

# Johnson Electric Holdings Limited

## Sustainability Report 2019



Years of  
Innovating  
Motion  
1959 – 2019

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## ABOUT OUR REPORT

This Sustainability Report 2019 (the "Report") covers the sustainability performance of Johnson Electric Holdings Limited (the "Company") (Stock code: 179) and its subsidiaries (collectively the "Group" or "Johnson Electric"). It should be read in conjunction with the Group's Annual Report 2019, in particular the Management's Discussion and Analysis and the Corporate Governance Report sections.

The information presented relates to sustainability performance and activities in all of Johnson Electric's major operating locations worldwide from 1 April 2018 to 31 March 2019, unless stated otherwise. There were no significant changes to the boundaries of the activities included in this Report compared to the previous year.

Our Report was prepared in accordance with the Environmental, Social and Governance Reporting Guide ("ESG Reporting Guide") set out in Appendix 27 of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited ("HKEx"). It has been independently verified by the Hong Kong Quality Assurance Agency ("HKQAA"). The verification statement can be found on page 41.

Our Report is published in English and Chinese. Both versions are available for download from [www.johnsonelectric.com](http://www.johnsonelectric.com). For environmental protection purposes, we do not provide printed copies of this Report.

# MESSAGE FROM THE CHAIRMAN AND CHIEF EXECUTIVE



I am pleased to present Johnson Electric's Sustainability Report for 2019.

***Sustainability is integral to our ability to succeed in a constantly evolving and competitive market***

We will continue to focus on growing our business in a sustainable way and constantly explore new paths towards this. Consequently, despite the highly unpredictable current business environment, I remain highly optimistic about our growth trajectory in the medium and longer term.

Underpinning this optimism is the fact that Johnson Electric's products and technologies touch consumers' lives in so many different ways – and these touchpoints are proliferating in an increasingly “connected” world shaped by the forces of electrification, digitalization and connectivity. Furthermore, the market's demand for products that address sustainability concerns aligns directly with where we have been focusing our investments in innovation and new product development over a number of years.

In the case of our Automotive Products Group, we provide mission-critical components and subsystems that help automotive manufacturers reduce emissions, enable vehicle electrification and optimize thermal management. Our Industry Products Group, meanwhile, delivers a range of innovative motion solutions that improve energy efficiency, use less raw materials and reduce waste across a wide range of end markets from home appliances and power tools to smart electricity meters and medical devices.

Looking further into the future, we are exploring where and how our technologies can be applied to meet society's demand for even more sustainable new products and services. For example, in October 2018, we took a minority equity interest and entered into a strategic cooperation agreement with WeRide – a “mobility as a service” start-up business. Driven by artificial intelligence, WeRide is a smart-mobility company that will create autonomous all-electric vehicles for the Chinese market.

This strategic cooperation agreement gives WeRide access to Johnson Electric's technology expertise and engineering support, particularly in relation to motion-related hardware applications critical to the performance of the leading-edge autonomous driving technology developed by WeRide and its partners. Through this collaboration, we also seek to advance our own understanding of the performance requirements of hardware systems and components for the next generation of autonomous vehicles that is set to reshape transportation globally.

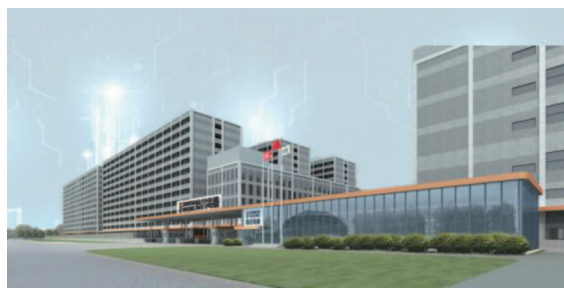


### Adapting and Strengthening the Business

As noted in last year's Sustainability Report, we have been proactive in embracing the opportunities provided by advanced automation and digitization to improve the efficiency of our manufacturing and internal business operations. This ongoing journey is changing the balance of economic, ecological and social concerns related to our business.

Our transformation to a highly automated advanced digital enterprise assists us in the sustainable development goal of decoupling economic growth from environmental degradation. It delivers improvements in productivity, product quality, and resource and energy efficiency. It also reduces the space required for production lines and increases employee safety.

#### Jiangmen Digital Factory



Introducing our **next-generation manufacturing facility** with integrated digital capability to ensure long-term sustainability and customer success

### Our Core Values

In addition to incorporating sustainability in our products and manufacturing processes, we are dedicated to socially responsible interactions with our customers, employees, suppliers, shareholders, business partners and the local communities where we operate around the world. This includes implementing policies and practices on a variety of issues, such as integrity and ethics, human rights, non-discrimination, social responsibility and environmental management.

This year, when I addressed the annual gathering of our senior managers at Johnson Electric's 2019 Global Leadership Meeting, I concluded with the following remarks about Johnson Electric's core values:

***I think everybody will be conscious that the world around us is currently at a worrying juncture. Politics has become extremely polarized and many countries appear so divided that there is a real risk of social instability.***

***It is not Johnson Electric's business to get involved in politics. But, as a Company employing people in 23 countries across four continents, we have a responsibility to assure our people that while we need to change our business model to adapt to new circumstances, we are not going to change the commitments contained in our "MARBLE" statement of core values. I would like to quote two particularly relevant phrases from MARBLE [see MARBLE values in Appendix II on page 34].***

***The first is this: "Johnson Electric believes that good corporate citizenship requires uncompromising standards of integrity, openness and fairness."***

***And the second is that: "We employ more than 38,000 people worldwide and recognize that our business thrives on the diversity of our people and their ideas."***

***These commitments to honesty, openness and inclusion is how we have done business for the past 60 years – and this is how we will continue to do business in the future.***

#### Our core values



A brief extract from Patrick Wang's address to Johnson Electric's 2019 Global Leadership Meeting

I would like to thank our customers, employees, partners and suppliers for their continued support for our sustainability journey. I continue to be encouraged by Johnson Electric's corporate sustainability and citizenship achievements, as reflected in our first-time inclusion in the Hang Seng Sustainability Benchmark Index, with an A rating. However, there is always more to be done, and we will continue to reach higher.

**Patrick Shui-Chung Wang JP**  
Chairman and Chief Executive  
Hong Kong, July 2019

# JOHNSON ELECTRIC AT A GLANCE

A global leader in the supply of precision motors, motion subsystems and related electro-mechanical components.



Years of  
1959 – 2019 | Innovating Motion

## Johnson Electric : Innovating Motion since 1959

The Johnson Electric Group traces its origins to a business founded in Hong Kong by Mr. and Mrs. Wang Seng Liang in 1959 to manufacture small electric motors for toys. The business has since expanded its product range and geographic presence to become a global leader in the supply of precision motors, motion subsystems and related electro-mechanical components to the automotive industry and other industrial and consumer product applications.

Johnson Electric Group presently employs over 38,000 individuals in 23 countries spanning Asia, Europe, the Middle East, North America and South America. Johnson Electric Holdings Limited, the Group's parent company, is listed on The Stock Exchange of Hong Kong.

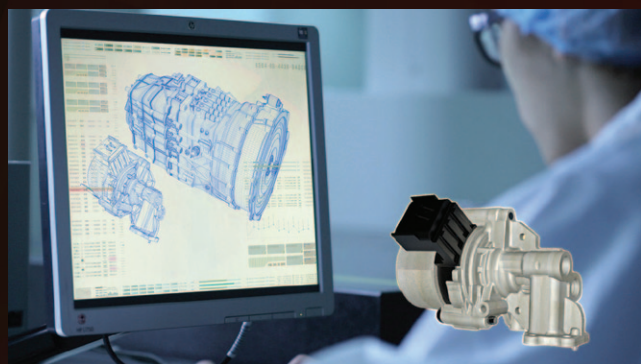
## Automotive Products Group

Johnson Electric develops and produces subsystems for automotive applications that require motors, actuators, pumps and related components. We supply over 500 customers spanning OEMs, Tier 1 and Tier 2 suppliers in the automotive industry and our products can be found in substantially all of the major passenger vehicle brands in the world.

Demand for our technology and motion solutions is growing due to increasingly stringent regulations on fuel emissions and fuel economy, as well as the ongoing adoption by mid-range and compact car models of the more advanced comfort and safety features of luxury vehicles.

Johnson Electric's automotive products include: thermal management subsystems such as powertrain cooling fans, battery cooling fans for hybrid/electric vehicles, coolant valve actuators, and auxiliary electric water pumps; heating, ventilation and air-conditioning actuators; engine and transmission oil pumps; electric power steering motors; electric parking brake actuators and motors; headlamp actuators and levelers; washer pump systems and motors; window lift drives; sun-roof drives; power-lift-gate drives; electric door lock motors and actuators; seat adjust motors; transmission and driveline actuators; motors for turbo charger actuators; engine management motors and actuators; and powder metal components for engines, transmissions and suspensions.

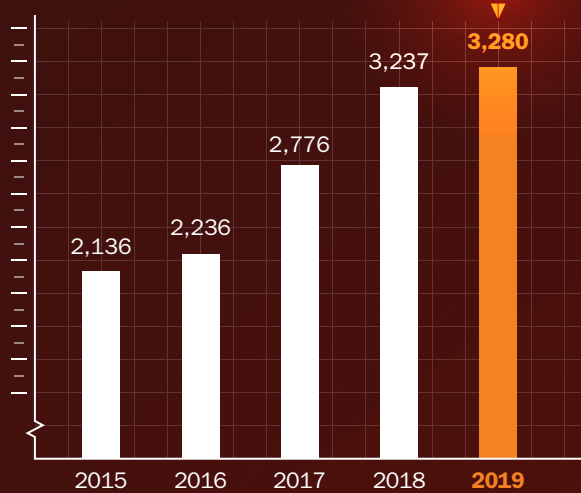
For vehicles in production today and for the next generation of conventional internal combustion engine, hybrid and all-electric vehicles under development, the imperative is for electro-mechanical components to be energy efficient, compact, lightweight and yet capable of withstanding extreme temperatures, shocks and vibrations for the lifetime of the car. Our ability to address these technical challenges and deliver reliable, cost-competitive products to automotive customers worldwide has made Johnson Electric a recognised leader in the market.



Hybrid Transmission Electric Oil Pump

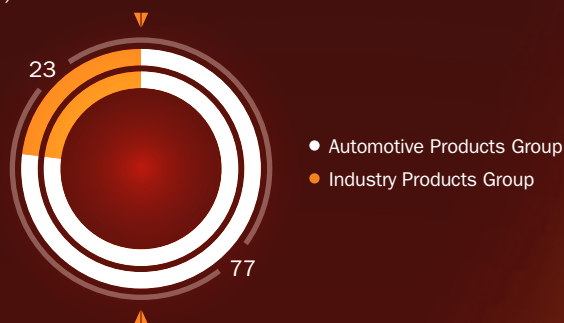
## Total Group Sales

(US\$ million)



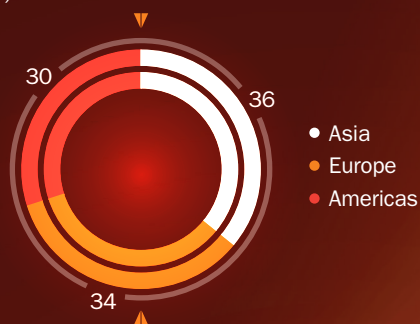
## Sales by Operating Division

(%)



## Sales by Destination

(%)

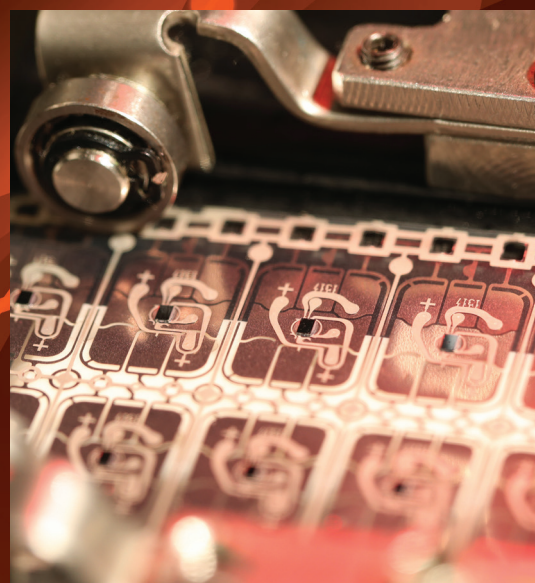


## Industry Products Group

Johnson Electric supplies advanced motion solutions and electro-mechanical components to approximately 1,500 industrial and commercial customers whose products are found in a remarkably diverse range of industrial, professional and consumer application segments.

