



GRI Content Index FY2017 and Sustainability Reporting Supplement

This 2018 GRI report by Johnson Controls of FY2017 data has been prepared in accordance with the GRI Standards: Comprehensive option and is our complete sustainability report. For a detailed explanation of the GRI standards, visit the [GRI website](#).

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GRI Content Index

GRI CONTENT INDEX FY2017

GENERAL STANDARD DISCLOSURES

Disclosure Number	Description	Response	Omission
Organizational Profile			
102-1	Name of the organization	Johnson Controls International plc One Albert Quay Cork, Ireland www.johnsoncontrols.com	
102-2	Activities, brands, products, and services	Building Technologies and Solutions (Buildings) Power Solutions (Power) 2017 Form 10-K , Business, Pages 3-5	
102-3	Location of headquarters	2017 Form 10-K , Header Location of Headquarters	
102-4	Location of operations	2017 Form 10-K Properties , Pages 22-23 Location of Headquarters , Page 1 JCI Sustainability Supplement: Location of operations	
102-5	Ownership and legal form	Johnson Controls plc is a public limited company governed by a board of directors. Articles of Association	
102-6	Markets served	2017 Form 10-K , Business, Pages 3-5, and Properties, Pages 22-23 Global Site Directory , Page 1 Global Location Finder , Page 1	
102-7	Scale of the organization	2017 Form 10-K , Selected Financial Data, Pages 31-32 2017 Form 10-K , Business, Pages 3-7	
102-8	Information on employees and other workers	JCI Sustainability Supplement: 102-8 Our Employees	

Disclosure Number	Description	Response	Omission
*Organizational Profile			
102-9	Supply chain	JCI Sustainability Supplement: Supplier Sustainability Supplier Portal Ethics Expectations of Our Suppliers Johnson Controls Supplier Sustainability Rating Survey	
102-10	Significant changes to the organization and its supply chain	2017 Form 10-K , Acquisitions and Divestitures, Pages 77-78 2017 Form 10-K , Business, Pages 3-7	
102-11	Precautionary Principle or approach	Our Sustainability Reporting and Policies Risk Management Process JCI Sustainability Supplement: Sustainability Approach JCI Sustainability Supplement: Risk Management Health and Safety - Overview Supplier Portal Human Rights & Sustainability Policy Conflict Minerals Policy Code of Ethics	
102-12	External initiatives	JCI Sustainability Supplement: Sustainability Policies and Commitments Voluntary Corporate Commitments	
102-13	Membership of associations	JCI Sustainability Supplement: Sustainability Policies and Commitments 2017 Sustainability Memberships	
Strategy			
102-14	Statement from senior decision-maker	2017 Business and Sustainability Report , Message to Stakeholders by George Oliver, Page 5 JCI Sustainability Supplement: Letter from Grady Crosby	
102-15	Key impacts, risks, and opportunities	2017 Form 10-K , Risk Factors, Page 7 2017 Business and Sustainability Report JCI Sustainability Supplement: Sustainability Approach JCI Sustainability Supplement: Governance Structure Human Rights & Sustainability Policy Code of Ethics 2017 Sustainability Materiality Assessment	

Disclosure Number	Description	Response	Omission
Ethics and Integrity			
102-16	Values, principles, standards, and norms of behavior	JCI Sustainability Supplement: Ethics and Integrity Our Values Human Rights & Sustainability Policy Energy & Climate Position Code of Ethics	
102-17	Mechanisms for advice and concerns about ethics	JCI Sustainability Supplement: Ethics and Integrity Code of Ethics Integrity Helpline	
Governance			
102-18	Governance structure	JCI Sustainability Supplement: Governance Structure 2018 Annual Report , Page 27 Our Leaders	
102-19	Delegating authority	JCI Sustainability Supplement: Governance Structure	
102-20	Executive-level responsibility for economic, environmental, and social topics	JCI Sustainability Supplement: Governance Structure Form10-K , Executive Officers, Page 27 Our Leaders	
102-21	Consulting stakeholders on economic, environmental, and social topics	JCI Sustainability Supplement: Stakeholder Engagement 2018 Annual Report , Pages 30, 34-36 2017 Sustainability Materiality Assessment	
102-22	Composition of the highest governance body and its committees	JCI Sustainability Supplement: Board of Directors Committees 2018 Annual Report , Pages 1–10, 31-32 Johnson Controls Board of Directors	
102-23	Chair of the highest governance body	Lead Director Charter Corporate Governance website , Pages 39-40 2018 Annual Report , Pages 27-28	
102-24	Nominating and selecting the highest governance body	Corporate Governance website 2018 Annual Report , Pages 34-36, 39	

Disclosure Number	Description	Response	Omission
*Governance			
102-25	Conflicts of interest	JCI Sustainability Supplement: Conflicts of Interest Corporate Governance website 2018 Annual Report , Pages 33-34	
102-26	Role of highest governance body in setting purpose, values, and strategy	JCI Sustainability Supplement: Governance Structure Corporate Governance website 2018 Annual Report , Page 25	
102-27	Collective knowledge of highest governance body	JCI Sustainability Supplement: Governance Structure 2018 Annual Report , Page 3-10	
102-28	Evaluating the highest governance body's performance	Corporate Governance website 2018 Annual Report , Pages 30-31	
102-29	Identifying and managing economic, environmental, and social impacts	Sustainability homepage for Johnson Controls JCI Sustainability Supplement: Governance Structure JCI Sustainability Supplement: Risk Management Risk Management Process 2018 Annual Report , Pages 25-36 Human Rights & Sustainability Policy Code of Ethics Corporate Governance website 2017 UN Global Compact COP	
102-30	Effectiveness of risk management processes	JCI Sustainability Supplement: Risk Management JCI Sustainability Supplement: Global Sustainability Council 2018 Annual Report , Page 28	
102-31	Review of economic, environmental, and social topics	JCI Sustainability Supplement: Governance Structure JCI Sustainability Supplement: Risk Management 2018 Annual Report , Pages 6, 25 (Vision and Values), 39, and 56	
102-32	Highest governance body's role in sustainability reporting	JCI Sustainability Supplement: Global Sustainability Council	
102-33	Communicating critical concerns	JCI Sustainability Supplement: Ethics and Integrity Code of Ethics Integrity Helpline Corporate Governance website	

Disclosure Number	Description	Response	Omission
*Governance			
102-34	Nature and total number of critical concerns	JCI Sustainability Supplement: Ethics and Integrity Code of Ethics Integrity Helpline	Information on the nature and total number of critical concerns communicated to executive leadership and the board are highly confidential and are protected by attorney client privilege.
102-35	Remuneration policies	2018 Annual Report , Pages 55-64	
102-36	Process for determining remuneration	2018 Annual Report , Pages 53-54	
102-37	Stakeholders' involvement in remuneration	2018 Annual Report , Page 45	
102-38	Annual total compensation ratio	JCI Sustainability Supplement: 102-38 Our Employees	
102-39	Percentage increase in annual total compensation ratio	JCI Sustainability Supplement: 102-39 Our Employees	
Stakeholder Engagement			
102-40	List of stakeholder groups	JCI Sustainability Supplement: 102-40 Stakeholder Engagement 2017 Sustainability Memberships 2017 Sustainability Materiality Assessment	
102-41	Collective bargaining agreements	JCI Sustainability Supplement: 102-41 Human Rights EEO Employer Code of Ethics 2017 Buildings Collective Bargaining 2017 Power Solutions Collective Bargaining	
102-42	Identifying and selecting stakeholders	JCI Sustainability Supplement: Stakeholder Engagement 2017 Sustainability Materiality Assessment	

Disclosure Number	Description	Response	Omission
*Stakeholder Engagement			
102-43	Approach to stakeholder engagement	JCI Sustainability Supplement: 102-43 Stakeholder Engagement 2017 Sustainability Materiality Assessment	
102-44	Key topics and concerns raised	JCI Sustainability Supplement: Stakeholder Engagement 2017 Sustainability Materiality Assessment	
Reporting Practice			
102-45	Entities included in the consolidated financial statements	2017 Form 10-K , Entities Included in the Consolidated Financial Statement, Pages 4-5 Corporate Governance website	
102-46	Defining report content and topic boundaries	JCI Sustainability Supplement: Stakeholder Engagement JCI Sustainability Supplement: Sustainability Approach 2017 Sustainability Materiality Assessment	
102-47	List of material topics	JCI Sustainability Supplement: Stakeholder Engagement 2017 Sustainability Materiality Assessment	
102-48	Restatements of information	2017 Form 10-K JCI Sustainability Supplement: 102-48 About Our Reporting	
102-49	Changes in reporting	There are no significant modifications regarding the scope, boundary or measurement methods beyond any updates that are specifically discussed in the relevant sections contained within this report.	
102-50	Reporting period	This GRI report is for Johnson Controls Fiscal Year 2017: October 1, 2016 – September 30, 2017 Form 10-K , Header, Page 1	
102-51	Date of most recent report	Our most recent report was published in April 2017. FY 2016 GRI Report Sustainability Reporting, Policies & Commitments	

Disclosure Number	Description	Response	Omission
*Reporting Practice			
102-52	Reporting cycle	Reporting cycle is on an annual basis for the previous fiscal year. Data will be compiled for the fiscal year most recently finished and posted publicly in early April.	
102-53	Contact point for questions regarding the report	Jenna Kunde – Director, Sustainability Programs Johnson Controls, 5757 N. Green Bay Avenue, Glendale, WI 53209 Phone: 414-524-2501 Corp-Sustainability@jci.com	
102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Comprehensive option.	
102-55	GRI content index	Our full GRI report may be viewed or printed in pdf from Johnson Controls' website, with links provided to supporting documents, at http://www.johnsoncontrols.com/corporate-sustainability/reporting-and-policies	
102-56	External assurance	JCI Sustainability Supplement: 102-56 External Assurance of Data 2017 Verification Statement for JCI-GHG Emissions 2017 Verification Statement for JCI-Waste 2017 Verification Statement for JCI-Water 2017 Form 10-K , Page 59	
Global Management Approach			
103-1 103-2 103-3	Explanation of the Material Topic and its Boundary The Management Approach and its Components Evaluation of the Management Approach	JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary JCI Sustainability Supplement: Location of Operations JCI Sustainability Supplement: Ethics and Integrity 2017 Sustainability Materiality Assessment 2018 Annual Report 2017 Business and Sustainability Report Our Sustainability Reporting and Policies	

MATERIAL TOPICS

ECONOMIC

Disclosure Number	Description	Response	Omission
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Economic Performance

GRI 103: MANAGEMENT APPROACH 2016

<p>103-1</p> <p>103-2</p> <p>103-3</p>	<p>Explanation of the material topic and its Boundary</p> <p>The management approach and its components</p> <p>Evaluation of the management approach</p>	<p>2017 Sustainability Materiality Assessment</p> <p>JCI Sustainability Supplement: Location of Operations</p> <p>JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary</p> <p>Corporate Governance website</p> <p>Sustainability Governance</p> <p>2017 Business and Sustainability Report</p> <p>Code of Ethics</p>	
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GRI 201: ECONOMIC PERFORMANCE 2016

201-1	Direct economic value generated and distributed	JCI Sustainability Supplement: 201-1 Economic 2017 Form 10-K , Pages 60, 63, and 117	
201-2	Financial implications and other risks and opportunities due to climate change	JCI Sustainability Supplement: 201-2 Risks and Opportunities due to Climate Change 2017 Awards 2017 Form 10-K , Climate Change Risk Factors, Page 11	
201-3	Defined benefit plan obligations and other retirement plans	JCI Sustainability Supplement: 201-3 Our Employees - Benefits Tomorrow Needs You	
201-4	Financial assistance received from government	We receive grants, tax incentives and low or no interest loans from many countries and subdivisions of countries including China, Canada, France, the United Kingdom, and the United States. Financially material assistance from governments is typically reported in our annual 10-K filing. No government is a material shareholder in the company.	We do not currently track centrally all of the types of potential government assistance listed in this indicator.

Disclosure Number	Description	Response	Omission
Market Presence			
GRI 103: MANAGEMENT APPROACH 2016			
103-1 103-2 103-3	Explanation of the material topic and its Boundary The management approach and its components Evaluation of the management approach	2017 Form 10-K , Products/Systems and Services, Pages 4-5 Corporate Governance website Code of Ethics Sustainability Governance 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Location of Operations JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary Tomorrow Needs You Engaging Employees	
GRI 202: MARKET PRESENCE 2016			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	JCI Sustainability Supplement: 202-1 Our Employees - Compensation	
202-2	Proportion of senior management hired from the local community	Talent Acquisition Process Flow US & CN Talent Acquisition Process Flow - Mexico JCI Sustainability Supplement: Community Engagement	
Indirect Economic Impacts			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	Corporate Governance website Sustainability Governance 2017 Sustainability Materiality Assessment 2017 Form 10-K , Properties, Page 22 Location of Headquarters JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary	
103-2	The management approach and its components	JCI Sustainability Supplement: Indirect Economic Impacts Corporate Social Responsibility Program Overviews 2017 Business and Sustainability Report Code of Ethics Supplier Diversity	

Disclosure Number	Description	Response	Omission
*Indirect Economic Impacts			
103-3	Evaluation of the management approach	Supplier Sustainability Rating 2017 Awards Johnson Controls among Top 100 Global Innovators	
GRI 203: INDIRECT ECONOMIC IMPACTS 2016			
203-1	Infrastructure investments and services supported	JCI Sustainability Supplement: Indirect Economic Impacts JCI Sustainability Supplement: Community Engagement Johnson Controls demonstrates commitment to giving back to its communities Corporate Social Responsibility Program Overviews Applied Research and Development 2017 Business and Sustainability Report Blue Sky 2017 Fact Sheet ELP 2017 Fact Sheet	
203-2	Significant indirect economic impacts	JCI Sustainability Supplement: Indirect Economic Impacts JCI Sustainability Supplement: Community Engagement Corporate Social Responsibility Program Overviews 2017 Business and Sustainability Report Blue Sky 2017 Fact Sheet ELP 2017 Fact Sheet	

Disclosure Number	Description	Response	Omission
Procurement Practices			
GRI 103: MANAGEMENT APPROACH 2016			
103-1 103-2 103-3	Explanation of the material topic and its Boundary The management approach and its components Evaluation of the management approach	JCI Sustainability Supplement: Supplier Sustainability Supplier Sustainability Rating Survey Letter Supplier Sustainability Rating survey - Johnson Controls Supply Chain: Supplier Sustainability Expectations Supplier Portal 2017 Sustainability Materiality Assessment Conflict Minerals Policy Code of Ethics Supplier Diversity Slavery and Human Trafficking Policy JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary	
GRI 204: PROCUREMENT PRACTICES 2016			
204-1	Proportion of spending on local suppliers	JCI Sustainability Supplement: 204-1 Local Suppliers	
Anti-Corruption			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	JCI Sustainability Supplement: Explanation of the material topic and its boundary Code of Ethics 2017 Sustainability Materiality Assessment	
103-2	The management approach and its components	JCI Sustainability Supplement: Risk Management Risk Management Process JCI Sustainability Supplement: Ethics and Integrity JCI Sustainability Supplement: Human Rights 2017 UN Global Compact COP Human Rights & Sustainability Policy	
103-3	Evaluation of the management approach	Integrity Helpline	

Disclosure Number	Description	Response	Omission
*Anti-Corruption			
GRI 205: ANTI-CORRUPTION 2016			
205-1	Operations assessed for risks related to corruption	JCI Sustainability Supplement: Risk Assessment Risk Management Process Human Rights & Sustainability Policy Code of Ethics	
205-2	Communication and training about anti-corruption policies and procedures	JCI Sustainability Supplement: 205-2 Communication on anti-corruption policies and procedures	
205-3	Confirmed incidents of corruption and actions taken	JCI Sustainability Supplement: Ethics and Integrity JCI Sustainability Supplement: 205-3 Anti-Corruption Supplier Portal Code of Ethics Supplier Sustainability Rating Johnson Controls named one of the 2018 World's Most Ethical Companies	
Anti-Competitive Behavior			
GRI 103: MANAGEMENT APPROACH 2016			
103-1 103-2 103-3	Explanation of the material topic and its Boundary The management approach and its components Evaluation of the management approach	JCI Sustainability Supplement: Ethics and Integrity JCI Sustainability Supplement: Human Rights JCI Sustainability Supplement: Governance Structure 2017 Sustainability Materiality Assessment 2017 UN Global Compact COP Code of Ethics Human Rights & Sustainability Policy Integrity Helpline JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary	
GRI 206: ANTI-COMPETITIVE BEHAVIOR 2016			
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	2017 Form 10-K , Legal Proceedings, Page 23	

MATERIAL TOPICS

ENVIRONMENTAL

Disclosure Number	Description	Response	Omission
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Materials

GRI 103: MANAGEMENT APPROACH 2016

103-1	Explanation of the material topic and its Boundary	JCI Sustainability Supplement: Materials	
103-2	The management approach and its components	Power Solutions Recycling Fact Sheet	
103-3	Evaluation of the management approach	2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary	

GRI 301: MATERIALS 2016

301-1	Materials used by weight or volume	JCI Sustainability Supplement: 301-1 Materials Power Solutions Recycling Fact Sheet	
301-2	Recycled input materials used	JCI Sustainability Supplement: 301-2 Materials Empire State Building Case Study Power Solutions Recycling Fact Sheet	
301-3	Reclaimed products and their packaging materials	JCI Sustainability Supplement: 301-3 Materials Power Solutions Recycling Fact Sheet Code of Ethics Human Rights & Sustainability Policy	

Disclosure Number	Description	Response	Omission
Energy			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	2017 Awards 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary JCI Sustainability Supplement: Energy PowerFrame Overview Energy and Efficiency Services Lithium-Ion Battery Overview Sustainability Reporting, Policies & Commitments	
103-2	The management approach and its components	JCI Sustainability Supplement: Energy Advanced Energy Storage Technology 2017 Business and Sustainability Report 2017 Awards Johnson Controls among Top 100 Global Innovators	
103-3	Evaluation of the management approach	JCI Sustainability Supplement: Energy 2017 Awards Corporate Responsibility Magazine ranks Johnson Controls 16th in Best Corporate Citizens List. 2017 Awards Johnson Controls recognized as world leader in addressing climate change Johnson Controls named to 2018 World's Most Ethical Companies 2017 Awards DOE Better Plants Goal Achievement Award DOE Better Buildings Better Plants Challenge	
GRI 302: ENERGY			
302-1	Energy consumption within the organization	JCI Sustainability Supplement: 302-1 Energy 2017 Verification Statement for JCI-GHG Emissions	
302-2	Energy consumption outside of the organization	JCI Sustainability Supplement: 302-2 Energy 2017 Verification Statement for JCI-GHG Emissions	
302-3	Energy intensity	JCI Sustainability Supplement: 302-3 Energy 2017 Verification Statement for JCI-GHG Emissions 2017 Business and Sustainability Report	

Disclosure Number	Description	Response	Omission
*Energy			
302-4	Reduction of energy consumption	JCI Sustainability Supplement: 302-4 Energy DOE Better Buildings Better Plants Challenge 2017 Awards Johnson Controls Manufacturing System recognized	
302-5	Reductions in energy requirements of products and services	JCI Sustainability Supplement: 302-5 Energy BE Energy Performance Contracting Batteries - Battery Recycling Buildings - HVAC Equipment Lithium-Ion Battery Overview	
Water			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary Energy and Efficiency Services - Water JCI Sustainability Supplement: Water	
103-2	The management approach and its components	JCI Sustainability Supplement: Water EPRI Technology Abstract on Thermosyphon Cooling Case Study - Glendale Corporate Headquarters	
103-3	Evaluation of the management approach	JCI Sustainability Supplement: Water 2017 Business and Sustainability Report BlueStream Hybrid Cooling System	
GRI 303: WATER 2016			
303-1	Water withdrawal by source	JCI Sustainability Supplement: 303-1 Water 2017 Verification Statement for JCI- Water 2017 Business and Sustainability Report	
303-2	Water sources significantly affected by withdrawal of water	JCI Sustainability Supplement: 303-2 Water 2017 Verification Statement for JCI-Water Human Rights & Sustainability Policy	Unavailable

Disclosure Number	Description	Response	Omission
*Water			
303-3	Water recycled and reused	JCI Sustainability Supplement: 303-3 Water 2017 Verification Statement for JCI-Water Case Study - Glendale Corporate Headquarters Energy and Efficiency Services - Water	Unavailable
Biodiversity			
GRI 103: MANAGEMENT APPROACH 2016			
103-1 103-2 103-3	Explanation of the material topic and its Boundary The management approach and its components Evaluation of the management approach	JCI Sustainability Supplement: Biodiversity Human Rights & Sustainability Policy Code of Ethics 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary	
GRI 304: BIODIVERSITY 2016			
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	JCI Sustainability Supplement: 304-1 Biodiversity Code of Ethics 2017 UN Global Compact COP	Unavailable
304-2	Significant impacts of activities, products, and services on biodiversity	JCI Sustainability Supplement: 304-2 Biodiversity	Unavailable
304-3	Habitats protected or restored	JCI Sustainability Supplement: 304-3 Biodiversity	Unavailable
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	JCI Sustainability Supplement: 304-4 Biodiversity	Unavailable

Disclosure Number	Description	Response	Omission
Emissions			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary JCI Sustainability Supplement: Emissions DOE Better Buildings Better Plants Challenge	
103-2	The management approach and its components	JCI Sustainability Supplement: Emissions 2017 Business and Sustainability Report Sustainability homepage for Johnson Controls	
103-3	Evaluation of the management approach	JCI Sustainability Supplement: Emissions 2017 Awards 2017 Awards DOE Better Plants Goal Achievement Award Johnson Controls named to 2018 World's Most Ethical Companies 2017 Awards Johnson Controls among Top 100 Global Innovators 2017 Awards Johnson Controls recognized as world leader in addressing climate change 2017 Awards Corporate Responsibility Magazine ranks Johnson Controls 16th in Best Corporate Citizens list	
GRI 305: EMISSIONS 2016			
305-1	Direct (Scope 1) GHG emissions	JCI Sustainability Supplement: 305-1 Emissions 2017 Verification Statement for JCI-GHG Emissions 2015 Awards CDP Leadership Index 2016 Awards CDP Climate A List 2017 Awards Johnson Controls recognized as world leader in addressing climate change 2018 Awards Dow Jones Sustainability Index	
305-2	Energy indirect (Scope 2) GHG emissions	JCI Sustainability Supplement: 305-2 Emissions 2017 Verification Statement for JCI-GHG Emissions 2015 Awards CDP Leadership Index 2016 Awards CDP Climate A List 2018 Awards Dow Jones Sustainability Index 2017 Awards Johnson Controls recognized as world leader in addressing climate change	

Disclosure Number	Description	Response	Omission
*Emissions			
305-3	Other indirect (Scope 3) GHG emissions	JCI Sustainability Supplement: 305-3 Emissions 2017 Verification Statement for JCI-GHG Emissions BE Energy Performance Contracting Supplier Sustainability Rating 2016 Awards CDP Climate A List 2018 Awards Dow Jones Sustainability Index 2017 Awards Johnson Controls recognized as world leader in addressing climate change	
305-4	GHG emissions intensity	JCI Sustainability Supplement: 305-4 Emissions 2017 Verification Statement for JCI-GHG Emissions 2015 Awards CDP Leadership Index 2016 Awards CDP Climate A List 2018 Awards Dow Jones Sustainability Index 2017 Awards Johnson Controls recognized as world leader in addressing climate change 2017 Business and Sustainability Report	
305-5	Reduction of GHG emissions	JCI Sustainability Supplement: 305-5 Emissions DOE Better Buildings Better Plants Challenge Case Study - Glendale Corporate Headquarters Johnson Controls Advances Environmental Sustainability with low GWP refrigerants. 2016 Awards CDP Climate A List 2018 Awards Dow Jones Sustainability Index 2017 Awards Johnson Controls recognized as world leader in addressing climate change	
305-6	Emissions of ozone-depleting substances (ODS)	JCI Sustainability Supplement: 305-6 Emissions Johnson Controls Advances Environmental Sustainability with chiller platforms compatible with low GWP refrigerants Energy & Climate Position Johnson Controls Refrigerant Guiding Principles Johnson Controls joins White House discussion on reducing use of high global warming potential refrigerants Human Rights & Sustainability Policy	

Disclosure Number	Description	Response	Omission
*Emissions			
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	JCI Sustainability Supplement: 305-7 Emissions 2017 Verification Statement for JCI-GHG Emissions 2017 Stack & Fugitive Emissions	
Effluents and Waste			
GRI 103: MANAGEMENT APPROACH 2016			
103-1 103-2 103-3	Explanation of the material topic and its Boundary The management approach and its components Evaluation of the management approach	JCI Sustainability Supplement: Effluents and Waste 2017 Business and Sustainability Report 2017 Sustainability Materiality Assessment Batteries - Battery Recycling Circular Economy JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary	
GRI 306: EFFLUENTS AND WASTE 2016			
306-1	Water discharge by quality and destination	JCI Sustainability Supplement: 306-1 Effluents and Waste 2017 Verification Statement for JCI-Water 2017 NOVs, Permit Exceedances and Releases Code of Ethics Energy and Efficiency Services - Water Human Rights & Sustainability Policy	
306-2	Waste by type and disposal method	JCI Sustainability Supplement: 306-2 Effluents and Waste 2017 Verification Statement for JCI- Waste Code of Ethics Human Rights & Sustainability Policy 2017 Business and Sustainability Report	

Disclosure Number	Description	Response	Omission
*Effluents and Waste			
306-3	Significant spills	JCI Sustainability Supplement: 306-3 Effluents and Waste 2017 NOVs, Permit Exceedances and Releases 2016 NOVs, Permit Exceedances and Releases 2015 NOVs, Permit Exceedances and Releases 2014 NOVs, Permit Exceedances and Releases 2017 Form 10-K , Environmental Matters, Page 23	
306-4	Transport of hazardous waste	JCI Sustainability Supplement: 306-4 Effluents and Waste 2017 Verification Statement for JCI-Waste	
306-5	Water bodies affected by water discharges and/or runoff	JCI Sustainability Supplement: 306-5 Effluents and Waste	Unavailable
Environmental Compliance			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	Code of Ethics 2017 Sustainability Materiality Assessment 2017 Form 10-K , Environmental, Health and Safety Matters, Page 6; Environmental, Health and Safety and Other Matters, Page 56; Environmental Matters, Page 134; Environmental Matters, Page 23, and Risk Factors, Page 7 JCI Sustainability Supplement: Environmental Compliance	
103-2	The management approach and its components	JCI Sustainability Supplement: Environmental Compliance	
103-3	Evaluation of the management approach	JCI Sustainability Supplement: Environmental Compliance	

Disclosure Number	Description	Response	Omission
*Environmental Compliance			
GRI 307: ENVIRONMENTAL COMPLIANCE 2016			
307-1	Non-compliance with environmental laws and regulations	JCI Sustainability Supplement: 307-1 Environmental Compliance 2017 NOVs, Permit Exceedances and Releases 2016 NOVs, Permit Exceedances and Releases 2015 NOVs, Permit Exceedances and Releases 2014 NOVs, Permit Exceedances and Releases 2017 Form 10-K , Environmental Matters, Page 23	
Supplier Environmental Assessment			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Supplier Sustainability	
103-2	The management approach and its components	JCI Sustainability Supplement: Supplier Sustainability Code of Ethics Conflict Minerals Policy Slavery and Human Trafficking Policy Supplier Portal	
103-3	Evaluation of the management approach	JCI Sustainability Supplement: Supplier Sustainability Supplier Sustainability Rating Supplier Sustainability Rating survey - Johnson Controls Supplier Sustainability Rating Survey Letter	

