

2021 Green Bond Report



September 2021

The power behind your mission






Sustainability is fundamental
to everything we do at
Johnson Controls.

Our commitment to sustainability

Sustainability is fundamental to everything we do at Johnson Controls. We strive to grow our business by providing sustainable products and services, empowering our people, and reducing the environmental footprint of our own operations and supply chain. As the global leader in smart, healthy and sustainable buildings, our mission is to reimagine the performance of buildings to serve people, places and the planet. We believe that our leadership in sustainability will ultimately create long-term benefits for customers, employees, shareholders and society.

Johnson Controls is proud to be consistently ranked as a sustainability leader among industry peers, which is evidenced by being:

included in more than
40 prestigious sustainability indexes



Recognized as among the top 100 Best Corporate Citizens by 3BL Media for 16 consecutive years



Awarded CDP Climate Leadership level and an MSCI AAA Rating

We believe good isn't good enough, so we are driving further and faster on climate action, with science-based targets delivering absolute emissions reductions and a commitment to achieve net zero carbon emissions before 2040.

We also lead in sustainable finance. In December 2019, Johnson Controls became one of the first industrial companies in the U.S. syndicated loan market to tie our senior revolving credit facilities to specific sustainability metrics. Then, in September 2020, Johnson Controls made sustainability a direct part of our investor offerings by becoming one of the first industrial companies to

issue a green bond in U.S. debt capital markets. Proceeds from this \$625 million inaugural green bond offering (2020 Green Bond and/or Green Bond) have been allocated to support projects that focus on actionable sustainability in pursuit of our goals.

To further cement our position as a pioneer among U.S. industrials, in September 2021 we published an integrated green, social and sustainability-linked financing framework. This expanded Sustainable Finance Framework¹, which received a positive second-party opinion from Sustainalytics, provides us with the flexibility to utilize a full slate of sustainable finance instruments.

¹ The company's 2021 Sustainable Finance Framework was constructed in alignment with the 2021 versions of the Green Bond and Social Bond Principles, the Sustainability Bond Guidelines, the Green Loan and Social Loan Principles and the Sustainability-Linked Loan Principles as well as the 2020 version of the Sustainability-Linked Bond Principles.

Sustainability governance



At Johnson Controls, we believe good governance requires not only an effective set of specific practices but also a culture of responsibility and accountability throughout the company. Governance at Johnson Controls is intended to foster and promote both of these beliefs.

The board of directors approves and oversees the implementation of the company's mission, vision and values, and is briefed each quarter on our sustainability progress. The board's Governance and Sustainability Committee provides oversight of our sustainability program, goals, management, trends and environmental health and safety.

Authority for day-to-day management of economic, environmental and social topics is delegated to the Executive Committee, which comprises the senior executives responsible for all our major corporate functions. Our CEO and Executive Committee members have sustainability and diversity embedded into their performance goals.

Johnson Controls centralizes its sustainability governance through its Sustainability Leadership Committee (SLC), which provides regular updates to our Executive Committee and board of directors. The Committee is chaired by the Chief Sustainability, Government and Regulatory Affairs Officer and is made up of leaders of the company's businesses, regions across the globe, and key corporate functions.

The SLC is charged with:

- Ensuring Johnson Controls is world class across all measures of sustainability, including environmental, social and governance (ESG)
- Embedding sustainability into the company's culture and operations across the enterprise
- Building sustainability metrics and key performance indicators into employee performance goals
- Launching working groups to address specific sustainability-related topics to drive the company's sustainability commitments and strategy under a long-standing Global Sustainability Council (GSC)

The GSC and Global Sustainability Team play the role of connector and coordinator, ensuring streamlined engagement across diverse business functions to deliver on the enterprise Sustainability Strategy. The GSC was established in 2009 to provide a structure for enterprise-wide sustainability management. The working groups are composed of small teams and are designed to address specific sustainability-related topics.

Sustainable finance governance



Johnson Controls established a senior-level Sustainable Finance Committee consisting of members of the SLC, Treasury, and Legal teams as well as other subject matter experts. Through collaboration among a broad range of teams and the Sustainable Finance Committee, projects that received Green Bond allocations were identified and evaluated based on compliance with the definition of Eligible Green Projects.