The continuing proliferation of hardware devices and equipment that contain electric motors, solenoids, switches and other electro-mechanical components reflects a rapidly changing world where businesses and consumers are seeking products that are more energy efficient, smaller, lighter, more controllable and more connected than ever before. Among the application segments we serve are: heating and ventilation; electric and gas metering; power tools; lawn and garden equipment; white goods; small domestic appliances; food and beverage dispensing machines; window automation; printers and business machines; medical devices; bank/SIM cards; ATMs and Point of Sale equipment.

Many of the world's leading branded goods companies rely on Johnson Electric to solve their most complex motion problems and at a competitive total cost that enables them to be successful in their markets.



SIM Card Module

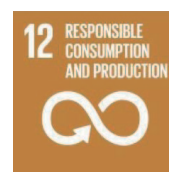
# UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs) IN OUR SUSTAINABILITY REPORT

Our Sustainability Report is divided into five key areas, reflecting our approach to sustainability issues and concerns. These are:

- Corporate Governance and Risk Management
- Sustainability in Johnson Electric Products
- Industrialization and Innovation
- Environmental Responsibility
- Investing in People and Communities

We assess the alignment of our business strategies in these five areas with the SDGs that we believe are most relevant to Johnson Electric's current activities and scope of business.

**Core SDGs where we believe we can have the greatest impact**



	SDG 9 Industry, Innovation and Infrastructure	SDG 12 Responsible Consumption and Production
<b>Our report</b>		
Corporate Governance and Risk Management		•
Sustainability in Johnson Electric Products	•	•
Industrialization and Innovation	•	•
Environmental Responsibility		•
Investing in People and Communities		•
<b>How the SDG relates to our strategies</b>	<p>We innovate to provide unique solutions to our customer's problems. Johnson Electric's industrial logic is driven by our need to be cost-competitive and flexible to align with market needs. We are expanding our global manufacturing footprint to be closer to our customers. Additionally, we are introducing advanced manufacturing technologies and digitization to our factories to maximize productivity and improve product quality.</p>	<p>As a technology leader for lightweight, high-power-density motion solutions, we make our customers successful in achieving their own sustainability goals. We do this by providing energy-efficient products that improve fuel consumption and reduce emissions. These products also last longer and require fewer resources in their manufacture.</p> <p>In our manufacturing operations, we take a systematic approach to resource- and energy-efficient production, as well as supply chain management. We provide a safe working environment for our employees and adhere to the directives set by the International Labour Organization's ("ILO") "ILO Declaration on Fundamental Principles and Rights at Work" and the United Nations' "UN Guiding Principles on Business and Human Rights."</p>

### Supporting SDGs that give further focus to our activities



Our report	SDG 3 Good Health and Well-being	SDG 4 Quality Education	SDG 11 Sustainable Cities and Communities	SDG 13 Climate Action	SDG 17 Partnerships for the Goals
Corporate Governance and Risk Management					•
Sustainability in Johnson Electric Products	•		•	•	•
Industrialization and Innovation					•
Environmental Responsibility			•	•	•
Investing in People and Communities	•	•	•		•
How the SDG relates to our strategies	<p>Johnson Medtech designs and delivers innovative technology solutions that help improve patient well-being and achieve better clinical outcomes. Our medical applications include motorized instruments for minimally invasive surgery; miniaturized precision drug delivery devices; and vital signs monitoring technology.</p>	<p>The Johnson Electric Technical College ("JETC"), operating in China and Mexico, assists underprivileged youth, providing a mix of general and technical education over a three-year apprenticeship programme. The Group also partners with schools and universities to support the provision of quality technical and vocational education.</p> <p>The Group's Junior Engineer programme allows all employees to become involved in educational outreach to the community.</p>	<p>The quality of urban living in the future will hinge on improved air quality and more efficient energy usage.</p> <p>We enable cleaner transportation with more complete combustion, reduced pollution from smaller internal combustion engines and increases in the performance and capabilities of hybrid and all-electric vehicles.</p> <p>We also offer a wide variety of solutions for heating and ventilation systems, as well as window automation and metering applications, directly targeting smarter, energy-efficient homes and buildings.</p>	<p>Our high-precision components for the automotive industry perform mission-critical functions in reducing fuel consumption and CO<sub>2</sub> emissions from internal combustion engine vehicles and also enable the transition to hybrid and all-electric vehicles.</p> <p>Our Industry Products Group also makes a strong contribution to climate action with solutions that reduce electricity consumption for hundreds of product applications.</p>	<p>Johnson Electric actively engages with customers, employees, suppliers and communities around the world to fulfil shared sustainability goals. These include responsible production and consumption, climate action, sustainable cities and communities, good health and well-being and quality education. Our employees are especially proactive in organizing regular community outreach activities to engage with and support the local communities in which we operate.</p>

Further details of our assessment of the SDGs can be found in Appendix III on page 35.

# CORPORATE GOVERNANCE AND RISK MANAGEMENT



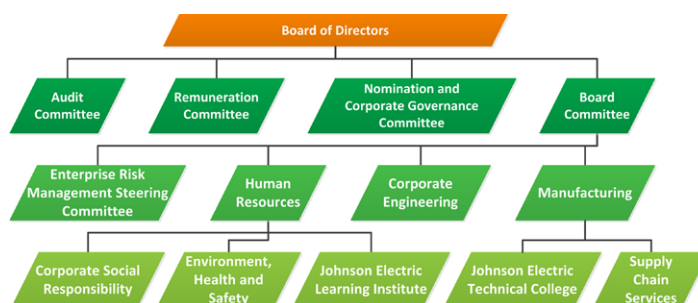
Johnson Electric pursues high standards of corporate governance that properly protect and promote the interests of all our stakeholders. We devote considerable effort to building a sound governance structure and to identifying and formalizing corporate governance best practices that foster a culture of integrity, transparency and accountability.

## Board of Directors and Its Committees

The Company's Board of Directors ("Board") currently consists of three executive directors and seven non-executive directors (of whom five are independent). Profiles of the Directors can be found on pages 198 to 201 of the Annual Report 2019. The directors meet on a quarterly basis and on other occasions when a board-level decision on a particular matter is required. The Board has reserved for its decision or consideration matters covering corporate strategy, annual and interim results, directors' appointments, succession planning, enterprise risk management, major acquisitions, disposals and capital transactions, as well as other significant operational and financial matters.

The Board is ultimately responsible for leading, reviewing and monitoring the Company's policies and is accountable for the sustainable development and performance of the Group.

Further details of the composition and work of the Board and its Committees can be found in the Corporate Governance Report section of the Annual Report 2019.



The Audit Committee considers the effectiveness of our enterprise risk management and internal control systems. Annually, it reviews a report from management on environmental, health and safety ("EHS") issues.

The Remuneration Committee determines the compensation structure and rewards for the Chairman and Chief Executive and other executive directors and monitors the policies applied in remunerating senior management on behalf of the Board.

The Nomination and Corporate Governance Committee is responsible for the development and maintenance of our overall corporate governance policies and practices.

The Board Committee supervises the day-to-day management of our sustainability issues, assisted by the Enterprise Risk Management Steering Committee and the Human Resources ("HR"), Corporate Engineering and Manufacturing departments. The HR function is responsible for identifying, managing and advising on issues relating to Corporate Social Responsibility. The EHS function is responsible for identifying, managing and advising on issues relating to environmental protection and employee health and safety. Corporate Engineering is responsible for innovation and for ensuring that our products make our customers successful in fulfilling their sustainability requirements. The Manufacturing department implements our Industrialization strategy, ensures responsible consumption and production in our factories and is responsible for the Johnson Electric Technical College.

## Code of Ethics and Business Conduct

We strive to conduct our business with honesty and integrity, both within the Group and in our dealings with our business partners, customers, suppliers, competitors and the communities in which we operate. To that end, we have published and implemented a Code of Ethics and Business Conduct (the “Code”) which sets out the principles that define such behaviour. This guides all our employees to use good judgment and ethical decision making in their business conduct and practices to prevent bribery, fraud, corrupt behaviour, money laundering and conflicts of interest.

We endeavour to conduct business only with reputable customers and suppliers. We believe that our business partners’ sourcing decisions should be based on the product offering, including quality, price, service and other competitive factors. Business courtesies such as gifts, favours, contributions or entertainment must never be offered or accepted if they can be interpreted as improper.

Additionally, we are committed to complying fully with all applicable anti-money laundering laws throughout the world’s jurisdictions. Our management processes for customer relationships are designed to ensure that each of our business units knows its markets and its customers’ businesses. We take reasonable steps to ensure that we do not accept any forms of payment that are suspicious or identified as a means of laundering money.

All managers, globally, are required to sign an annual declaration that they have read and conformed to the requirements of our Code. Additionally, we maintain a whistleblower hotline, accessible globally at any hour by phone or email. This enables employees to make anonymous reports of any ethical or business conduct concerns; any such reports are investigated promptly and confidentially. If it is determined that there has been a violation of our Code, we take prompt action to prevent reoccurrence. If necessary, we take appropriate disciplinary action.

In FY18/19, the Group concluded one case it brought against an employee for corrupt practices. Although the monetary amount was not material to the Group’s operations, such behaviour is not tolerated by the Group. No other legal cases brought against the Group or our employees regarding corrupt practices were concluded during this year. (FY17/18: no concluded cases).

## Enterprise Risk Management

We have instituted policies and procedures to identify, mitigate and control our exposure to business and sustainability risks through proactive management and close cooperation across senior management and the Group. Led by the Chairman and Chief Executive of the Company, our Enterprise Risk Management Steering Committee works with senior leaders in core business functions to classify, analyse and track existing and emerging risks. In addition, robust day-to-day business practices are aimed at lowering the frequency and reducing the severity of any risk exposure. These business practices are closely monitored by our senior management and tested periodically both by management and by our Internal Audit function to ensure their continued effectiveness.

Further details of our Enterprise Risk Management, our risk profile and our policies for managing our exposure to key risks can be found on pages 41 to 47 of the Annual Report 2019.

# SUSTAINABILITY IN JOHNSON ELECTRIC PRODUCTS

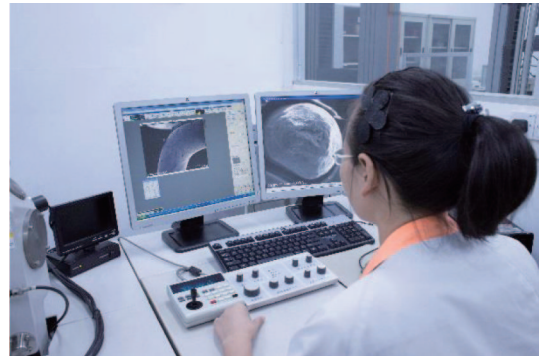


Johnson Electric's core business is the supply of electro-mechanical motion systems and solutions to customers who value innovation and reliability. Within this defined market space, we target segments where "mega trends", regulatory change or technology advancements are driving demand.

Across a diverse range of industries and geographies, we work closely with our customers to understand their own customers' requirements and key preferences. Whether those requirements are for better energy efficiency, a cleaner environment, support for ageing populations, improved security, superior product functionality or ease of use that reduces barriers to gender equality, Johnson Electric delivers.

At Johnson Electric, we seek to remain relevant and grow our business on a sustainable basis. We keep track of emerging trends and continue to develop products that offer effective and attractively priced solutions to our customers' problems, and take into consideration the environmental and social aspects of their business. For example, addressing the imperatives to consume responsibly, reduce emissions, lower fuel consumption and energy usage and make efficient use of resources.

Sustainability is also intrinsic to our product development process, as a direct result of engineering for efficiency. Our engineers strive to "make customers successful" by developing products that consume fewer resources in their manufacture and use less energy to deliver the required performance and functionality. Johnson Electric is a technology leader for lightweight, high-power-density innovations for environmentally friendly products. For example, our brushless electronically commutated motors consume energy more efficiently and enjoy a much longer operating life than brushed electric motors; and our range of compact products consume less steel, copper and plastic in their manufacturing process.