Disclosure Number	Description	Response	Omission
*Supplier Environmental Assessment			
GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT 2016			
308-1	New suppliers that were screened using environmental criteria	JCI Sustainability Supplement: 308-1 Supplier Environmental Assessment	
308-2	Negative environmental impacts in the supply chain and actions taken	JCI Sustainability Supplement: 308-2 Supplier Environmental Assessment Supplier Sustainability Rating Supplier Diversity Code of Ethics Supplier Portal	

MATERIAL TOPICS

SOCIAL

Disclosure Number	Description	Response	Omission
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Employment

GRI 103: MANAGEMENT APPROACH 2016

103-1	Explanation of the material topic and its Boundary	2017 Form 10-K 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Social JCI Sustainability Supplement: Our Employees 2017 Business and Sustainability Report EEO Employer	
103-2	The management approach and its components	Tomorrow Needs You 2017 UN Global Compact COP Human Rights & Sustainability Policy Code of Ethics JCI Sustainability Supplement: Ethics and Integrity JCI Sustainability Supplement: Social Careers: Women and Military	
103-3	Evaluation of the management approach	2017 Awards - 50 Best Companies for Diversity 2017 Awards Johnson Controls honored for supporting military veterans 2016 Awards - 50 Best Companies for Diversity Johnson Controls named to 2018 World's Most Ethical Companies Integrity Helpline	

GRI 401: EMPLOYMENT 2016

401-1	New employee hires and employee turnover	JCI Sustainability Supplement: 401-1 Our Employees	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	JCI Sustainability Supplement: 401-2 Our Employees	

Disclosure Number	Description	Response	Omission
*Employment			
401-3	Parental leave	JCI Sustainability Supplement: 401-3 Our Employees	
Labor/Management Relations			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	EEO Employer 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary JCI Sustainability Supplement: Social	
103-2	The management approach and its components	Human Rights & Sustainability Policy JCI Sustainability Supplement: Ethics and Integrity JCI Sustainability Supplement: Social	
103-3	Evaluation of the management approach	2017 UN Global Compact COP	
GRI 402: LABOR/MANAGEMENT RELATIONS 2016			
402-1	Minimum notice periods regarding operational changes	JCI Sustainability Supplement: 402-1 Continued Employability	
Occupational Health and Safety			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary JCI Sustainability Supplement: Our Employees- Health and Safety Global Environment, Health & Safety (EHS) Policy	

Disclosure Number	Description	Response	Omission
*Occupational Health and Safety			
103-2	The management approach and its components	JCI Sustainability Supplement: Our Employees – Health & Safety Health and Safety - Overview JCI Sustainability Supplement: Ethics and Integrity	
103-3	Evaluation of the management approach	Integrity Helpline JCI Sustainability Supplement: Our Employees- Health and Safety Global Environment, Health & Safety (EHS) Policy	
GRI 403: OCCUPATIONAL HEALTH AND SAFETY 2016			
403-1	Workers Representation in Formal Joint Mgmt. Worker Health & Safety Committees	JCI Sustainability Supplement: 403-1 Health and Safety Health and Safety - Overview Global Environment, Health & Safety (EHS) Policy	
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	JCI Sustainability Supplement: 403-2 Health and Safety JCI Sustainability Supplement: Health and Safety - Overview Global Environment, Health & Safety (EHS) Policy	
403-3	Workers with high incidence or high risk of diseases related to their occupation	JCI Sustainability Supplement: 403-3 Health and Safety JCI Sustainability Supplement: Health and Safety - Overview Global Environment, Health & Safety (EHS) Policy	
403-4	Health and safety topics covered in formal agreements with trade unions	JCI Sustainability Supplement: 403-4 Health and Safety Health and Safety - Overview Code of Ethics Global Environment, Health & Safety (EHS) Policy	
Training and Education			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary JCI Sustainability Supplement: Our Employees – Employee Development	

Disclosure Number	Description	Response	Omission
*Training and Education			
103-2	The management approach and its components	JCI Sustainability Supplement: Our Employees – Employee Development Tomorrow Needs You 2017 Business and Sustainability Report	
103-3	Evaluation of the management approach	JCI Sustainability Supplement: Our Employees – Employee Development EEO Employer	
GRI 404: TRAINING AND EDUCATION 2016			
404-1	Average hours of training per year per employee	JCI Sustainability Supplement: 404-1 Our Employees – Employee Development	
404-2	Programs for upgrading employee skills and transition assistance programs	JCI Sustainability Supplement: 404-2 Our Employees – Employee Development JCI Sustainability Supplement: Employee Development, Training and Education	
404-3	Percentage of employees receiving regular performance and career development reviews	JCI Sustainability Supplement: 404-3 Our Employees – Employee Development Tomorrow Needs You	
Diversity and Equal Opportunity			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	Management approach includes Diversity, Equal Opportunity and Non Discrimination. JCI Sustainability Supplement: Our Employees - Diversity and Inclusion 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary About Us – Diversity & Inclusion	

Disclosure Number	Description	Response	Omission
*Diversity and Equal Opportunity			
103-2	The management approach and its components	JCI Sustainability Supplement: Our Employees - Diversity and Inclusion Code of Ethics EEO Employer Human Rights & Sustainability Policy 2017 UN Global Compact COP Diversity and Inclusion section of the Business and Sustainability Report Careers: Women and Military	
103-3	Evaluation of the management approach	2017 Awards 2017 Awards -50 Best Companies for Diversity 2017 Awards - Noteworthy Best Companies for Diversity 2017 Awards - Top Employer in China Johnson Controls named to 2018 World's Most Ethical Companies JCI Sustainability Supplement: Ethics and Integrity JCI Sustainability Supplement: Our Employees - Diversity and Inclusion Integrity Helpline	
GRI 405: DIVERSITY AND EQUAL OPPORTUNITY 2016			
405-1	Diversity of governance bodies and employees	JCI Sustainability Supplement: 405-1 Our Employees 2018 Annual Report , Pages 28, 32, 34-36	
405-2	Ratio of basic salary and remuneration of women to men	JCI Sustainability Supplement: 405-2 Our Employees 2017 Awards Code of Ethics 2017 Awards -50 Best Companies for Diversity 2017 Awards - Noteworthy Best Companies for Diversity 2017 Awards - Top Employer in China 2017 Awards - Johnson Controls honored for supporting military veterans	
GRI 406: NON-DISCRIMINATION 2016			
406-1	Incidents of discrimination and corrective actions taken	JCI Sustainability Supplement: 406-1 Our Employees JCI Sustainability Supplement: Our Employees - Diversity and Inclusion EEO Employer Code of Ethics Integrity Helpline	

Disclosure Number	Description	Response	Omission
Freedom of Association and Collective Bargaining			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	JCI Sustainability Supplement: Human Rights 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary	
103-2	The management approach and its components	JCI Sustainability Supplement: Ethics and Integrity Human Rights & Sustainability Policy 2017 UN Global Compact COP Code of Ethics Ethics & Human Rights section of the Business and Sustainability Report	
103-3	Evaluation of the management approach	2017 UN Global Compact COP Code of Ethics Integrity Helpline	
GRI 407: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING 2016			
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	JCI Sustainability Supplement: 407-1 Human Rights Human Rights & Sustainability Policy Code of Ethics Integrity Helpline	
Child Labor			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	JCI Sustainability Supplement: Human Rights 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the material topic and its boundary	

Disclosure Number	Description	Response	Omission
*Child Labor			
103-2	The management approach and its components	JCI Sustainability Supplement: Human Rights Human Rights & Sustainability Policy JCI Sustainability Supplement: Ethics and Integrity Code of Ethics 2017 UN Global Compact COP Slavery and Human Trafficking Policy Slavery and Human Trafficking Statement Ethics & Human Rights section of the Business and Sustainability Report	
103-3	Evaluation of the management approach	Integrity Helpline Johnson Controls named to 2018 World's Most Ethical Companies	
GRI 408: CHILD LABOR 2016			
408-1	Operations and suppliers at significant risk for incidents of child labor	JCI Sustainability Supplement: 408-1 Human Rights	
Forced or Compulsory Labor			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	JCI Sustainability Supplement: Human Rights 2017 Sustainability Materiality Assessment 2017 UN Global Compact COP JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary Ethics & Human Rights section of the Business and Sustainability Report	
103-2	The management approach and its components	2017 UN Global Compact COP JCI Sustainability Supplement: Ethics and Integrity Conflict Minerals Policy Slavery and Human Trafficking Policy Slavery and Human Trafficking Statement Human Rights & Sustainability Policy Code of Ethics	
103-3	Evaluation of the management approach	Integrity Helpline Johnson Controls named to 2018 World's Most Ethical Companies	

Disclosure Number	Description	Response	Omission
*Forced or Compulsory Labor			
GRI 409: FORCED OR COMPULSORY LABOR 2016			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	JCI Sustainability Supplement: 409-1 Human Rights JCI Sustainability Supplement: Ethics and Integrity 2017 UN Global Compact COP Slavery and Human Trafficking Policy Human Rights & Sustainability Policy Code of Ethics	
Security Practices			
103-1	Explanation of the material topic and its Boundary	JCI Sustainability Supplement: Human Rights 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the material topic and its boundary	
103-2	The management approach and its components	JCI Sustainability Supplement: Ethics and Integrity 2017 UN Global Compact COP Code of Ethics	
103-3	Evaluation of the management approach	Integrity Helpline	
410-1	Security Personnel Trained in Human Rights Policies or Procedures	JCI Sustainability Supplement: 410-1 Human Rights Integrity Helpline Code of Ethics	
Rights of Indigenous Peoples			
103-1	Explanation of the material topic and its Boundary	JCI Sustainability Supplement: Human Rights 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the Material Topic and its Boundary	
103-2	The management approach and its components	2017 UN Global Compact COP Human Rights & Sustainability Policy Code of Ethics JCI Sustainability Supplement: Ethics and Integrity Slavery and Human Trafficking Policy	

Disclosure Number	Description	Response	Omission
*Rights of Indigenous Peoples			
103-3	Evaluation of the management approach	EEO Employer Integrity Helpline	
411-1	Incidents of Violations Involving Rights of Indigenous Peoples	JCI Sustainability Supplement: 411-1 Human Rights JCI Sustainability Supplement: Ethics and Integrity	
Human Rights Assessment			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	JCI Sustainability Supplement: Human Rights 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the material topic and its boundary	
103-2	The management approach and its components	2017 UN Global Compact COP Slavery and Human Trafficking Policy Human Rights & Sustainability Policy Code of Ethics JCI Sustainability Supplement: Human Rights JCI Sustainability Supplement: Ethics and Integrity JCI Sustainability Supplement: Our Employees – Health and Safety	
103-3	Evaluation of the management approach	Integrity Helpline Health and Safety - Overview Supplier Sustainability Rating 2017 Awards Johnson Controls named to 2018 World's Most Ethical Companies	
GRI 412: HUMAN RIGHTS ASSESSMENT 2016			
412-1	Operations that have been subject to human rights reviews or impact assessments	JCI Sustainability Supplement: 412-1 Human Rights JCI Sustainability Supplement: Ethics and Integrity JCI Sustainability Supplement: Health and Safety	
412-2	Employee training on human rights policies or procedures	JCI Sustainability Supplement: 412-2 Human Rights Code of Ethics	

Disclosure Number	Description	Response	Omission
*Human Rights Assessment			
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	JCI Sustainability Supplement: 412-3 Human Rights Supplier Portal Human Rights & Sustainability Policy Code of Ethics Supplier Sustainability Rating Slavery and Human Trafficking Policy	
Local Communities			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	Corporate Social Responsibility Program Overviews 2017 Business and Sustainability Report JCI Sustainability Supplement: Explanation of the material topic and its boundary JCI Sustainability Supplement: Community Engagement	
103-2	The management approach and its components	JCI Sustainability Supplement: Community Engagement Blue Sky 2017 Fact Sheet ELP 2017 Fact Sheet Corporate Social Responsibility Program Overviews	
103-3	Evaluation of the management approach	Sustainability Awards and Recognition	
GRI 413: LOCAL COMMUNITIES 2016			
413-1	Operations with local community engagement, impact assessments, and development programs	JCI Sustainability Supplement: 413-1 Community Engagement Corporate Social Responsibility Program Overviews	
413-2	Operations with significant actual and potential negative impacts on local communities	JCI Sustainability Supplement: 413-2 Community Engagement Corporate Social Responsibility Program Overviews	

Disclosure Number	Description	Response	Omission
Supplier Social Assessment			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	Supplier Portal 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the material topic and its boundary JCI Sustainability Supplement: Supplier Sustainability	
103-2	The management approach and its components	JCI Sustainability Supplement: Supplier Sustainability Assessment Supplier Sustainability Conflict Minerals Policy Code of Ethics Slavery and Human Trafficking Policy	
103-3	Evaluation of the management approach	Supplier Sustainability Rating	
GRI 414: SUPPLIER SOCIAL ASSESSMENT 2016			
414-1	New suppliers that were screened using social criteria	JCI Sustainability Supplement: 414-1 Supplier Sustainability Assessment Supplier Portal Supplier Sustainability Rating	
414-2	Negative social impacts in the supply chain and actions taken	JCI Sustainability Supplement: 414-2 Supplier Sustainability Assessment	
Public Policy			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	Public Reporting Policies JCI Sustainability Supplement: Public Policy Code of Ethics 2017 Materiality Assessment JCI Sustainability Supplement: Explanation of the material topic and its boundary	

Disclosure Number	Description	Response	Omission
*Public Policy			
103-2	The management approach and its components	JCI Sustainability Supplement: Public Policy 2017 Sustainability Memberships Public Reporting Policies Political Contributions Policy Code of Ethics	
103-3	Evaluation of the management approach	Public Reporting Policies	
GRI 415: PUBLIC POLICY 2016			
415-1	Political contributions	2015 PAC Contributions 2016 PAC Contributions 2017 PAC Contributions Political Contributions Policy Public Reporting Policies JCI Sustainability Supplement: 415-1 Political Contributions	
Customer Health and Safety, Marketing & Labeling			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	JCI Sustainability Supplement: Customer Health and Safety Health and Safety - Overview 2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the material topic and its boundary Management approach includes Customer Health and Safety, Marketing & Labeling	
103-2	The management approach and its components	JCI Sustainability Supplement: Customer Health and Safety Global Environment, Health & Safety (EHS) Policy Health and Safety - Overview	
103-3	Evaluation of the management approach	Health and Safety - Overview JCI Sustainability Supplement: Customer Health and Safety	

Disclosure Number	Description	Response	Omission
*Customer Health and Safety, Marketing & Labeling			
GRI 416: CUSTOMER HEALTH AND SAFETY 2016			
416-1	Assessment of the health and safety impacts of product and service categories	JCI Sustainability Supplement: 416-1 Customer Health and Safety	
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	JCI Sustainability Supplement: 416-2 Customer Health and Safety	
GRI 417: MARKETING AND LABELING 2016			
417-1	Requirements for product and service information and labeling	JCI Sustainability Supplement: 417-1 Marketing and Labeling	
417-2	Incidents of non-compliance concerning product and service information and labeling	JCI Sustainability Supplement: 417-2 Marketing and Labeling	
417-3	Incidents of non-compliance concerning marketing communications	JCI Sustainability Supplement: 417-3 Marketing and Labeling	
Customer Privacy			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	2017 Sustainability Materiality Assessment JCI Sustainability Supplement: Explanation of the material topic and its boundary Privacy Notice and Binding Corporate Rules JCI Sustainability Supplement: Customer Privacy	
103-2	The management approach and its components	JCI Sustainability Supplement: Customer Privacy Privacy Notice and Binding Corporate Rules	
103-3	Evaluation of the management approach	Privacy Notice and Binding Corporate Rules	

Disclosure Number	Description	Response	Omission
*Customer Privacy			
GRI 418: CUSTOMER PRIVACY 2016			
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	JCI Sustainability Supplement: 418-1 Customer Privacy Privacy Notice and Binding Corporate Rules	
Socioeconomic Compliance			
GRI 103: MANAGEMENT APPROACH 2016			
103-1	Explanation of the material topic and its Boundary	2017 UN Global Compact COP Code of Ethics Human Rights & Sustainability Policy JCI Sustainability Supplement: Explanation of the material topic and its boundary	
103-2	The management approach and its components	2017 UN Global Compact COP Code of Ethics 2017 Form 10-K , Pages 6, 23, 56, and 59	
103-3	Evaluation of the management approach	Johnson Controls named to 2018 World's Most Ethical Companies	
GRI 419: SOCIOECONOMIC COMPLIANCE 2016			
419-1	Non-compliance with laws and regulations in the social and economic area	JCI Sustainability Supplement: 419-1 Compliance JCI Sustainability Supplement: Ethics and Integrity 2017 Form 10-K , Pages 6, 23, 56, and 59	

Disclaimer: The information in the Johnson Controls corporate social responsibility and sustainability report, in accordance with the Global Reporting Initiative (GRI) framework, is shared based on the best available data at publication and is subject to change. In some cases, data is estimated. Johnson Controls cautions that our statements with respect to current and future potential implications of corporate social responsibility and sustainability topics are subject to numerous important risks, uncertainties, assumptions and other factors, some of which are beyond Johnson Controls' control, which could cause Johnson Controls' actual results and business implications to differ materially from those expressed or implied by the information in the GRI report. Stakeholders should read the report with these factors in mind.



**Johnson Controls
Sustainability
Reporting
Supplement**

INTRODUCTION

Letter from Grady L. Crosby

Grady L. Crosby is the Vice President of Public Affairs, Chief Diversity Officer, President of the Johnson Controls Foundation, and Executive Chair of the Global Sustainability Council.

Johnson Controls' commitment to sustainability dates back to our roots. In 1885, Warren Johnson launched a company to explore new ways to harness and conserve precious energy resources. In doing so, he also launched a tradition of customer-focused innovation—a tradition that has inspired thousands of employees for more than 130 years and that continues to drive the success of Johnson Controls. Throughout our history, we have helped to create a more sustainable world and helped our customers to do the same.



Johnson Controls' vision is "A safe, comfortable and sustainable world." We are global diversified technology and multi industrial leader serving a wide range of customers in more than 150 countries. We help our customers win by combining technology with insights to build purposeful solutions that help the world progress. This includes bringing a range of innovative, sustainable, clean technologies to market that help our customers use fewer resources, protect the environment, and reuse and recycle materials. In addition to helping our customers meet their environmental needs, we have a strong track record of doing well by doing good, which includes our commitment to protect the environment across our value chain as part of our "purpose-led" value.

2017 was the first year following the merger between Tyco and Johnson Controls. Our teams around the globe have made significant progress on integration, including continuing our leadership in Sustainability. We make deliberate choices that play to our strengths, and prioritize strategies that deliver the most value to our customers and shareholders. These choices are guided by our Values, our Ethics, and our Human Rights and Sustainability policies and commitments.

To deliver on our commitments and to realize our company vision, we recognize the importance of transparency and reporting. We report across many indices, including the Global Reporting Index, CDP, and Dow Jones Sustainability Index, among others. For a full description of our company activities, please read our annual [Business and Sustainability Report](#). This Sustainability Reporting Supplement is produced to provide greater detail on our sustainability activities and additional information material to our stakeholders.

The future is being built today, and Johnson Controls is making that future more productive, more secure and more sustainable. At its core, that promise is about delivering innovation that make people's lives – and the world – better.

A handwritten signature in black ink that reads "A. L. Crosby". The signature is fluid and cursive.

Grady L. Crosby



Sustainability Approach

SUSTAINABILITY APPROACH

[102-11](#) | [102-15](#) | [102-46](#)

Overview and Sustainability Goals

Today, as a multi-industrial, global company, Johnson Controls brings a range of innovative, sustainable products to market that help our customers become more resource efficient, sustainable and competitive. The products we make and the services we deliver help customers improve energy efficiency, reduce pollution, waste less, and recycle more. In addition to helping our customers, we have a strong track record of improving resource efficiency and sustainability across our value chain.

Johnson Controls' core businesses are recognized for providing sustainable products, services and solutions. Our customers trust us to provide purposeful technology and insights that improve resilience, safety, circularity and resource efficiency.

From fuel-efficient batteries, to energy-efficient heating and cooling equipment, to distributed energy storage, we have a range of technology and insights that help reduce energy use, greenhouse gas emissions, and improve the lives of people and the environment.

- Our Batteries help reduce emissions. We have seen significant growth in the use of Start-Stop batteries, which save 5-8 percent of fuel relative to traditional batteries. We continue to be the world's largest recycler of conventional vehicle batteries.
- Our Building Technology equipment, including our Metasys smart building solution, continues to help customers like Stanford University and the Hawaii Department of Transportation reduce energy and water costs.
- Our Distributed Energy Storage solution brings our building controls technology together with our battery technology to help commercial and industrial customers like Case Western Reserve University better manage their energy.
- Our Tyco Retail Solutions and other connected offerings help our customers utilize their resource more efficiently.
- Our Tyco Fire and Security offerings help keep people, including first responders, safe and secure. These offerings also help protect the natural and built environment.

We are committed to improving environmental performance across our own global operations, including manufacturing plants, distribution centers, service centers, offices, fleets and other operations worldwide. We have enterprise-wide, global environmental goals to help us enhance our operational excellence, reduce our exposure to climate change risks, reduce our reliance on natural resources, and save money.

Our sustainability strategy focuses on solutions, people, partnerships, performance and governance in order to drive Johnson Controls to be recognized as a global leader in providing scalable, market-based building and energy solutions addressing the world's greatest sustainability challenges. We have measurable goals to drive each of the following:

Solutions – improve the sustainability of our high-impact products and services.

People – foster a culture of sustainability that engages and attracts people who want to make a difference.

Partnerships – lead in global partnerships that significantly increase the scale of our sustainability impact.

Performance – performance measures identified to track progress towards our sustainability vision and goals.

Governance – formalize a sustainability governance process and update strategy to maintain leadership.

2020 Goals

In 2009, our [Global Sustainability Council \(GSC\)](#) established enterprise-wide global sustainability goals for 2020 (compared to a 2014 baseline) related to greenhouse gas emissions, energy, water, and waste reduction:

- Increase our non-hazardous waste diversion rate to 90 percent
- Reduce water intensity as a factor of revenue by 5 percent
- Reduce greenhouse gas intensity as a factor of revenue by 15 percent
- Reduce energy intensity as a factor of revenue by 15 percent
- These goals were especially ambitious because they demanded an even higher standard of sustainability than we had achieved by 2014. For example, from 2002 through 2014, we reduced our global greenhouse gas intensity by 41 percent and our energy intensity by 40 percent.
- We see our goals as a way to reduce long-term risks, reduce costs, and meet the needs of our communities.

2025 Goals

The merger of Johnson Controls with Tyco International was a change in our company profile material enough that the GSC determined new enterprise-wide sustainability goals were needed. Accordingly, in 2017, the GSC worked with executive leadership to adopt new 2025 Sustainability Goals related to greenhouse gas emissions, energy, water, waste, safety and diversity from a 2017 baseline. These goals continue our commitment to address our environmental and social impacts and address topics most [material](#) to Johnson Controls and our stakeholders. We will report to these new goals when we report for fiscal year 2018.

Detail on our performance toward our environmental sustainability goals can be found in the [Environmental](#) section.

Sustainability Policies and Commitments

[102-12](#) | [102-13](#)

Voluntary Corporate Commitments	Date Adopted
UN Global Compact	2004
Copenhagen Communique	2009
Global Alliance for Energy Productivity EP100	2015
Responsible Corporate Engagement in Climate Policy	2015
American Business Act on Climate Pledge	2015
"We Are Still In" pledge	2017

Alignment with United Nations' Sustainable Development Goals

[Johnson Controls supports the goals](#) adopted by the United Nations to end poverty, protect the planet and ensure prosperity for all. We promote sustainability through the way we do business, the solutions we provide and our engagement in society.

Stakeholder Engagement and Sustainability Materiality Assessment

[102-21](#) | [102-42](#) | [102-43](#) | [102-44](#) | [103-1](#) | [102-46](#) | [102-47](#)

We engage with stakeholders around the world both formally and informally every day. These interactions are crucial to Johnson Controls, driving us to solve today's challenges while constantly asking 'what's next.' As we engage in dialogue throughout the year, we ensure we are providing our stakeholders with current, relevant information that is important to them. We methodically ask for their insights and input to help us drive continued business and relationship success.

Some benefits resulting directly from stakeholder engagement include:

- Enhancing best practices
- Improving data benchmarking so it is more easily understood
- Learning about new marketing opportunities and gaining a balanced perspective of our activities
- Establishing more efficient processes for tracking progress on several sustainability goals
- Gaining a deeper appreciation of what others see as our global responsibility

Materiality Assessment

Sustainability materiality assessments are a form of stakeholder engagement exercise that help identify what sustainability issues are important to an organization's key stakeholders. These assessments involve reaching out to internal and external stakeholders to get their input on priorities. This information helps inform the organization's sustainability priorities.

Johnson Controls completed its first global sustainability materiality assessment in early 2014. As a result of that assessment, we took a number of actions to further drive organizational sustainability priorities and efforts. Johnson Controls completed additional Sustainability Materiality Assessments in January of 2016 and January of 2017. The process helped Johnson Controls to assess the environmental, social, and governance topics that are priorities for Johnson Controls' employees, customers, supply chain participants and non-profit stakeholders. The most recent findings will be leveraged to continue communication, reporting and engaging on these areas internally and externally.

For the Sustainability Materiality Assessment, we went to our business leaders and obtained their input on which stakeholders they felt we should ensure to include from our employee base resulting in cross-functional and global representation, we also included our Business Resource Group leaders, key suppliers, some of our top customers, highly-regarded NGOs and industry groups with expertise in sustainability, labor groups, trade press, and academic leaders who are knowledgeable about our business.

The top ten issues for our stakeholders from the [2017 Sustainability Materiality Assessment](#), in order of their ranking of the topic's importance and impact to their organization and Johnson Controls, were:

- ethics & compliance
- energy-efficient products
- innovation
- cybersecurity
- product compliance
- occupational health & safety
- energy/environment laws & regulations
- talent management & employee training
- hazardous material management
- diversity and inclusion

Stakeholder Engagement

[102-40](#) | [102-43](#)

Our approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.