The six categories of Eligible Green Projects include:

- Eco-efficient and/or circular economy adapted projects, production technologies and processes
- Green buildings
- Pollution prevention and control
- Sustainable water and wastewater management
- Clean transportation
- Renewable energy

2020 Green Bond allocation



Johnson Controls committed to fully allocating the net proceeds of \$619 million from our 2020 Green Bond within two years of issuance to Eligible Green Projects. In addition, we limited use of proceeds for refinancing projects to a three-year lookback period.

We are proud to report that we were able to allocate the full \$619 million within one year of issuance. Overall, we allocated 40 percent of the net outstanding proceeds to finance new green projects and expenditures, with the remaining 60 percent of proceeds used to refinance existing green expenditures incurred within the three-year lookback period preceding the year of issuance. The below summary provides a breakdown of how the proceeds were allocated.

\$619 million

(100% allocated – 40% financed / 60% refinanced)

Green buildings

\$177 million

(0% financed/100% refinanced)



Eco-efficient and/or circular economy adapted projects, production technologies and processes

\$442 million

(55% financed/45% refinanced)



2020 Green Bond impact



Johnson Controls has always been a company that drives energy efficiency, both internally and for our customers. We are focused on empowering customers and communities to streamline building operations and deliver energy efficiencies that will help them meet their environmental goals.

The investments made with our Green Bond proceeds are helping us meet our ambitious sustainability commitments by directly reducing the environmental footprints of our company and our customers. Below is a summary of the estimated positive environmental impacts from the green projects financed or refinanced by our Green Bond proceeds.

Green Bond Category	Metric	Impact ^{2,3}
Green Buildings	Metric tons of CO ₂ e avoided due to energy efficiency of campuses selected	440 metric tons CO ₂ e per year
Eco-efficient and/or circular economy adapted projects, production technologies and processes	Metric tons of CO ₂ e avoided due to energy efficiency of products selected	1,200,000 metric tons CO ₂ e per year

² Calculated impact is based on actual historical sales data to estimate average annual impact. Results may differ in future years.

³ Emissions were calculated using (IEA) and eGRID average country emission factors.

Project spotlight

The following section highlights projects to which Johnson Controls has allocated the funds from its 2020 Green Bond.

2025 Sustainability Strategy: Performance

Improve sustainability performance and track the company's progress

Johnson Controls Asia-Pacific Headquarters, Shanghai, China

Eligible Project Category: Green Buildings

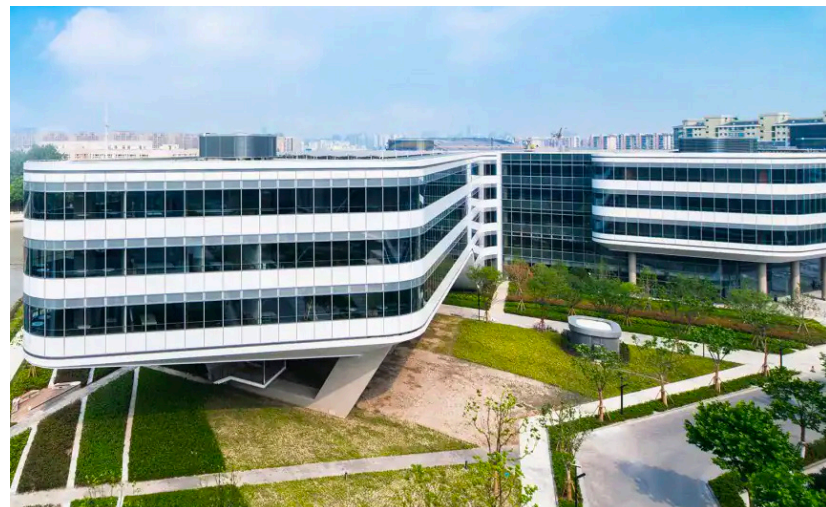
The Johnson Controls Asia-Pacific headquarters in Shanghai, China is the first triple-certified green building in China.

The headquarters sets a new standard for green and smart buildings, being the first in China to receive several top global energy efficiency awards, including IFC-World Bank Group's EDGE (Excellence in Design for Greater Efficiencies) Certification, U.S. Green Building Council's LEED Platinum Certification, and the China Green Building Design Label Three Star Certification.

The headquarters showcases a full range of smart building solutions. Its sustainable design – which includes a Central Plant, renewable energy and intelligent lighting, the Metasys® Building Automation System, and other advanced technologies – is generating significant savings in overall energy consumption compared to the local market standard. Its 2,000 square meters of solar power panels generate more than 200,000 kilowatt hours of power each year, and its green roof covers more than 750 square meters.