*Sustainability is intrinsic to our engineering efforts*



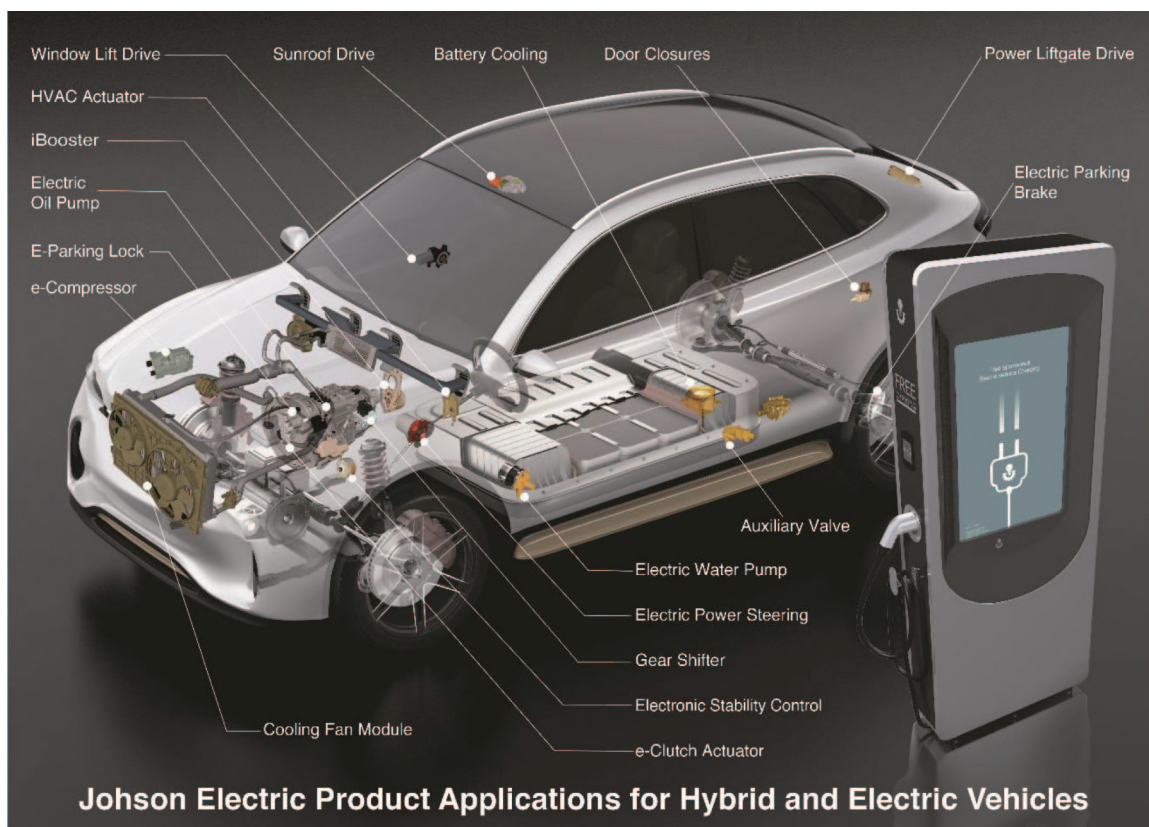
*Our "Eco Motion" symbol denotes those products that improve energy and fuel efficiency. The green leaf in the centre is marked with the Greek letter Eta, the engineering symbol for efficiency; it is enclosed by a circle to represent motion.*

## Automotive Products Group

The automotive industry enables the high degree of mobility that shapes modern life and its industry, cities and communities, providing access to economic opportunities and improving standards of living. However, this mobility comes with environmental and social impacts including noise, congestion, accidents, pollution, climate change and resource depletion.

From these impacts stem opportunities for Johnson Electric to innovate and focus on engineering for efficiency. Our Automotive Products Group (“APG”) applies our innovative technology to contribute to a more sustainable automotive industry by tackling some of its environmental and social challenges. This represents a significant source of opportunity and growth.

APG’s wide range of application-specific know-how enables us to develop and produce lightweight, highly efficient motors, actuators, pumps and related components for all critical automotive motion-related functions. APG products enhance the capabilities of hybrid and all-electric vehicles, improve fuel efficiency and reduce emissions from internal combustion engine vehicles; they also support the development of autonomous vehicles and offer enhanced safety for all vehicles. At the same time, these components must meet tough EMC requirements, reduce noise, vibration and harshness, and adhere to strict power budgets.



Examples of APG's products and functional applications include:

- **Thermal management subsystems and motors** play a critical role in meeting the specific operating temperature requirements of the traction motor, battery, power electronics and additional electronics subsystems of hybrid and all-electric vehicles. Keeping these components at the right temperature – neither too hot nor too cold – extends the range of the vehicle, improving the battery life and helping prevent thermal events. In particular, the electrification of vehicles is increasing the need for water cooling pumps and high-power cooling

Thermal management is also key to optimizing the performance of internal combustion engine vehicles to reduce fuel consumption and engine emissions. This creates a requirement for controlled, efficient cooling-on-demand that can only be delivered by electrifying coolant pumps and valves, not by conventional mechanical solutions

- **Braking, steering and suspension subsystems and components** are a recent focus area for improving the sustainability performance of light vehicles. Traditional power braking systems and power steering systems harvest power from the internal combustion engine to generate force. Hybrid and all-electric vehicles must replace this with electric systems to achieve the same force. Next-generation internal combustion engine vehicles have smaller engines that also require electric assistance to generate the same braking and steering force as older, conventional vehicles
- **Engine, transmission and driveline subsystems and components** including products to manage the flow of oil, fuel, intake air and exhaust gases; start-stop components; lightweight, durable powder metal components; actuators and motors for smart power transfer units and axles and a wide range of other applications

In hybrid and internal combustion engine vehicles, the electrification of components in the engine, transmission and driveline offers weight reduction and improved precision, accuracy and speed of response in controlling performance compared to conventional mechanical solutions. Fuel efficiency is improved, power density is increased and the level of combustion by-products (emissions) is reduced

APG's thermal management solutions include electric water pumps; coolant valves and actuators; powertrain cooling fans and battery cooling fans.



Coolant pumps for battery-electric vehicles

APG's products for braking, steering and suspension applications include electric motion parts for brake boosters; electric vacuum pump systems; parking brake actuators and motors; electric power steering motors; energy harvesting from braking and suspension movements; and lightweight durable powder metal components for suspension systems.

The electrification of engine, transmission and driveline components for improved performance and efficiency includes pumps; compressors; smart axle; throttle control; variable valve lifting; variable valve timing; turbochargers and many other applications.



Motor for electronic throttle control

- **Exhaust treatments** assist in reducing emissions in the vehicle exhaust system, including exhaust gas recirculation, secondary air injection, selective catalytic reduction and oil separation

Secondary air injection adds fresh air to the exhaust stream to increase the efficiency of the catalytic converter, thereby lowering emissions of toxic gases and pollutants

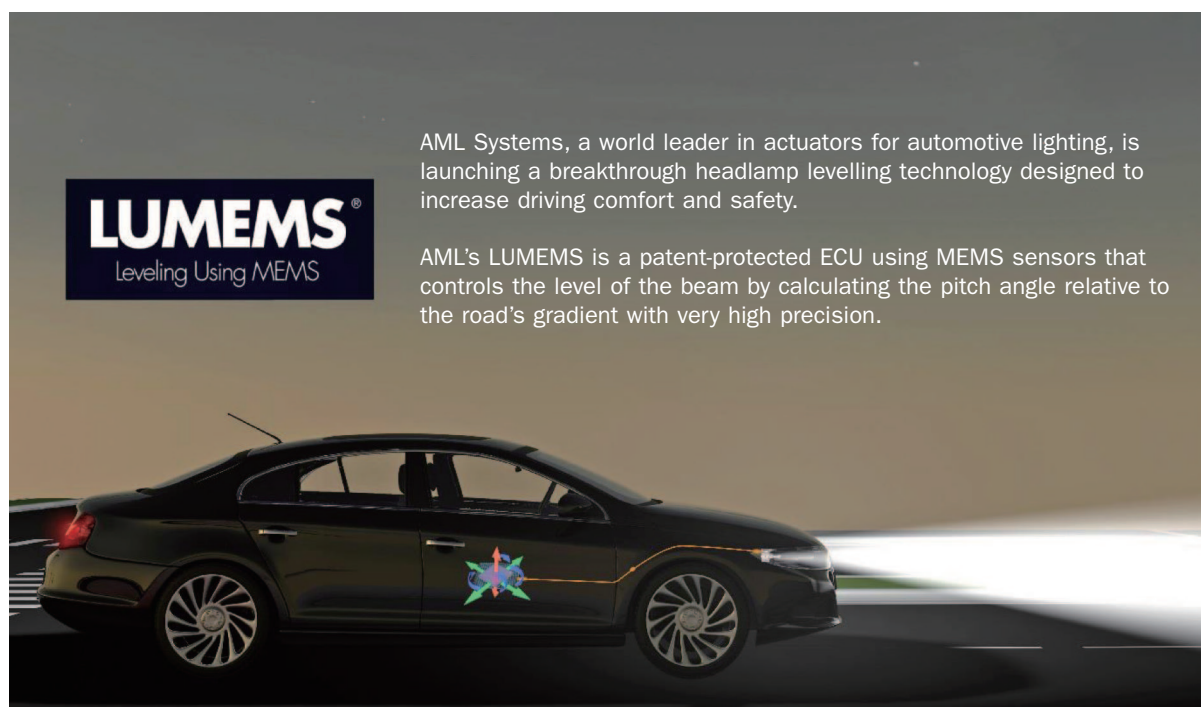
Modern diesel engines operate with a lean burn air-to-fuel ratio, to prevent their exhausts from emitting soot and unburned fuel. However, lean-burn engines generate nitrogen oxides which are harmful pollutants. Selective catalytic reduction injects diesel exhaust fluid (“DEF”) into the exhaust pipeline, so that nitrogen oxides are converted into harmless nitrogen and water, contributing to sustainable cities and communities through cleaner air

Oil separators remove oil from the exhaust for cleaner air. If this oil is returned to the sump, this measure may reduce oil consumption. Additionally, with the trend for downsizing engines, an increasing number of vehicles are being fitted with turbochargers, which are particularly sensitive to the build-up of oil residue from the exhaust

- **Weight reduction** is key to extending the range of next-generation hybrid and all-electric vehicles, improving fuel consumption and reducing engine emissions from internal combustion engine vehicles

APG assists this with lightweight energy-efficient solutions for existing electrified applications, such as power seat adjustment, power windows and cabin heating, ventilation and air-conditioning. APG also enables the replacement of heavier conventional mechanical and hydraulic systems with lighter electric motion systems. Examples include brake-by-wire and electric power steering. Conventional mechanical and hydraulic systems draw power from the engine; if they are replaced with an electric motion system the result is a reduction in the overall power demand on the engine, further improving fuel efficiency and reducing emissions

- **Safety** requirements for vehicles are becoming ever more stringent, driven both by customer demand and government regulations. APG meets this demand with products for active and passive applications, including headlamp actuators and levellers, electric brake assistance, traction control, vehicle levelling, impact and crash sensing and other safety systems



## Industry Products Group

The Industry Products Group (“IPG”) serves a wide range of industrial, professional and consumer application segments. Many of these segments are undergoing rapid social and technological change and disruption, arising from a complex mix of demands and priorities that generate positive and negative impacts on economic, environmental and social development worldwide.

The growing number of devices and equipment that contain electro-mechanical components benefits social development, improving quality of life and removing barriers to equality as equipment becomes smaller, lighter and easier to use. However, the trade-off is often environmental stress from increased demand for energy, as well as increased mining and processing of raw materials. As long as products with better environmentally friendly credentials come at a higher cost, the adoption of more environmentally friendly products will remain slow. Consumers are likely to opt for technologies with a lower cost but a shorter life cycle or poor energy efficiency.

Johnson Electric seizes this opportunity to apply our innovative technology and application expertise to bring attractively priced products to market that help our customers reduce pollution, increase energy efficiency, decrease greenhouse gas emissions and enable equality.