Stakeholder Type/Group	Frequency of engagement	Approach	Portion of engagement as part of the report preparation process
Employees including Executive Leadership and Business Resource Group leaders	At least quarterly	Quarterly "Town Hall" meetings Employee Surveys Business Resource Group initiatives Sustainability report Internal website Materiality Assessment	Participation in Sustainability Materiality Assessment
Suppliers	At least quarterly	Calls 1x1 engagement Surveys Conferences Top Supplier Awards Supplier Diversity initiatives Materiality Assessment	Participation in Sustainability Materiality Assessment
Customers	At least quarterly	Calls Meetings 1x1 engagement Surveys Materiality Assessment Market Research	Participation in Sustainability Materiality Assessment
Investors	At least quarterly	Calls Annual Investor Day Materiality Assessment	Participation in Sustainability Materiality Assessment
Non-governmental organizations	At least quarterly	Calls Meetings Conferences Materiality Assessment Memberships Funding through Foundation and Sponsorships Employee volunteering	Participation in Sustainability Materiality Assessment

Stakeholder Type/Group	Frequency of engagement	Approach	Portion of engagement as part of the report preparation process
Industry Groups	At least quarterly	Calls Meetings Conferences Materiality Assessment	Participation in Sustainability Materiality Assessment
Labor Groups	At least quarterly	Calls Meetings	Participation in Sustainability Materiality Assessment
Media	At least quarterly	Calls Meetings Conferences Materiality Assessment	Participation in Sustainability Materiality Assessment
Academia	At least quarterly	Calls Meetings Research partnerships Employee matching programs for higher educational institutions Materiality Assessment	Participation in Sustainability Materiality Assessment

Public Policy

Johnson Controls engages with our stakeholders on public policy issues that are important to our business, including public policy issues and programs related to: energy efficient buildings and their operations; interconnected building systems; energy storage; fuel-efficient batteries; and material recycling. We have staff at the corporate level and within each of our major geographies that engage with our stakeholders on local, state and national public policy issues.

Our public policy engagement is often conducted in conjunction with the efforts of allied business, trade and issue organizations of which the company is a member. Those organizations include

- United States: the Business Council for Sustainable Energy, the Alliance to Save Energy, the American Council for an Energy Efficient Economy, the National Association of Energy Service Companies, the National Association of Manufacturers, and the Electric Drive Transportation Association.
- Europe: European Partnership for Energy and the Environment, European Building Automation Controls Association, the European Alliance of Companies for Energy Efficiency in Buildings, Association of Automotive & Industrial Battery Manufacturers, the Association of the European Automotive Suppliers, the European Association for Storage of Energy, and AmCham EU, which represents the interests of US companies with assets in Europe.
- Asia Pacific: China Energy Conservation Association; China Association Of Building Energy Efficiency (CABEE); the Centre for Environmental Education and Communications of Ministry of Environmental Protection China (CEEC of MEP); China National Resources Recycling Association (CRRA); China Energy Storage Alliance; and Center for Environmental Education and Communications (CEEC) of State Environmental Protection Administration (SEPA) of China.

Political Contributions

[415-1](#)

Johnson Controls and its employees participate in the public policy process in the United States in a variety of ways – from corporate government affairs activities designed to educate and influence elected officials and policy makers on key issues related to the company’s business, to individual political giving by employees through Johnson Controls Political Action Committee (PAC), to membership in trade associations and organizations to help advance our business objectives. In 2017, the Johnson Controls PAC and Tyco PAC merged.

Currency: USD	2017	2016	2015	2014
Recipient: PAC Activity Country: USA	\$223,500	\$10,500	\$13,500	\$12,600

**Data is publicly available.*

Johnson Controls did not make any corporate contributions to political candidates, parties nor committees in 2017. It does not provide financial or in-kind support in other countries, or in other ways besides our PAC in the U.S.

About Our Reporting

Explanation of the Material Topic and its Boundary and Explanation of the effect of any restatements of information provided in previous reports, and the reasons for such restatements.

[103-1](#) | [102-48](#)

Our GRI report focuses on operations within our control for the fiscal year 2017 (FY2017). Unless otherwise noted in the report section for a specific performance metric, this report includes data from business operations that were at least 51 percent under Johnson Controls operating control and financially consolidated during the reporting year. In some instances, information is only available for U.S. or North America operations. This will be noted in the answers either in the comments area or directly in the answer.

The GRI topics that are material to Johnson Controls and what we reported on in FY2017 are: economic performance, market presence, indirect economic impacts, procurement practices, anti-corruption, anti-competitive behavior, materials, energy, water, emissions, effluents & waste, environmental compliance, supplier environmental assessment, employment, labor/management relations, occupational health and safety, training and education, diversity & equal opportunity, non-discrimination, freedom of association & collective bargaining, child labor, forced or compulsory labor, human rights assessment, local communities, supplier social assessment, public policy, customer health and safety, customer privacy, and socioeconomic compliance. Specific materialities are detailed in the [2017 Materiality Assessment](#).

Sustainability metrics for reported FY2017 include data from Building Technologies & Solutions, Power Solutions, and the Johnson Controls Hitachi joint venture. Data for FY2017 excludes Adient, which is now a fully independent company.

Historic data for 2016 and prior years remains the same as previously reported.

In 2017, the Global Sustainability Council worked with executive leadership to adopt a new 2025 Sustainability Strategy that harmonizes sustainability targets and activities across our new combined enterprise. As part of

this new strategy, we will be committing to new 2025 goals related to greenhouse gas emissions, energy, water, waste, safety and diversity from a 2017 baseline.

All estimates are based on the best available data at the time of publication. Any other restatements are explained in more detail in the relevant questions.

Unless otherwise noted, "home country" refers to our United States operations.

* This year, we have transitioned from preparing our report in accordance with GRI G4 Sustainability Reporting Guidelines: Comprehensive option to GRI Standards: Comprehensive option. As a result, this year there are some new GRI Standards questions which are answered starting with this reporting cycle.

External Assurance of Data

102-56

Johnson Controls uses several different third-party groups for data assurance. The groups selected are independent of Johnson Controls and are specialized in the subject area they review.

Financial External Assurance

Our consolidated financial statements reported in our [Form 10-K](#) and other related reports are reviewed by PricewaterhouseCoopers LLP, an independent registered public accounting firm.

Sustainability External Assurance

From 2006 to 2010, our energy usage and greenhouse gas (GHG) emissions data within the United States were independently reviewed by WSP Group, a subcontractor hired by EPA Climate Leaders. Lessons learned from the audits were applied to our Inventory Management Plan that was used to calculate our global energy use and GHG emissions. Starting with our 2011 data, Bureau Veritas, an independent auditor recognized by the Carbon Disclosure Project, audited our GHG emissions data per ISO Standard 14064-3, Greenhouse gases - Part 3: Specification with Guidance for the Validation and Verification of Greenhouse Gas Assertions. They also audited our water data per the International Standard on Assurance Engagements (ISAE) 3000. Starting in 2014, Bureau Veritas audited our waste data per the International Standard on Assurance Engagements (ISAE) 3000. The objective of the audits is to provide further confidence that our reported energy, GHG emissions, water and waste data have a low margin of error and are consistent with external or internally defined sustainability accounting principles. The certificates for these most recent audits are attached as verification statements in the GRI Content Index.

Environmental Health and Safety External Assurance

Johnson Controls uses a third party software, ProcessMap, for our Environmental, Health and Safety Information System (EHSIS) to track environment, health and safety data from facilities worldwide. Data are reviewed routinely by qualified internal personnel, including the regular use of an internal audit process to check not only data in the system but also site-level checks of original records and other aspects. At times, we engage assistance from third-party environmental, health and safety and ISO consultants for site-specific audits; this includes using, for some sites, certified registrars to validate and certify our operations to various quality, environmental, six sigma and safety standards, e.g., ISO 9000, ISO 14001, OHSAS 18001. Additionally, filings with environmental, health and safety, and other regulatory agencies are routinely checked internally and by the applicable regulatory agency.

Location of Operations

[103-1](#) | [102-4](#)

Our 120,000 worldwide employees serve a wide range of customers in over 2,000 locations in more than 150 countries. Johnson Controls' [Location Finder](#) helps our customers find the facility that can best serve their needs. We have locations in the following countries:

Argentina	Germany	Monaco	South Korea
Australia	Guam	Netherlands	Spain
Austria	Hong Kong	New Zealand	Sweden
Bahrain	Hungary	Norway	Switzerland
Belgium	India	Oman	Taiwan
Brazil	Indonesia	Panama	Thailand
Canada	Ireland	Peru	Turkey
Chile	Israel	Philippines	Ukraine
China	Italy	Poland	United Arab
Colombia	Japan	Portugal	Emirates
Costa Rica	Kazakhstan	Puerto Rico	United Kingdom
Czech Republic	Kuwait	Qatar	United States of
Denmark	Luxembourg	Russia	America
Egypt	Macau	Singapore	Uruguay
Finland	Malaysia	Slovakia	Uzbekistan
France	Mexico	South Africa	



Governance Structure

GOVERNANCE STRUCTURE

Including committees of the highest governance body and committees responsible for the decision-making on economic, environmental, and social topics.

[102-18](#)

- Johnson's Controls Board of Directors is guided by our Corporate Governance Principles, Code of Ethics, and Articles of Association, all of which are publicly available in the [Corporate Governance](#) section of our corporate website.
- Detailed information about the company's governance structure is publicly available at <http://investors.johnsoncontrols.com>
- Detailed information about the company's executive officers is publically available in our [2017 Form 10-K](#), page 27.
- Detailed information about the company's Board of Directors is publically available in our [2018 Annual Report and Proxy Statement](#), page 2.
- Detailed information about the Board of Directors committees is publically available in our [2018 Annual Report and Proxy Statement](#), page 30.

Composition of the Highest Governance Body and its Committees

[102-22](#)

Board of Directors Committees

Committee Function	Name of Committee	Formal Board Responsibility?	Number of Non-Executive Directors
Audit/Accounting	Audit Committee	<input checked="" type="checkbox"/>	4
Remuneration/ Compensation	Compensation Committee	<input checked="" type="checkbox"/>	3
Nomination	Corporate Governance Committee	<input checked="" type="checkbox"/>	3
Worldwide Labor Policies and Practices	Executive Compliance Committee; various business unit Compliance Committees	<input type="checkbox"/>	20
Human Rights Issues	Executive Compliance Committee; various business unit Compliance Committees	<input type="checkbox"/>	20
Diversity and Employment Equity	Executive Leadership Team	<input type="checkbox"/>	13
Supply Chain Social Responsibility	Procurement Leadership Team	<input type="checkbox"/>	12

Corp. Social Responsibility, Corp. Citizenship, Sustainable Development	Global Sustainability Council	<input type="checkbox"/>	19
Health and Safety	Health & Safety Senior Leader Committee	<input type="checkbox"/>	5
Environmental Issues	Global Sustainability Council	<input type="checkbox"/>	19
Risk Management	Risk Committee	<input checked="" type="checkbox"/>	14
Ethics Issues	Executive Compliance Committee; various business unit Compliance Committees	<input type="checkbox"/>	20
Political Involvement	JCI PAC Steering Committee	<input type="checkbox"/>	10
Customer Service and Quality	Commercial Excellence Council	<input type="checkbox"/>	9
Community and Public Relations	Executive Leadership Team	<input type="checkbox"/>	13
Charitable Giving	Foundation Committee	<input type="checkbox"/>	6
Other Executive	Executive Committee	<input checked="" type="checkbox"/>	6

	Male	Female	Total Number
Total board members with executive functions	1	0	1
Total non-executive directors (excluding independent directors)	0	0	0
Total independent non-executive directors on the board	8	2	10
Total board	9	2	11
Membership of under-represented social groups	3		
Stakeholder Representation	0		

**Information in this section is as of the Annual Meeting of March 7, 2018.*

Responsibility for Economic, Environmental, and Social Topics

[102-19](#) | [102-20](#) | [102-26](#) | [102-27](#) | [102-29](#)

In general, Johnson Controls’ management is responsible for developing our overall mission and strategic plan from an enterprise and business level. Johnson Controls Board of Directors approves and oversees the implementation of the company’s mission, strategic plan and business strategies and provides advisory support. The Vision and Values of our Board of Directors include our company vision of a safe, comfortable and sustainable world and our Company values: Integrity First; Purpose Led; Customer Driven; Future Focused; and One Team. The Board of Directors is briefed at each meeting which often includes economic, environmental and/or social topics.

Authority for day-to-day management of economic, environmental, and social topics is delegated to the **Executive Leadership Team (ELT)**, which comprises the senior executives responsible for all our major corporate functions. The most senior positions with operational responsibility for Environment and Society aspects include the Executive Vice President and General Counsel; Vice President, Public Affairs and Chief Diversity Officer; Executive Vice President Human Resources, and Vice President for Procurement.

In addition, at the local level, local business unit leaders are responsible for the impacts our business has on the environment and local society. The ELT further delegates relevant authority for economic, environmental, and social topics—particularly including all the material aspects discussed in Johnson Control’s Sustainability Supplement—to the internal [Global Sustainability Council](#) (GSC) and other appropriate organizations within the company. The GSC regularly reports to the ELT regarding sustainability strategies, priorities, goals, and performance.

Executive Leadership Team Responsibility for Corporate Social Responsibility and Sustainability

As of the annual meeting of March 7, 2018	Name	Position or Title	Organizational Level (from Board and CEO) and Reporting Line
Overall Responsibility for Corporate Social Responsibility and Sustainability	George Oliver	Chairman and Chief Executive Officer	0 - Serves on Board of Directors
Diversity and Employment Equity	Lynn Minella	Executive Vice President & Chief Human Resources Officer	1 - reports to Chairman and CEO
Community and Public Relations	Grady L. Crosby	Vice President, Public Affairs & Chief Diversity Officer	1 - reports to Chief Human Resources Officer who reports to the Chairman and CEO
Environmental Issues	Michael Bartschat	Vice President, Chief Procurement Officer	1 - reports to Chairman and CEO
Health and Safety	Michael Bartschat	Vice President, Chief Procurement Officer	1 - reports to Chairman and CEO

Risk Management	Matthew Heiman	Vice President, Corporate Secretary & Associate General Counsel	2 - reports to General Counsel who reports to the Chairman and CEO
Supply Chain Social Responsibility	Michael Bartschat	Vice President, Chief Procurement Officer	1 - reports to Chairman and CEO
Compliance/Ethics Issues Specify all job titles held by the person assigned overall ownership of the compliance and ethics program: Chief Compliance and/or Ethics Officer	Andrew Thorson	Vice President Chief Compliance Officer	2 - reports to EVP and General Counsel who reports to Chairman and CEO and reports to Audit Committee
Human Rights Issues & Labor Issues	Anthony V. Alfano	Vice President, Chief Labor And Employee Counsel, VP COE Americas	2- Reports to Chief Counsel
Quality Management	Robert B. Beach Jr.	Vice President Manufacturing Excellence	2 - Reports to VP Chief Procurement Officer who reports to the Chairman and CEO

Global Sustainability Council

[102-30](#) | [102-32](#)

The Global Sustainability Council (GSC) was established in 2009 to provide a structure for our enterprise-wide environmental sustainability strategy and coordination. It plays a central role as a coordinating structure for the enterprise on sustainability issues. The GSC is responsible to the Chief Executive Officer and his direct reports. The Executive Sponsor of the GSC is Grady Crosby, Vice President, Public Affairs, Chief Diversity Officer and President, Johnson Controls Foundation. The membership of the GSC is comprised of VP-level executives that represent different business areas, functions and regions, to ensure that our environmental and sustainability initiatives have sufficient senior-level support across the enterprise, globally.

The GSC focuses on solutions, people, partnerships, performance and governance and has developed measurable goals for each in order to drive Johnson Controls to be recognized as a global leader in providing scalable, market-based building and energy solutions addressing the world's greatest sustainability challenges.

The GSC is the mechanism by which top enterprise-wide environmental initiatives are tracked. The leader of the GSC formally reviews and approves the organization's annual business and sustainability report and the content for the GRI framework, which supports multiple reporting and research entities throughout the year.

Key impacts, risks, and opportunities

[102-15](#)

We govern our enterprise risks and opportunities through a risk management and mitigation program which is built on a solid foundation of decades of Internal Audit risk monitoring and a dedicated Enterprise [Risk Management Program](#). As a global multi-industrial company, we face a range of risks, including general economic, credit and capital market conditions risks, regulatory risk, global climate change risk, and several other risks which are fully listed and explained in our [2017 Form 10-K](#).

Our Board of Directors and senior leadership team understand the importance of a robust corporate risk management program. In addition, we have key teams in place to oversee and advise our sustainability risks and opportunities. They include:

- **Executive Committee (EC)** – comprised of the highest level of management within the corporation and oversees overall global implementation of the strategic plan.
- **Executive Leadership Team (ELT)** - which comprises the senior executives responsible for all our major corporate functions.
- **Global Sustainability Council (GSC)** – provides a coordinating structure by which top enterprise-wide sustainability initiatives for our products, services, employees, strategic partnerships, operations, supply chain and customers are driven and tracked. The Council also works with the Purchasing Leadership Team to help improve the eco-efficiency of the supply chain.
- **Purchasing Leadership Team (PLT)** – comprised of key procurement management personnel from our businesses and other experts representing supplier diversity and sustainability to ensure best practices e.g. social and environmental performance of suppliers, supplier diversity composition, as well as the quality and cost of purchased goods.
- **Specialized committees and management groups** that address areas of the strategic plan that may be specific to a certain functional area or business group.

We set and measure progress on goals related to energy intensity, greenhouse gas intensity, water intensity and non-hazardous waste to landfill. These goals and other sustainability efforts are fully explained in our 2017 Business and Sustainability Report and our [Global Reporting Initiative Index](#).

Conflicts of Interest

[102-25](#)

Johnson Controls' [Corporate Governance Guidelines](#) address the specifics of material relationships and independence to ensure conflicts of interest are avoided. The Board of Directors' Governance Committee reviews potential conflicts of interest referred to the Committee involving the company, directors, or executive officers.

In addition, annually each director and executive officer completes a questionnaire in part designed to identify potential conflicts of interest and cross-board membership.

The Board of Directors has adopted written policies and procedures regarding related person transactions to assist in identifying potential conflicts of interest. Under Johnson Controls' policies, each of our executive officers, directors or nominees for director are required to disclose to the Governance Committee certain information relating to related person transactions for review, approval or ratification by the Governance Committee. There were no related person transactions in FY2017.

The Board of Directors has affirmatively determined by resolution that that the following directors are independent and have no material relationship with Johnson Controls, except as a director or shareholder: Michael E. Daniels, Roy Dunbar, Brian Duperreault, Gretchen Haggerty, Simone Menne, Juan Pablo del Valle Perochena, Jürgen Tinggren, Mark P. Vergnano, R. David Yost and John D. Young. Based on the NYSE's listing standards and the Johnson Controls Corporate Governance Guidelines, the Board of Directors affirmatively determined that George R. Oliver is not independent based on their employment by Johnson Controls. The Board of Directors is comprised of greater than two-thirds independent directors.

Risk Management

[102-11](#) | [102-29](#) | [102-30](#) | [102-31](#) | [205-1](#)

Johnson Controls has a comprehensive [risk management program](#). Directors are involved in the program with primary responsibility for overall risk oversight, including the company's risk profile and management controls. More detailed information on the Board of Directors' role and the Risk Management Process is disclosed in the [2017 Annual Report](#) on page 28.

The Board of Directors has primary responsibility for overall risk oversight, including our risk profile and management controls. The Board oversees the implementation of our strategic plan and the risks inherent in the operation of our businesses. We maintain an Enterprise Risk Management ("ERM") process which identifies, assesses, prioritizes, and manages a broad set of risks across the corporation. These risks fall into six categories: external, strategic, operational, people, financial, and legal and compliance. The assessment process is administered by the Corporate Secretary and the Board receives annual overviews of top risks along with plans for management and mitigation. These activities are supplemented by a rigorous internal audit function that reports regularly to the Audit Committee.

Johnson Controls Senior Executive Risk Committee ("Risk Committee") provides increased leadership focus and more frequent risk related oversight. The Risk Committee is currently comprised of senior leaders from key functions and each business unit. The Risk Committee meets regularly to actively manage the ERM program and maintain continuous awareness of enterprise risk. The Risk Committee reviews areas of risk within the operations identified by the ERM program, Insurance Health and Safety, Enterprise Security, Legal & Compliance, and Internal Audit and Finance. Additionally, the Risk Committee regularly identifies and discusses potential emerging risks. They report their determination of significant risks to the enterprise, mitigation plans, and status at regularly scheduled reviews. Risk Committee members review the regular communications to the Board to confirm the communications are both comprehensive and accurate.

The Board of Directors and its committees exercise their risk oversight function by carefully evaluating the reports they receive from management and by making inquiries of management with respect to areas of particular interest to the Board. Each of the Board committees is responsible for oversight of risk management practices for categories of top risks relevant to committee functions, as summarized below. The Board as a group also reviews risk management practices and a number of significant risks in the course of its reviews of corporate strategy, business plans, reports of Board committee meetings and other presentations.

The Full Board of Directors oversees the following primary areas of risk: Strategic, financial and execution risks and exposures associated with the annual operating plan and the strategic plan (including matters affecting capital allocation); major litigation and regulatory exposures and other current matters that may present material risk to our operations, plans, prospects, or reputation; acquisitions and divestitures; senior management succession planning.

- **The Audit Committee** reviews and discusses with management the company’s major financial reporting, tax, accounting, internal controls, information technology and compliance risk exposures and the steps management has taken to monitor and control such exposures
- **The Governance Committee** reviews and discusses with management the implementation and effectiveness of the company’s corporate governance policies and EHS programs, oversees the ERM process and is deeply involved in key management succession planning
- **The Compensation Committee** reviews and discusses with management the extent to which the company’s compensation policies and practices create or mitigate risks for the company
- **The Executive Committee** comprised of the Chairman, lead Director and each committee chair that meets at least annually to review the company’s retirement plans and other matters as delegated to it by the Board of Directors. Assignments to, and chairs of, the Audit and Compensation Committees are recommended by the Governance Committee and selected by the Board
- Accordingly, while each of the above four committees contributes to the risk management oversight function by assisting the Board of Directors in the manner outlined above, the Board itself remains responsible for the oversight of our overall ERM program.

Operations Assessed for Risks Related to Corruption

[205-1](#)

100% of the company’s business units and corporate activities have been analyzed for risks related to corruption. This risk assessment is part of our strategic planning and Sarbanes Oxley processes. This risk assessment is also part of our audit plan which is a risk-based audit process. We have improved even further our international trade compliance program which includes the topic of corruption and have made sure risks are identified and processes are in place. This program looks at all of our businesses and geographies.

See our [Code of Ethics](#) and [Human Rights & Sustainability Policy](#) which both address corruption.

	2017	2016	2015	2014
Total number of business units (1) analyzed for risks related to corruption	2	3	3	4
Percentage of business units analyzed for risks related to corruption	100%	100%	100%	100%

(1) Number of business units: Johnson Controls has undergone several corporate transitions over the past few years. In 2014, Johnson Controls announced the spin-off of its auto interiors business unit. In 2016, the Company completed the spin-off of its automotive experience business unit, which is now Adient plc, a fully independent company. As of the end of FY2017, Johnson Controls had two defined business units: Power Solutions and Building Technologies & Systems.



Ethics and Integrity

ETHICS AND INTEGRITY

[102-16](#) | [102-17](#) | [102-33](#) | [102-34](#) | [103-1](#) | [103-2](#) | [103-3](#) | [419-1](#)

Throughout our history, Johnson Controls has conducted business with integrity. Our dedication to "do the right thing" improves our long-term business performance, reputation, productivity, and employee retention. [Values First, the Johnson Controls Code of Ethics](#) applies to everyone at Johnson Controls – including the Board of Directors, company officers, employees, agents and contract workers. In addition to our Code of Ethics, we are committed to the principles in our [Human Rights & Sustainability Policy](#).



George Oliver, Chairman and CEO

Integrity is at the center of everything we do at Johnson Controls. Our company's ongoing success stems from our deeply engrained culture of ethics and integrity. Acting with integrity allow us to meet the high expectations of our customers, partners and communities, and gives us a competitive advantage. Doing business with integrity is the only way to do business.

The Johnson Controls Code of Ethics is translated into 26 languages and provides specific guidance on the behaviors that allow us to implement our culture globally.

Compliance with our Code of Ethics and our Anti-Corruption Policy is a condition of employment. Johnson Controls trains its employees on a variety of anti-corruption and related matters, including the Foreign Corruption Protection Act, anti-bribery statements from our Code of Ethics and our Code of Ethics more broadly.

All management-level employees must complete ethics certification which requires completion of the ethics training module and a review of the Code of Ethics. Employees for whom certification is not required must demonstrate that they know and understand the Code of Ethics as part of their orientation and as part of their annual job appraisals. Each year since we launched the online ethics training in 2001, our number of participants has grown and we have achieved 100 percent compliance with the training and certification requirements.

Status of the completion of the annual employee training certification is reported to the Audit Committee of the Board of Directors. The Audit Committee of the Board of Directors also has oversight responsibility for the contents of the Code of Ethics. The Code of Ethics is reviewed annually and updated periodically to reflect changes in laws, regulations, and company policies.

The [Code of Ethics](#) is publicly available to anyone, including employees, customers, suppliers and other third parties on johnsoncontrols.com and employees have access to the Code of Ethics on the company's internal intranet.

Our Code of Ethics is also communicated to our employees in the following ways:

- All new employees upon being hired are required to sign that they have read, understand and will comply with our Code of Ethics as a condition of employment.
- The Code of Ethics is addressed by our managers regularly in employee meetings.
- The Code of Ethics is frequently addressed through the "tone at the top" whenever our leadership team provides communications throughout the year to employees (employee portal, in-person meetings, web casts, emails to employees, etc.).
- All leaders are required to comply with the Leadership Expectations Model of which the ethical behavior outlined in the Code of Ethics is one of the core elements.

We seek to create an environment that removes barriers and promotes inclusion, fosters effective recruitment, development, motivation and retention so that each is able to maximize his or her contribution to meeting business objectives. To ensure our processes are working properly and that employees, customers and shareholders understand our policies and guiding principles around treatment, respectability and integrity, we systematically gather feedback and take action to improve our work environment. We track, analyze and communicate performance outcomes quarterly.

Integrity Helpline

[102-17](#)

A 24-hour Integrity Helpline is managed by the Ethics & Compliance department and is available to anyone who wishes to ask a question related to an ethical issue at the company. The Helpline is available in 26 languages, is operated by an independent third-party vendor and allows callers to ask questions anonymously. Employees, suppliers, customers and third parties can ask ethics questions either by phone or the [Integrity Helpline](#).

Questions that are asked via the Integrity Helpline are triaged and then routed to the appropriate function or Business Unit for handling and response. Statistics are collated quarterly and are reviewed with the global compliance leadership team.

The Integrity Helpline is only one of several communication vehicles that employees can use to ask ethics-related questions. Most often, employees discuss such issues directly with their supervisor. This reflects the fact that most questions that come up every day are being handled at the local plant or office level, with local managers and supervisors. In addition, employees are encouraged to reach out to their HR representative, Legal department or Compliance team if they don't feel comfortable going to their direct manager.

Anti-Corruption

Communication and Training about Anti-Corruption Policies and Procedures

[205-2](#)

Communication on anti-corruption policies and procedures	2017 *		2016		2015		2014	
	Total ^{1,2}	Percent	Total	Percent	Total	Percent	Total	Percent
Governance body members	145	100	318	100	318	100	365	100
Employees	68,109	76	30,785	100	31,120	100	33,458	100
Business partners³	373	90						

Training on Anti-corruption ⁴	2017		2016		2015		2014	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Governance body members	145	100	318	100	318	100	365	100
Employees	68,109	76	30,785	100	31,120	100	33,458	100

- (1) The FY2017 total is smaller than that of previous years due to Adient spin off.
- (2) FY2017 data is based on total employees and percent is calculated based on online employee population of 90,000. FY2017 Managers and above: 42,724, 100%. FY2016 data and before is based on Managers and above.
- (3) Percent based on suppliers who are in-scope for our third-party supplier program.
- (4) Due to differing Human Resource management/employee data systems, training and communication data by region is not available.