Additionally, the building reduces water usage. The reclaimed water system in the building collects used water and rain, and reuses them with high efficiency, including in bathroom fixtures

that use 40 percent less water than similar products. All the display screens are Energy Star certified, which save more than 30 percent of energy consumption in daily use, and embodied energy in materials was reduced by 21 percent by using Forest Stewardship Council-certified (FSC) wood-based building materials and sourcing locally supplied products. The headquarters is also equipped with hybrid and electric vehicle charging stations that enable employees to commute with a smaller carbon footprint.



2025 Sustainability Strategy: Solutions

Provide increasingly sustainable products and services

OpenBlue

Eligible Project Category: Eco-efficient and/or circular economy adapted projects, production technologies and processes

One of our ambitious sustainability commitments is to double annual avoided emissions by 2030 through customer use of our OpenBlue digitally enabled products and services. OpenBlue addresses the unique and personal challenges that our customers face by leveraging data to drive customer productivity, performance and enhanced resilience through safety, respectful security, sustainability and intelligence.

As the global leader in smart, healthy and sustainable buildings, we are eager to drive harder and faster to cut the 40 percent of greenhouse gases that come from buildings. In July 2021 we announced OpenBlue Net Zero Buildings as a Service in response to our customers' increasing needs for assistance in making their sustainability goals easier to plan, execute, track and achieve. OpenBlue Net Zero Buildings as a Service provides a one-stop shop for companies striving to meet net zero carbon and renewable energy goals. It includes a full spectrum of sustainability offerings tailored to schools, campuses, data centers, and healthcare facilities as well as commercial and industry players, with services including sustainability roadmap development, planning, financing, execution, and reporting.

This sustainability solution is supported by our OpenBlue Net Zero Advisor offering, which delivers real-time, AI-driven tracking and reporting of sustainability metrics to help facilities managers ensure and prove the net zero carbon reduction and renewable energy impact of their buildings. Based on criteria such as LEED certification, the new technology automatically gathers and

analyzes data about energy, water, materials and greenhouse gas emissions involved in every phase of a building's lifecycle and proves CO₂ reductions, renewable energy and efficiency gains.

Our proprietary research echoes the demand, prioritization and urgency for support that businesses, governments and global leaders are calling for. We have already helped our customers save more than 30.6 million tons of CO₂ globally and \$6.6 billion through guaranteed operational savings, with so much more scope for savings to come.



The YORK® YZ Magnetic Bearing Centrifugal Chiller

Eligible Project Category: Eco-efficient and/or circular economy adapted projects, production technologies and processes

Johnson Controls chillers provide customers with the lowest life cycle emissions by combining energy efficiency, optimized performance, and low-GWP (global warming potential) refrigerants. We have developed a family of low-GWP YORK commercial chillers using refrigerant alternatives R-1233zd, R-1234ze, and R-513A. Our chillers for industrial applications can also use low-GWP refrigerants such as R-290, R-717 and R-744.

The YORK YZ Magnetic Bearing Centrifugal Chiller is a revolutionary advancement that challenges everything you know about conventional chiller design. Built upon decades of industry-leading chiller expertise, our engineers questioned every component and challenged every assumption.

The result is the first chiller fully optimized for ultimate performance with a next-generation, low-GWP refrigerant, to deliver exceptional efficiency and operation.

We believe 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 refrigerant with an extremely low GWP one, delivering superior real-world performance, lower cost of ownership and a new definition of sustainability. YZ chillers offer 35 percent better efficiency than conventional centrifugal chillers. This system also offers up to 60 percent lower refrigerant charge than traditional systems available in the market.



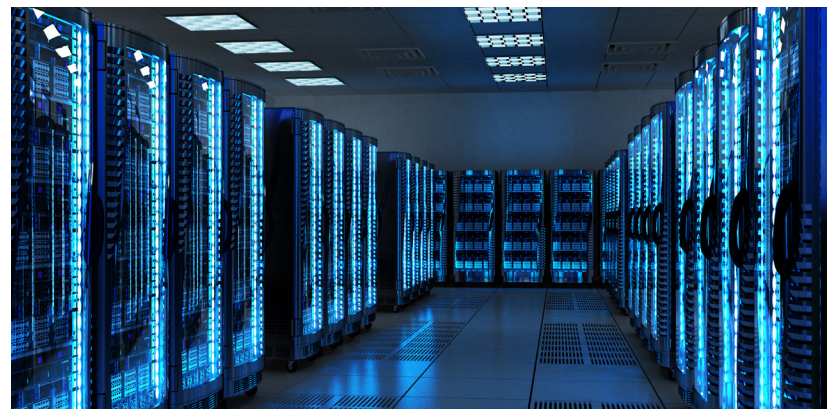
Silent-Aire

Eligible Project Category: Eco-efficient- and/or circular economy adapted projects, production technologies and processes

In May 2021, Johnson Controls announced the completion of our acquisition of Silent-Aire, a global leader in hyperscale cooling and modular data center solutions with a clear focus on sustainability.