For example, the battery-electric share of the lawnmower and handheld garden tools markets is rising sharply. Our motion systems performance and paradigm-changing robotic solutions facilitate this, accelerating the reduction in sales of traditional gasoline internal combustion engines – especially highly polluting 2-stroke engines. Our lightweight high-power-density motors also allow smaller, lighter and easy-to-use tools and equipment, lowering barriers to gender equality. Johnson Electric will continue to build on its history of development in this field, providing effective solutions to replace gasoline engines with clean, quiet and efficient motion systems.

Governments are another key stakeholder influencing demand for energy-efficient technologies, issuing directives limiting the power consumption of certain types of appliances or tightening the requirements for energy-efficient buildings, for example. Governments also influence consumer markets indirectly through imposing energy taxes, energy efficiency labelling regulations for domestic appliances, energy awareness campaigns and smart meter rollouts. All of these government actions in turn lead to increased demand for IPG’s products, including motorized shut-off valves for use in smart gas meters and disconnect relays for smart electric meters.

Johnson Electric’s vertical integration along our value chain also assists customers in reducing their environmental footprint. Rather than simply purchasing a motor from us, increasingly customers ask IPG to provide sustainability solutions with a more complete subsystem, including the motor, switch, gears and the controlling electronics. This is cost-effective for the customer, simplifying the customer’s logistics flow and reducing the negative environmental impacts of transportation and packaging.

IPG also serves the healthcare market. Johnson Medtech designs and delivers innovative technology solutions that help improve patient well-being and achieve better clinical outcomes. Medical applications include motorized instruments for minimally invasive surgery, miniaturized precision drug delivery devices, patient care and wearable monitoring technology that frees the patient from being confined to a hospital bed.



*Foetal Monitoring Sensor Patch*

## Quality Assurance Culture and Policy

Johnson Electric is committed to providing “Safe Choice” solutions, using superior designs, world-class quality systems and controlled manufacturing processes to meet or exceed our customers’ requirements.

### International Recognition and Compliance

To meet the increasing quality requirements demanded by customers and government regulations, our various manufacturing facilities and our in-house testing laboratories are certified under relevant international standards\*. Additionally, our products are compliant with the necessary health, safety and environmental protection requirements as tested by recognized external testing laboratories and bodies.

\* These international standards include:

- ISO9001 for quality management systems
- IATF 16949 (which contains sector-specific supplemental requirements on applying ISO9001 for the automotive industry)
- IECQ QC080000 hazardous substance process management system for hazardous-substance-free legal and customer requirements such as RoHS, ELV and REACH
- ISO13485 quality management system for meeting regulatory requirements for the medical devices industry
- ISO14001 for environmental management systems
- ISO17025 for testing and calibration laboratories

### Quality Assurance in New Product Development

Johnson Electric’s product development and engineering control process combines engineering, materials science and manufacturing expertise from conceptual design to final production. We apply high-standard tools and methodologies. These include advanced product quality planning, V-model product development, quality function deployment, design and process failure mode effects analysis, simulation testing, risk assessment and capability analysis to create differentiated products that deliver high performance, superior quality, reliability and safety.

### Continuous Improvement

Johnson Electric integrates manufacturing processes with product development and quality management systems to ensure product, production processes and business operations are “designed-in” with full capabilities. We achieve this through vertical integration for superior quality, a global manufacturing footprint, efficient logistics and a uniform global production system for high process capability around the world. This is underpinned by a culture of continuous improvement and lessons learned for eliminating waste and improving quality. We are reducing variation with increasing automation, and taking a systematic approach to increasing product quality and process capability. We are also enhancing the effectiveness of operations and customer satisfaction.

### Customer Feedback Handling System

Any customer complaint or warranty claim is logged in our Global 8D Database. This serves as a communication channel between front-line staff and engineers at manufacturing locations, enabling a team approach to identifying, correcting and eliminating problems. A description of the problem and details of any containment actions, Root Cause Analysis and permanent corrective actions are recorded in the system, as appropriate. Every logged complaint is analysed thoroughly, using sophisticated problem-solving tools such as 5 Whys, Fish-Bone Diagrams, Fault-Tree Analysis and Design of Experiments.

## Recall and Traceability

In the case of incidents arising from customer feedback or internal control processes, any issue relating to safety or health will trigger a defined recall system and procedures. The barcode or QR code on the product and/or product packing contains the product and lot information, giving traceability to the inbound materials, in-process records and outbound products to enable responsive containment action. Returned products are segregated, analysed and improvement actions are taken, as appropriate.

## Integrating Sustainability into Our Supply Chain

Our engagement with suppliers is driven by its focus on “Innovation” and “Safe Choice”. These core values are incorporated in the Group’s supplier selection process and performance monitoring throughout the business engagement with suppliers. Robust supplier qualification procedures, carried out before ordering regular supplies from any supplier, ensure the Group has the right supplier to source the right item. These procedures include due consideration of cost, quality, environmental awareness, ethical behaviour and social responsibility.



*Insulin drive with a QR code for traceability*

## Supplier Selection Criteria

Suppliers are contractually required to be certified under relevant international quality and environmental management standards\*. Additionally, we support our suppliers to strive for continuous improvement and better performance and encourage them to comply with environmental requirements and directives\*\*.

We also expect suppliers to exercise social responsibility. Every supplier is required to comply with and sign our Code, which prohibits offering of gifts, certificates, loans, hospitality, service or favour in an improper manner. Suppliers are required to comply with the U.S. Foreign Corrupt Practices Act, the UK Bribery Act 2010 and the criminal law of the country of operations. Additionally, our purchase terms and conditions require suppliers to adhere to directives set by the International Labour Organization’s “ILO Declaration on Fundamental Principles and Rights at Work” and the United Nations’ “UN Guiding Principles on Business and Human Rights”. These set out principles of freedom of association, right of collective bargaining, abolition of child labour and elimination of all forms of forced or compulsory labour or discrimination in the workplace.

\* Relevant international standards such as:

- ISO9001 for quality management systems
- ISO14001 for environmental management systems
- ISO/TS 16949 (which contains particular requirements on applying ISO9001 to the automotive industry)
- ISO13485 on applying ISO9001 in manufacturing and regulating medical devices

\*\* Environmental requirements and directives such as:

- Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment (“RoHS EEE”)
- Directive No. 2000/53/EC End of Life Vehicles (“ELV”)
- Regulation EC No. 1907/2006 (“REACH”) and Regulation No. 1272 / 2008 (“CLP”), Toxic Substance Control Act as amended (“TOSCA”) directive
- The Dodd-Frank Wall Street Reform Act pertaining to Conflict Minerals

# INDUSTRIALIZATION AND INNOVATION



## Building a Global Manufacturing Footprint

The key goals of our manufacturing strategy are to be global, flexible, cost-competitive and aligned with the needs of the market. We aim to support our customers by being close to where they are operating and being able to ensure fast and reliable supplies, as well as a highly responsive service.

To execute this strategy, we are progressively expanding the Group's operating footprint, with factories in 18 countries across Asia, North America, South America and Europe. This closer proximity to customers brings multiple benefits to our economic and sustainability performance on several levels:

- Localization of the supply chain reduces exposure to tariffs, import duties and exchange rate fluctuations while also strengthening local economies
- Shorter logistics routes lower freight costs, energy consumption, CO<sub>2</sub> emissions and inventory levels
- Creating a diverse manufacturing footprint reduces our operating risk by minimizing heavy reliance on any single country or factory

## Thriving in a Digitized World

We are in the midst of a significant investment programme to transform our business through advanced automation and digital technology from a labour-intensive model to a more digitally advanced enterprise. Our industrial logic requires us to align our design and production processes to reduce cycle times and is geared towards higher volume product segments featuring more standardized designs.

Our goals in this transformation process are to improve the long-term sustainability of our business by:

- Providing innovative cost-competitive solutions to customers' problems
- Accelerating automation to improve quality, increase speed and manage cost
- Improving resource efficiency and energy efficiency
- Reducing space (and land) requirements for our factories
- Reducing our vulnerability to the shrinking availability of labour due to demographic changes (declining birth rates and ageing populations) in nearly all major manufacturing economies

This uplift in our manufacturing and functional capabilities closely aligns with the sustainable development goal of decoupling economic growth from environmental degradation. It is key to progress in SDG 9: Industry, Innovation and Infrastructure and SDG 12: Responsible Consumption and Production.

The lead plant for this digital transformation is a next-generation manufacturing facility currently under construction in Jiangmen, China. This will be Johnson Electric's first fully integrated digital factory, running the latest Manufacturing Executions Systems ("MES"), Product Lifecycle Management ("PLM") and Enterprise Resource Planning ("ERP") systems.

As we noted in last year's Sustainability Report, the structural changes in the way work is done will have an impact upon the size and profile of our workforce, as processes become less labour-intensive and require different skill sets.

We held a number of activities to engage employees in this transformation, including a competition – open to all employees – to design a poster on the theme of "Thriving in a Digitized World". The winning entry formed part of our internal communication programme for all sites, globally. Meritorious entries, together with videos of senior managers discussing elements of our automation and digitization programme, were uploaded to JE in Motion, our in-house social media platform, stimulating discussion on the implications of these changes for Johnson Electric and for our workforce. This topic also formed the core theme of the Group's annual "One Johnson Celebration".



Our transformation to a more digitally advanced business model will take some time to complete. Component designs and manufacturing methods cannot always be easily changed in the middle of the customer's product life and this is especially true in the automotive segment. Consequently, we need to continue to work with many of our legacy manufacturing lines for some time. But, even here, there are opportunities to apply new technologies, such as machine vision, to achieve close-to-zero defects and reduce waste.

## Investing in Technology Innovation

Technology leadership and application-specific know-how are the drivers that make Johnson Electric a global leader in our industry. Over the past two decades, we have evolved from being a leading small precision motor manufacturer to providing the broadest set of engineered motor and motion-system solutions available in the market today. These solutions include DC & AC motors, stepper motors, actuators, solenoids, switches, relays, precision gears, powder metal components, pumps and flexible printed interconnects.

**Johnson Electric invests in innovation to provide unique motion solutions to customer problems.**

**We employ more than 1,700 engineers around the world, providing a wide variety of tools in our laboratories, from wind tunnels and immersion tanks to electron microscopes.**

**We filed more than 400 patent applications in FY18/19.**

We constantly challenge our business managers and engineers to consider how particular market segments are changing – including the market priorities of reducing emissions, lowering fuel consumption, using fewer raw materials, improving health and well-being, improving safety standards, increasing mobility and controllability and reducing inequalities. We ask them how these changes might offer new opportunities for our innovative technology.

In some instances, this can mean differentiating our product offering using new technology (or a combination of technologies) to provide a unique motion solution to a customer's problem. In doing so, the ultimate objective is to help the customer differentiate their products in the marketplace – such as through lower energy consumption, lower weight, lower noise or higher performance. In other situations, it can mean designing and delivering a solution that offers lower total transaction costs for a customer over their end-product's entire life cycle.

# ENVIRONMENTAL RESPONSIBILITY



We are committed to responsible manufacturing and take practical steps to protect the environment wherever we operate around the world. Johnson Electric believes that excellent environmental performance will contribute to the sustainable growth of the Group for generations to come. Our specific goal for our environmental management is “No damage to the environment wherever Johnson Electric operates”.

## Environmental Management

We proactively address and manage environmental issues, monitor and control environmental risks and track critical measurable environmental factors, worldwide, through our robust EHS management system.

We identify significant environmental aspects for each manufacturing location and devote resources to managing these, setting specific objectives and targets. Management reviews ensure continuous improvement in our environmental performance. The Chairman and Chief Executive and the Executive Committee receive reports on key environmental performance indicators on a regular basis.

All Johnson Electric manufacturing locations, worldwide, are required to apply this EHS management system and comply with both our global environmental standards and local environmental regulations. This is subject to rigorous verification through internal audit programmes and by accredited external auditors.