Confirmed Incidents of Corruption and Actions Taken

[205-3](#)

	2017 *	2016	2015	2014
Total number of confirmed incidents of corruption	2	0	0	0
Total number of confirmed incidents in which employees were dismissed or disciplined for corruption	2	0	0	0
Total number of confirmed incidents when contracts with business partners were not renewed due to violations related to corruption	0	0	0	0

All reported issues of alleged corruption are documented, investigated and remediated until resolution.

In June 2013, Johnson Controls self-reported to the Securities and Exchange Commission (SEC) and Department of Justice an alleged Foreign Corrupt Practices Act violation related to its Building Efficiency marine business in China. In 2016 we settled the matter with the SEC without admitting or denying the SEC's findings and was issued a declination letter from the Department of Justice. As part of the settlement agreement, Johnson Controls was required to self-report to the SEC and additional findings of corruption based on internal investigations. In early 2017, Johnson Controls self-reported two corruption-related matters to the SEC as required under its reporting obligations. Johnson Controls' reporting obligations concluded with the SEC in July, 2017 without the regulator taking any additional action.



Our Employees

OUR EMPLOYEES

Employee Information

New employee hires and employee turnover

[401-1](#)

Total Workforce		2017*		2016		2015		2014	
New Employee Hires		Total Number	Rate	Total Number	Rate	Total Number	Rate	Total Number	Rate
Global (excludes hires from acquisition/HAF)	All age groups	26,831	22.6	36,873	25.9	32,807	23.4	34,387	20.5
	Under 30 years old	12,497	55.5						
	Between 30 and 50 years	12,137	18.5						
	Over 50 years old	2,197	7.2						
Employee Turnover		Total Number	Rate	Total Number	Rate	Total Number	Rate	Total Number	Rate
Global (Exclude Terms from Divestiture or Facility Sold)	All age groups	25,108	21.2	33,785	23.7	30,447	21.7	37,096	22.1
	Under 30 years old	8,546	37.9						
	Between 30 and 50 years	12,552	19.2						
	Over 50 years old	4,010	13.1						

Information on Employees and Other Workers

[102-8](#)

Women in supervisory positions and above	2017 *	2016	2015	2014
Non-management – male	80,429	90,376		
Non-management – female	22,745	39,357		
Non-management total	103,174	129,733	87,436	94,116
Supervisor level and above – male	12,440	12,078		
Supervisor level and above – female	2,975	2,970		
Supervisor level and above	15,415	15,048	51,564	73,884
Total employees	118,589	144,781	139,000	168,000

Full-time and part-time employees by gender	2017 *	2016	2015	2014
Full-time – male	92,269	101,804		
Full-time – female	24,877	41,529		
Total full time	117,146	143,333	138,011	167,902
Part-time – male	599	650		
Part-time – female	843	798		
Total Part-time	1,442	1,448	1,520	2,903

Employees by region	Male	Female
North America	37,867	10,500

Permanent and temporary employees by gender	2017 *	2016	2015	2014
Indefinite or permanent contract – male	91,036	97,593		
Indefinite or permanent contract – female	24,961	39,988		
Total indefinite or permanent	115,997	137,581	131,751	158,536
Fixed term or temporary contract – male	1,685	4,785		
Fixed term or temporary contract – female	759	4,861		
Total fixed term or temporary	2,444	9,646	7,780	12,269

Compensation and Benefits

[202-1](#)

Ratio of Standard Entry Level Wage by Gender Compared to Local Minimum Wage

Ratio of employee entry level wages to the minimum wage at significant locations of operations	Local minimum wage	Gender or Total Workforce	Minimum wage used	Ratio of entry level wage to minimum wage
United States (Headquarters locations)	Exists	Men	7.25 USD	2.21
United States (Headquarters locations)	Exists	Women	7.25 USD	2.21
China	Exists	Men	2,190 CNY	0.91
China	Exists	Women	2,190 CNY	0.97

Ratio of employee entry level wages to the minimum wage at significant locations of operations	Local minimum wage	Gender or Total Workforce	Minimum wage used	Ratio of entry level wage to minimum wage
Mexico (Juarez locations)	Exists	Men	80.04 MXN	2.30
Mexico (Juarez locations)	Exists	Women	80.04 MXN	1.93
Czech Republic	Exists	Men	11,000 CZK	1.51
Czech Republic	Exists	Women	11,000 CZK	1.10
Slovakia	Exists	Men	435 EUR	2.29
Slovakia	Exists	Women	435 EUR	1.99

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Ratio of annual total compensation

Country	Ratio (Highest Paid : Median Income)
Canada	1.72
Czech Republic	3.88
Germany	2.787
Mexico	7.84
China	10.38
Singapore	3.41
Slovakia	4.35
USA	6.33

In providing the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees, we are including full time employees that are manager-level or above (Corporate only for USA, Canada and Mexico).

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Ratio of percentage increase in annual total compensation

Country	Ratio (Highest Increase : Median Increase)
Canada (Corp)	0.78
Czech Republic	1.40
Germany	1.17
Mexico	0.93
China	0.90
Singapore	1.00
Slovakia	3.55
USA	1.10

The ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country is based on the ratio of the median merit percentage increase versus the merit increase of the highest paid employee in that country. The overall global average is 1.36 of the median increase over the highest paid increase.

Benefits which are standard for full-time employees

[201-3](#) | [401-2](#)

Johnson Controls recognizes that our employees are key to our success and offers its employees a broad range of benefits. We are proud to have been recognized as an employer who values its employees, including being named a Top Employer in China, one of the 50 Best Companies for Diversity, and one of the World's Most Ethical Companies.

Please see below for a list of many of the benefits we offer. We publicly disclose many of the benefits we offer employees (This does not count disclosure found in the company's required filing with the SEC). Some location-specific benefits vary. For example, some locations offer childcare, and we provide English classes to families in Mexico. Also, not all locations have gym facilities or gym fee reimbursement programs.

Insurance:

- Healthcare employee
- Healthcare family
- Dental
- Vision
- AD&D
- Short Term Disability
- Long Term Disability
- Disability/invalidity insurance
- Life Insurance
- Accident Insurance

Vacation and leave:

- Maternity and/or paternity leave
- Vacation
- Paid sick days
- Bereavement Leave

Flexibility:

- Job security initiatives for redeployment, including retraining, relocation, work-sharing and outplacement services
- Flexible work schemes and work-sharing
- Recall rights for laid-off employees
- Flex scheduling
- Telecommuting options
- Paid time off for employee volunteers

Financial:

- Stock Ownership
- Stock Options
- Relocation Assistance
- Matching gift program

Education:

- Education Benefits: Employee
- Tuition reimbursement (other than career training)
- Higher education scholarship programs, for either employees or their relatives
- Workforce training, skills and leadership development programs
- Mentoring program

Wellness:

- Employee Assistance Program
- Work/Life Support Program
- Wellness/Fitness Program
- Onsite Fitness Facilities
- Onsite Recreation Facilities
- Gym facilities or gym fee reimbursement programs
- Preventative healthcare programs
- Carpooling support programs
- Employee recognition programs

Retirement:

- Pension plans/retirement provision
- Retirement: Defined Benefit Plan (including pension plan)

Parental Leave

[401-3](#)

	2017	2016	2015	2014
Number of female employees by gender that were entitled to parental leave	9,243	42,327	100%	100%
Number of male employees by gender that were entitled to parental leave	34,423	102,454	100%	100%
Rate of female employees who returned to work after leave	66.2	83.2	84.4	85.7
Rate of male employees who returned to work after leave	76.0	90.0	85.8	88.3

Rate data for all years and number data for 2017 reflects U.S. population only, because parental leave is not tracked uniformly around the world. 2016 numbers represent all female and male employees globally.

Diversity and Inclusion

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Johnson Controls is committed to leading the industry in diversity and inclusion; it's what our customers expect, and it's essential to business success. Only in valuing diversity and inclusion and committing to equal opportunity practices will we be able to fully utilize the human and business resources available to us in our pursuit of customer satisfaction. At the same time, we believe that by valuing diversity, we enable all to fully realize their potential.

We value and respect the diversity of our employees, officers, directors, suppliers, customers, and communities. We build a culture of diversity and inclusion, and work to eliminate discrimination and harassment in all of its forms, including that related to color, race, gender, sexual orientation and gender identity, age, pregnancy, caste, disability, union membership, ethnicity, national origin or religious beliefs.

Our company is committed to providing equal opportunity in all of our employment and purchasing practices. (See [Supplier Sustainability](#) for more about our commitment to supplier diversity within our supply chain). This applies to hiring, salary, benefits, advancement, discipline, termination, and retirement.

Leadership in Removing Barriers and Promoting Inclusion

We follow established processes to achieve diversity goals around the world and to build a culture of inclusion receptive to diverse ideas, experiences and practices. We offer workshops, websites, and communications to help employees embrace and realize the benefits of workforce diversity. Our people also benefit from opportunities to work outside of their home countries.

Efforts globally include the establishment of several Diversity Councils across Europe, Africa, and Latin America. These teams of Johnson Controls diversity champions work actively to improve employee awareness of the advantages of diversity and inclusion, and encourage acceptance for all employees. Example initiatives include distribution of diversity and inclusion newsletters to all employees, development of a diversity and inclusion brochure and training for shop floor employees, and roundtable discussions with country leaders.

Employee Business Resource Groups

Our employees help create an inclusive workforce through initiatives like Business Resource Groups (BRGs). These are employee led, volunteer groups open to all employees with the goal to improve attraction, retention, inclusion, and engagement of a diverse and global workforce. All BRGs are organized by employees and funded by the company. All BRGs go through an official chartering process and must develop programming and initiatives focused in four areas: Career, Commerce, Culture and Community.

- Women's Network (WN)
- African and African American Business Resource Group (AAABRG)
- Sustainability (EMPACT)
- Hispanic Business Resource Group (UNIDOS)
- Asia Pacific Business Resource Group (APBRG)
- LGBTQA Business Resource Group (JC4e)
- Young Professionals (SYNERGY)
- People impacted by disabilities (UNlimited)
- Veterans Engagement Team (VET)

Training and Accountability

The office of Workforce Diversity partners closely with Human Resource and Business leaders across all divisions to meet our diversity and inclusion objectives. Their mission is to create, develop, and fully leverage the strengths of a diverse workforce in order to meet our growth commitments. Strategies in support of this mission fall into four categories:

- 1) Attract and retain the required amount of qualified talent globally.
- 2) Maintain a workplace where employees are included and passionately engaged.
- 3) Invite and leverage a variety of perspectives, cultures and experiences for Innovation.
- 4) Anticipate and manage culture, system, practices and compliance for scalable success.

Johnson Controls has implemented several measures which focus on ensuring accountabilities exist for making progress in diversity. One example is tying a portion of our executives' incentive compensation to diversity performance for females and minorities. In 2017, Johnson Controls achieved its diversity goals for the enterprise and each business unit. We also commit to having a diverse talent pipeline by partnering in the workforce planning forecasts with our business units, each with targeted goals around recruiting interns and new college graduates.

In addition, Johnson Controls has sponsored conferences, including the National Association for the Advancement of Colored People, and has received numerous awards for its work in promoting non-discrimination and diversity. Workers' representatives are not subject to discrimination and have access to workplaces necessary to carry out their respective functions.

Inclusive Culture Commitment

We are committed to providing a workplace that is free of harassment or any other behavior that diminishes a person's integrity and self-esteem. Neither physical nor mental harassment nor abuse will be tolerated. Johnson Controls requires the line management of each facility to ensure implementation of the equal opportunity and no harassment policies in accordance with national, state or provincial law. Additionally, the Executive Vice President of Human Resources monitors implementation and compliance to these policies.

Discrimination is defined as, "Any act or omission which fails to meet the standards of the Equal Opportunity Commission (EEOC) which includes all types of discrimination, to include race, religion, age, national origin, gender, sexual orientation, gender identity, genetic information or disability."

Employees, temporary employees, visitors and other non-employees are encouraged to immediately report situations of harassment committed by anyone, including visitors and other non-employees. They are asked to report the matter to their department manager, plant/facility manager, or local human resources manager. Johnson Controls wants to know of any harassment or unfair practice so that appropriate action can be taken after a prompt investigation. Actions taken as a result of an investigation may include discipline and warnings to employees, employee counseling, leadership training, and EEO/Harassment training.

A 24-hour Integrity Helpline is managed by the Ethics & Compliance department and is available to anyone who wishes to ask a question related to an ethical issue at the company. The Helpline is available in 26 languages, is operated by an independent third-party vendor and allows callers to ask questions anonymously. Employees, suppliers, customers and third parties can ask ethics questions either by phone or through a website, our [Integrity Helpline](#).

Questions that are asked via the Integrity Helpline are triaged and then routed to the appropriate function or Business Unit for handling and response. Statistics are collated quarterly and are reviewed with the global compliance leadership team.

The Integrity Helpline is only one of several communication vehicles. Most often, employees discuss such issues directly with their supervisor. This reflects the fact that most questions that come up every day are being handled at the local plant or office level, with local managers and supervisors. In addition, employees are encouraged to reach out to their Human Resources representative, the legal department or compliance team if they don't feel comfortable going to their direct manager.

Diversity Information

Diversity of governance bodies and employees

[405-1](#)

Governance body (e.g. board members (as of Annual Meeting of <u>March 7, 2018</u>))	Male		Female		Minority or Vulnerable Group		Age Groups		
	Number	%	Number	%	Number	%	% <30 years old	% 30 - 50 years old	% >50 years old
	9	82%	2	18%	3	27%	0%	9%	91%

Employees	Male			Female		
	Global number	% in home country	Global %	Global number	% in home country	Global %
Total	92,869		71%	25,720		29%
Managers	12,440	79%	81%	2,975	21%	19%

Employees	Minority or Vulnerable Group			Age Groups		
	Global number	% in home country	Global %	% <30 years old	% 30 - 50 years old	% >50 years old
Total	10,441		24%	19%	55%	26%
Managers	1,086	17%	17%	3%	61%	36%

Ratio of basic salary and remuneration of women to men, by significant locations* of operations
[405-2](#)

Location	2017 Ratio	2016 Ratio	2015 Ratio	2014 Ratio
Canada	0.90	1.14	0.91	0.80
Czech Republic	0.83	0.88	1.10	0.76
Germany	0.94	0.93	0.86	0.84
Mexico	1.10	0.76	0.84	0.77
Singapore	0.74	0.71	1.07	1.00
China	0.99	0.97	0.96	0.82
Slovakia	0.80	0.97	0.79	0.81
Total Home Country	0.86	0.87	0.75	0.73
Total Worldwide	0.92	0.91	0.91	0.818

*Significant location: location that has a large concentration of employees in both plant and corporate offices.

Incidents of discrimination and corrective actions taken

[406-1](#)

	2017	2016	2015	2014
Total number of incidents of discrimination	84	105	147	148

Status for all incidents for all years:

- ✓ Reviewed
- ✓ Remediation plan being implemented Remediation plan implemented, results reviewed through routine internal management review process
- ✓ Incident no longer subject to attention

Corrective Actions Taken: All appropriate incidents are investigated and corrective actions implemented to prevent a recurrence.

Health and Safety

[103-1](#) | [103-2](#) | [103-3](#)

Vision, Mission, and Values

Health and Safety is critical to Johnson Controls' success as a company. We are committed to a safe and healthy work environment for our employees, our vendors and contractors, our visitors and our communities. We maintain a Zero Harm vision for our Health and Safety programs worldwide. Health and Safety is a core component of Johnson Controls vision which is to achieve *a safe, comfortable and sustainable world*.

Health and Safety is also core to our values as a company which guides our strategy, beliefs and behaviors. Specifically, Johnson Controls' Integrity value is defined as: *We act with honesty, fairness, respect and safety, furthering a culture of unquestioned integrity. This strengthens relationships across businesses and functions.*

Combined, our Vision and Values create a company culture committed to Health and Safety and one where a company culture of Health and Safety is core to our business principles, our strategies and our way to do business.

Health and Safety Organization

At Johnson Controls we are one team, and we value the health and well-being of every team member. Workplace safety is a pillar of our global Johnson Controls Operating System aimed at a zero-injury culture. To achieve that, we apply industry-leading standards across our operations worldwide.

Johnson Controls employs dedicated Health and Safety professionals around the world. Each Business Unit maintains a Health and Safety organization and management structure designed to support its Health and Safety efforts. At the site, plant or branch level, the company employs environmental, and health and safety (EHS) specialists, combining both functions into a single role. The corporate Health and Safety team drives the company's strategic Health and Safety initiatives in close collaboration with the business unit Health and Safety leads. Enterprise wide standards and programs are established in collaboration with the business unit health and safety leaders.

Policies, Standards and Certifications

Johnson Controls has a company-wide [Environmental Health and Safety Policy](#) that is supported by local, regional and site specific employee Health and Safety policies and programs. Johnson Controls' Health and Safety policies embody the key elements enabling Zero Harm to employees and the environment and include local and regional regulatory requirements and industry standards (e.g. European Union, US-OSHA, National Fire Protection Association, country-specific, etc.) when necessary.

For a safety management system, Johnson Controls generally follows the standards of OHSAS 18001. Many of Johnson Controls' locations are certified under this standard, however, Johnson Controls does not require external certification for all its operations. In addition, various locations maintain other key certifications including ISO 9001 and ISO 14001.

Training

Training is a key component of Johnson Controls Health and Safety programs. Our standards require new employees to receive the appropriate level of Health and Safety training for their work environment. Health and Safety training is provided through an employee's initial orientation or on-boarding process and also includes continual Health and Safety training through regular toolbox talks and ranging from specific certifications to general awareness and behavior training conducted through a combination of classrooms and computer based training.

Audits and Inspections

As part of the OHSAS 18001 standard and other applicable Health and Safety standards, Johnson Controls requires locations to perform regular safety audits to ensure proper safety policies, programs procedures, analysis and training are in place. Audit data are used to create improvement and corrective action plans.

In addition, Johnson Controls engages an independent third party conformity assessment and certification vendor to audit selected operations for adherence to our global Health and Safety standards. In addition to Management Systems Certifications for ISO 9001 / ISO 14001 / OHSAS 18001, the third party auditor also performs specialized audits for location-specific Health and Safety issues (e.g., Ergonomics, Industrial Hygiene, Machine Guarding, OSHA Recordkeeping, NFPA 70E Live Electrical, Confined Space, etc.).

Reporting, Technology and Software

Johnson Controls uses an enterprise Environmental Health and Safety software system, EHSIS (Environmental Health & Safety Information System), to support its Health and Safety programs worldwide. This system allows users to input, track and manage work-related injuries and illnesses as well as near misses and unsafe acts / unsafe conditions, create and perform safety audits, measure compliance with government regulations and internal procedures, create standard reports, manage risk assessments, track waste / energy / waste metrics and medical monitoring results (i.e., blood lead levels). The EHSIS platform is used by the company's Health and Safety professionals and other stakeholders to address their Health and Safety related responsibilities.

We continue to benchmark and share information on workplace health and safety through our participation in the National Safety Council.

Each Business Unit is responsible for reporting their Health and Safety activities and outcomes. These reports are generated monthly and are circulated to the senior leadership team. Health and Safety is a standard topic at monthly operational reviews.

The Johnson Controls' Corporate Environmental Health and Safety department provides a monthly Global "Zero Harm" Report that contains information related to Key Performance Indicators including Total

Recordable Incident Rate (TRIR) and Lost Time Incident Rate (LTIR). The monthly “Zero Harm” Report is distributed to Johnson Controls’ Executive Leadership Team including the Chairman and Chief Executive Officer and his direct reports, the Business Unit Presidents and their direct reports, and to the Global Health and Safety Leadership Team. At the end of each quarter, a “Quarterly Zero Harm” report is produced.

Health and Safety Committees

As part of our global Health and Safety standards, Johnson Controls maintains Health and Safety Committees at the Local (location), Regional, Business Unit and corporate levels.

At the Local level, Health and Safety Committees take many forms, depending upon the business, but serve the same principal function: to facilitate and maintain regular communication regarding Health and Safety issues and information across all levels of the organization. This information includes, but is not limited to Health and Safety standards, processes and procedures, roles and responsibilities, prevention measures, near misses and incident reviews, key performance indicator trends, reporting and investigation obligations, inspections by relevant authorities, and both internal and external audit results. Health and Safety meetings are held regularly and topics are tailored to specific location needs depending upon the type and scope of work.

In the manufacturing organization, Health and Safety Committees generally operate at the location level due to the size and concentration of employees. In the installation and service business, Health and Safety Committees generally operate at the branch and/or regional levels due to a dispersed workforce.

At the Corporate level, the Environmental, Health and Safety Leadership Team (SLT) drives Johnson Controls’ Health and Safety agenda. The SLT includes Vice President of Environmental, Health and Safety (EHS), Directors of EHS each business division, the Senior Counsel for EHS, and the Director of Global Corporate Sustainability. The purpose of the SLT is to set Johnson Controls’ global EHS vision, mission, strategy, and standards. The SLT also defines and reviews Johnson Controls’ Key Performance Indicators, identifies and evaluates global Health and Safety issues, shares best practices, and works to evolve Johnson Controls’ Health and Safety programs. The SLT meets every month. The Vice President of EHS, and the Senior Counsel for EHS also are members of the [Global Sustainability Council](#).

Key Performance Indicators

Johnson Controls utilizes a mixture of Leading and Lagging Indicators to assess the Health and Safety performance of its operations. Lagging indicators include the OSHA Total Recordable Incident Rate (TRIR) and the Lost Time (or Lost Workday) Incident Rate (LTIR) based upon the number of incidents per 100 employees (or per 200,000 work hours). Johnson Controls places more emphasis on the TRIR due to its uniform application around the world. While the LTIR is also tracked, Johnson Controls believes it is less useful in measuring Health and Safety outcomes due to the inherent differences in national occupational compensation and health schemes and variations in workplace regulations.

While Johnson Controls continues to measure and report on lagging indicators, it promotes the use of leading indicators as more relevant predictors of Health and Safety performance and outcomes. Leading indicators include, but are not limited to, near misses and unsafe conditions reported, corrective actions completed, safety discussions held, motor vehicle calls reported, safety observations noted, safety focused improvement events completed, job safety analysis completed, and self-audits completed. Presently, leading indicators are defined, tracked and measured by each Business Unit.

Trade Union Health & Safety

Certain Johnson Controls operations can be subject to collective bargaining agreements, including health and safety topics covered by these agreements. In the European Union, Johnson Controls' Health and Safety programs are subject to Works Council review and approval and to collective bargaining agreements in certain countries. Johnson Controls collaborates with trade unions and other employee representative organizations as defined by local regulations to improve workplace health and safety.

Health & Wellness

Johnson Controls has Health and Wellness programs at its major locations. In addition to the traditional workplace Health and Safety programs, the company's Health and Wellness programs seek to improve employee well-being both within and outside of the workplace. Health and Wellness programs include the establishment of fitness centers, running and walking tracks, weight loss programs, vaccinations, smoking cessation programs and many other health improvement and health prevention programs. Johnson Controls believes that these Health and Wellness programs are an integral part of the company's Health and Safety agenda going forward.

Health and Safety Information

Workers representation in formal joint management-worker health & safety committees

403-1

<p>Percentage of the total workforce represented in formal joint management-worker health and safety committees:</p>	<p>✓ Over 75% Between 50% and 75% Between 25% and 50% Up to 25% None</p>
<p>Explanation of the level(s) at which each formal joint management-worker health and safety committee typically operates within the organization:</p>	<p>The Company maintains and requires Health and Safety Committees at the facility, region, business unit and enterprise levels. For a more complete description of the Company's Health and Safety Committees, please refer to the Health and Safety- Overview document.</p>

Types of injury and rates of injury, occupational disease, lost days and absenteeism and number of work-related fatalities

[403-2](#)

	Incident Category	Employee Category	2017	2016	2015	2014
Global	Injury Rate (IR)	Total Workforce	0.56	0.62	0.74	0.76
Global	Lost Days Rate (LDR)	Total Workforce	0.24	0.26	0.33	0.40
Global	Work-Related Fatalities	Total Workforce	0	3	2	0

- We do not track by region due to system constraints.
- To calculate these figures we follow US OSHA injury classifications globally.
- Data is per 200,000 hours.

Workers with a high incidence or high risk of diseases related to their occupation

[403-3](#)

- Our Safe Workplace Principle within Johnson Controls Manufacturing System is aligned with the requirements of OHSAS 18001 and 100% of our Power Solutions facilities in 2017 are certified by a third party to meet this standard.
- Johnson Controls provides a variety of relevant medical services to assist employees in countries where access to health care may be limited.
- We also sponsor educational programs about prevention and treatment of both common and serious diseases. Programs about lead blood reduction are routine in Power Solutions Plants. During 2017, 100% of our manufacturing employees across our global operations tested below 30 micrograms per deciliter. To provide additional details, percentage of employees below 20 micrograms per deciliter by region are: 100% in Europe and Asia, 99% in Mexico and South America and 98% in the United States.

Health and safety topics covered in formal agreements with trade unions

[403-4](#)

We believe strongly in providing all employees a safe place to work no matter location or union association. Johnson Controls communicates that belief through its [Code of Ethics](#), which applies to all employees and our suppliers.

Employee Development, Training and Education

Talent Management

Johnson Controls supports the continued development of its people. Strategic talent reviews and succession planning occur on a planned cadence annually – globally and across all business areas. Annually, the CEO convenes several meetings with senior company leadership to review top enterprise talent. In these meetings, leaders discuss key talent management issues with the CEO, review critical roles, top talent, strategic talent moves, and gain commitment for their talent management focus for the coming year. Talent assessments and career development plans are used to drive development of high-potentials by identifying individual key strengths and areas for improvement, and identifying key events and experiences needed for the development of the individual. Across the organization, our leaders are monitoring the progress on representation of diverse talent via our succession planning and talent review processes, which allows for pipeline development and career planning for diverse talent.

Training & Education

High performance at Johnson Controls is an outcome of a person's ability to change, adapt, and grow throughout his or her career. At Johnson Controls, the emphasis is on the value of real-life, real-time learning that enables a person to meet the demands of challenging and changing work. The company's approach to learning focuses on reinforcing key principles that are designed to support an individual's effectiveness in his or her current job, and in future situations. Throughout the world, Johnson Controls employees are encouraged to develop by doing, take charge of their learning and growth, and seek support along the way.

Johnson Controls ensures that managers and employees are equipped with the tools necessary to continue to learn, grow and develop throughout their careers. Johnson Controls provides technical and leadership training to employees, customers and suppliers who work for or with our products and services. Training is provided in a number of formats to accommodate the learner's style and pace, location, and technological knowledge and access. Johnson Controls has offered more than 3,000 courses to all audiences. This represents nearly 40,000 individual student enrollments in course offerings, of which 36,000 were employees.

Additionally, the company's volunteer programs offer employees the opportunity to enhance their leadership development skills by volunteering their time and expertise for local non-profit organizations, taking on board roles for associations and non-profits, and managing projects with a team of volunteers. These types of skills are beneficial for the workplace and contribute to a lifelong learning outside of the office environment.