Silent-Aire is committed to long-term sustainability by pushing technological advances that foster environmental excellence. Its custom data center solutions for cloud service providers have set the standard for innovation, energy efficiency, volume manufacturing, and complexity of rapid regional deployments. It was a pioneer when it introduced free air cooling into its data center solutions, and when combined with innovative, direct evaporative cooling, it has lowered product use emissions and energy consumption on a massive scale.

The innovation and sustainable focus that Silent-Aire maintains enables them to provide highly efficient, sustainable and reliable products along with consistent and dependable execution. This complements our own integrated solutions for data center providers through OpenBlue digital solutions that enhance operational resiliency and energy efficiency, helping our customers achieve their sustainability goals. Together, this strategic combination broadens our portfolio of sustainable and reliable data center solutions.





Appendix

Report of independent accountants

Independent verification of avoided GHG emissions



Report of Independent Accountants

To the Management of Johnson Controls International plc.

We have examined the accompanying management assertion of Johnson Controls International plc (JCI) that an amount equal to the net proceeds of \$619 million from the September 10, 2020 issuance of the \$625 million 1.750% Senior Notes due 2030 (the "Notes") was fully allocated to finance or refinance, in whole or in part, a portfolio of new or existing Eligible Green Projects (as defined in management's assertion) during the three-year period preceding the year of issuance of the Notes and through July 31, 2021 in accordance with the Eligible Green Project Criteria (as set forth in management's assertion). JCI's management is responsible for its assertion. Our responsibility is to express an opinion on management's assertion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects. An examination involves performing procedures to obtain evidence about management's assertion. The nature, timing and extent of the procedures selected depend on our judgment, including an assessment of the risks of material misstatement of management's assertion, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

Only the information included in JCI's management's assertion is part of our examination engagement. The other information in this Johnson Controls 2021 Green Bond Report has not been subjected to the procedures applied in our examination engagement, and accordingly, we make no comment as to its completeness and accuracy and do not express an opinion or provide any assurance on such information.

In our opinion, management's assertion is fairly stated, in all material respects.

A handwritten signature in cursive script that reads "PricewaterhouseCoopers LLP".

PricewaterhouseCoopers LLP
Milwaukee, Wisconsin
September 17, 2021

Exhibit A

Johnson Controls International plc

Management’s Assertion on Green Bond Allocations

Management of Johnson Controls International plc (“JCI”) is responsible for the completeness, accuracy, and validity of this management assertion. Management asserts that an amount equal to the net proceeds of \$619 million from the September 10, 2020 issuance of the \$625 million 1.750% Senior Notes due 2030 (the “Notes”) was fully allocated to finance or refinance, in whole or in part, a portfolio of new or existing Eligible Green Projects during the three-year period preceding the year of issuance of the Notes and through July 31, 2021 (the “Reporting Period”) in accordance with the Eligible Green Project Criteria set forth below.

JCI Green Bond Use of Proceeds for Eligible Green Projects during the Reporting Period

JCI Eligible Green Project Category	JCI Eligible Green Project Criteria¹	
Eco-efficient and/or circular economy adapted products, production technologies and processes	<p>New or existing investments and expenditures to develop, manufacture, distribute and install products, services, and solutions that optimize the energy and water efficiencies of buildings and homes.</p> <p>For purposes of this assertion, JCI considers new or existing investments and expenditures to include research and development, acquisition costs, and capital and operating expenditures related to products, services and solutions that optimize the energy and water efficiencies of buildings and homes, which related to OpenBlue, The York YZ Magnetic Bearing Centrifugal Chiller, and Silent-Aire.</p>	\$442 million
Green Buildings	For purposes of this assertion, existing investments and expenditures related to the design and construction of the Johnson Controls Asia-Pacific Headquarters, Shanghai, China that achieved LEED v3,4 Platinum Standard certification.	\$177 million
Total Use of Net Proceeds for Eligible Green Projects		\$619 million
Net proceeds from the issuance of the Notes		\$619 million