To achieve our goal of “No damage to the environment wherever Johnson Electric operates” we:

- Design environmentally friendly products and processes
- Comply with applicable environmental laws and regulations
- Commit appropriate resources and leadership to our Global EHS management system
- Continuously improve our Global EHS management system to set and maintain rigorous standards for managing our environmental risk
- Improve our environmental management by defining appropriate objectives and targets on a regular basis
- Promote environmental awareness in our workforce through regular communication; and
- Communicate our environmental performance to stakeholders and seek their involvement wherever applicable

All Johnson Electric operating facilities worldwide are certified under ISO14001, the international standard for environmental management systems. In FY18/19, most of our sites upgraded from ISO14001:2004 to ISO14001:2015, which adds increased consideration of external factors including environmental issues, competitive context and the expectations of interested parties alongside internal environmental factors.



*EHS Management Review in Shenzhen, Johnson Electric's largest manufacturing site*

## Energy Consumption and Greenhouse Gases (“GHG”)

Our operations consumed more energy and emitted more GHG compared with last year. The underlying energy and GHG intensity also increased. This was largely due to growth in our powder metal business, but also to construction work necessary to expand our existing sites in Switzerland and Canada.

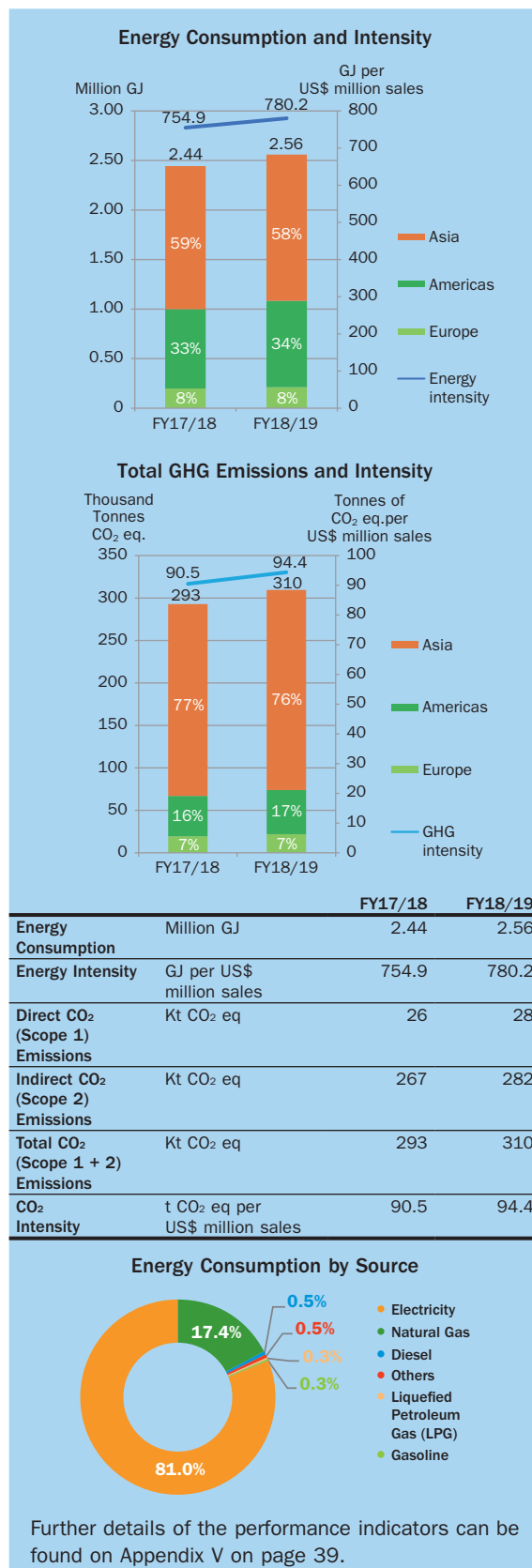
Our powder metal business makes sintered-metal parts for the automotive industry. The furnaces required to make sintered-metal parts are far more energy- and GHG-intensive than our other production processes. Consequently, this business accounts for 35% of our entire energy consumption. Despite this, these sintered-metal parts reduce energy consumption and GHG emissions when considered over the full life cycle of the vehicle as they replace heavier cast-metal parts. Nevertheless, we will be seeking energy savings from this business in the future.

Energy consumption by source followed a similar pattern to the previous year. 81% of our energy was consumed as electricity, largely for assembly and parts production, including plastic injection, stamping, powder metallurgy, die-casting and magnet production. Auxiliary production systems such as air-conditioning and air-compressor systems also consumed electricity. Natural-gas usage contributed 17% to overall energy consumption, largely for space heating for operations in northerly countries. Some manufacturing processes, such as sintering furnaces for powder metal parts and magnet production, also use natural gas.

The majority of our GHG emissions were in Asia. When comparing energy usage by region with GHG emissions for each region, the greater use of renewable and nuclear energy in countries such as Canada, Switzerland and France is a significant factor in the lower proportion of GHG emissions in Europe and the Americas.

The increases in consumption and intensity were partly mitigated by the beneficial impact of a number of energy- / GHG-saving projects across the Group (see following page), as we continued to seek opportunities for improvement.

**China’s Carbon Emissions Trading Scheme:** The beneficial impact of energy- / GHG-saving projects and technological advancements in our manufacturing also enabled our Shenzhen factories to generate 47kt excess carbon credits in calendar year 2018 (2017: 45kt). Our accumulated credits available for trading in the soon to be established carbon market are approximately 247kt.



**Energy- / GHG-saving projects:** We seek to reduce our energy and GHG intensity at all our plants around the world. Some of the projects undertaken in FY18/19 to address this include:

- Upgrading manufacturing capabilities through advanced automation. This includes the conversion of manual or semi-automatic production lines to fully automatic lines. Our automation reduces energy and carbon intensity per part produced while delivering higher productivity, improved product quality and better resource efficiency. It also improves employee safety by isolating hazards
- Replacing sintering furnaces in Shenzhen, China. A traditional sintering furnace consumes 1.05kWh per kg of output while our new furnaces consume 0.68kWh per kg of output, a 35 per cent reduction in energy consumption. Powder metal part production in Shenzhen is on a small scale, compared to our powder metal business at other sites. Nevertheless, this project points to the potential for future energy savings in our worldwide powder metal business
- Replacing traditional electromagnetic aluminium smelting furnaces with a new generation of furnaces that reduce heat loss in smelting, resulting in an estimated 40 per cent energy saving. This also reduced the surface temperature of the furnaces from 70°C to 35°C, improving employee safety
- Increased use of frequency convertors in elevators, exhaust systems and air-conditioning, improving motor efficiency and saving power
- Installing an integrated cooling system for a climatic chamber used by the quality laboratory in Asti, Italy. This system adjusts the temperature in the chamber only to the extent required to compensate for changes in the outside temperature
- Installing electric charging stations for buses contracted to carry commuting employees in Shenzhen, China. Before this, all of the buses were diesel-engined. Now, more than 80 per cent of these buses are electric



*Automated production lines in Shenzhen*

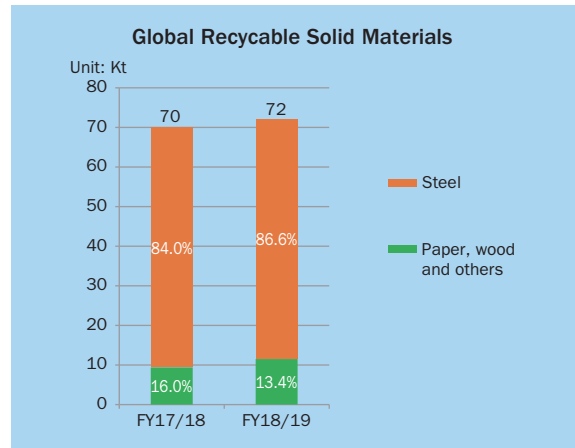
In addition to energy saving projects, our China operations continue to strengthen their energy-management systems. In FY18/19, Johnson Electric (Guangdong) Co., Ltd. achieved certification under the GB/T23331-2012 standard, an ISO50001 equivalent, for energy management. All operations in Shenzhen are now certified under this standard.

## Materials Consumption

Manufacturing our products requires the consumption of raw materials such as steel, copper, aluminium and plastic resins. We recycle scrap from production processes to recover as much of these valuable resources as possible. This scrap is recovered and reused directly in our production processes (e.g. aluminium, epoxy powder, tin and some plastics), otherwise it is sold for further recycling (e.g. steel, copper, plastic and wood).

In FY18/19, we recycled and sold approximately 72kt of recoverable solid materials. We continue to explore ways to prevent or reduce the creation of scrap or to recover more for recycling or reuse. Examples include:

- In Shenzhen, China, we are currently exploring opportunities for the recovery and reuse of polypropylene material from glue dispensers. Previously, used plastic dispensers were classed as hazardous waste
- In Hirson, France, we began to recover and reuse Santoprene™ thermoplastic vulcanizates (“TPV”), from plastic injection cores in the manufacturing process. We estimate this reduced TPV consumption by 5,000kg this year



## Pollution Prevention and Management

Our main non-CO<sub>2</sub> emissions are volatile organic compounds (“VOCs”) from glues used in product assembly, solvents used for parts cleaning, injection moulding and ink printing. We also have some particulate matter (“PM”) emissions from various powder processes.

In FY18/19, we undertook several projects to reduce these pollutants, including:

- Upgrading the grinding-dust collection system in Shenzhen, China. We installed local exhaust ventilation to remove PM from the grinding workshop. This improved indoor air quality, providing a better working environment to our employees. The PM is collected by filtering before the exhaust is released to the atmosphere
- Continued progress on our two-year project to phase out hydrochlorofluorocarbon solvents used for precision cleaning in our Shenzhen factories. These compounds are low but not zero ozone-depleting substances (“ODS”). We have been field-testing a non-ODS alternative since September 2018
- Installing oily mist control in the kitchen of our new factory in Nanjing, China. This aligns with the air cleaning objective of the Lishui Economic and Technological Development Zone



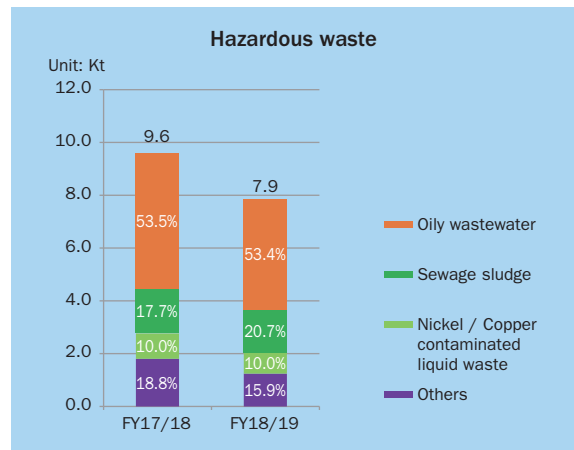
Upgrade of grinding-dust collection system

## Waste Management

In FY18/19, we generated approximately 5.3kt of non-hazardous waste and approximately 7.9kt of hazardous waste. Non-hazardous waste comprised mainly wood, cardboard, packaging materials, paper and food from our operations. Hazardous waste – including oily wastewater, treatment sludge and liquid waste containing spent copper or nickel solutions – is collected and treated by licensed vendors in compliance with regulatory requirements.

We aim to prevent or minimize general and hazardous waste through the development, implementation and continuous improvement of site-specific programmes for all waste streams. Highlights in FY18/19 included:

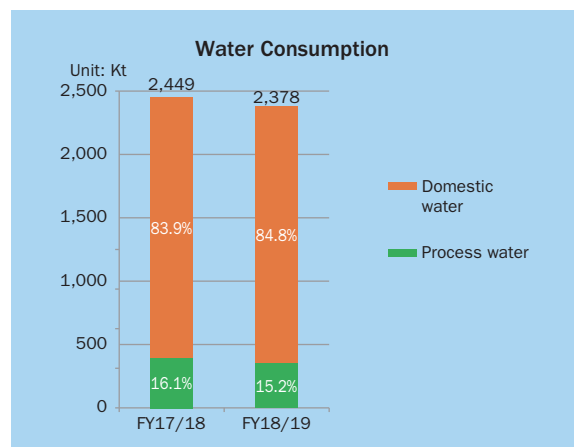
- In Shenzhen, China, we began the dehydration and reduction of wastewater and sludge from electroplating processes. This greatly reduced the weight of disposed sludge and reduced disposal costs
- In Asti, Italy, we replaced a 1,600 kilovolt-ampere (“kVA”) oil-immersed transformer with a 2,000kVA cast-resin transformer. This eliminated the need for periodic disposal and replacement of exhausted oil, a hazardous waste



## Water Stewardship

Our operations do not consume significant quantities of water and none of our major operations are in water-stressed regions. Nevertheless, the Group takes a responsible approach to water stewardship, seeking to maximize efficiency, minimize waste and prevent poor quality wastewater. We engage employees on the need to conserve water and we constantly seek to improve water stewardship in our existing facilities. Good stewardship is integral to the design of our new facilities.

