)
Balance December 31, 2017	\$26.9

(a) "Deductions" include accounts and advances written off, less recoveries.

CORPORATE DATA

Annual General Meeting

The company's 2017 Annual Report on Form 10-K as filed with the United States Securities and Exchange Commission, and other company information, is available through Ingersoll Rand's website, www.ingersollrand.com. Securities analysts, portfolio managers and representatives of institutional investors seeking information about the company should contact:

Shane Lawrence
Director, Investor Relations
704-655-5651

Annual General Meeting

June 7, 2018, 2:30 p.m.
Adare Manor Hotel
Adare, Co. Limerick
Ireland



This integrated annual report and the 2017 online sustainability supplement at www.ingersollrand.com/sustainabilitysupplement is produced in accordance with the G4 framework established by the Global Reporting Initiative (GRI) and reports on our financial and non-financial performance for the 2017 fiscal year. For more information on GRI, please visit www.globalreporting.org. To ensure the quality of our environmental, health and safety data, we assure selected data with a third-party provider. The results of this assurance can be found in our online sustainability supplement at www.ingersollrand.com/sustainabilitysupplement. At the time of publication, assurance of our environmental and safety data from operations was not yet complete and the data presented in this document is subject to change. This annual report, including the letter to shareholders, 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 operational excellence initiatives, our future financial performance, our growth, market opportunities 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, 2017, and any further disclosures we make on related subjects in materials we file with or furnish to the SEC. We do not undertake to update any forward-looking statements.

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VISION

A world of sustainable progress and enduring results.

VALUES

Integrity

We act with the highest ethical and legal standards in everything we do.

Respect

We respect and value the worth of all people, cultures, viewpoints and backgrounds.

Teamwork

We work together and share resources to provide greater value to our customers, employees, business partners and shareholders.

Innovation

We use our diverse skills, talents and ideas to develop customer-driven, innovative, and imaginative solutions.

Courage

We speak up for what we believe is right and take measured risks to create progress.



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 \$14 billion global business committed to a world of sustainable progress and enduring results.



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