¹ Refer to the “Use of Proceeds” section of the Prospectus Supplement dated September 8, 2020 to the Prospectus dated September 4, 2020 filed by JCI with the Securities and Exchange Commission pursuant to Securities Act Rule 424(b)(5) on September 10, 2020 for eligible categories and criteria to which the proceeds may be allocated at: https://www.sec.gov/Archives/edgar/data/0000833444/000119312520242549/d55283d424b5.htm#supprom55283_7



**VERIFICATION OPINION DECLARATION
 AVOIDED GREENHOUSE GAS EMISSIONS**

To: The Stakeholders of Johnson Controls

Apex Companies, LLC (Apex) was engaged by Johnson Controls International PLC (Johnson Controls) to conduct an independent verification of the annual avoided greenhouse gas (GHG) emissions for an energy efficient building and for select eco-efficiency products reported by Johnson Controls in association with their Green Bond for the period described below. This verification opinion declaration applies to the related information included within the scope of work described below.

The determination of the avoided GHG emissions is the sole responsibility of Johnson Controls. Johnson Controls is responsible for the preparation and fair presentation of the avoided GHG emissions in accordance with the criteria. Apex’s sole responsibility was to provide independent verification on the accuracy of the avoided GHG emissions reported, and on the underlying systems and processes used to collect, analyze, and review the information. Apex is responsible for expressing an opinion on the avoided GHG emissions statement based on the verification. Verification activities applied in a limited level of assurance verification are less extensive in nature, timing, and extent than in a reasonable level of assurance verification.

Boundaries of the reporting company avoided GHG emissions covered by the verification:

- * Selected office building avoided emissions
- * Three separate eco-efficiency products sold worldwide

Types of avoided GHGs: CO₂, N₂O, CH₄, HFCs

Avoided GHG Emissions Statement:

Green Bond Category	Metric	Impact – Estimated Avoided Emissions per year
Selected LEED Certified Green Building ¹	Metric tons of CO ₂ equivalent avoided due to energy efficiency of selected building	440 metric tons CO ₂ equivalent
Eco-efficient and/or circular economy adapted projects, production technologies and processes ²	Metric tons of CO ₂ equivalent avoided due to energy efficiency of selected products ²	1,200,000 metric tons CO ₂ equivalent

¹ The calculated annual avoided emissions are based on energy consumption in one green building during FY2019 - October 1, 2018 to September 30, 2019.

² The avoided emissions noted above are the sum of per year avoided emissions from three selected eco-efficient products during the period of 2018 through 2020.

Data and information supporting the reported avoided emissions were based on both historical and estimated data.



Period covered by avoided GHG emissions verification:

- 2018 through 2020 for the selected building and products

Criteria against which verification was conducted:

- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol, Corporate Accounting and Reporting Standard, Revised Edition (Scope 1 and 2) and the GHG Protocol Scope 2 Guidance, an amendment to the GHG Protocol Corporate Standard.
- WRI/WBCSD Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Scope 3)

Reference Standard:

- ISO 14064-3: Second edition 2019-04: Greenhouse gases -- Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements

Level of Assurance and Qualifications:

- Limited
- Materiality Threshold $\pm 5\%$ (applied to each metric separately)

GHG Verification Methodology:

- Interviews with relevant personnel of Johnson Controls;
- Review of documentary evidence produced by Johnson Controls;
- Review of Johnson Controls data and information systems and methodology for collection, aggregation, analysis and review of information and calculations used to determine avoided GHG emissions;
- Audit of samples of data used by Johnson Controls to determine avoided GHG emissions.

Verification Opinion:

Based on the process and procedures conducted, there is no evidence that the avoided GHG emissions statement shown above:

- is not materially correct and is not a fair representation of the avoided GHG emissions data and information

It is our opinion that Johnson Controls has established appropriate systems for the collection, aggregation and analysis of quantitative data for determination of these avoided GHG emissions for the stated period and boundaries.

Statement of independence, impartiality, and competence

Apex is an independent professional services company that specializes in Health, Safety, Social and Environmental management services including assurance with over 30 years history in providing these services.

No member of the verification team has a business relationship with Johnson Controls, its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest.

Apex has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

The verification team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, has over 20 years combined experience in this field and an excellent understanding of Apex's standard methodology for the verification of greenhouse gas emissions data.