In FY18/19, we consumed 2,378kt and discharged 2,082kt of water. Our main use of water is for sanitary purposes, with the remainder used in manufacturing processes. Similarly, most of the wastewater discharged from our facilities is sanitary wastewater. The small proportion of wastewater that comes from our manufacturing processes is treated within our facilities in compliance with required standards before discharge.



## Water – Reduce, Reuse and Recycle in New Plants

In FY18/19, we began construction of a new manufacturing plant in Jiangmen, China. Our design includes a rainwater harvesting system that meets the national green building design criteria. Harvested rainwater is stored in underground tanks for non-potable uses including toilet flushing and irrigation, reducing fresh water demand.

We are also building-in facilities to treat wastewater with a high concentration of inorganic compounds as well as particulate matter from grinding and milling. Treated wastewater will have less than 50mg/m<sup>3</sup> chemical oxygen demand, complying with the stringent requirements of “Water Quality Standard for Industrial Uses – Reuse of Urban Recycling Water”. After treatment, the water will be reused in grinding and milling processes. Waste removed from the water will be disposed of properly.

Similarly, we took advantage of our plant expansion in Mississauga, Canada to install an underground storm water collection and pollution prevention system under the parking lot. This system removes contaminants from storm water and snowmelt run-off before it reaches the municipal storm water infrastructure and its outflow into nearby Lake Ontario.

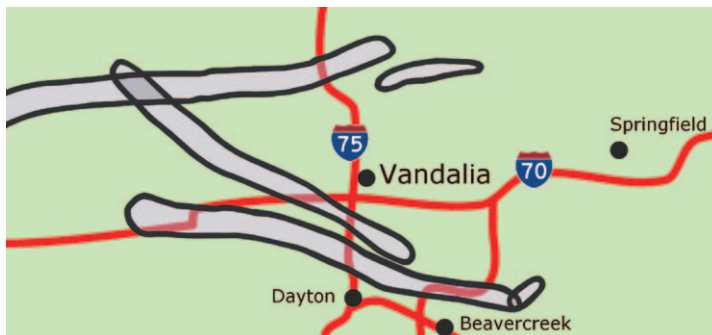


*Construction of underground storm water collection and pollution prevention system in Mississauga, Canada*

## Emergency Response – Tornadoes in Vandalia, Ohio, USA

On 27 May 2019, Vandalia, Ohio and the surrounding area was struck by multiple tornadoes, injuring people and causing catastrophic damage. Thousands of people were left without power and water, and roads were blocked by debris including fallen trees and power lines.

While our factory in Vandalia was untouched, some employees' homes were destroyed or damaged. Following our emergency response procedures for extreme weather events and other disasters, we swiftly contacted all employees to ascertain their safety and offer assistance. Senior management, including the Chairman and Chief Executive, were immediately alerted to the urgency and severity of the situation and rapidly authorised an employee assistance programme. This included five days paid absence for employees who had lost their homes and two weeks lodging for their families. We also held a donation drive for our employees which collected food and personal items. Surplus donated items were passed to local community shelters.



*Map showing tornado tracks (grey shading) in the area surrounding our Vandalia, USA factory*

# INVESTING IN PEOPLE AND COMMUNITIES



## Employment Vision and Strategy

Our employees are central to Johnson Electric's success. To maintain our competitive edge we must attract, select and retain talented and motivated employees from a diverse range of backgrounds.

Our goal is to offer our people an inclusive and rewarding work environment at different phases of their careers. To achieve this, we cultivate an environment where employees can benefit from three key value propositions.



### ONE JOHNSON AROUND THE WORLD

*We are a truly global team bound together by our shared values. We recognize that the talent and diversity of our people drive business results.*



### WE MAKE THINGS HAPPEN

*We thrive on innovation and excel in execution. We are committed to making our customers successful and our world a better place.*



### RIGHT PEOPLE, RIGHT JOBS

*We are highly selective. We believe that hiring the right people and putting them in the right jobs maximizes the success of our people and the business.*

These value propositions are supported by a three-pronged people strategy to attract and develop the **Right People**, put them in the **Right Jobs** and provide them with the **Right Environment** so they excel at what they do. Together, these propositions contribute to fulfilling Johnson Electric's people vision to become "One Johnson around the world, a great company and a great place to work!"

## Attracting, Retaining and Developing Talent

Our talent management strategy includes succession plans for mission-critical roles, building our talent pipeline and assessing organizational effectiveness.

This is underpinned by a people-calibration process; a formal system for evaluating, defining and assessing each employee's capability. It forms the backbone of a sustainable leadership pipeline. Succession planning reviews, held twice a year, accelerate the readiness of high-potential employees and ensure emerging requirements are considered as the business model changes. We are widening the scope of this process so that managers at all levels become accountable for identifying and developing talent within their own teams. We will continue to provide overall support for coaching, on-the-job training, international assignments and other wider talent initiatives.

We also place great emphasis on investing in the next generation of engineers to bring new ideas and insights to Johnson Electric. Every year, we provide scholarships at top engineering schools around the world and hold campus recruitment drives to invite talented engineers to join our trainee programme. On joining, each trainee is provided with a focused development plan and is mentored by one of our senior engineers/managers.

This year, we also launched a leadership competency framework, providing a baseline for leadership behaviour that employees should strive to embody. The framework has been embedded in our recruitment process and will be included in performance management. This will assist in ensuring we are hiring the right people to thrive within our company culture and that all employees are aware of the key competencies that drive success at Johnson Electric and work to develop themselves in those areas.

## Compensation and Rewards

We maintain a global compensation structure to ensure competitive pay levels and benefit offerings in each market in which we operate. Annual incentive pay is tied to the achievement of revenue, profitability and liquidity goals and is an important component of compensation for more than 80 per cent of staff-level employees, including all management. Additionally, the Group's long-term incentive share scheme forms a critical part of the competitive compensation package for senior executives, encouraging retention while aligning rewards to shareholder value. The scheme includes not only time-vested restricted stock units, but also a high proportion of performance stock units which vest only if stringent financial conditions are achieved.

## Growth and Development

The Johnson Electric Learning Institute (“JELI”) was established in 2016 to cultivate a learning culture. JELI sets the global direction for all employee learning and development activities in the Group. This is supported by a strong network of learning and development teams in each location to deliver local learning programmes in response to business priorities and organizational talent needs.

We provide a wide variety of development channels, including stretch assignments and international secondments offering employees opportunities to gain global exposure and broaden their horizons.

We also offer just-in-time classroom and eLearning programmes to grow employees’ soft and technical skills. Our “Learning in Motion” hub, a global eLearning platform, provides more than 300 courses covering key business and soft-skill areas. They allow employees to learn anytime, anywhere, on any device, at their own pace. Also, as part of cultivating a learning culture, we organize a Learning Month every April. This emphasizes continuous learning as a key attribute required in every Johnson Electric employee.

Additionally, operating from campuses in China and Mexico, our Johnson Electric Technical College (“JETC”) targets underprivileged youth and provides a way for the new generation to choose engineering as a viable career option and join the Group’s workforce upon graduation. Founded in Shajing, China in 2004, JETC provides a mix of general and technical education to youth over a three-year course. Since its foundation, it has accepted more than 1,300 students, including a further intake of about 90, expected to join in China and Mexico later in 2019.

In Serbia, we provide training schemes in partnership with a local secondary technical school and with the University of Niš. Students participating in these schemes spend two days a week in the factory, following detailed programmes based on the JETC concept, bringing together theory and practical experience.

### **Polish Soldering Championships**



During the year, representatives from Johnson Electric Poland were among the 70 participants in the 3rd Polish Soldering Championships. Competitors, representing companies across Poland, were required to assemble various electronic components – some as small as 0.2 x 0.4mm – to produce a working system. The assembly process and the finished system were judged by international-class trainers and experts in the field.

## Employee Engagement

Open and honest communication is a fundamental part of Johnson Electric's pledge to employees, inseparably linked to the high-performance engagement culture the Group constantly seeks to instil. The Group utilizes a variety of communication channels for this, including:

- **One Johnson Global Celebration**, an annual event, for all Johnson Electric employees around the globe. This year the event celebrated Johnson Electric's 60th anniversary and also challenged employees with the theme of "Thriving in a Digitized World" to embrace change and upskill themselves to remain relevant in the digital age
- **JE In Motion**, a digital platform for sharing multimedia content with all employees globally or specific employee groups, facilitating knowledge sharing and team collaboration
- **Regular all-staff meetings** in every Johnson Electric location, providing updates on business performance and key projects
- **MARBLE Snapshot survey** of the organization's engagement level. This provides a confidential route for employee feedback. Follow-up actions ensure that employees' voices are heard and responded to at both corporate and team levels
- **Local initiatives**, including a variety of recreational and team-building activities throughout the year to boost engagement and promote recognition. Local teams organized festive celebrations, potlucks, outings, cultural excursions, "Take Your Kid to Work" days, karaoke nights, appreciation BBQs and similar events

Other means to ensure employees' alignment with Johnson Electric's strategy and direction include newsflashes, open forums and global and local employee contests.

### 60th Anniversary Celebration



Unveiling the 60th anniversary celebration at the One Johnson Celebration in Hong Kong

### GATE's 40th Anniversary Celebration



Above and below: Johnson Electric Italy celebrated the 40th anniversary of GATE, the Group's first acquisition



## Maintaining a Healthy and Safe Work Environment

Johnson Electric is committed to protecting employees' good health and well-being. This forms an essential element of our sustainable development. Our specific goal for employees' health and safety is "No harm to people working for Johnson Electric".

We always seek to build and maintain a health and safety culture with unceasing emphasis on safety matters in the workforce and continuous improvement to eliminate potential causes of incidents.

### Health and Safety Management

We address and manage occupational health and safety issues through our robust EHS management system, monitoring and controlling health and safety risks and tracking critical safety performance indicators, worldwide. This management system is also subject to continuous improvement. For example, over recent years we have increased the number of hazard monitoring points, enhanced health checks provided for employees potentially exposed to certain chemicals and processes in the workplace, and improved record keeping and documentation to ensure that we capture appropriate evidence of our efforts to maintain a good working environment for our workers.

To achieve our goal of "No harm to people working for Johnson Electric" we:

- Design products and processes that are safe for employees
- Comply with applicable health and safety laws and regulations
- Commit appropriate resources and leadership to our Global EHS management system
- Improve our Global EHS management system to set and maintain rigorous standards for managing our health and safety risk
- Improve our occupational safety management by defining appropriate objectives and targets on a regular basis
- Promote a positive safety culture in our workforce through regular communication; and
- Communicate our health and safety performance to stakeholders and seek their involvement wherever applicable

Most of our operating locations, including all our major sites, have achieved OHSAS18001 certification for their occupational health and safety management systems.

We are now migrating to ISO45001:2018, the new international standard for occupational health and safety management systems, which replaces OHSAS18001. In FY18/19, our operations in Izmir, Turkey, Niš, Serbia and Changzhou, China obtained ISO45001:2018 certification. Our other sites continue to work towards this.

We identify significant occupational health and safety aspects in every factory and devote resources to ensuring employee safety, through specific objectives and targets. Every level of management is involved in reviews to ensure continuous improvement in health and safety performance, everywhere. Our Chairman and Chief Executive and the Executive Committee receive regular reports on key health and safety performance indicators.

Every Johnson Electric factory is required to apply this EHS management system and comply with both our global safety standards and local regulations. This is subject to rigorous verification through internal audit programmes and by accredited external auditors.

In day-to-day activities, leaders set a common theme of "injury-free". This is reinforced through regular safety inspections, training and proper incident analysis. This ensures that lessons learned are embedded in machine improvements, process improvements, and job-specific training. All newly hired factory employees receive a safety orientation as part of their induction.