Programs for upgrading employee skills and transition assistance programs

[404-2](#)

As Johnson Controls continues to grow, we believe that attracting, developing, motivating and retaining leaders are key elements of our sustainable and profitable growth. As our business has become more global, we must develop leaders from every part of the world. We understand that like customers, our employees and potential employees have choices of where to work, and we must compete for the best talent. We invest significantly in being an employer of choice, and have developed a system to promote our people's career and personal development while seeking their engagement in our vision, values and objectives. We ensure that our work environments promote excellent performance, teamwork, inclusion, leadership, safety and growth. We encourage community involvement and volunteerism with leadership and environmentally related causes.

Johnson Controls sponsors a variety of formal programs to recognize, reward and motivate employees:

- **Extreme Learning Program (XLP)** – A development program for senior leaders who have demonstrated the potential to be a next-generation global leader at Johnson Controls. Each year a group of roughly 40 high-potential leaders are challenged with solving real-world business problems while building new relationships and exploring global business issues. The program started in 2004 and has graduated 12 classes.
- **Leadership Edge Program (JCLE)** – An intensive development and acceleration program for senior managers and directors who have demonstrated the potential to be the next generation of leaders at Johnson Controls. The program helps leaders shift their mindset and behaviors to think and act with broader scope and responsibility by strengthening their knowledge and skill in business strategy, financial acumen, customer centricity, and people leadership. This program annually engages 150 managers from around the world. The program began in 2007.
- **iLead People** – The program is for frontline managers to create clarity about what their role as a leader is at Johnson Controls. Leaders learn how to reinforce the Johnson Controls high performance culture and deliver an impactful leadership development experience that builds global management capability. Frontline leaders will develop skills needed to effectively manage, engage, and lead their team in order to drive organizational growth.
- **iLead by Influence** – This program covers the critical ‘influencing skills’ that can help participants lead without authority and does so in an interactive format that includes practical skill building exercises.
- **Change Leadership Curriculum** – The award winning curriculum helps employees at all levels develop change competence. The curriculum reaches thousands of employees per year and includes titles in: Change Practitioner Bootcamp, Change Agents: Delivering Project Results, Reinforcing Change, Leading yourself through change, Leading and Accelerating Change, Communicating Change and Sponsoring change for senior leaders.
- **Commercial Development Program** - The Johnson Controls Commercial Development Program (CDP) is a two-year program designed to help top talent develop their commercial skills through three rotational assignments across various areas of the company. Participants are involved with projects and initiatives that directly impact our strategic operations and business growth. The program allows participants gain insight into a variety of business operations and provides training and educational opportunities to supplement their development.
- Professional development for all employees includes our new Career Development Portal, and many other courses, videos and self-paced activities across a wide array of professional development skills. The Career Development Portal includes assessments that employees can use to identify preferences, career options and resources to develop themselves.

Average Hours of Training per Year per Employee

[404-1](#)

Employee category	2017		2016		2015		2014	
	Male	Female	Male	Female	Male	Female	Male	Female
CEO	6.58	0	2.42	0	3.17	0	2	0
President/Executive Vice-President	5.96	6.17	3.2	1.00	3.63	2.17	2.66	5.3
Vice-President/General Manager	5.94	6.32	3.13	5.2	6.32	8.46	4.57	6.1
Director	7.37	7.93	7.40	6.20	10.95	10.00	9.13	10.14
Manager	10.23	10.17	10.02	10.50	14.29	15.95	10.08	13.22
Supervisor	10.02	19.40	11.34	15.12	12.85	14.46	8.53	9.58
Individual Contributor - Professional	9.50	15.55	10.35	11.52	10.34	12.35	8.14	8.07
Individual Contributor-	12.57	11.78	15.83	14.29	3.94	2.09	7.57	14.3
Overall Average	11.07	13.02	12.78	12.78	6.59	5.13	10.04	8.79

Performance Management

Johnson Controls has a standardized performance management process which includes an annual development plan for all non-production employees globally. This standardization enables improved strategic talent review workflow, career development planning, as well as improved reporting and analysis. Johnson Controls also maintains internal web portal sites dedicated to Human Resource professionals, employees and managers for desktop access to key Human Resource-related information that has been translated for global use.

Percentage of employees receiving regular performance and career development reviews

[404-3](#)

Employee Category	2017	2016	2015	2014
Male	38	77	89	93
Female	48	78	91	93
Total	40	77	90	92

Employability

Johnson Controls has an internal posting system in place throughout the United States, Canada and Europe. This system allows current employees the opportunity to search, review and apply for jobs through a centrally managed website. Plans for South America and Asia are underway. We have undertaken measuring the enrollment of our diverse high potentials in these programs to ensure that this talent has access to critical career development experiences.

Continued External Employability

[402-1](#)

The competitive nature of the business requires Johnson Controls to occasionally restructure in order to compete and survive in a rapidly changing, cost-driven customer environment. In alignment with company values, when workforce reductions occur, they are carried out with utmost respect for the individuals concerned.

Johnson Controls respects any obligation from applicable regulations or collective agreements to inform employees and their representatives in due course. In general, should a plant close or reductions in workforce occur within Johnson Controls operations, impacted employees receive 60-day advance notice. In accordance with federal requirements, Johnson Controls also ensures the collective bargaining unit, if applicable, the State dislocated worker unit, and appropriate unit of local government are also advised.

Measures frequently taken in connection with redundancies include: identification of alternative internal employment opportunities and provision for outplacement transition services. Johnson Controls ensures compliance with company plan benefit guidelines and local government regulations.



Economics

ECONOMIC

Economic Performance

[103-1](#) | [103-2](#) | [103-3](#)

Our GRI report focuses on operations within our control for FY2017. Unless otherwise noted, this report includes data from business operations that were at least 51 percent under Johnson Controls operating control and financially consolidated during the reporting year. Also see our [2018 Annual Report](#).

Johnson Controls is a global diversified technology and multi-industrial leader serving a wide range of customers in more than 150 countries. We employ more than 100,000 people around the world. We create intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart cities and communities. We are committed to helping our customers win and creating greater value for all of its stakeholders through strategic focus on our buildings and energy growth platforms.

In the fourth quarter of FY2016, Johnson Controls, Inc. and Tyco completed their merger. This merger brings together best-in-class product, technology and service capabilities across controls, fire, security, HVAC, power solutions and energy storage, to serve various end-markets including large institutions, commercial buildings, retail, industrial, small business and residential.

Building Technologies & Solutions

The Building Technologies & Solutions business is a global market leader in engineering, developing, manufacturing and installing building products and systems around the world, including HVAC equipment, HVAC controls, energy-management systems, security systems, fire detection systems and fire suppression solutions. The Buildings business further serves customers by providing technical services (in the HVAC, security and fire-protection space), energy-management consulting and data-driven solutions via its recently launch data-enabled business. In FY2017, approximately 27% of its sales originated from its service offerings.

We are a North American market leader in residential air conditioning and heating systems and a global market leader in industrial refrigeration products. Our trusted brands across HVAC, building controls, and fire and security systems - such as YORK®, Hitachi Air Conditioning, Metasys®, Ansul, Ruskin®, Titus®, Frick®, PENN®, Sabroe®, Simplex® and Grinnell® - give Johnson Controls the most diverse portfolio in the building technology industry. In FY2017, Building Technologies & Solutions accounted for 76% of the Company's consolidated net sales.

We are well positioned with the market's broadest portfolio of products, integrated solutions, and service offerings. We continued our proud history of innovation with numerous product launches and enhancements—including Metasys® 9.0, our next-generation building automation system that enhances productivity, increases operational savings and reduces installation costs. We will continue to invest in research and development as well as sales, leveraging global scale to expand our installed base and market reach. As building technologies continue to converge, we are prepared to lead the way.

Power Solutions

Johnson Controls is the largest producer of lead-acid automotive batteries in the world, producing and distributing approximately 154 million lead-acid batteries annually in approximately 68 wholly- and majority-owned manufacturing or assembly plants, distribution centers and sales offices in 17 countries worldwide. Power Solutions delivered \$7.3 billion in sales in 2017. Approximately 76% of unit sales worldwide in FY2017

were to the automotive replacement market, with the remaining sales to the OEM market. Power Solutions accounted for 24% of the Company's FY2017 consolidated net sales.

Power Solutions services both automotive OEMs and the battery aftermarket by providing advanced battery technology, coupled with systems engineering, marketing and service expertise. Our portfolio includes a full range of leading battery technologies that support the continuum of vehicle electrification, with number one global positions in conventional lead-acid and start-stop batteries. Investments in new product and process technology have expanded product offerings to absorbent glass mat ("AGM") and enhanced flooded battery ("EFB") technologies that power start-stop vehicles, as well as lithium-ion battery technology for certain hybrid and electric vehicles. Johnson Controls has also invested to develop sustainable lead and poly recycling operations in the North American and European markets.

This year we saw strong growth in start-stop technology, led by North America and China. The percentage of new vehicles using this technology is expected to increase from approximately 40 percent today to 60 percent globally by 2025. With the typical electrical load for vehicles also growing, we see additional opportunity for absorbent glass mat (AGM) battery technology. Our \$800 million expansion to increase global AGM production capacity, launched in 2015, continued on pace in 2017.

Investments and Indirect Economic Impacts

Johnson Controls makes investments that will strengthen our ability to serve our customers and support long-term growth. These investments are determined each year as deemed necessary and appropriate for the business and go through a rigorous business case review.

Indirect economic investments are made each fiscal year to support many different stakeholders. In the last seven years, the Johnson Controls Foundation has funded more than \$57 million to support U.S. charitable organizations in the areas of the arts, education, health and social services, and the environment. In 2017, the Foundation granted \$7 million to nonprofit organizations that measurably improve our communities. Through the Foundation's Education and Arts Matching Gift Program employee's contributions are matched dollar-for-dollar to eligible institutions and organizations in those categories. All investments are tracked with impact metrics and are reviewed to ensure goals are attained. Also see [Community Engagement](#) section.

Our products and services also have an indirect economic impact by helping our customers save energy and water, and reduce waste, and in turn, save money. Additionally our financial support of research and development in clean energy technologies, such as energy storage, helps to strengthen economic opportunity for a wide range of stakeholders.

Direct Economic Value Generated and Distributed

[201-1](#)

Currency: Million USD	Value generated	Value distributed					Value retained
	Revenues	Operating costs	Wages and benefits	Payments to providers of capital	Payments to government	Community investments	(generated less distributed)
FY2017							
Company Level	31,606	-21,136	-6,614	-1,198	-1,756	16.7	909

Financial Risks and Opportunities Due to Climate Change

[201-2](#)

This [table](#) details our analysis of risks and opportunities related to climate change.

Johnson Controls is committed to being a solution provider. We help our customers win by providing a range of innovative, sustainable, clean technologies to market that help our customers adapt to climate change, use fewer resources, protect the environment, and reuse and recycle materials.

We believe that significant action is needed in the short-term to mitigate the causes of climate change and begin adapting to the negative risks and actual impacts of global warming. We believe the highest priority actions should be improving energy efficiency in buildings and vehicles which represent the fastest, cleanest and most cost-effective way to reduce greenhouse gas emissions.

We believe that a comprehensive global climate policy is needed, backed by strong national policies, goals and actions. We believe that the price of energy should reflect the environmental costs of consumption allowing market economics to lead the shift to cleaner alternatives and new technologies. We support a variety of market-based approaches to regulating carbon emissions that assure the integrity of the reductions and are efficient in their implementation.

The current lack of consistent climate policy creates economic and regulatory uncertainty, which may impact the demand for our products, obsolescence of our products and our operations. Such regulatory uncertainty extends to regulations of products and components and incentives that if discontinued, could adversely impact the demand for energy efficient buildings and batteries for energy efficient vehicles, and could increase costs of compliance. For example, the Kigali Amendment to the Montreal Protocol has not been ratified by the United States. This ratification and implementation is needed to deliver certainty to the HVAC industry.

We believe that a complementary set of energy policies are needed to overcome market barriers to energy efficiency, accelerate emission reductions and reduce the overall cost of compliance to businesses and consumers. These policies include updated building codes, building performance labeling, and financial incentives for energy efficiency retrofits. In the vehicle sector, incentives are also required to build an effective supply-chain for large-scale manufacturing of next-generation advanced technology batteries and electric drive vehicles.

Additionally, climate changes, such as extreme weather conditions, could impact our business. For example, the demand for our products and services, such as heating and air conditioning equipment and automotive replacement batteries, may be affected by changing weather conditions. Climate changes could also disrupt our operations by impacting the availability and cost of materials needed for manufacturing and could increase insurance and other operating costs. These factors may impact our decisions to construct new facilities or maintain existing facilities in areas most prone to physical climate risks. We could also face indirect financial risks passed through the supply chain, and process disruptions due to physical climate changes could result in price modifications for our products and the resources needed to produce them.



Supplier Sustainability

SUPPLIER SUSTAINABILITY

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At Johnson Controls we are committed to providing safe, quality products and services. It is our goal to work collaboratively with our suppliers to exceed our customers' increasing expectations, achieving outstanding performance through best in class products, services and processes. For more detailed information, see our [Supplier Portal](#).

Suppliers Partnership for the Environment

The [Suppliers Partnership for the Environment](#) (SP) is an innovative partnership between automakers, their suppliers and the US Environmental Protection Agency (EPA) to work together to develop projects and activities focused on environmental sustainability issues impacting the auto supply chain. Randy Leslie, Vice President of Global Products Engineering Services & Change Program at Johnson Controls, chairs the SP leadership council. SP works across several focus areas:

- Addressing ways for automotive suppliers to reduce their energy consumption and optimize their efficiency, reducing their carbon footprint by utilizing more efficient technologies, practices and services.
- Providing a forum through which SME innovators can communicate and share ideas directly and efficiently with OEMs and Tier I suppliers.
- Providing a forum for the auto supply chain to share leading sustainability practices/innovations to foster global impact and harmonized approaches, particularly with the G7 and G20.
- Developing and deploying environmental technologies and programs in order to reduce environmental impacts, gain financial value, as well as promote environmental sustainability.
- Identifying ways to provide value within the automotive supply chain by working together to reduce waste, promote reuse and maximize recycling.
- Promoting collaboration and sharing of environmental best practices to support the automotive supply chain in the Southeastern United States in advancing its environmental sustainability, waste minimization and business development goals.
- Addressing opportunities for automotive suppliers to minimize and optimize their water usage.

Procurement Practices

Johnson Controls' Procurement Leadership Team (PLT) focuses on promoting sustainability within the supply chain. We work with more than 200,000 direct and indirect suppliers throughout the world, and expect them to conduct their operations in a socially and environmentally sustainable manner, aligning with Johnson Controls values and policies. Johnson Controls expects all of its suppliers to abide by its key policies including our corporate ethics, human rights and sustainability policies and our sustainability commitments. The PLT has developed environmental requirements that state all suppliers must comply with applicable laws and regulations, as well as our social and environmental standards. Johnson Controls expects all of its suppliers to abide by its key policies including our corporate ethics, human rights and sustainability policies and our sustainability commitments.

Environmental and Social Oversight Protocols for Suppliers

Expectations

Johnson Controls [expects its suppliers](#) to conduct their operations in a socially and environmentally responsible manner. Our goal is to work collaboratively with suppliers to encourage the following:

1. Compliance with applicable laws and regulations.
2. Integration of environmental, occupational health and safety, and human rights and labor policies into the decision-making process based on a sound management system.
3. Clear, accurate and appropriate reporting to Johnson Controls upon request.

Basic Principles

Our Code of Ethics provides overall guidance about our expectations to both suppliers and employees. In addition, a company-wide standard is in place that provides additional guidance to procurement and other personnel regarding the environmental and social performance of suppliers.

Johnson Controls encourages improvement when appropriate. However, termination of a contract is considered when the vendor fails to comply with the spirit and intent of our [Code of Ethics](#), has significant social and environmental performance issues that cannot be resolved in a timely or cooperative manner or could result in significant repercussions for Johnson Controls or our customers.

Supplier Selection Criteria

In addition to cost and quality, social and environmental performance is used to select and retain suppliers. Acceptance of a purchase order means the supplier agrees to our purchasing standards. No purchase orders will be awarded to suppliers that refuse to abide by the [Code of Ethics](#) or equivalent within a reasonable amount of time or have significant environmental or social performance issues that cannot be resolved in a timely manner.

Factors influencing supplier selection include (but are not limited to) quality, service, delivery and technical requirements. We prefer local or regionally based suppliers who are able to meet our requirements in order to reduce GHG emissions related to transit, streamline supply chain complexity, and create opportunities for other suppliers in the markets we serve.

Supplier Assessments and Supplier Scorecard

Johnson Controls is able to provide a wide portfolio of products, services and operations that promote efficient use of resources with help from its mature supply chain and on-going innovation.

Johnson Controls identifies new suppliers each and every year. The Supplier Assessment Survey (SAS) is a best practice in our business and we perform it for all new suppliers. A SAS is required for all new suppliers and suppliers with poor performance by the critical areas of the Global Supplier Scorecard which consist of the following categories: Leadership, Sustainability, Quality Management Systems, Material Systems, Commercial Systems & Engineering Systems.

Johnson Controls assesses its suppliers on several different dimensions through different mechanisms including background checks, self-assessment surveys, site visits, third party audits/data, internal discussions with personnel from other internal (i.e., environmental, safety, human resources and quality) and external organizations (i.e., industry peers, regulatory agencies, investment analysts, internet, news media, and non-government organizations) as well as trade publications, Dunn & Bradstreet reports, and informal networks with other procurement groups and trade associations.

The company also employs a proprietary supplier questionnaire called the [Johnson Controls Sustainability Supplier Rating](#) to quantitatively measure our suppliers' sustainability programs. It was first released in January of 2010 and is available on the Johnson Controls website.

The online survey is administered to key suppliers annually. The survey contains questions related to human rights, working conditions, employee safety, energy management, carbon footprint, waste management, local and diversity sourcing, and overall environmental impact. It also asks if the supplier is publicly reporting data such as its greenhouse gas emissions and specifically asks if the supplier is disclosing its carbon emissions to the [CDP global disclosure system](#). In addition to this survey, on site reviews of supplier operations may also occur as needed. The Johnson Controls' Sustainability Rating is part of our supplier scorecard.

For example, when we first determine to put a vendor on an approved vendor list or first establish a contract with a supplier, we establish expectations and negotiate terms and conditions. As part of this work, we assess the supplier's ability to meet our expectations and terms and conditions. For organizations that seek to be long term suppliers to Johnson Controls, we expect them to complete a number of questionnaires and forms, including our Supplier Sustainability Rating Survey, which covers multiple environmental and social topics and serves as a basis for certain awards that we grant to high performing suppliers. We evaluate their performance in a number of ways which include: regular business reviews, scorecards, quality audits, and other mechanisms. As part of our evaluation, we consider compliance with our [Code of Ethics](#) as well as applicable laws and regulations governing such topics as labor, human rights, and other environmental and social topics.

Tracking and Accountability

[308-1](#) | [308-2](#) | [414-1](#) | [414-2](#)

	2017	2016	2015	2014
Percentage (%) of new suppliers that were screened using social criteria	100%	100%	100%	100%
Percentage (%) of new suppliers that were screened using environmental criteria	100%	100%	100%	100%

Each business unit tracks the following metrics on our suppliers:

- Percentage of total suppliers that refuse to abide by the Johnson Controls Code of Ethics or equivalent.
- Percentage of direct material suppliers identified for auditing.
- Percentage of direct material suppliers audited by Johnson Controls or third party.
- Number and type of suppliers terminated due to social and environmental performance issues

We require all our suppliers to adhere to our [Code of Ethics](#), which covers such issues as labor, human rights, and environment, and we have policies and procedures in all our Business Units for removing unethical suppliers from our approved vendor lists if they don't or won't comply with our Code of Ethics. We do not disclose specific numbers or incidents regarding non-compliance.

To date, no significant social or environmental performance issues have been identified with any supplier. Current data indicates that no supplier has refused to abide with the essence of the Code of Ethics or has been terminated due to social or environmental performance issues. However, there have been instances in which follow-up questions and discussions have been necessary, particularly relative to environmental permit currency and operations compliance.

There have been past instances where suppliers with good environmental and/or social performance records were awarded contracts over those with more questionable records.

Protocols for Assessing Data Reliability

Generally, Johnson Controls expects suppliers to behave ethically as well as maintain open and honest communications. We believe this to be true with nearly every supplier that we have under contract. Each business group has a common set of criteria (supplier sustainability rating, supplier scorecard and supplier assessment survey) for assessing the environmental and social performance of key suppliers, especially those posing the greatest risks to Johnson Controls and its customers (i.e., raw material extraction, chemical processing, manufacturing associated with high labor demands, etc.). We also rely on local, state and federal agencies to monitor a supplier's compliance with environmental and labor laws. We often use the web or have direct discussions with the regulatory agency to review a supplier's compliance record. In addition, we often perform site audits of selected suppliers to ensure that the proper environmental and social processes are documented, implemented and remain effective. Additional supplier oversight may also be prompted by negative reports regarding the environmental and social conditions of a supplier's facility or process.

However, like any company, we encounter issues that are dealt with promptly and appropriately. Falsification of data is taken seriously and appropriate follow-up actions are taken whenever data is suspect that could result in contract termination.

Procedures and Timetable for Addressing Supplier Compliance

In April 2006, the corporate standard that provides [Code of Ethics](#) guidance to procurement and other personnel regarding the environmental and social performance of suppliers was implemented company-wide and continues as new suppliers are added. Each business has established common processes to ensure compliance with the standard and appropriate additions/modifications are being taken. For some business units, implementation includes modifications to the Suppliers Standard Manual, audit criteria, processes for collecting and reporting metrics, and discussions with suppliers.

In addition, self-audit questionnaires have and continue to be sent to key suppliers in each business. The "first round" responses were reviewed and opportunities for improvement discussed with key suppliers. Improvements include ensuring each supplier understands and complies with our human rights, environmental, governance expectations and encouraging them to have systems in place to drive continuous improvement.

Supplier Diversity

Diversity business development is the set of commercial and purchasing processes that incorporate diverse-owned businesses as elements of our product and services offerings. It is a strategic business imperative that supports our mission to exceed customers' increasing expectations. As such, goal attainment and progress is reviewed and communicated throughout the organization on a monthly basis. We understand that diversity business development is a team effort and requires the support of each Johnson Controls office, facility and account.

Our diversity business initiative is directed by senior management and is integrated into our corporate strategy. Johnson Controls and its customers define diverse suppliers as companies that are certified as owned, operated and controlled by minorities or women, and those designated by government agencies as small or disadvantaged businesses. We do business with more than 500 diverse suppliers and contractors, representing more than 50 product and service categories.

Since 2003, Johnson Controls has been a member of the elite Billion Dollar Roundtable (BDR), an organization comprised of only 24 U.S. corporations that spend more than \$1 billion annually with minority- and women-owned businesses. The BDR's mission is to drive supplier diversity excellence through best practice sharing and thought leadership.

Guidance on Environmental and Social Performance of Suppliers

Our [Code of Ethics](#) provides overall guidance about our expectations to both suppliers and employees. In addition, a company-wide standard is in place that provides additional guidance to procurement and other personnel regarding the environmental and social performance of suppliers as further specified below:

LABOR – Suppliers should treat workers with dignity and:

1. Prohibit the use of forced, bonded, indentured or involuntary prison labor. Allow workers to leave employment upon reasonable notice and not require workers to hand over government-issued identification, passports or work permits as a condition of employment.
2. Employ workers who are at least 16 years old. Youth (between 16 to 18 years) should enjoy all the benefits of a nurturing workplace such as training and development programs. Workers under the age of 18 should not perform hazardous work and may be restricted from night work with consideration given to educational needs.
3. Set work hours to comply with local law. Limit a workweek to 60 hours or less, including overtime, except in emergency or unusual situations.
4. Comply with applicable wage laws, including those relating to minimum wages, overtime hours and legally mandated benefits.
5. Employees receive at least the minimum wage required by law or the prevailing industry wage, whichever is higher. Workers receive full details regarding deductions for taxes, and benefits. Wages are not deducted for disciplinary purposes and are paid in cash, check form or by direct deposit.
6. Maintain workplaces free of physical or mental harassment, abuse, or any other behavior that diminishes a person's integrity and self-esteem. This includes harsh and inhumane treatment, including any sexual harassment, sexual abuse, corporal punishment, mental or physical coercion, verbal abuse of workers.
7. Maintain workplaces free of unlawful discrimination and harassment in all of its forms, including that related to color, race, gender, sexual preference, age, pregnancy, caste,

disability, union membership, ethnicity, and religious beliefs. This applies to hiring, salary, benefits, advancement, discipline, termination, and retirement.

8. Respect voluntary freedom of association, including the right to organize and bargain collectively in a manner that is legally compliant. Workers' representatives are not subject to discrimination and have access to workplaces necessary to carry out their respective functions. Where worker representation and collective bargaining are restricted by law, efforts should be made to facilitate open communication and direct engagement between workers and management as alternative ways of ensuring that workers' rights, needs and views are considered and acted upon appropriately and in good faith.

HEALTH AND SAFETY – suppliers practice the following:

1. Control worker exposure to potential safety hazards (e.g., electrical and other energy sources, fire, heat, vehicles, and fall hazards) through proper design, engineering and administrative controls, preventive maintenance and safe work procedures (including lockout/ tag-out). Where hazards cannot be adequately controlled by these means, provide workers at no cost as appropriate the proper personal protective equipment and ensure proper maintenance of the equipment. Workers are not disciplined for raising safety concerns.
2. Maintain appropriate emergency plans and response procedures, including: emergency reporting, employee notification and evacuation procedures, worker training and drills, appropriate fire detection and suppression equipment, adequate exit facilities and recovery plans.
3. Manage, track and report occupational injuries and illnesses, including provisions to: a) encourage worker reporting; b) classify and record injury and illness cases; c) provide necessary medical treatment; d) investigate and implement corrective actions to eliminate their causes; and e) facilitate return of workers to work.
4. Identify, evaluate and control worker exposure to chemical, biological, radiological and physical agents as well as physically demanding tasks. Provide appropriate personal protective equipment, when hazards cannot be otherwise controlled.
5. Provide and properly maintain machine safeguards, interlocks and barriers.
6. Provide clean toilet facilities, access to potable water and sanitary food preparation and storage facilities. Worker dormitories provided by the vendor or a labor agent are to be clean, safe, and provide emergency egress, adequate ventilation and reasonable personal space.

ENVIRONMENTAL - adverse effects on the community, environment and natural resources are to be minimized while safeguarding the health and safety of the public as well as ensure the following:

1. Obtain, keep current and follow required environmental permits (e.g. discharge monitoring) and registrations.
2. Implement programs to conserve water and energy and reduce waste.
3. Identify and manage the materials posing a hazard if released to the environment are to ensure safe handling, movement, storage, recycling or reuse and disposal.
4. Monitor, treat and control air emissions, wastewater and waste as required prior to discharge or disposal.
5. Adhere to applicable laws and contract requirements regarding prohibition or restriction of specific substances, materials and waste.

MANAGEMENT SYSTEM – suppliers adopt a management system compliant with ISO 14001 or equivalent as approved by Johnson Controls Procurement Department that promotes continuous improvement and compliance with applicable laws, regulations and contract requirements.