Attestation:

A handwritten signature in blue ink, appearing to read 'David Reilly', written in a cursive style.

David Reilly, Lead Verifier
Principal Consultant, Sustainability Services
Apex Companies, LLC

A handwritten signature in blue ink, appearing to read 'Trevor Donaghu', written in a cursive style.

Trevor Donaghu, Technical Reviewer
Program Manager, Sustainability Services
Apex Companies, LLC

August 27, 2021

This verification opinion declaration, including the opinion expressed herein, is provided to Johnson Controls and is solely for the benefit of Johnson Controls in accordance with the terms of our agreement. We consent to the release of this opinion declaration by you for public reporting purposes, but without accepting or assuming any responsibility or liability on our part to any party who may have access to this opinion declaration.



Johnson Controls is proud of our sustainability efforts and we have publicly reported sustainability data since 2002.

About Johnson Controls

At Johnson Controls (NYSE:JCI), we transform the environments where people live, work, learn and play. As the global leader in smart, healthy and sustainable buildings, our mission is to reimagine the performance of buildings to serve people, places and the planet.

With a history of more than 135 years of innovation, Johnson Controls delivers the blueprint of the future for industries such as healthcare, schools, data centers, airports, stadiums, manufacturing and beyond through its comprehensive digital offering, OpenBlue. With a global team of 100,000 experts in more than 150 countries, Johnson Controls offers the world's largest portfolio of building technology, software as well as service solutions with some of the most trusted names in the industry.

For more information, visit www.johnsoncontrols.com or follow us [@johnsoncontrols](https://twitter.com/johnsoncontrols) on Twitter

Johnson Controls International plc cautionary statement regarding forward-looking statements

Johnson Controls International plc has made statements in this report that are forward-looking and therefore are subject to risks and uncertainties. All statements in this document other than statements of historical fact are, or could be, "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. In this communication, statements regarding Johnson Controls' future financial position, sales, costs, earnings, cash flows, other measures of results of operations, synergies and integration opportunities, capital expenditures and debt levels are forward-looking statements. Words such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe," "should," "forecast," "project" or "plan" and terms of similar meaning are also generally intended to identify forward-looking statements. However, the absence of these words does not mean that a statement is not forward-looking. Johnson Controls cautions that these statements are subject to numerous important risks, uncertainties, assumptions and other factors, some of which are beyond Johnson Controls' control, that could cause Johnson Controls' actual results to differ materially from those expressed or implied by such forward-looking statements, including, among others, risks related to: Johnson Controls' ability to manage general economic, business, capital market and geopolitical conditions, including global inflation and component shortages; Johnson Controls' ability to manage the impacts of natural disasters, climate change, pandemics and outbreaks of contagious diseases and other adverse public health developments, such as the COVID-19 pandemic; the strength of the U.S. or other economies; changes or uncertainty in laws, regulations, rates, policies or interpretations that impact Johnson Controls' business operations or tax status; the ability to develop or acquire new products and technologies that achieve market acceptance; changes to laws or policies governing foreign trade, including increased tariffs or trade restrictions; maintaining the capacity, reliability and security of our enterprise and product information technology infrastructure; the risk of infringement or expiration of intellectual property rights; any delay or inability of Johnson Controls to realize the expected benefits and synergies of recent portfolio transactions such as its merger with Tyco and the disposition of the Power Solutions business; the outcome of litigation and governmental proceedings; the ability to hire and retain key senior management; the tax treatment of recent portfolio transactions; significant transaction costs and/or unknown liabilities associated with such transactions; the availability of raw materials and component products; fluctuations in currency exchange rates; labor shortages, work stoppages, union negotiations, labor disputes and other matters associated with the labor force; the cancellation of or changes to commercial arrangements. A detailed discussion of risks related to Johnson Controls' business is included in the section entitled "Risk Factors" in Johnson Controls' Annual Report on Form 10-K for the 2020 fiscal year filed with the SEC on November 16, 2020, which is available at www.sec.gov and www.johnsoncontrols.com under the "Investors" tab. Shareholders, potential investors and others should consider these factors in evaluating the forward-looking statements and should not place undue reliance on such statements. The forward-looking statements included in this communication are made only as of the date of this document, unless otherwise specified, and, except as required by law, Johnson Controls assumes no obligation, and disclaims any obligation, to update such statements to reflect events or circumstances occurring after the date of this communication.

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The power behind your mission