Additionally, every June is designated as International Safety Month, providing a platform for continuous improvement in our safety practices and helping to nurture a safety culture.

## Safety Performance

We continue to focus on developing our safety culture and on further improving our safety performance. There is unceasing emphasis on safety matters in the workforce and continuous improvement to eliminate potential causes of incidents.

We carefully investigate all incidents that result in first aid or recordable injuries, to determine ultimate root causes and prevent or reduce the likelihood of recurrence. We also encourage employees to report hazards and near-misses to identify areas for further improvement in safety performance.

We measure our performance using the recordable injury frequency (“RIF”) and the lost-time accident rate (“LTA”). We use the United States’ Occupational Safety and Health Administration (“OSHA”) definitions for these and calculate them as a rate per 100 employees, working in the year.

In FY18/19, there were:

- 163 recordable injuries across the Group giving a RIF of 0.31 per 100 employees
- 62 lost-time accidents (recordable injuries with lost time of more than one working day). Consequently, the LTA rate was 0.12 per 100 employees
- Zero fatalities

This represents a decrease in the overall injury rate but an increase in the number of more severe cases. Analysis of the safety reports from injury incidents revealed that 40 per cent of injuries were caused by working with machines or equipment, with the majority of these being injuries to fingers. Unsafe behaviour was also a direct cause of some injuries.

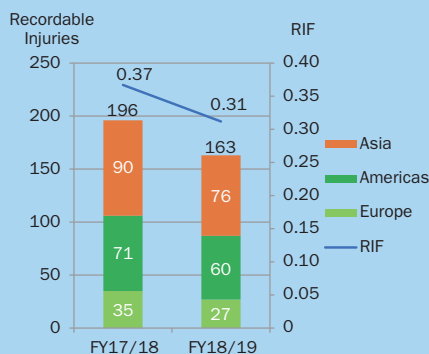
As we now have a strong focus on increased automation and robotics in our manufacturing processes – especially for repetitive or high-risk manual procedures – we expect the injury rate to reduce in future. We will also seek other opportunities to reduce injury rates through training and process improvement.

### Safety Milestones

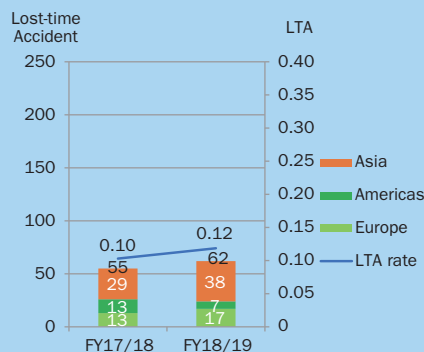
In June 2018, Springfield, Tennessee celebrated 1 million worked-hours without a lost-time accident.

In August 2018, Stackpole Powder Metal, in Ancaster, Canada, celebrated eight successive years with no lost-time accidents. Each employee received a commemorative T-shirt and hat.

#### Recordable Injury and RIF



#### Lost-time Accident and LTA rate

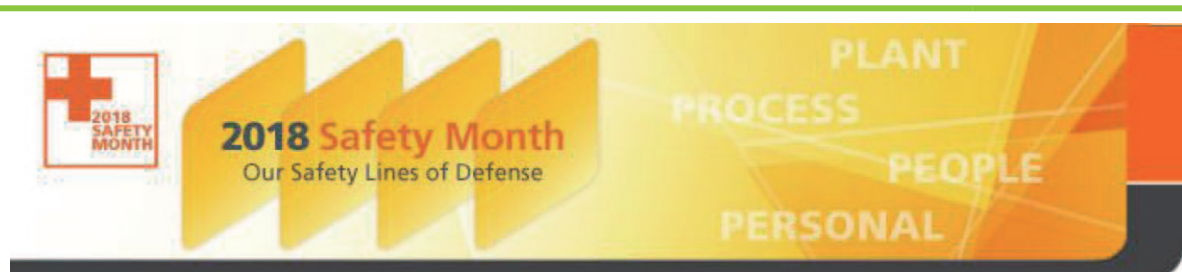


## Response to Leukaemia cases in Shenzhen, China

Over the past 10 years Johnson Electric has employed 270,000 workers in our Shenzhen factories. Five of those workers were diagnosed with leukaemia and claimed that the disease was workplace related. Our investigation and analysis of each employee's workplace, work processes and work history did not reveal any direct linkage to leukaemia. However, local health authorities classified these five cases as occupational disease. This classification was primarily based upon the Company having insufficient historical documentation regarding EHS processes and audits. This administrative oversight has been corrected in conjunction with the overall continuous improvement of health and safety processes in the workplace.

Consistent with occupational disease regulations, the five workers are continuing to receive their monthly salary and their medical expenses are funded through work injury insurance. A care team from the Human Resource department ensures they receive the care and benefits to which they are entitled.

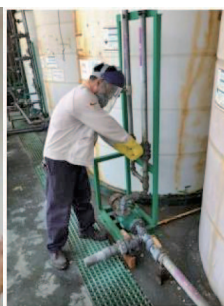
We pursue continuous improvement in the management of health and safety matters, including workshop air quality, chemical safety, safety culture, health monitoring, industrial hygiene monitoring, documentation and administrative procedures.



An important element in our efforts to build and maintain a safety culture is “Safety Month”, which takes place every June, with organized activities across the entire Group to raise awareness of safety risks. This year, our theme was “Our Safety Lines of Defense”.

We classify four layers or “Safety Lines of Defense”, being Plant, Process, People and Personal Behaviour. Using this “Safety Line of Defense” approach, the risk of a potential safety issue is mitigated by layering a variety of lines and types of defences. Our Safety Month training and activities emphasized the importance of adopting the right plant and good processes to protect workers’ health, and of workers always following good safety practices and using the protective equipment provided to them, so that each layer of Plant, Process, People and Personal Behaviour is actively engaged in preventing safety risk.

During Safety Month, operating sites exchanged safety best practices through videos and interactive multimedia. Operations with excellent safety performance received Safety Performance Awards and Safety Lines of Defense Awards.



Far left: Presentation of Safety Performance Awards

Left: Chemical leakage and dangerous-waste-handling exercise in Shanghai

## Safety Highlights

We devote substantial effort to the protection of workers' health and seek continuous improvement in health and safety performance, at all our sites around the world. To achieve this we seek ways to separate hazards from employees; reduce the range of chemicals in use, maintain strong controls over the purchase, storage, use and disposal of chemicals; build and maintain a safety culture; and improve our EHS management through better communication and training in the workplace, in the classroom and online, increased hazard monitoring, and improved documentation and record keeping.

Highlights of our continuous improvement activities in FY18/19 include:

<b>Asti, Italy</b>	<b>Physical Safety</b>	Low friction sliders for screwdrivers installed to prevent ergonomic risks
<b>Beihai, China</b>	<b>Road Safety</b>	Motorcycle "Helmet Safety" campaign
<b>Będzin, Poland</b>	<b>General Safety</b>	Introduced virtual reality to simulate real-life situations in training
<b>Changzhou, China</b>	<b>General Safety</b>	Digitalized hazard reporting through the use of QR codes
<b>Chennai, India</b>	<b>Employee Health</b>	Staff talks, a doctor's visit and training on dengue and H1N1 flu
<b>Ózd, Hungary</b>	<b>Chemical Safety</b>	Improved chemical management system, ensuring that chemical use meets local and European Union requirements
<b>Nanjing, China</b>	<b>General Safety</b>	Adopted digital technology to provide a "Safety Wisdom Platform" for instant safety inspections and recording of corrective actions
<b>Niš, Serbia</b>	<b>Workplace Noise</b>	Fully enclosing a pressing machine reduced noise levels by more than 25 per cent
<b>Shenzhen, China</b>	<b>Chemical Safety</b>	Water-based paints replaced harmful solvent-based paints in spraying processes and reduced VOC emissions
	<b>Workplace Safety</b>	Manual assembly procedure replaced by automatic die-casting machine with manipulators, eliminating safety risks to operators and improving efficiency
	<b>Workplace Noise</b>	Upgrading frequency conversion motors reduced noise levels in one workshop by more than 10 per cent
	<b>General Safety</b>	Enhanced EHS inspection plan, with a theme each month. Launched incentive programme for reporting potential hazards
<b>Wuxi, China</b>	<b>Workplace Health</b>	Introduced work-break exercises in production office and areas to reduce employees' potential ergonomic risks

## Community Engagement

Much of Johnson Electric's community engagement runs on the flagship theme of "technical education", which comprises two main initiatives:

- **Johnson Electric Technical College:** The JETC serves a dual purpose. It provides the Group with a stream of well-educated future employees. It also gives back to society by providing a quality general and technical education to underprivileged youngsters in China and Mexico. In Serbia, using similar concepts to JETC, we work in partnership with a local technical high school, providing access to Johnson Electric's facilities and staff, to assist students in receiving a quality technical education
- **Junior Engineer:** 30 Johnson Electric locations hosted Junior Engineer events in 2018. This simple but effective community outreach programme encourages an early interest in science, technology, engineering and mathematics subjects. Participating children, from 6 to 12 years old, build a toy powered by a Johnson Electric motor

An employee contest produced a new toy design for the 2018 Junior Engineer event. The winning entry, named "J-bot", is a robot car with on-board programming and circuitry, allowing it to be controlled by mobile devices



Technical Education is also a recurring theme in local community engagement activities. Local teams collaborate with educational institutions in their neighbourhoods to provide internship opportunities for students, reward outstanding performers and organize open-house events for students.

Johnson Electric sites around the world also partner with local government and non-governmental organizations ("NGOs") to take part in a range of charitable activities and actions such as health education, poverty relief, support for children and the elderly, and support for animal welfare and the environment. In FY18/19, their activities included:

- **Zacatecas, Mexico** – We lobbied state authorities to provide day-care facilities for the children of workers in the industrial park in which our factory is located. Following this, in February 2019, the Guarderia Centenario de Rotary facility opened, providing comprehensive day-care services including meals, development and psychomotricity, and pre-school learning for 250 children from 43 days to 4 years old. We donated several cradles and offer transportation to support Johnson Electric mothers using the facility. This day-care centre enables working mothers from poverty-stricken families, who cannot afford to travel home every night, to be with their children every day
- **Shenzhen, China** – We worked in alignment with the XinQiao District Volunteering Centre to organize an "Enterprise Volunteers Day", with 80 volunteers providing services to the needy in the community
- **Serbia** – Employees took part in the humanitarian-ecological action "Cap for Smile". By collecting plastic caps for recycling, the initiative raises funds to help children with disabilities and enable them to enjoy fuller lives
- **Canada** – Employees raised donations for the Canadian Mental Health Association through the "Ride Don't Hide" initiative, the largest mental-health bike ride in Canada

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# APPENDIX I: JOHNSON ELECTRIC'S LABOUR AND HUMAN RIGHTS POLICIES

We adhere to directives set by the International Labour Organization's "ILO Declaration on Fundamental Principles and Rights at Work" and the United Nations' "UN Guiding Principles on Business and Human Rights". These set out principles of freedom of association, right of collective bargaining, abolition of child labour and elimination of all forms of forced or compulsory labour or discrimination in the workplace.

Every year, all our regional and country Human Resources teams and our subsidiaries acknowledge and certify their full compliance with Johnson Electric's labour and human rights policies and to relevant labour laws and regulations, including:

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***Equal employment opportunity***

Johnson Electric is committed to treating all applicants and employees in a fair and non-discriminatory manner without regard to age, disability, marital status, race or colour, national origin, veteran status, religion, sex, sexual orientation, or any other legal protected status.

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***Open communication***

Johnson Electric is committed to maintaining open two-way communication throughout the Group, keeping employees informed of current happenings and fostering an environment where employees are comfortable voicing their opinions, ideas, suggestions and concerns.

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***Harassment free workplace***

Johnson Electric is committed to providing a workplace in which the dignity of every individual is respected.

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***Workplace violence and weapons***

Johnson Electric's objective is to provide a safe work environment that is free from acts and threats of violence.