ETHICS – suppliers should uphold the highest ethical standards to include:

1. Prohibit corruption, extortion and embezzlement, bribery, or other means of obtaining undue or improper advantage and to ensure fair business, advertising and competition.
2. Properly disclose and protect business information, customer information, and intellectual property rights in accordance with applicable requirements and prevailing industry practices.
3. Protect supplier and employee whistleblower confidentiality.

SLAVERY AND HUMAN TRAFFICKING - suppliers should take steps to ensure that slavery and human trafficking is not taking place in any part of their supply chain or in any part of their business. To the extent that a supplier refuses to cooperate with our compliance efforts, we may reconsider our supply arrangement and implement remedies available to us. Please see our [Slavery and Human Trafficking Policy](#).

CONFLICT MINERALS – We will not purchase from suppliers who provide products with any materials from the conflict region. Please see our [Conflict Minerals Policy](#) and [Conflict Minerals Report](#).

Proportion of Spending On Local Suppliers

[204-1](#)

	2017	2016	2015	2014
Percentage, estimated, of the procurement budget used for significant locations of operation spent on suppliers local to that operation (such as percentage of products and services purchased locally)	60%	60%	60%	60%

**Geographic definition of "local": May include immediate area for routine support and may extend to entire host country or adjacent areas or countries.*



Our Customers

OUR CUSTOMERS

Customer Health and Safety

Our Company values include being "Customer Driven" and "Future Focused", which define our commitment to helping our customers win and to continuously improving our business. The responsibility for monitoring customer satisfaction resides within the Board of Directors and within business unit management.

Johnson Controls is committed to providing quality products and services that meet or exceed the expectations of our customers. Deficiencies that threaten the physical well-being of any person or put the financial security of our company at risk should be reported immediately to management. Deficiencies may involve product quality, safety, design, installation, or maintenance.

Our internal Johnson Controls Operating System (JCOS) defines and standardizes best practices across our corporate activities, including our Commercial Excellence initiative as well as our Engineering Excellence initiative which together help to continuously improve the solutions we deliver to our customers which advance health and safety. JCOS also advances uniformity in dealing with customers and brings prompt, measurable quality improvements.

Building Technology & Solutions Delivers Customer Health & Safety Results

At Johnson Controls, we create healthier, more productive building environments that deliver energy savings, operational savings and sustainable solutions. No matter if it's for homeowners, schools or major military installations, our technology and services bring results. We have smart ways to improve buildings, empower the people within, and meet customer goals of comfort, safety and other key objectives.

Power Solutions Delivers Customer Health & Safety Results

Johnson Controls has more than 100 years of experience delivering vehicle batteries to meet our customers' evolving needs. We provide batteries to global automakers and aftermarket distributors and retailers. Our global footprint, manufacturing capabilities, and our value added services ensure we deliver a high quality product to our customers and support their growth, wherever they are located.

Johnson Controls produces 152 million batteries - one-third of the industry's output - every year. We power every type of passenger vehicle, heavy-duty and light commercial trucks, motorcycles, golf cars, lawn and garden tractors, and marine applications.

For example, our Automotive Flooded Batteries, 12-volt batteries, are engineered to support the electrical demands of today's vehicles, providing reliable starting power time and time again in the most demanding climate conditions. They feature our exclusive PowerFrame® grid technology, which delivers the following benefits:

- ✓ Structurally strong: PowerFrame patented grid technology is up to 66 percent more durable and corrosion-resistant than other grid designs.
- ✓ Patterned for power: The PowerFrame grid design provides superior cranking power with up to 70 percent better electrical flow than other grid technologies.
- ✓ Clean construction: PowerFrame manufacturing uses 20 percent less energy and produces 20 percent fewer greenhouse gases than other manufacturing methods.

All of these features — combined with superior safety, quality and our recycling system — allow us to offer high-performing, environmentally-friendly products.

Assessment of the health and safety impacts of product and service categories

416-1

A standardized procedure assessing safety and health impacts for our product development is in place across the enterprise. We follow a launch procedure for New Product Development in our Building Technologies & Solutions and Power Solutions businesses. The procedure uses a process known as Failure Mode and Effect Analysis (FMEA) to address single point failure modes in the Design and Process. For new products, we may also use Fault Tree Analysis (FTA) in the design to capture compounding effects leading to failures, after which the countermeasures can be put back into the FMEAs as single point failures. Product safety and noncompliance to regulatory items are defined under FMEAs with the highest severity ratings.

	2017	2016	2015	2014
Percentage of significant product or service categories that are covered by and assessed for compliance with company procedures for assessing product/service health and safety impacts	100%	100%	100%	100%

Incidents of non-compliance concerning the health and safety impacts of products and services

416-2

Johnson Controls did not have any incidents of non-compliance with regulations or voluntary codes concerning the health and safety impacts of our products and services.

Product safety controversies within the last three years

While the company faces certain product liability cases which are brought against its products from time to time, none of those cases have involved actions for non-compliance with an applicable regulatory or voluntary code and fines, settlements or court imposed awards for such non-compliance.

The company does have a process for determining whether products in the field have nonconformities that might be the source of potential product safety concerns. It regularly monitors field performance and performance in the factory to determine whether any nonconformities in our product could be the source of those types of concerns. If we determine that such circumstances exist (i.e. nonconformities that could cause safety concerns in the field), we either work with our customer to determine the correct field response in cases where we supply the component and not the entire end product or determine the correct field actions if our product is the product sold to the end user. In doing so, we determine any requirements for reporting such actions promulgated by applicable regulatory agencies and report our actions consistent with those reporting requirements.

Product Labeling

[417-1](#)

Product labels are reviewed to ensure compliance with all regulatory requirements across the enterprise.

Our Building Technologies & Solutions products are listed by Nationally Recognized Test Labs (NRTLs). The standards used for these listings require that specific information be placed on defined labels regarding safety. This information includes Max voltages, amperages, pressures, etc. It also requires the NRTL and the standards tested. By regulation we also include additional labels as needed such as refrigerant type, DOE required efficiency or performance ratings.

Our Power Solutions products are produced with labels that comply with international laws and industry standards for consumer batteries. Industrial batteries have a generic label per their applicable requirements. Because these products may contain hazardous substances, our on-product labeling is compliant to the battery industry best practices and with applicable law regarding hazardous content. The Power Solutions business has on-product warnings to instruct user on safe use of the products and on-product labeling that indicates the product is recyclable. This is combined with strong point of sale procedures in to facilitate the recycling of those batteries.

Requirements for product and service information and labeling	Required for product/service labeling			
The sourcing of components of the product or service	Yes			
Content, particularly with regard to substances that might produce an environmental or social impact	Yes			
Safe use of the product or service	Yes			
Disposal of the product and environmental/social impacts	Yes			
	2017	2016	2015	2014
Percentage of significant product or service categories that are covered by and assessed for compliance with company procedures for product and service information and labeling	100%	100%	100%	100%

[417-2](#)

Johnson Controls did not have any incidents of non-compliance with product and service information and labeling regulations or voluntary codes.

[417-3](#)

Johnson Controls did not have any incidents of non-compliance with marketing communications regulations or voluntary codes.

Customer Privacy

Johnson Controls cares about privacy and are committed to protecting personal information in accordance with fair information practices and applicable data privacy laws.

Johnson Controls joined the very exclusive list of comparable companies which have obtained official approval from [European Data Protection Authorities for Binding Corporate Rules](#) (BCRs). BCRs form a required set of policies which satisfy the most stringent standards and represent the company's commitment to a seamless protection of personal data, when such data is transferred or accessed globally. Aligned with Johnson Controls Ethics and Compliance standards, obtaining recognition for BCRs demonstrates Johnson Controls' continued commitment to the protection of personal data from our employees, customers, suppliers and consumers. This is a strategic trust enabler for the organization.

Substantiated complaints concerning breaches of customer privacy and losses of customer data

[418-1](#)

The company has not identified any substantiated complaints of breaches of customer privacy.

Socioeconomic Compliance

Non-compliance with laws and regulations in the social and economic area

[419-1](#)

Currency: USD	2017	2016	2015	2014
Total monetary value of significant fines	\$41,482	\$331,980 (1)	\$39,853	\$27,841
Total number of non- monetary sanctions	16	17	5	6

- (1) In 2016, Johnson Controls [announced](#) that it has entered into a settlement with the U.S. Securities and Exchange Commission (SEC) with respect to Foreign Corrupt Practices Act (FCPA) issues that it had self-reported related to the company's marine business in China. After discovering evidence of potential improper behavior on the part of employees in its marine business in China, the company voluntarily reported the circumstances to the U.S. government, conducted a thorough investigation and fully cooperated with the U.S. authorities.

To ensure transparency, we are reporting all "reportable incidents," which we define as non-compliance that requires reporting to a regulatory agency.

We have a number of mechanisms and processes in place to prevent non-compliance. For example, our Johnson Controls Manufacturing System defines standards for a range of topics, including environment, health, safety and other matters, to ensure compliance. We identify and share best practices across the enterprise through the Global Manufacturing and Operations Council and other mechanisms to continuously improve our compliance practices. In the unlikely event of an emergency or crisis, we have a regularly-updated Crisis Management Plan to effectively address incidents and minimize impacts to our employees, communities, the environment, and other stakeholders.



Environmental

ENVIRONMENTAL

Environmental sustainability metrics for reported FY2017 include data from Building Technologies & Solutions, Power Solutions, and the Johnson Controls Hitachi joint venture. Data for FY2017 excludes Adient, which is now a fully independent company.

Materials

[103-1](#) | [103-2](#) | [103-3](#) | [301-1](#) | [301-2](#) | [301-3](#)

As the world continues to grow, so does our environmental footprint. Last year, at the G7 Alliance on Resource Efficiency workshop held in Washington, DC, it was noted that three quarters of all raw materials used in industrialized countries end up in landfills in just one year -- that number is staggering and cause for significant concern.

At Johnson Controls, we select materials based on a range of criteria including customer requirements, quality, cost, and other key factors. Since sustainability is a key corporate value for our company, we:

- Reduce total consumption and minimize waste through employee training and process improvements.
- Increase the use of easy-to-recycle materials.
- Purchase energy-efficient (Energy Star or EU labeled) equipment whenever appropriate.
- Other appropriate sustainability practices.

POWER SOLUTIONS

Johnson Controls Circular Economy



Johnson Controls is the world's largest manufacturer and recycler of conventional vehicle batteries. Nearly every vehicle battery uses materials that can be continually recycled, which makes vehicle batteries both economical and sustainable. Our vision is a world where 100% of vehicle batteries are recycled. We recycled our first battery in Germany in 1904 — four years before Henry Ford introduced the Model T. Today in the G7 economies, 99% of all used conventional vehicle batteries are responsibly recycled and recovered to create new ones.

Power Solutions uses materials for battery production including but not limited to:

- Lead from primary and secondary (recycled) metal smelters
- Sulfuric acid
- Plastic for battery casings

Our batteries have some of the highest recycled content of any manufactured product.

- We have proven 100% recycling rates are possible.
- We're using our century of recycling experience to help increase recycling rates and accelerate the development of new recycling systems.

Our commitment is to design, make, transport and recycle batteries in the safest, most sustainable way.

- We continuously evaluate and invest in technologies, controls and processes that improve our operations while reducing our environmental footprint.
- We operate all our facilities to meet the highest global environmental, health and safety requirements.
- We never stop looking to improve. We learn from each of the plants we build or upgrade and strive to apply those lessons learned to all of our operations globally.
- We extend our commitment across our supply chain and our partners.
- We track the total number of recycled batteries and other recycling results here:
<http://www.recyclingmybattery.com/en-us>

BUILDING TECHNOLOGIES & SOLUTIONS

Many organizations are choosing to renovate their spaces versus starting anew. Choosing to upgrade buildings with Johnson Controls means sound stewardship – through updated technology, energy retrofits and central plant strategies that improve existing assets in all buildings. By taking a holistic approach, Johnson Controls covers all aspects of a retrofit, starting with identifying organizational goals and technical needs. We help select the equipment that provides the best outcome, and then engineer, install and commission the system.

Johnson Controls is the world leader in HVAC, fire protection, security, building management systems and other building equipment using materials including but not limited to:

- Metals
- Refrigerants

OVERALL BUSINESS

The materials we purchase across all businesses to support administrative, building maintenance, and transportation related activities include but are not limited to:

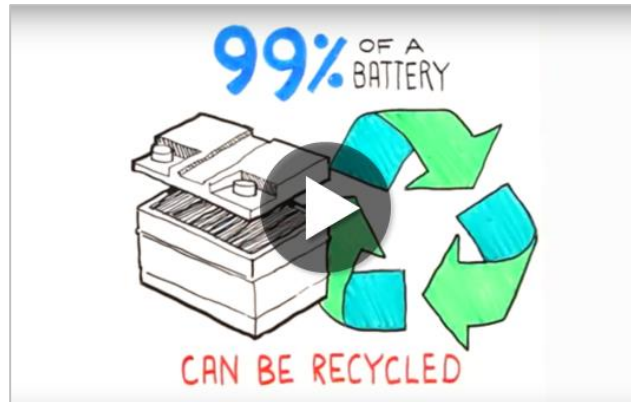
- Gasoline and diesel fuel
- Cleaning products
- Stationery and paper products
- Office furniture
- Electrical equipment (computers, printers, fax machines, photocopiers, microwave ovens, dishwashers)
- Foods and beverages

Supply Chain Governance

See [Supplier Sustainability](#) Section.

Results: Materials

The Circulars 2017 Finalist Multinational



Johnson Controls was named a finalist in the Circulars 2017 awards. The company is one of the nominees for the Accenture Strategy Award for Circular Economy Multinational. The Accenture Strategy Award recognizes an established organization, with global reach and over \$100 million in turnover, which is demonstrating innovation in its existing business.

The Circulars, an initiative of the World Economic Forum and the Forum of Young Global Leaders, is the world’s premier circular economy award program, offering recognition to individuals and organizations from commerce and civil society across the globe that have made notable contributions to the circular economy in the private sector, public sector and society.

Entrants to the awards are leading the way in driving innovation and growth that is decoupled from the use of scarce natural resources. Awards were presented in a ceremony at the World Economic Forum Annual Meeting in Davos in January 2017.

According to the Circulars’ website, Johnson Controls has established one of the world’s most successful examples of a circular economy.

Materials used by weight or volume

[301-1](#)

	Unit (weight or volume)	% internally sourced	% externally sourced
Raw materials used	% by weight	21%	79%
Total non-renewable materials	% by weight	21%	78%
Total renewable materials used	% by weight	0%	1%
TOTAL		21%	79%

Recycled input materials used

[301-2](#)

	2017	2016	2015	2014
% Recycled input materials used	73%	72%	74%	74%

Methodology notes for Materials used and Recycled input materials used:

The values are estimated using company-wide purchasing and spend information. The largest amount of materials used, by weight, are metals, such as steel, copper, tin, aluminum, and lead. Our internally sourced material is the recycled lead from used car batteries in our Power Solutions business. A very small amount of our raw materials come from a renewable source; mainly bio-materials. Whenever primary data is not available on percent of recycled content in our materials, we use the recycled content industry average.

Percent of reclaimed products and their packaging materials

[301-3](#)

Product sold	2017	2016	2015	2014	How data was collected
Lead batteries	80%	80%	80%	80%	Our own batteries are manufactured with more than 80 percent recycled content – some of the highest recycled content of any product in the world. Today, in the U.S. and Europe, 99 percent of conventional vehicle batteries are recycled.
Pallets for a variety of products	90%	90%	90%	90%	The majority of pallets used to ship materials are reused through a pickup program we have established with our suppliers and customers.

Energy

[103-1](#) | [103-2](#) | [103-3](#)

Enterprise Goals and Commitments to Sustainability: Energy

Our 2020 goal was to reduce energy intensity as a factor of revenue by 15 percent. From 2002 through 2017, we are proud to have reduced our energy intensity by 47 percent.

During 2017, our Global Sustainability Council worked with executive leadership to adopt a new 2025 Sustainability Strategy. Continuing our commitment to address our environmental impacts, we established new goals for energy which we will report against for FY2018.

Additionally, we are committed to:

- Participate in the U.S. Department of Energy Better Plants Challenge, through which we have made a commitment to reduce energy intensity among our US plants by 25% between 2009 and 2019.
- Continue the practices in our Energy and Climate Change Position and Policy statements.
- Engage our suppliers on energy efficiency through our Supplier Efficiency Program.

Operational Initiatives for Sustainability: Energy

We are committed to improving environmental performance and reducing energy from our global operations, including manufacturing plants, distribution centers, service centers, offices, fleets and other operations worldwide, and have put in place policies, goals and operational practices toward this end.

Our Global Manufacturing and Operations Council established a maturity matrix covering all aspects of our manufacturing and operations called the Johnson Controls Manufacturing System (JCMS), which defines among other things progressive levels of maturity in environmental and sustainability management, goals and practices. The JCMS provides a framework for continuous improvement in operational management, including the pillar of Environment & Sustainability.

We reduce energy in our operations by:

- Tracking our energy use and intensity at a facility and global level to ensure progress toward our goals.
- Participating in Energy Hunts in all manufacturing facilities, which continuously identify no-cost and low-cost energy savings measures in such categories as heating, ventilating, air conditioning, compressed air, lighting and other energy-using equipment and practices.
- Improving the energy efficiency of our manufacturing operations and processes, such as through the patented PowerFrame manufacturing process which uses 20% less energy and releases 20% fewer greenhouse gas emissions than other manufacturing methods for batteries.
- Requiring that certain new construction facilities meet LEED standards. Johnson Controls currently has more than 1.9 million square feet of certified green building space around the world.
- Pursuing fleet vehicle efficiency improvements.
- Pursuing green power purchases.
- Certifying their manufacturing plants to the ISO14001, ISO50001 and other relevant standards.

Transportation Initiatives

We continue to implement initiatives to reduce environmental impact from transportation:

- Systematically make modal shifts (i.e. shifting to less energy-intensive transport mode) for parts of the supply chain (including intermodal solutions).
 - We conduct network optimization studies to analyze our transportation supply chain on a regular basis to find opportunities to consolidate and/or change modes of transportation to improve cost structure and reduce energy use.
- Collaborate with suppliers to decrease environmental impact from transportation.
 - As a current member of US EPA Smartway Program we also encourage our leased truckers to participate in it and achieve efficiency, GHG and fuel savings.
- Optimize packaging, e.g. in order to decrease weight and/or increase load factors.
 - Reductions achieved through participation in EWALs and Lorry Rail as our logistics suppliers
- Increase use of ESG-preferred freight forwarders and/or introducing minimum ESG requirements for freight forwarders.
 - Use of supplier surveys and recognition programs.
- We joined the US EPA Smartway program and encourage our suppliers to do the same, making our transportation more efficient and a rating system in place to measure progress.

Operational Initiatives for Sustainability: Renewable Energy

We continuously seek cost-competitive lower-carbon purchased electricity and other energy. Our Corporate Energy team supports our purchasing of renewable energy certificates (RECs). We make these purchases from renewable energy projects located in the USA. We voluntarily purchase RECs and make sure they are additional to the green power that may already be offered in the standard electricity mix. We also have on-site renewable energy in some of our locations.

Our Johnson Controls Corporate Headquarters building in Glendale, WI is our best example. It is LEED Platinum certified and has on-site solar generation, which directly feeds into a portion of the buildings' needs for electricity. We generate the energy on-site and use it directly, offsetting our electricity consumption from standard utility supply. Additionally, we have been a partner of the EPA Green Power Partnership since 2010.

Product Sustainability: Energy

Since introducing our first product more than 130 years ago -- an electric room thermostat -- our customers have trusted us to provide products and services that reduce energy use and improve sustainability. From fuel-efficient batteries, to energy-efficient heating and cooling equipment, to distributed energy storage, we offer a range of innovative products that help our customers become more resource efficient, sustainable and competitive.

BUILDING TECHNOLOGIES & SOLUTIONS

Our Building Technologies & Solutions (BT&S) business unit has myriad offerings that help customers save energy.

Green Buildings: Johnson Controls currently has completed over 52 million square feet of certified green building space for our customers around the world. In China alone, we have helped our customers achieve LEED for 51 locations covering 25 million square feet and China's Star Green building certification for 8 locations covering 5 million square feet.

Energy Efficient Technology: The revolutionary [YORK® YZ magnetic-bearing centrifugal chiller](#) is the most efficient chiller in the world. The YZ chiller is fully optimized for ultimate performance with a next generation low-GWP (global warming potential) refrigerant, delivering superior real-world performance, lower cost of ownership and a new definition of sustainability. YZ chillers offer 35% better efficiency than conventional centrifugal chillers. This system also offers up to 60% lower refrigerant charge than traditional systems available in the market.

Refrigerants: We recently collected data and developed an approach to quantify energy use and GHG emissions from our chiller products from our BT&S business unit. This approach will help us to quantify the benefit our customers obtain whenever we manufacture products that operate with a higher energy efficiency. We expect to continue to refine the process to measure emissions per product for our chiller product family as well as for our other divisions' products. This should help us better demonstrate the energy savings and other environmental attributes.

Energy Retrofits: We also help our customers achieve energy savings through the implementation of [Energy Performance Contracting](#). Through these projects we deploy equipment upgrades and management services to deliver guaranteed energy savings. These projects also help customers achieve GHG reductions. Since January 2000 our efforts helping our customers save energy through performance contracting have resulted in a reduction of more than 26.2 million metric tons CO₂e.

Renewable Energy Offerings: In response to increasing global demand for renewable energy, Johnson Controls is expanding its product and service offerings to include elements of solar, biomass, wind, waste-to-energy, landfill gas to energy, geothermal, combined heat & power (CHP) and other renewable sources and fuel cells as energy supply options for customers. We expect demand from businesses and organizations for onsite renewable energy to escalate as fossil fuels increase in price and concern grows about their economic and environmental impact. We believe the real opportunity involves combining renewable technologies with innovative energy efficiency strategies and aggressively working to develop renewable offerings to state, local and federal government agencies, school districts, hospitals, and private industry.

BATTERIES

Our system for advanced start-stop vehicles combines a high-power, 12-volt lithium-ion battery with a 12-volt lead acid battery to deliver 5–8 percent fuel economy improvement over conventional vehicles. Our latest generation high-voltage, hybrid electric vehicle (HEV) battery system delivers improved electric driving range and up to 20–40 percent greater fuel economy than conventional vehicles. Our 48-volt battery system for micro hybrid vehicles is used with 48-volt motor and electronics to deliver up to 15 percent fuel economy over conventional vehicles at a fraction of the cost of a full hybrid. Our lithium-ion products for plug-in hybrid vehicles (PHEVs) and electric vehicles (EVs) enable extended electric driving range, with fuel savings of more than 40 percent for PHEVs and 100 percent for EVs compared to conventional vehicles.

DISTRIBUTED ENERGY STORAGE

Johnson Controls can help manage energy use, cut costs and provide backup power for a building, campus or enterprise with our L1000 In-Building Distributed Energy Storage System. We combine world-class battery technology, in-depth buildings expertise and intelligent controls to deliver the solution that performs best with specific building systems. Johnson Controls brings the holistic energy storage solution that works best with specific applications, in front of or behind the meter. Our modular containerized solutions handle multiple, simultaneous applications for utilities and large commercial customers.

Thought Leadership, Best Practice Sharing, Research & Development on Sustainability: Energy

Johnson Controls continues to initiate efforts to bring innovations in sustainability into the marketplace. We play an active role in a number of energy, environment and sustainability groups, associations and government-sponsored programs in which we share and learn many new ideas including those that will help reduce resource use and improve sustainability. Through knowledge sharing and partnering, we also help our customers, suppliers and other stakeholders achieve their environmental goals.

- As a World Economic Forum Strategic Partner, Johnson Controls is one of 100 select companies that provide essential support to the Forum and are the driving force behind its communities and activities.
- Support research and development on new battery technologies and energy storage technologies that can help reduce and optimize energy use, including complementing our global R&D capabilities with investments in more than 30 laboratories around the world.
- Participate in the SE4ALL energy efficiency accelerator leadership, which involves collaborations that will help double the rate of energy efficiency improvement.
- Support thought leadership and accelerated action on building efficiency within cities globally through innovative partnerships.
- Sponsor events such as The 28th annual Energy Efficiency Forum, held in Washington, D.C., and cosponsored by Johnson Controls and the U.S. Energy Association, focused on how the United States can leverage innovation to become an “energy efficiency superpower.”
- Engage with our stakeholders on climate change, energy efficiency and related issues through COP23 and other events that bring together stakeholders across business, government and non-governmental organization sectors.
- Engage as an active member and/or board member in several leading energy-related organizations and associations. See [Membership List](#).

Results: Energy

Many of our overall sustainability awards and accomplishments are found on our [website](#). For our energy work specifically:

- The U.S. Department of Energy (DOE) Better Plants Program recognized Johnson Controls with the Goal Achievement Award in the Better Buildings, Better Plants Challenge, exceeding its goal of 25 percent energy savings over the course of seven years.
- Additionally, the U.S. DOE Better Plants Program recognized Johnson Controls with the Better Practice Award for driving organizational and cultural changes associated with energy efficiency achievements by establishing a company-wide Energy Hunt program as part of the Johnson Controls Manufacturing System (JCMS).
- The Energy Hunt program resulted in a threefold increase in energy savings projects identified for 2016 for our Power Solutions and Building Technologies & Solutions business units together; and in 2017, we annually increased them by 27%.
- From 2002 through 2017, we reduced our energy intensity by 47 percent.
- In 2017, we reduced our global energy intensity by 1.8%.
- CDP recognized our actions and strategies in response to climate change with an A-, placing us in the global leadership group.
- In 2017, we procured and consumed 225 million kWh in green power, through on-site generation and renewable energy certificates.

Energy consumption within the organization

[302-1](#) | [302-3](#)

Consumption by fuel type	Unit of Measure	2017	2016	2015	2014
Renewable fuels					
Biomass	GJ	59,134	60,222	52,820	62,702
Ethanol	GJ	995	3,940	8,051	7,951
Subtotal	GJ	60,129	64,162	60,871	70,653
Non-renewable fuel sources					
Natural Gas	GJ	5,796,141	6,206,818	6,589,589	6,620,490
Fuel distilled from crude oil and other fossil fuels*	GJ	3,494,716	2,052,669	2,109,447	2,388,466
Subtotal	GJ	9,290,857	8,259,487	8,699,036	9,008,956
Energy consumed					
Electricity	GJ	9,613,118	11,362,318	11,127,587	10,787,820
Steam	GJ	115,430	229,307	237,757	250,740
Subtotal	GJ	9,728,548	11,591,625	11,365,344	11,038,560
GRAND TOTAL	GJ	19,079,534	19,915,275	20,125,251	20,118,169

*This category includes: gasoline, diesel, propane/LPG, butane, jet fuel, heavy fuel oil, coal.

Methodology notes:

- The data is tracked using the Environmental, Health and Safety Information System (EHSIS) tool which also is the source of the conversion factors. Energy consumption is tracked at the facility, group and corporate levels. Since 2003, we have reported sustainability data in accordance with the Global Reporting Initiative (GRI) guidelines. This information is third party verified by Bureau Veritas with a limited assurance.
- Percentage of total operational spending on energy (most recent reporting year): More than 0%, but less than 5%.
- Please refer to our latest CDP report for a breakout of the sources of the renewable energy used.
- Please see section GRI 102-48 for more detail on restatements of information.
- The categories of "heating" and "cooling" are not applicable to our data tracking.
- The "Energy Sold" category is not applicable to our company, Johnson Controls does not sell energy.
- All estimates are based on the best available data at publication and may change over time.

Energy consumption outside the organization

[302-2](#)

Energy Category/Activities	Unit of measure	2017	2016	2015	2014
UPSTREAM					
Fuel and energy related activities¹	GJ	935,005	1,197,789	1,202,580	1,269,496
Transportation and distribution²	GJ	16,481,303	22,053,983	20,697,803	15,449,840
DOWNSTREAM					
Investments³	GJ	0	1,331,427	1,990,554	2,078,398
Use of sold products⁴	GJ	84,213,516	94,002,099	104,617,473	110,680,300
GRAND TOTAL	GJ	101,629,824	118,585,298	128,508,410	129,478,034

- (1) This energy is associated with the losses during transmission & distribution of energy (electricity and natural gas). This energy loss is estimated using publicly available transmission and distribution factors based on the volume of energy consumed.
- (2) This energy is associated with the transportation of our products and raw materials that is controlled and paid for by Johnson Controls. Transportation includes air, ocean, and truckloads. Energy values are estimated based on spend data.
- (3) This energy is associated with the energy consumed by the plants that belong to joint ventures where Johnson Controls has no operational control and/or has a minority equity share. This category mainly included the energy for the JV automotive plants from Adient that were previously part of the Johnson Controls plant portfolio, but since the Adient is now a separate company, we are no longer reporting data for this category.
- (4) This energy is associated with the energy consumed by our chiller products manufactured during the reporting year and through their entire use phase. This value is estimated by modeling the energy usage for a representative sample of chiller product categories and extrapolating for the rest.

Methodology notes:

- Tracking of renewable energy in our value chain is currently outside of our energy accounting scope.

Energy Intensity

[302-3](#)

	Unit of measure	2017	2016	2015	2014
Numerator¹	GJ	19,079,534	19,915,275	20,125,251	20,118,169
Denominator²	Million USD in revenue	30,171	36,866	36,508	36,971
Energy Intensity (ratio)	GJ per Million USD in revenue	632	540	551	544

- (1) Scope includes only what is under company's operational control.
- (2) Revenue values used in this analysis have been adjusted for acquisitions and divestitures, consistent with the energy values used in the numerator.

Methodology Notes:

- Energy and revenue values are both adjusted to reflect acquisitions and divestitures. Please see section GRI 102-48 for more detail on restatements of information.
- All estimates are based on the best available data at publication and may change over time.

Reduction of energy consumption

[302-4](#)

	Unit of measure	2017	2016	2015	2014
Total Energy Saved	Gigajoules	204,823	310,374	114,255	114,270

Methodology notes:

- Our Continuous Improvement team collects project information implemented at the plant level. This project information includes energy usage and cost savings as well as details behind the type of energy being saved and project description. Reports from this tool facilitate the process of aggregating annual savings each year.
- Base year/baseline: Savings represent reductions for each year. The previous year, therefore, represents the base year.
- All estimates are based on the best available data at publication and may change over time.
- Johnson Controls is committed to continuously reducing our energy use. Here we focus on how we achieve our internal energy reductions. Supply chain and product energy reductions are covered in separate sections.
- The implementation of our Energy Hunt Program continues across participating manufacturing facilities globally. This program drives culture change and helps our plants identify energy savings opportunities by evaluating measures that include HVAC temperature scheduling, lighting, supply and demand of compressed air, building envelope, and employee energy awareness and engagement.

Since 2011, 1,059 low- or no-cost projects resulted in energy and operational savings of over \$29 million USD. We track projects using our Continuous Improvement Track system (CI TRAC). In 2016, we tripled the number of projects identified for our Power Solutions and Building Technologies & Solutions business units together, and in 2017, we annually increased them by 27%.

- Typical improvements include enhancements to heating, ventilating and air-conditioning systems, lighting and electrical systems, control systems, motors and pumps, and eliminating leaks and waste. Features of the program include: investment-grade audits of resource consuming systems, benchmarking of a facilities' energy usage and equipment efficiency, identifying solutions based on best practices and various key performance indicators to prioritize specific energy and cost-saving projects, installing equipment and processes needed to meet the overall business objectives.

Reductions in energy requirements of products and services

[302-5](#)

Product/Service(s) Unit of measure: Gigajoules (GJ)	2017	2016	2015	2014
Energy Savings Performance Contracting¹	21,768,740	22,786,125	24,937,483	16,870,833
Batteries in Start-Stop vehicles²	119,460,000	119,460,000	87,120,000	50,292,000
Chiller Products³	520,117	582,773	570,803	492,043
TOTAL	141,748,857	142,828,898	112,628,286	67,654,876

- (1) These values are guaranteed energy savings from our energy savings performance contracting project portfolio in the US and Canada active during each reporting year.
- (2) These savings are associated with the use of our batteries in vehicles with start-stop technology compared to the standard technology. Vehicles with start-stop technology in the U.S. leapt to 16.8% in 2017, up 75% from the penetration rate in 2016 ([2018 Sustainable Energy in America Factbook](#), The Business Council for Sustainable Energy).
- (3) These annual energy savings are associated with the higher energy efficiency of two of our chiller products compared to existing standard industry designs.

Methodology notes:

- Our energy solutions team generates reports for our guaranteed energy savings active during each reporting year, which facilitates generating an annual total. Savings from batteries in vehicles with start-stop technology are based on production information and average MPG increase through the use of start-stop over standard technology. Our chiller equipment savings represent the higher efficiency of our products compared to existing standard designs.
- Base year/baseline: Energy Savings represent reductions for each year brought by a portion of our products and services. The previous year, therefore, represents the base year.
- Johnson Controls provides a variety of advanced products, services and technologies for an assortment of applications that include reducing energy and greenhouse gases (GHG). Find some examples [here](#).

Emissions

[103-1](#) | [103-2](#) | [103-3](#)

Enterprise Goals and Commitments on Sustainability: Emissions

Please see the [Energy](#) section for additional detail on our initiatives to reduce our energy and emissions intensity.

Johnson Controls takes an enterprise approach to reducing our greenhouse gas (GHG) emissions, which is linked closely to our activities on energy reduction. We are committed to continuously reducing the environmental impact of our own operations, which includes our offices, manufacturing facilities, and fleet. We look across the lifecycle of our business, including emissions upstream, within our "four walls" and downstream. Our emissions reduction strategies include improving energy efficiency, using renewable energy (either on-site or off-site), tracking and managing emissions using information technology, and exploring how demand response, energy storage, and other new technologies can continue to help us manage our emissions.

Our 2020 goal was to reduce our emissions intensity by 15% over a 2014 baseline. We are proud to have reduced our emissions intensity by 15.8% between 2008 and 2014. In 2017, our new [2025 Sustainability Strategy](#) continues our commitment to address our environmental impacts.

In 2017, we reduced our global GHG intensity by 2.6%.

Thought Leadership, Research & Development: Emissions

In 2014 and 2015, we met with the U.S. White House administration and other industry players to discuss approaches to phase down the use of high global warming refrigerants, which are used in air-conditioning and refrigeration systems. Johnson Controls has committed to spend more than \$50 million over three years to develop new products and improve and expand its existing low-global warming potential (GWP) portfolio of refrigerants, which will also lead to reductions in our direct and downstream emissions.

Additionally, Johnson Controls continues to lead the way and has created the public website called "[Refrigerant Guiding Principles](#)" with the objective of sharing a guide about the changing refrigerant landscape. Through this website we are able to create awareness, share information with our customers and ensure that our refrigerant choices are practical, safe, efficient and environmentally friendly solutions. We share our refrigerant stewardship model, which states that our refrigerants need to meet the following three criteria: 1) Safe and reliable; 2) Efficient and sustainable; and 3) Available and affordable.

Product Development

True sustainability means the lowest total emissions – from beginning to end. Johnson Controls has developed a line of low global warming potential HVAC product families that use refrigerant alternative R-513A: the YORK YVWA water-cooled screw chiller and the YORK YMC2 magnetic-bearing water-cooled centrifugal chiller. The offering covers a broad range, from 433 to 3,516 kW (120 to 1,000 tons), for water-cooled applications. R-513A, or Chemours' Opteon XP10, is a non-flammable (A1) azeotropic alternative to R-134a, providing lower global-warming potential and comparable performance.

Recently, we went even further: Adapting a chiller design to a new refrigerant is not enough. That's why the YORK® YZ was specifically designed to maximize the potential energy efficiency of a low-GWP refrigerant. Our design optimization for the highest possible efficiency combined with a low-GWP refrigerant makes the YORK® YZ Centrifugal Chiller the best choice for the environment. In selecting a low-GWP refrigerant for the groundbreaking YORK® YZ, we considered safety, efficiency, availability, environmental impact and cost. We

chose R1233zd(E) refrigerant because it is nonflammable, low in toxicity per ASHRAE specifications (A1), readily available from refrigerant manufacturers, exceptionally efficient with proper chiller design optimization and has an ultra-low global warming potential of 1. The YORK® YZ was then built to have better efficiency at all design conditions, resulting in total direct and indirect emissions that are impressively low – and performance that is exceptionally high.

Operational Initiatives for Sustainability: Emissions

Johnson Controls takes a wide variety of approaches to reduce our direct (Scope 1), energy indirect (Scope 2), other indirect (Scope 3) emissions. Some of our current activities include the following:

Manufacturing

- Establish and implement the Energy Hunt program across all manufacturing facilities as part of our Johnson Controls Manufacturing System, which is designed to help facilities continuously identify no-cost and low-cost energy savings measures in such categories as heating, ventilating, air conditioning, compressed air, lighting and other energy-using equipment and practices.
- Improve the energy efficiency of our manufacturing operations and processes, such as through the patented PowerFrame manufacturing process which uses 20% less energy and releases 20% fewer greenhouse gas emissions than other manufacturing methods for batteries.
- Conduct a refrigerant leakage reduction program in plants.

Real Estate

- Require that certain new construction facilities meet LEED standards.
- Johnson Controls currently has completed over 52 million square feet of certified green building space for our customers around the world. In China alone, we have helped our customers achieve LEED for 51 locations covering 25 million square feet and China's Star Green building certification for 8 locations covering 5 million square feet.

Improving Vehicle Efficiency

Johnson Controls has implemented several greenhouse gas (GHG) reduction strategies in its legacy global fleet of vehicles which was in operation during our reporting year 2016. It first introduced hybrid electric vehicles into its fleet in 2009. Today, it operates more than 620 hybrids, each reducing GHG emissions by 30%, and together saving \$500,000 in fuel costs during the first two-and-a-half years of operation. Other strategies include the use of other higher MPG vans and trucks, a year over year CO₂ reduction policy in Europe, and the implementation of a policy which prohibits speeding and encourages fuel-efficient driving techniques. Johnson Controls joined the National Clean Fleets Partnership through the U.S. Department of Energy in February 2012. Now that our company has merged with Tyco, our fleet size has grown, however efficient initiatives will continue to be implemented to make sure we reduce its environmental footprint. Also see [Transportation Initiatives](#).

Renewable Energy

See [Operational Initiatives for Sustainability: Renewable Energy](#)

Research & Development: Energy Storage

Johnson Controls has joined a partnership to establish the Joint Center for Energy Storage Research at Argonne National Laboratory, southwest of Chicago. The U.S. Department of Energy will fund the research with up to \$120 million over five years. The initiative will combine efforts at several independent research programs into a larger, coordinated effort. The research center will combine the R&D firepower of five DOE national laboratories, five universities, and four private firms in an effort aimed at achieving revolutionary advances in battery performance.

Product Sustainability: Emissions

For more detail around our product sustainability, see [Product Sustainability: Energy](#).

Results: Emissions

Johnson Controls successfully completed a Limited Assurance of its Greenhouse Gas Emissions data that was performed by Bureau Veritas North America, a CDP recognized third party assessor. The assurance protocol used for GHGs was ISO 14064-3:2006: Greenhouse gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions.

Since 2013, for Scope 3, we were able to quantify all categories that were identified as relevant and material for our company. To learn more about our Scope 3 activities, please refer to the sections GRI 302-2 and GRI 302-5. Please also refer to our Scope 3 section in our latest CDP Climate Change response by visiting: www.cdp.net.

Direct (Scope 1), Indirect (Scope 2) and Other Indirect (Scope 3) GHG emissions

[305-1](#) | [305-2](#) | [305-3](#) | [305-4](#)

	2017	2016	2015	2014
Direct (Scope 1) - Metric Tons CO₂e				
CO₂	707,216	630,274	668,109	696,565
CH₄	139	992	1,035	1,045
N₂O	184	262	246	274
HFC	256,839	194,522	205,159	210,706
Subtotal	964,378	826,050	874,549	908,590
Indirect (Scope 2)¹ - Metric Tons CO₂e				
Market-based	1,355,140	1,701,447	1,630,006	1,624,334
Location-based	1,423,391			
Subtotal	1,355,140	1,701,447	1,630,006	1,624,334
Other Indirect (Scope 3) - Metric Tons CO₂e				
Purchased goods and services	6,526,000	12,200,000	13,200,000	12,300,000
Capital goods	2,032,000	274,000	2,000,000	300,000
Fuel and energy related activities²	114,000	136,000	135,000	144,785

Upstream transportation and distribution	1,198,000	1,600,000	1,485,000	1,082,442
Waste	14,200	27,000	24,000	29,145
Business travel³	36,400	43,000	30,000	45,373
Employee commuting	249,000	229,000	312,000	377,758
Investments	0	218,000	284,000	61,849
Use of products⁴	18,134,000	20,300,000	22,200,000	22,717,354
End of life	268,200	300,000	361,000	361,119
Subtotal	28,571,800	35,327,000	40,031,000	37,419,826
Biogenic⁵ Metric Tons CO ₂ e	5,387	5,425	4,759	5,788
GRAND TOTAL (Scope 1+2+3)⁶ Metric Tons CO ₂ e	30,891,318	37,854,497	42,535,555	39,952,751
GHG Intensity⁷ Metric Tons CO ₂ e per Million USD in revenue	76.9	68.6	68.6	68.5

- (1) We compute both location and market-based indirect emissions. We use market-based emissions to track our progress towards our reduction targets. Gases used to calculate Scope 2 include CO₂, CH₄, and N₂O.
- (2) Category considers emissions for transportation and distribution losses only.
- (3) Category considers emissions from business air travel only.
- (4) Category considers emissions from chiller products only.
- (5) Emissions reported for informational purposes only, not included in Scope 1 subtotals or section grand totals.
- (6) Excludes biogenic emissions, and considers the market-based emissions for Scope 2.
- (7) Considers only Scope 1 and Scope 2 emissions. All Scope 2 emissions are calculated using the Market-based approach from the World Resources Institute (WRI) Greenhouse Gas (GHG) Protocol's Scope 2 Guidance. Revenue values used in this analysis have been adjusted for acquisitions and divestitures, consistent with the energy values used in the numerator.

Rationale for choosing a base year

In 2017, we were tracking against our [2020 Goals](#):

- Increase our non-hazardous waste diversion rate to 90 percent
- Reduce water intensity as a factor of revenue by 5 percent
- Reduce greenhouse gas intensity as a factor of revenue by 15 percent
- Reduce energy intensity as a factor of revenue by 15 percent

Our 2020 goals were set in 2009, however, in 2014, due to divestments, acquisitions, and structural changes, the company decided to set a new baseline year of 2014 and continue tracking progress.

The merger of Johnson Controls with Tyco International was a change in our company profile material enough that our Global Sustainability Council (GSC) determined new goals were needed. Accordingly, in 2017, the GSC worked with executive leadership to adopt new [2025 goals](#) related to greenhouse gas emissions, energy, water, waste, safety and diversity from a 2017 baseline. We will report on our new 2025 goals when we report on fiscal year 2018.

Standards, methodologies, assumptions, and/or calculation tools used for direct (Scope 1) GHG emissions

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition); The Greenhouse Gas Protocol: Scope 2 Guidance, An amendment to the GHG Protocol Corporate Standard; The Climate Registry: General Reporting Protocol; The Climate Registry: Electric Power Sector (EPS) Protocol; US EPA Climate Leaders: Indirect Emissions from Purchases/Sales of Electricity and Steam; US EPA Climate Leaders: Direct Emissions from Stationary Combustion; US EPA Climate Leaders: Direct Emissions from Mobile Combustion Sources; and DEFRA.

Methodology notes:

- GHG emissions consolidation approach for Scopes 1 and 2: Operational control
- Source of emissions factors and the GWP rates used: EPA and International Energy Agency (IEA). All GWPs used for 2014 - 2017 come from IPCC Fourth Assessment Report (AR4 - 100 year).
- Please see section GRI 102-48 for more detail on restatements of information. All estimates are based on the best available data at publication and may change over time.

Reduction of GHG emissions

[305-5](#)

	Unit of measure	2017	2016	2015	2014
Total GHG reductions	Metric tons CO ₂ e	99,982	47,047	15,783	30,846

List of GHG included: Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and hydrofluorocarbons (HFC). Greenhouse gas (GHG) reductions are measured as an aggregate value for each year rather than in relation to a base year.

Our CI-TRAC tool from our Continuous Improvement team collects project information implemented at the plant level. This project information includes energy usage and cost savings as well as details behind the type of energy being saved and project description. Reports from this tool facilitate the process of aggregating annual cost and GHG reductions each year.

Methodology notes:

Please see section GRI 102-48 for more detail on restatements of information. All estimates are based on the best available data at publication and may change over time.

Emissions Reduction Activities

Please see above in [Operational Initiatives for Sustainability: Emissions](#) and in [Energy](#) for a detailed description of our emissions reduction activities.

Emissions of ozone-depleting substances (ODS)

[305-6](#)

	Unit of measure	2017	2016	2015	2014
Purchase of ODS	Metric tons of CFC-11 equivalent	6.8	7.5	16.9	26.8

Substances included in the calculation: R22

Methodology notes:

- This data was collected through our procurement teams accounting for the purchase and usage of R22. All estimates are based on the best available data at publication and may change over time.
- Totals in production row represent mass that we use in our manufacturing and laboratory testing processes. Johnson Controls is not a producer of these substances, however this is the most appropriate row to report the data given that it is involved in our production and laboratory activities.
- Within our York line of products, we track the use of hydrochlorofluorocarbons (HCFC) in the manufacturing of our building equipment systems, which is the main source of our ozone-depleting substances (ODS). Their related emissions are primarily used in developing countries, consistent with the phase out schedule specified by the Montreal Protocol. Our heating, ventilation and air conditioning (HVAC) service technicians offer preventive maintenance and predictive diagnostics to prevent the release of ozone-depleting substances ODS while working on equipment containing

refrigerants at customer facilities. Although we may use HCFCs when servicing some of our customers, we do not report that usage since we consider it part of our customers' activities. We have been engaged in the rapid phasing down of R22 and other HCFCs in accordance with the Montreal Protocol, including seeking alternatives where possible.

Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions

[305-7](#)

Emissions Types	Unit of measure	2017	2016	2015	2014
SOx emissions¹	Kg	10,323	9,860	20,424	21,212
SOx intensity	kg per Million USD in revenue	0.34	0.33	0.56	0.58
NOx emissions²	Kg	381,885	364,041	552,983	560,484
NOx intensity	kg per Million USD in revenue	12.7	12.3	15.2	15.2
Particulate matter emissions³	Kg	36,172	33,909	47,400	49,138
Hazardous air pollutants (HAP)⁴	Kg	TBD	27,181	39,771	27,848
Volatile organic compound (VOC) emissions⁵	Kg	6,436	81,546	108,077	96,730
VOC intensity⁵	kg per Million USD in revenue	0.5	3.0	2.9	2.6
Global normalized stack and fugitive emissions⁶	kg per Million USD in sales	14.7	17.7	21.1	20.5

- (1) Global SOx emissions from the combustion of natural gas, propane/LPG, diesel, butane, gasoline, and biomass from stationary sources.
- (2) Global NOx emissions from the combustion of natural gas, propane/LPG, diesel, butane, gasoline, and biomass from stationary sources.
- (3) Global PM emissions from the combustion of natural gas, propane/LPG, diesel, butane, gasoline, and biomass from stationary sources.
- (4) HAPs data is US data only. HAPs data for 2017 has not yet been calculated as the data is extracted from Toxic Release Inventories (TRI) reports, which are not gathered for reporting until later in 2018.

- (5) 2017 reported value for VOC currently excludes toxic release inventory (TRI) data since it is still unavailable at this time and only includes VOC emissions from fossil fuel combustion. 2016 figure was restated and now it includes TRI reported data.
- (6) Stack and fugitive emissions numerator value considers the sum of SO_x, NO_x, VOC, PM, and HAPs data. 2017 reported value currently excludes toxic release inventory (TRI) data since it is still unavailable at this time. 2016 figure was restated and now it includes TRI reported data.

Methodology notes:

- Reported data considers emissions from the combustion of natural gas, propane/LPG, diesel, butane, gasoline, and biomass from stationary sources. This section also includes data reported through the Environmental Protection Agency (EPA) Toxic Release Inventory (TRI) reports.
- Data reported for all emissions and years covers all operationally controlled facilities unless specifically noted.
- Hazardous air pollutants (HAP) and volatile organic compounds (VOC) data for 2017 from EPA not available at this time of the year because it is based on toxic release inventory (TRI) data which is not reported until July 2018.
- Energy consumption data used for these calculation is compiled using our EHSIS reporting tool. This tool allows us to collect site level utility information. The rest of the information is retrieved from the EPA's Envirofacts database as reported through Toxic Release Inventory (TRI) Reports.
- Emission factors from EPA AP 42, Fifth Edition, Volume I and the California Air Resources Board were used to estimate emissions from stationary combustion.
- Select items have been verified. Bureau Veritas verified the energy consumption data which is used as primary data to estimate SO_x, NO_x, VOC, and PM emissions from combustion.
- Emissions are tracked mostly at the facility level and then aggregated across the enterprise. In some cases, data are only available for certain regions. For example, our HAP and VOC data are from the Toxic Release Inventory (TRI) database maintained by the U.S. Environmental Protection Agency and therefore include only releases in the United States.
- Historically, emissions from acquisitions have not been accounted for until after the date of acquisitions.
- Effective 2014, we no longer consider and report Copper or Certain Glycol Ethers as a HAP, consistent with U.S. Environmental Protection Agency (EPA) definition of HAPs, however we continue to report releases of these substances.
- Other Annual Emissions may include one or more of the following: antimony/antimony compounds; arsenic; chlorofluoromethane; chromium; cobalt; copper; 1,1-dichloro-1-fluoroethane; 2,2-dichloro-1,1,1-trifluoroethane; diethanolamine; diisocyanates; ethylene glycol; lead/lead compounds; manganese; nickel; N-methyl-2-pyrrolidone; propylene; sulfuric acid (acid aerosols); toluene diisocyanate; xylene; and zinc compounds.
- SO_x, NO_x, PM and a portion of the VOCs data is calculated as a product of combustion from the use of natural gas, propane/LPG, diesel, butane, gasoline, and wood pellets.
- Please see section GRI 102-48 for more detail on restatements of information.
- Dust and persistent organic pollutant (POP) emissions are considered not significant based on our set of operations.
- All estimates are based on the best available data at publication and may change over time.

Water

[103-1](#) | [103-2](#) | [103-3](#)

Enterprise Goals and Commitments to Sustainability: Water

During 2017, our Global Sustainability Council worked with executive leadership to adopt a new 2025 Sustainability Strategy that includes water consumption reduction targets, which we will report against for FY2018.

Product Sustainability: Water

Water-cooled systems are more efficient for industrial heat rejection than traditional air-cooled systems. The Johnson Controls BlueStream™ hybrid cooling system combines water and air cooling technologies to reduce water consumption up to 80 percent while optimizing energy efficiency.

We enable our customers to save water, such as by including water conservation measures in performance contracting projects. We also provide an innovative thermosyphon cooling method for power plants which pre-cools the hot water exiting the steam condenser in a thermal power plant before the hot water is further evaporatively cooled by the cooling tower. Due to reduced cooling tower heat load, preliminary analysis conducted by Johnson Controls indicates the cooling tower annual evaporative water loss or makeup water can theoretically be reduced by 30% to 80%, as compared to traditional open cooling tower systems while maintaining the maximum peak power plant output on the hottest summer days.

In 2016, we partnered with two national laboratories—the National Renewable Energy Laboratory (NREL) in Golden, Colorado, and Sandia National Laboratories in Albuquerque, New Mexico—to test our solution at NREL's high-performance computing data center. The center expects to save a million gallons of water per year...a number that will keep on growing as the Blue Stream hybrid cooling system is more widely used.

Operational Initiatives for Sustainability: Water

Our 2020 goal was to reduce our water intensity by 5% by 2020 across all facilities globally. To achieve this goal, we have implemented several projects across our facilities to improve water efficiency including:

- Detecting and repairing water leaks and recalibrating flow meters.
- Integrating water efficiency into our Johnson Controls Manufacturing System activities to help reduce water consumption in our plants.
- Reducing water use in our corporate office facilities – for example our Glendale headquarters deploys a number of water-saving technologies and measures, including gray water use for toilets, rainwater collection for irrigation, permeable pavers in parking lots, and geothermal cooling.

In 2017, our Global Sustainability Council worked with executive leadership to adopt a new [2025 Sustainability Strategy](#) that includes water and waste reduction goals from a 2017 baseline.

Results: Water

[103-3](#)

We are proud to have implemented a number of water saving projects for our customers. One example is the project we did for Stanford University in 2015, which helped cut its water use by 15 percent and is

projected to save \$420 million in operational costs thanks to a new central energy facility (CEF) developed with help from Johnson Controls. The new plant helps Stanford make substantial progress to meet California's statewide goal to reduce water use by 25 percent.

Learn more at: <http://www.johnsoncontrols.com/media-center/news/press-releases/2015/06/15/johnson-controls-helps-stanford-university-dramatically-reduce-water-and-energy-use-in-new-central-plant>

Water withdrawal by source

[303-1](#)

Source	Unit of measure	2017	2016	2015	2014
Municipal water supplies or other water utilities	Cubic meters	7,320,925	8,508,609	8,165,748	8,140,961
Total water withdrawal	Cubic meters	7,320,925	8,508,609	8,165,748	8,140,961
Normalized water withdrawal (Intensity)	Cubic meters per Million USD in revenue	243	231	224	220

Methodology notes:

- Data is sourced from direct measurements (invoices, metered data).
- Starting with our 2011 data, Bureau Veritas, an independent auditor recognized by CDP, audited our water consumption. The objective of the audits is to provide further confidence that our reported energy, greenhouse gas (GHG) emissions and water data have a low margin of error. The certificate for this most recent audit is attached as a Verification Statement in Supporting References.
- As Johnson Controls has expanded globally, the diversity of our facilities and products has increased. Outside of municipal water we currently do not have comprehensive data on other water sources used, however we have initiated efforts to improve the detail of our water data.
- Please see section GRI 102-48 for more detail on restatements of information.
- All estimates are based on the best available data at publication and may change over time.

Water sources significantly affected by withdrawal of water

[303-2](#)

Specific Data Unavailable

As Johnson Controls has expanded globally, the diversity of our facilities in terms of type and location has increased. Typically our facilities are in industrial corridors or complexes where other industrial activities are present, and our impacts on sources of water are not significant.