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***Code of ethics and business conduct***

The Code guides every employee in the use of good judgment and ethical decision-making, ensuring employees uphold Johnson Electric's belief in conducting our business lawfully and ethically. Globally, every manager is required to declare annually that they have read and conformed to the requirements of the Code of Ethics and Business Conduct. For more details of the whistleblower policy, please refer to page 8 of this Report.

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# APPENDIX II: MARBLE VALUES AND IMPERATIVES

Johnson Electric prides itself on a set of shared core values and commitments that together form the foundation for everything we do. The first initial of each of these values spell the word “MARBLE” – the acronym Johnson Electric employees use internally when referring to these values.

<b><i>Make customers successful</i></b>	Providing “Safe Choice” solutions and delivering what our customers need, when they need it, is the primary goal of Johnson Electric. We are committed to making our customers successful in their business, as the basis for long-term success in our business.
<b><i>Attract and develop great people</i></b>	Johnson Electric aims to offer its people a superior career development experience that rewards results, enterprise, coaching and teamwork. We recognize that our business thrives on the diversity of our people and their ideas.
<b><i>Reach higher</i></b>	Johnson Electric people set stretch goals for themselves to drive business growth and personal career fulfilment. We know from experience that bold thinking and bold action bring about extraordinary results. We make Johnson Electric a great company and a great place to work.
<b><i>Believe in practical solutions</i></b>	Johnson Electric is driven by shop-floor practicality and a positive “can-do” mindset. We seek to turn innovative ideas into cash flow by working quickly as a team and refusing to be stalled by complexity.
<b><i>Lead by example</i></b>	Johnson Electric believes that good corporate citizenship requires uncompromising standards of integrity, openness and fairness. We are committed to demonstrating leadership wherever we do business through the promotion of a safe and healthy environment for our people and the local community.
<b><i>Excel in execution</i></b>	Johnson Electric’s customers expect the highest standards of quality and performance. We work not only to meet those expectations but also to exceed them through continuous cycles of learning. We have fun at work and celebrate success.

A group-wide “Living MARBLE” programme recognizes employees who exemplify the MARBLE values. Since its inception in 2014, the programme has presented awards to more than 1,100 employees whose role-model behaviour illustrates the MARBLE values in action, including over 260 awards presented during FY18/19.



# APPENDIX IV: HKEX ESG REPORTING GUIDE

## Environmental, Social and Governance Reporting Guide

## Notes / Sections

### A. Environmental

#### Aspects A1: Emissions

General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Environmental Responsibility/ Performance Indicators
KPI A1.1	The types of emissions and respective emissions data.	
KPI A1.2	Greenhouse gas (GHG) emissions in total (in tonnes) and where appropriate, intensity.	
KPI A1.3	Total hazardous waste produced (in tonnes) and where appropriate, intensity.	
KPI A1.4	Total non-hazardous waste produced (in tonnes) and where appropriate, intensity.	
KPI A1.5	Description of measures to mitigate emissions and results achieved.	
KPI A1.6	Description of how hazardous and non-hazardous waste is handled, reduction initiatives and results achieved.	

#### Aspects A2: Use of Resources

General disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Environmental Responsibility/ Performance Indicators
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kwh in '000s) and intensity.	
KPI A2.2	Water consumption in total and intensity.	
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	
KPI A2.4	Description of whether there is any problem in sourcing water that is fit for purpose, water-efficiency initiative and results achieved.	Performance Indicators
KPI A2.5	Total packaging material used for finished products (in tonnes), and if applicable, with reference to per unit produced.	

#### Aspects A3: The Environment and Natural Resources

General disclosure	Policies on minimizing the issuer's significant impact on the environment and natural resources.	Environmental Responsibility
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	

## Environmental, Social and Governance Reporting Guide

Notes /  
Sections*B. Social – Employment and Labour Standards*

## Aspect B1: Employment

General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Investing in People and Communities
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	
KPI B1.2	Employee turnover rate, by gender, age group and geographical region.	

## Aspect B2: Health and Safety

General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer, relating to providing a safe working environment and protecting employees from occupational hazards.	Investing in People and Communities
KPI B2.1	Number and rate of work-related fatalities.	
KPI B2.2	Lost days due to work injury.	
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.	

## Aspect B3: Development and Training

General disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Investing in People and Communities
KPI B3.1	Percentage of employees trained, by gender and employee category.	
KPI B3.2	Average training hours completed per employee, by gender and employee category.	N/A

## Aspect B4: Labour Standards

General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child labour and forced labour.	Johnson Electric's Labour and Human Rights Policies
KPI B4.1	Description of measures to review employment practices to avoid child labour and forced labour.	
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	

Environmental, Social and Governance Reporting Guide		Notes / Sections
B. Social – Operating Practices		
Aspect B5: Supply Chain Management		
General disclosure	Policies on managing environmental and social risks of the supply chain.	Sustainability in Johnson Electric Products
KPI B5.1	Number of suppliers by geographical region.	Performance Indicators
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	N/A
Aspect B6: Product		
General disclosures	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Sustainability in Johnson Electric Products
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Performance Indicators
KPI B6.2	Number of product- and service-related complaints received and how they are dealt with.	N/A
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	See Annual Report 2019
KPI B6.4	Description of quality assurance process and recall procedures.	Sustainability in Johnson Electric Products
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	N/A
Aspect B7: Anti-Corruption		
General disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Corporate Governance and Risk Management
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	
KPI B7.2	Description of preventive measures and whistle blowing procedures, how they are implemented and monitored.	
B. Social – Community		
Aspect B8: Community Investment		
General disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Investing in People and Communities
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	

# APPENDIX V: PERFORMANCE INDICATORS

Items	FY18/19	FY17/18	Unit	HKEx indicators	Page
Energy consumption	2.56	2.44	million GJ	A2.1	19
Energy intensity	780.2	754.9	GJ per US\$ million sales	A2.1	19
Direct CO <sub>2</sub> (Scope 1) emissions <sup>1, 2</sup>	28	26	Kt CO <sub>2</sub> eq	A1.1 / A1.2	19
Indirect CO <sub>2</sub> (Scope 2) emissions <sup>1, 3</sup>	282	267	Kt CO <sub>2</sub> eq	A1.1 / A1.2	19
Total CO <sub>2</sub> emissions	310	293	Kt CO <sub>2</sub> eq	A1.1 / A1.2	19
CO <sub>2</sub> intensity	94.4	90.5	t CO <sub>2</sub> eq per US\$ million sales	A1.1 / A1.2	19
Solid materials recycled	72	70	Kt	A3.1	21
Hazardous waste produced	7.9	9.6	Kt	A1.3	22
Non-hazardous waste produced	5.3	5.3	Kt	A1.4	22
Water consumption	2,378	2,449	Kt	A2.2	22
Waste water discharged	2,082	2,164	Kt	A1.3	22
Cost of packaging materials incurred <sup>4</sup>	26.0	24.3	US\$ million	A2.5	N/A
Suppliers by region					
Asia	45	42	%	B5.1	N/A
Europe	35	32			
Americas	18	23			
Others	2	3			
Total workforce	38,997	42,197	no.	B1.1	N/A
Total workforce, by region					
Asia	73	74	%	B1.1	N/A
Europe	16	15			
Americas	11	11			
Total workforce, by category					
Blue collar	62	65	%	B1.1	N/A
Support / others	23	21			
Professional / supervisory	12	12			
Managerial	3	2			
Total workforce, by gender					
Male	58	58	%	B1.1	N/A
Female	42	42			

## Appendix V: Performance Indicators

Items	FY18/19	FY17/18	Unit	HKEx indicators	Page
Total workforce, by age group					
Under 30 years old	35	41			
30 – 50 years old	57	52	%	B1.1	N/A
Over 50 years old	8	7			
Turnover rate, by region <sup>5</sup>					
Asia	12.2	14.1			
Europe	13.4	11.9	%	B1.2	N/A
Americas	22.3	21.5			
Global	13.7	14.6			
Total turnover, by age <sup>5</sup>					
Under 30 years old	25.2	25.7			
30 – 50 years old	9.9	11.1	%	B1.2	N/A
Over 50 years old	11.4	11.3			
Total	13.7	14.6			
Total training hours	200,000	200,000	hours	B3.1 / 3.2	N/A
Number of work-related fatalities	Zero	Zero	cases	B2.1	29
Number of recordable injuries (“RI”) <sup>6</sup>	163	196	cases	B2.2	29
Recordable injury frequency (“RIF”) <sup>7</sup>	0.31	0.37	per 100 employees	B2.2	29
Lost-time accidents (“LTA”) <sup>8</sup>	62	55	cases	B2.2	29
Lost-time accident rate <sup>9</sup>	0.12	0.10	per 100 employees	B2.2	29
Percentage of total products sold or shipped subject to recalls for safety and health reasons	Zero	Zero	cases	B6.1	N/A
Number of legal cases concluded regarding corrupt practices brought against the issuer or its employees	1	Zero	cases	B7.1	8

<sup>1</sup> The calculation involved the use of country specific conversion factors and in reference to Greenhouse Gas (“GHG”) Protocol.

<sup>2</sup> Direct CO<sub>2</sub> (Scope 1) emissions refer to the direct emission of CO<sub>2</sub> eq. from the combustion of fossil fuels, including natural gas, diesel, liquefied petroleum gas, gasoline and heating oil.

<sup>3</sup> Indirect CO<sub>2</sub> (Scope 2) emissions refer to the indirect emission of CO<sub>2</sub> eq. from purchased electricity.

<sup>4</sup> Cost of packaging materials incurred is immaterial to the total procurement of the Group and our target is to minimize the total spending on packaging materials instead of packaging materials on finished goods.

<sup>5</sup> Turnover ratio is calculated as number of employees leaving during the year (voluntarily and involuntarily) per total workforce as of 31 March 2019. Blue collar is excluded from the calculation.

<sup>6</sup> Recordable injuries include all injuries except first aid cases as defined by US OSHA regulation.

<sup>7</sup> Recordable injury frequency is calculated as the number of recordable injuries per 100 employees working each year.

<sup>8</sup> Lost-time accident refers to recordable injuries with lost time of more than one working day.

<sup>9</sup> Lost-time accident rate is defined as lost-time accident per 100 employees working each year.

# APPENDIX VI: VERIFICATION STATEMENT



## Scope and Objective

Hong Kong Quality Assurance Agency (“HKQAA”) has been engaged by Johnson Electric Holdings Limited (the “Company”) to conduct an independent verification of its Sustainability Report (the “Report”). The Report articulates the efforts made by the Company and its subsidiaries (collectively “Johnson Electric”) in regards to the material sustainability aspects and the overall performance achievement. The Report covers the period of 1st April 2018 to 31st March 2019.

The aim of this verification is to provide a reasonable assurance of the Report which has been prepared in accordance with the Environmental, Social and Governance Reporting Guide (“ESG Guide”) of The Stock Exchange of Hong Kong Limited.

## Level of Assurance and Methodology

The process applied in this verification was based on the International Standard on Assurance Engagements 3000 (Revised) – Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. The verification process was designed to obtain a reasonable level of assurance in accordance with the standard for the purpose of devising the verification conclusion. The extent of this verification covered the Environmental, Social and Governance Reporting Guide (“ESG Guide”) of The Stock Exchange of Hong Kong Limited.

The verification procedures performed included reviewing systems and processes for collecting, collating and reporting of the performance data, verifying relevant documentation, interviewing responsible personnel with accountability for preparing the Report. Raw data and supporting evidence of the selected samples were thoroughly examined during the verification process according to the sampling plan.

## Independence

Johnson Electric is responsible for the collection and presentation of the information. HKQAA is not involved in the collection and calculation of data or the compilation of the reporting contents where HKQAA's verification activities are entirely independent from Johnson Electric.

## Conclusion

Based on the verification results and in accordance with the verification procedures undertaken, HKQAA has obtained reasonable assurance and is of the opinion that:

- The Report has been prepared in accordance with the ESG Guide;
- The Report illustrates Johnson Electric's sustainability performance, covering all material and relevant aspects and topics, in a balanced, comparable, clear and timely manner; and
- The data and information disclosed in the Report are reliable and complete.

In conclusion, the Report provides clear information with regards to the sustainability performance of Johnson Electric in a factual, responsive, consistent, fair and truthful manner.

**Signed on behalf of Hong Kong Quality Assurance Agency**

Connie Sham  
Head of Audit  
June 2019

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