We strive to create a positive impact on our environment, including by providing products and services that enable our customers to use less water. For example, Johnson Controls helps water providers and consumers reduce water usage, increase efficiency of the systems that distribute and use water, and

create healthy and sustainable environments. One of the ways we do this is by offering an innovative financing model that allows customers to pay for infrastructure improvements over time without upfront investment through energy and water cost savings. Also we seek to continuously improve and innovate by implementing best business practices in water management and conservation across our operations.

Our approach to the siting and management of all of our facilities remains consistent with our commitments as a signatory to the United Nations Global Compact, our [Code of Ethics](#), our environmental, health and safety standards as defined by our Johnson Controls Operating System, and all applicable laws and regulations.

Water recycled and reused

[303-3](#)

Specific Data Unavailable

In light of our recent business changes, we are undertaking an analysis to better understand our water use. Outside of municipal water we currently do not have data on other water sources used, including recycling. We are in the process of exploring the best approach to obtaining more granular water data and we hope to be able to report more information on the results of this analysis in the future. Efforts to collect water use data were initiated globally in 2003. Each year, the number of facilities reporting increases and will continue to improve so that we may trend usage for future reports. Water conservation and recycling efforts are primarily managed at the facility level, but more focus on water use is increasing as data becomes more available.

Although we do not have comprehensive water recycling data, we do have some examples of how we are recycling and reclaiming water across our business.

For example, our battery plants have several recycle systems in place, such as: (1) closed loop acid recycle system, in which acid is reused to achieve the desired acid concentration; and (2) pasting recycle systems, in which acid and oxide form a paste within a closed loop system that minimized releases into the wastewater treatment system. Also, battery wash water is contained and recycled back to acid mixing, except where detergents are used that involves treatment before discharge.

In addition, we have a commitment to build new facilities to LEED standards. We have innovative water reclamation technologies at several of our facilities, including our Glendale facility where we have a 30,000-gallon rooftop cistern to capture rainwater for re-use for water closets and urinals.

Effluents and Waste

[103-1](#) | [103-2](#) | [103-3](#)

In our [2017 Materiality Assessment](#), “Hazardous Materials and Waste” emerged as one of the top priorities. Within Effluents and Waste the subtopics Total Waste and Hazardous Waste are material sustainability topics for Johnson Controls. Also see [Explanation of the material topic and its boundary](#).

Enterprise Goals and Commitments on Sustainability: Waste

In 2017, our Global Sustainability Council worked with executive leadership to adopt a new [2025 Sustainability Strategy](#) that includes water and waste reduction goals from a 2017 baseline, which we will report against for FY2018.

Operational Initiatives for Sustainability: Waste

We engage in a range of programs, initiatives and activities specific to waste. Some of our current activities include the following:

- Establish and track progress of our waste generation towards zero waste to landfill.
- Continuously find ways to improve our waste management throughout the life cycle of our business, including finding ways to reduce waste in the first place, reuse or recycle materials.
- Reduce waste across our corporate facilities, through the use of compostable materials in the cafeteria and other activities.
- Promote and encourage recycling among our customers and end-users, including supporting take-back programs, public education, and retrofit options.
- Continue to be one of the most active and responsible lead-based battery recyclers in the world.
- See our [Materials](#) section for more information on battery recycling.

Results: Waste

As a result of our efforts, in FY2017, 26 of our facilities already divert more than 98 percent of non-hazardous waste annually from landfills or incinerators that do not recover energy. Overall, Johnson Controls has an 80 percent company-wide diversion rate for non-hazardous waste.

Water discharge by quality and destination

[306-1](#)

Destination	Unit of measure	2017	2016	2015	2014
Water discharge	Cubic meters	3,315,614	3,306,441	3,449,580	3,067,655

Methodology notes:

- Volume values for all years include total sewer discharge. We are currently in the process of collecting additional level of detail in terms of discharge destination to provide additional breakdown in the near future.
- Sewage and stormwater represent the major types of discharges from our manufacturing plants and office complexes.
- Wastewater from Power Solutions facilities is treated and tested before discharge. Discharge results are monitored and reported in accordance with applicable permit requirements. We reuse and

recycle water whenever possible. Our battery plants have several recycle systems in place such as (1) closed loop acid recycle system – acid is reused to achieve the desired acid concentration. and (2) pasting recycle systems where acid and oxide form paste within a closed loop system that minimized releases into the wastewater treatment system. Also, battery wash water is contained and recycled back to acid mixing, except where detergents are used that involves treatment before discharge.

- Unplanned discharges that violate host country regulations are tracked within our global Environmental Health & Safety teams and monitored by management.

Waste by type and disposal method

[306-2](#)

Category	2017	2016	2015	2014
Non-hazardous waste – Metric Tons				
Reuse	2,993	4,562	5,365	2,694
Recycling	106,920	196,802	218,159	209,495
Composting	274	667	0	0
Recovery (including energy recovery)	1,800	17,144	6,637	5,831
Incineration	1,929	993	5,851	1,634
Landfill	29,072	48,449	56,823	58,403
TOTAL	142,988	268,617	292,835	278,057
Hazardous waste – Metric Tons				
Reuse	3,082	2,155	7,047	5,750
Recycling	35,120	50,971	41,429	47,514
Composting	0	0	0	0
Recovery (including energy recovery)	1,263	1,584	1,428	958
Incineration	1,517	2,338	1,261	2,591
Landfill	164,548	185,989	164,486	148,893
TOTAL	205,530	243,037	215,651	250,706
GRAND TOTAL (Non-hazardous+Hazardous)	348,518	511,654	508,486	483,763

Methodology notes:

- Through our contracts with waste disposal contractors, we require them to provide with the data and documentation of each pickup from our sites matched to the GRI categories. This data is entered by site personnel at each location each month into our global Environmental Health & Safety tracking system.
- Please see section GRI 102-48 for more detail on restatements of information. All estimates are based on the best available data at publication and may change over time.

Significant spills

[306-3](#)

Recorded significant spills	Total number	Source detail
2017	0	2017 NOVs, Permit Exceedances and Releases
2016	3	2016 NOVs, Permit Exceedances and Releases
2015	2	2015 NOVs, Permit Exceedances and Releases
2014	3	2014 NOVs, Permit exceedances and Releases

A significant spill is defined as a spill that is included in the organization’s financial statements, for example due to resulting liabilities, or is recorded as a spill by the organization. To date, no spills have had a materially adverse effect on Johnson Controls finances or to the local environment and/or community. Nonetheless, to ensure transparency, we are reporting all "reportable spills," which we define as a spill or release that requires reporting to a regulatory agency.

Our Johnson Controls Manufacturing System defines standards for environmental management to avoid spills in the first place. We identify and share best practices across the enterprise through the Global Manufacturing and Operations Council and other mechanisms to continuously improve our environmental management practices. In the unlikely event of an emergency or crisis, we have a regularly-updated Crisis Management Plan to effectively address incidents and minimize impacts to our employees, communities, the environment, and other stakeholders.

Transport of hazardous waste

[306-4](#)

	Unit of measure	2017	2016	2015	2014
Hazardous waste transported	kilograms	205,530,074	243,037,711	215,651,145	205,706,978

In compliance with the Basel Convention and other relevant environmental laws and regulations, Johnson Controls strives to implement environmentally sound management of hazardous wastes and other wastes by taking all practicable steps to support proper waste handling and transport that is protective of human health and the environment. For the transport of all wastes, Johnson Controls seeks to hire reputable, conscientious and safe freight forwarders and carriers to carry the wastes, whether such wastes will be recycled or permanently disposed. Carriers are required to be licensed and insured for moving hazardous waste and dangerous goods. All reasonable precautions are taken to protect the environment and workers in transporting hazardous wastes and other wastes. Johnson Controls implements a "cradle-to-grave" process, tracking all waste that leaves U.S. soil until such wastes: (1) full environmentally sound recovery; or (2) disposal in a manner that is protective of human health and the environment.

Methodology Notes:

Numbers for this section have been updated to only reflect the hazardous waste mass that is generated as a by-product of our own operations and ultimately transported for disposal. All estimates are based on the best available data at publication and may change over time.

Water bodies affected by water discharges and/or runoff[306-5](#)*Specific Data Unavailable*

Typically our facilities are in industrial corridors or complexes where other industrial activities are present. Our approach to the siting and management of all of our facilities remains consistent with our commitments as a signatory to the [United Nations Global Compact](#), our [Code of Ethics](#), our environmental, health and safety standards, and all applicable laws and regulations.

Biodiversity[103-1](#) | [103-2](#) | [103-3](#) | [304-1](#) | [304-2](#) | [304-3](#) | [304-4](#)*Specific Data Unavailable*

We engage in a variety of community-oriented activities, many of which are related to environmental stewardship and biodiversity. In FY16, through initiatives like our Blue Sky Involve program, which is our global, employee-driven volunteer program that encourages employees to form volunteer teams and work with local non-profit organizations or schools to support the arts, education, environment, health and social service efforts while gaining leadership development skills, we funded \$67,000 projects globally related to environmental conservation, including planting trees and preserving natural habitats. We also dedicated more than 29,000 employee volunteer hours to environmental protection projects and planted more than 12,000 trees globally which in average will help sequester 28,000 pounds of carbon dioxide per year.

Typically our facilities are in industrial corridors or complexes where other industrial activities are present, and our land acquisitions are rare. We strive to create a positive impact on our environment, for example by providing products and services that enable our customers to use less energy, water and other resources, by recycling and reusing materials where possible, and by investing in conservation through our [Community Engagement](#) initiatives.

Our approach to the siting and management of all of our facilities remains consistent with our commitments as a signatory to the United Nations Global Compact, our [Code of Ethics](#), our environmental, health and safety standards, and all applicable laws and regulations.

Environmental Compliance

[103-1](#) | [103-2](#) | [103-3](#)

Environmental compliance is a top material sustainability aspect for Johnson Controls as determined through our most recent materiality survey. Also, more broadly, ethics and integrity are part of the fabric of Johnson Controls.

Non-compliance with environmental laws and regulations

[307-1](#)

Currency: USD	2017	2016	2015	2014
Total monetary value of significant fines	\$41,482	\$331,980	\$39,853	\$27,841
Number of environmental fines paid by the company	12	9	6	6
Total number of non-monetary sanctions	18	17	5	6
Cases brought through dispute resolution mechanisms	See 2017 attachments, 2017 NOVs, Permit Exceedances and Releases for details	See 2016 attachment, 2016 NOVs, Permit Exceedances and Releases for details	See 2015 attachment, Tab 1 for details	See 2014 attachment, Tab 1 for details

- To ensure transparency, we are reporting all fines that were paid in the year. In some cases, we pay fines in a year subsequent to the year that the incident was reported.
- Our Johnson Controls Manufacturing System defines standards for environmental management to ensure compliance. We identify and share best practices across the enterprise through the Global Manufacturing and Operations Council and other mechanisms to continuously improve our environmental compliance practices. In the unlikely event of an emergency or crisis, we have a regularly-updated Crisis Management Plan to effectively address incidents and minimize impacts to our employees, communities, the environment, and other stakeholders.
- In addition, all employees undergo ethics training, and we have personnel who are trained in relevant environmental compliance activities across our global operations.
- Spills, notices of violation and permit exceedances are recorded in our global Environment, Health & Safety information system. These data are routinely reviewed by all levels of management to promote continuous improvement.
- See our [2017 Form 10-K](#) for more information.



Social

SOCIAL

Human Rights

Our [Human Rights & Sustainability Policy](#) and our [Code of Ethics](#) define our overall management approach as relates to human rights, anti- corruption, environmental, governance, social and related matters.

Johnson Controls requires the line management of each facility to ensure implementation of the equal opportunity and no harassment policies in accordance with national, state or provincial law. Additionally, the Executive Vice President of Human Resources monitors implementation and compliance to these policies. Employees, temporary employees, visitors and other non-employees are encouraged to immediately report situations of harassment committed by anyone, including visitors and other non-employees. They are asked to report the matter to their department manager, plant/facility manager, or local human resources manager. Johnson Controls wants to know of any harassment or unfair practice so that appropriate action can be taken after a prompt investigation.

To ensure our processes are working properly and that employees, customers and shareholders understand our policies and guiding principles around treatment, respectability and integrity, we systematically gather feedback and take action to improve our work environment. We track, analyze and communicate performance outcomes quarterly.

Also see [Inclusive Culture Commitment](#).

UN Global Compact

Our Human Rights Policy specifically states that we fully support the United Nations Global Compact's Ten Principles which are based on The Universal Declaration of Human Rights, The International Labor Organization's Declaration on Fundamental Principles and Rights at Work, The Rio Declaration on Environment and Development and The United Nations Convention against Corruption. In addition, Johnson Controls supports the United Nations Framework on Business and Human Rights.

Our progress in meeting each of the UN Compact Principles are reported publicly on the UN Global Compact website. Also see, our [Sustainability Commitments](#).

Leadership in Human Rights Reporting

Johnson Controls publicly and fully reports to the UN Global Compact's Communication on Progress. Companies reporting in this manner are recognized as leaders in sustainability reporting that includes Human Rights. We also report in accordance with the Global Reporting Initiative and post those reports on our public website.

Freedom of Association and Collective Bargaining

[407-1](#) | [102-41](#)

There are no operations within Johnson Controls that have been identified being at significant risk for employees to exercise the right to freedom of association or collective bargaining.

Collective bargaining agreements	2017	2016	2015	2014
Percentage of total employees covered by collective bargaining agreements	29	39	41	43

*Percentage of employees covered by collective bargaining agreements represents data from North America and Latin America.

Child Labor

[408-1](#)

The company has not found any of its plants or operations which would be at significant risk for incidents of child labor.

We take active measures to prevent and eliminate child labor through our policies. Our [Code of Ethics](#) and Human Rights & Sustainability Policy address child labor and is consistent with the UN Global Compact and ILO Convention 138. Potential employees are required to show valid identification and proof of age before they are hired. To the best of our knowledge there is no child labor within our company.

Forced or Compulsory Labor

[409-1](#)

There are no operations within Johnson Controls which have been identified as having significant risk for incidents of forced or compulsory labor. We take proactive measures to prevent forced or compulsory labor through our policies.

Security Practices

[410-1](#)

At Johnson Controls, our security mission is to protect corporate assets – that includes people, property and intellectual assets – through the implementation of appropriate risk based and business minded security and loss prevention tactics. In order to achieve this security mission, we have processes, activities and metrics in place to support enterprise security operations to include: loss prevention, asset protection, executive protection, enterprise security risk management, security investigations, travel security, crisis management and business continuity.

Johnson Controls employs security personnel either directly or through vendors, and their responsibility is primarily physical security. All such personnel are sufficiently qualified and are trained in our Code of Ethics.

Security Training

Our approach to the siting and management of all of our facilities remains consistent with our commitments as a signatory to the United Nations Global Compact, our [Code of Ethics](#), our environmental, health and safety standards, and all applicable laws and regulations.

- Robust travel security program.
- A method for employees to report security and crisis related incidents via the eAlert portal and Crisis Hotline Reorganized our enterprise security infrastructure to better support our employees in higher risk regions.
- Have established a Global Security Operations Center to support crisis and risk-based intelligence monitoring and provide internal communication support.
- A security website for our global employees, with information on the Crisis Hotline, access to Security and Training resources, and links to other external Security related websites.
- An Active Shooter training program, including an online training course.
- Global security policies to ensure standardization and consistency in the delivery of our global protection plan.
- A robust Security Risk Assessment Program to assess risk and evaluate / improve management controls at our global facilities to include the implementation of a local training and awareness program.

	2017	2016	2015	2014
Percentage of security personnel who have received formal training in the organization's human rights policies or specific procedures and their application to security	100	100	100	100
Training requirements regarding human rights issues also apply to third party organizations providing security personnel	Yes	Yes	Yes	Yes

Human Rights Information

Incidents of Violations Involving Rights of Indigenous Peoples

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	2017	2016	2015	2014	
Total number of identified incidents involving indigenous rights	0	0	0	0	
Incidents (reporting year only)					Status of incidents and actions taken
N/A					<ul style="list-style-type: none"> ✓ Reviewed ✓ Remediation plan being implemented ✓ Remediation plan implemented, results reviewed through routine internal management review process ✓ Incident no longer subject to attention

Operations that have been subject to human rights reviews or impact assessments

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Country	# of Operations	% of Operations
All	All	100%

Employee training on human rights policies or procedures

[412-2](#)

	2017	2016	2015	2014
Total number of hours devoted to training on human rights policies or procedures concerning aspects of human rights that are relevant to operations	67,101	96,480	133,289	150,556

Percentage of employees in the reporting period trained in human rights policies or procedures concerning aspects of human rights that are relevant to operations	56.5%	60%	37%	59%
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Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening

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Significant investment agreements* and contracts that include human rights clauses or that underwent human rights screening:	2017	2016	2015	2014
Johnson Controls uses more than 200,000 suppliers.	100%	100%	100%	100%

*Significant investment agreements is defined as agreements with strategic suppliers.

Commitment and Expectations

- We respect the environment, the communities in which we operate, and our employees’ human rights, and we oppose corruption.
- We expect our employees and suppliers to act in a socially and environmentally responsible manner. We require them to comply with applicable laws and regulations.
- We encourage corruption-free decision-making and sound management based on appropriate environmental.
- We expect our suppliers to operate in a similar manner, and we have incorporated such language in our supplier contracts.

See [Supplier Sustainability](#).

Slavery and Human Trafficking

We expect that suppliers should take steps to ensure that slavery and human trafficking is not taking place in any part of their supply chain or in any part of their business. To the extent that a supplier refuses to cooperate with our compliance efforts, we may reconsider our supply arrangement and implement remedies available to us.

See [Supplier Sustainability](#).

Community Engagement

[203-1](#) | [203-2](#)

Global Community Involvement

To fulfill Johnson Controls' vision and value statements, our company strives to be a good neighbor and a good community partner. We seek to make the community a better place. We define success more broadly than just financial achievement. The communities where we do business are important stakeholders for Johnson Controls. We believe that community involvement and engagement programs enhance our relationships with our communities, customers, and employees, which in turn strengthens our company and benefits our shareholders.

Through philanthropy and employee volunteer programs, we improve and strengthen the hundreds of communities we call home. Johnson Controls contributes millions of dollars annually and our employees give freely of their time, skills and energy.

In 2017, Johnson Controls' corporate philanthropy efforts across the globe resulted in contributions of over \$16 million.

Blue Sky Involve Global Employee Volunteer Program

Throughout the world, we foster community involvement by our employees through our Blue Sky Involve employee volunteer program, demonstrating our social conscience to improve the communities in which we live, work and operate. Blue Sky Involve helps Johnson Controls employees share their passion and expertise through community volunteer activities and strengthens their professional and leadership skills. The program reinforces our corporate values and brings them to life through service to the community. Employees form volunteer groups and work with local non-profit organizations or schools to support education, environmental stewardship or social service effort. Each partner organization receives a grant of \$250, \$500, \$1,000 or \$2,500 USD, depending on project type, toward a volunteer project planned with our employees.

Since Blue Sky Involve launched in 2006, Johnson Controls employees have helped coordinate close to 10,000 projects and volunteered 1.8 million hours of their time to local communities.

In 2017, 7,440 employees formed 421 project teams and volunteered 54,400 hours, with their selected charities or schools receiving \$341,000 in grants.

Community Leadership Program

The Community Leadership Program (CLP) seeks to strategically match our leaders around the world with community and charitable organizations in addition to other individual volunteer opportunities. We do this by coupling the leader's personal passion and professional expertise with area organizations that need this type of guidance. Our involvement provides strategic feedback on economic, social, educational and environmental issues and illustrates our commitment to the communities where Johnson Controls has a presence.

In 2017, more than 87 leaders represented our company in local communities serving on charity boards. Several organizations benefiting from CLP include: Big Brothers Big Sisters, Boys & Girls Clubs of America, United Way, the United Performing Arts Fund (UPAF), and the YMCA.

LATAM Technology Training Program

Johnson Controls recognizes the need to inspire youth and promote the next generation of leaders throughout its global communities. We accomplish this through programs focused on STEM education and entrepreneurship and target at-risk youth who need access to educational programming. Johnson Controls piloted, established, and is now expanding its programming in Latin America. In 2011 the program was introduced in Brazil and included sessions in electronic security equipment installation and monitoring. This technical curriculum is conducted alongside our non-profit partners and together this programs builds a pipeline of promising young employees for Johnson Controls and the great security industry. Since the program started 30-40 students have enrolled in the program each year and 77 students graduated. The program has also been expanded to Argentina and Chile and includes training for youth in career advancement presentation, technical and occupational workshops, and internship opportunities.

Johnson Controls Foundation (U.S.)

In the last seven years, the [Johnson Controls Foundation](#) has funded more than \$57 million to support U.S. charitable organizations in the areas of the arts, education, health and social services, and the environment. Through the Foundation's Education and Arts Matching Gift Program, employee's contributions are matched dollar-for-dollar to eligible institutions and organizations in those categories.

In 2017, the Foundation gave \$7.4 million to nonprofit organizations that measurably improve our communities.

United Way

Johnson Controls holds a nationwide United Way giving campaign in the United States each year. In Wisconsin, where our U.S. headquarters is located, Johnson Controls has held the largest workplace giving campaign for seventh straight years. Our contribution makes up approximately 10% of the United Way campaign for Greater Milwaukee and Waukesha County.

In 2017, the generosity of our employees was responsible for more than \$5 million in contributions. These dollars included employee giving and a match from the Johnson Controls Foundation.

Global Disaster Relief

Johnson Controls supports natural [disaster relief](#) efforts globally. By partnering with large organizations such as the Red Cross and United Way, as well as smaller local agencies, we have played a role in supporting large-scale disaster relief efforts through our company donations.

Johnson Controls is a member of the American Red Cross Annual Disaster Giving Program, a select group of leading corporations providing the highest level of funding to global disaster relief efforts. Since 2012, Johnson Controls has made an annual donation of \$500,000. Our membership supports an emergency infrastructure which enables the Red Cross to respond immediately to the needs of individuals and families impacted by disasters.

Membership in the [American Red Cross Annual Disaster Giving Program](#) ensures Johnson Controls' assistance is there in a timely, consistent way, available when disasters occur, wherever and whenever they happen around the world. Johnson Controls provides additional support to relief efforts when extreme disasters occur and to local agencies for disasters if the American Red Cross is not asked to provide relief. In addition to company donations, Johnson Controls employees provide support to local communities through employee donations and volunteerism.

Community Sponsorships

Johnson Controls provides many organizations with financial sponsorship and coordinated volunteer efforts. In many instances, it is these sponsorship dollars that serve as the catalyst for an organization to achieve its larger objectives.

In 2017, Johnson Controls provided \$736,000 in sponsorships to nonprofit organizations.

Milwaukee Neighborhood Initiative

Through the Milwaukee Neighborhood Initiative, Johnson Controls partners with local non-profits to help strengthen three challenged local neighborhoods close to Johnson Controls headquarters, focusing on the areas of education, job development, affordable housing, health and the arts. Since the program's inception in 2016, more than \$1 million from the Johnson Controls Foundation has been granted to programs targeted at changing the trajectory of lives in these neighborhoods. Over 5,400 people who live, work or go to school in the neighborhood were touched by programs funded by the Neighborhood Initiative.

On May 23, 2017, Johnson Controls partnered with the Bucks and announced the gift of a multi-use sports complex on the campus of Browning School and Silver Spring Neighborhood Center. The gift is part of Johnson Controls sponsorship of the new Bucks arena and will include \$600,000 in the next 10 years of programming for the court.

Research and Development

We invest in research and development, as well as a network of laboratory and academic partnerships. These help us develop future technology and stay ahead of evolving industry trends. For example, we've invested in more than 30 laboratories dedicated to battery and energy storage development and testing in the United States, Mexico, Brazil, Germany and China.

As just one example, two new multi-year projects bring together Johnson Controls expertise and graduate student researchers at the University of Wisconsin - Madison. Funded by Johnson Controls, including a \$500,000 Fellows gift, the projects focus on furthering the fuel efficiency of start-stop and next-generation battery electric vehicles.

The first project seeks to identify the aging mechanisms of Absorbent Glass Mat (AGM) batteries in start-stop and vehicle optimization applications. The second will explore ways to leverage other energy storage devices for peak power acceptance and cycling. These projects expand our partnership with the University of Wisconsin and, along with our programs at other universities, promote energy storage technology breakthroughs.

Infrastructure Investments

We invest in our communities in a number of ways, including investments in new sustainable buildings. In 2017 Johnson Controls opened an Asia-Pacific headquarters in Shanghai. The Johnson Controls Headquarters Asia Pacific [received China's Three Star Green and LEED Platinum building certifications](#). The headquarters, located in Shanghai, China, has already been awarded the first design-phase EDGE certification for an office building in China from IFC-World Bank. It is expected to deliver 44 percent total energy savings, 42 percent water savings and 21 percent embodied energy in materials savings.

There are other examples as well. For example, in 2016, Johnson Controls announced that it is forming a joint venture with Binzhou Bohai Piston Co., Ltd., an auto parts affiliate of Beijing Automotive Industry

Group Co., Ltd. (BAIC Group), to build its fourth Chinese automotive battery manufacturing plant. Aimed at serving both automakers and aftermarket customers, the facility will be located in Binzhou, Shandong Province.

In 2017, we also expanded plants in the United States. In Norman, Oklahoma, we expanded our plant and added a 130,000-square-foot test lab. The facility boasts some of the most sophisticated, in-house testing capability of any manufacturer in the industry, and ensures the current product lines will meet emerging regulations, such as increased minimum product efficiencies. The facility is the size of one-and-a-half football fields, more than two floors totaling 52 feet high. It has psychrometric, sound, temperature, heat and rain testing capability and uses more than 2,500 tons of YORK® chilled water cooling.

Operations with local community engagement, impact assessments, and development programs

[413-1](#) | [202-2](#)

Our intent is to enter, operate and leave communities with a positive impact. 100% of our operations have implemented local community engagement, impact assessments, and development programs.

A formal and comprehensive process is implemented for every new facility, acquisition and divestiture we make in our portfolio. Our facilities are sited and operate such that operations rarely create issues for the local community. If such instances ever occur, our facility managers are prepared to interface with the community leaders to understand the issues and to draw upon more expertise to quickly resolve any issues.

In most cases where we are entering a market, our business has a positive impact on the local society. For example, the vast majority of company acquisitions and equity investments, most being smaller family-held service or technology companies, does not result in layoffs post-deal. The value of the business to Johnson Controls is dependent on retaining people. In a service company or a technology company, the people are indeed the greatest asset. Our financial business case for an acquisition rests on our ability to help the newly-acquired company grow in the region.

In addition, when we acquire a company and bring it into the Johnson Controls family, we bring many positives to our new employees, and thus to their communities. This includes our skill and job training, Equal Employment Opportunity and diversity programs as well as a wide selection of benefits. If there is a layoff or plant closing, Johnson Controls offers a variety of programs and services to ensure employees are enabled for success outside of the company.

Operations with significant actual and potential negative impacts on local communities

[413-2](#)

The mission of the Corporate Community Involvement and Engagement program is to invest in the communities where our employees live and work. Through our programs, outlined in [Community Engagement](#) and on our website at [Corporate Responsibility Program Overviews](#), we seek to bring positive impacts to our communities.