# Johnson Electric Holdings Limited **Sustainability Report 2018**





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## ABOUT OUR REPORT

This Sustainability Report 2018 (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 2018, in particular the Management's Discussion and Analysis and the Corporate Governance Report sections.

Information presented relates to sustainability performance and activities in Johnson Electric's major operating locations from 1 April 2017 to 31 March 2018, unless stated otherwise. It 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").

Our Report was independently verified by the Hong Kong Quality Assurance Agency ("HKQAA"). The verification statement can be found on page 46.

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

On 16 May 2017, Johnson Electric completed the acquisition of an additional 50% equity interest in Halla Stackpole Corporation ("HSC"), taking the Group's interest to 80%. The activities of HSC are now included within the scope of this Report. Apart from this acquisition, there were no other significant changes to the boundaries of the activities included in this Report compared to the prior year.

## MESSAGE FROM THE CHAIRMAN AND CHIEF EXECUTIVE



Johnson Electric achieved record net income for the financial year 17/18, underpinned by strong organic revenue growth from both of our operating divisions and by the impact of recent acquisitions.

This growth reflected the combination of an improving global economic environment, as well as new product launches and market share gains in a number of key product applications. The Group's ability and commitment to deliver innovative, cost competitive solutions to our customers' problems – very often their sustainability problems – is creating strong and sustained demand for our products and a solid order book of new business. We see exciting growth opportunities from the market's need for reduced emissions, lower fuel and energy consumption, improved health and well-being and increased mobility and controllability. These imperatives are right in the sweet spot for our unique range of electric motors, actuators and pump technologies.

Additionally, new technologies are taking the rate and intensity of change and the range of opportunities to a new level. We are in an operating environment that is more dynamic than in the past, requiring all businesses to adapt, innovate and selfdisrupt more frequently and more decisively than ever before.

To harness these opportunities and maintain our vitality and growth in years to come is requiring significant investment in building a larger, more automated and more global manufacturing footprint. It is also presenting us with the welcome but non-trivial challenge of simultaneously executing new product launches across multiple geographies. At the same time, we are embracing the Digital Revolution to bring about a fundamental shift in the way we operate. Advances in sensors, machine vision, digital twin technology, machine learning and artificial intelligence will enable us to improve product quality, enhance our speed and agility, reduce costs, increase customer satisfaction and explore new streams of revenue.

Sustainability is integral to our ability to succeed in a relentlessly competitive market. It drives us to constantly innovate, to create motion products that are energy and resource efficient and that deliver the required functionality and performance at the right price. We are also dedicated to socially responsible interactions with our customers, employees, suppliers, shareholders, business partners and the local communities where we operate, worldwide. 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.

In 2015, the United Nations adopted seventeen Sustainable Development Goals ("SDGs") that chart the course toward a more inclusive and environmentally sustainable future. Business participation is key to achieving these ambitious goals. The SDG Compass encourages companies to define their priorities, based

on an assessment of the SDGs that are most relevant to the business and its stakeholders, in order to "seize the most important business opportunities presented by the SDGs and reduce risk." This year, we reviewed the alignment of Johnson Electric's business strategy with these SDGs.

We identified two key SDGs where we believe we can "move the needle" and make the greatest impact. They are:

- SDG 9 Industry, Innovation and Infrastructure. We innovate to provide unique ٠ solutions to our customer's problems. Johnson Electric's industrial logic is driven by its 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 into our factories to maximise productivity and improve product quality; and
- SDG 12 Responsible Consumption and Production. This has implications for both our operations and our markets. In our manufacturing operations we take a systematic approach to ensuring resource and energy efficient production and supply chain management. As a technology leader for low-weight, highpower density motion solutions, we make our customers successful in achieving their own sustainability goals by providing energy-efficient products that assist in improving fuel consumption and reducing emissions, last longer and require less copper, steel and other resources in their manufacture.

To give further focus to our activities in these areas, we also identified five supporting goals. These include:

- SDG 3 Good Health and Well-Being. Johnson Medtech designs and delivers ٠ innovative technology solutions that help improve patient well-being and achieve better clinical outcomes. Our medical applications include motorised instruments for minimally-invasive surgery, miniaturised precision drug delivery devices and patient care and vital signs monitoring technology;
- SDG 4 Quality Education. The Johnson Electric Technical College ("JETC"), operating in China and Mexico, targets underprivileged youth, providing a mix of general and technical education over a 3-year apprenticeship programme. The Group also partners with schools and universities to support the provision of quality technical and vocational education;



INDUSTRY, INNOVATION

AND INFRASTRUCTUR







Johnson Electric Holdings Limited

- SDG 11 Sustainable Cities and Communities. The quality and sustainability
  of urban living in the future will hinge on improved air quality and more efficient
  energy consumption. Our automotive components contribute to this by enabling
  the shift to cleaner modes of 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. Our Industry
  Products Group offers a wide variety of solutions for heating and ventilation,
  window automation and meter applications that are directly targeted at smarter,
  energy-efficient homes and buildings;
- SDG 13 Climate Action. 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 are also enabling the transition to hybrid and all-electric vehicles. Our Industry Products Group also makes a strong contribution to climate action with solutions that reduce electricity consumption for hundreds of product applications; and
- SDG 17 Partnerships for the Goals. Johnson Electric actively engages with customers, employees, suppliers and communities around the world to fulfil shared sustainability goals. These include responsible consumption and production, climate action, sustainable cities and communities, good health and well-being and quality education. Our employees are especially proactive in organising regular community outreach activities to engage with and support the local communities where we operate.

I continue to be encouraged by Johnson Electric's corporate sustainability and citizenship achievements. This year we benefited from market share growth for eco-efficient products; reduced energy intensity; and increased recycling and reuse of resources in our manufacturing operations. Among our top priority initiatives is the reduction of plastic consumption in our operations – with pleasing progress being made in our European operations. We have also participated in China's pilot carbon emission trading scheme for five years and in 2017 our Shenzhen factories generated 45 thousand tonnes ("kt") of excess carbon credits.

On the social side, I am proud that since its founding in 2004, over 1,300 students – primarily underprivileged youth – have gained technical engineering training through our JETC in China and Mexico. This is an investment in the local community, but also an investment in our business, as it gives us access to top talent of the future. I am delighted that over 80% of those JETC students remain members of our team today.

We continue to invest in advanced production technology to improve productivity and continue to build partnerships with customers, employees, suppliers and other stakeholders for future sustainability. However, there is more to be done in all of these areas. We will continue to reach higher.

**Patrick Shui-Chung Wang** JP Chairman and Chief Executive

Hong Kong, August 2018











A short video about JETC

## JOHNSON ELECTRIC AT A GLANCE

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

## 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 40,000 individuals in 22 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.



Washing Machine Drain Pump

## **Industry Products Group**

Johnson Electric supplies advanced motion solutions and electromechanical components to approximately 2,000 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.



Motorised Window Shutter

## **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.



Electric Parking Brake Actuator

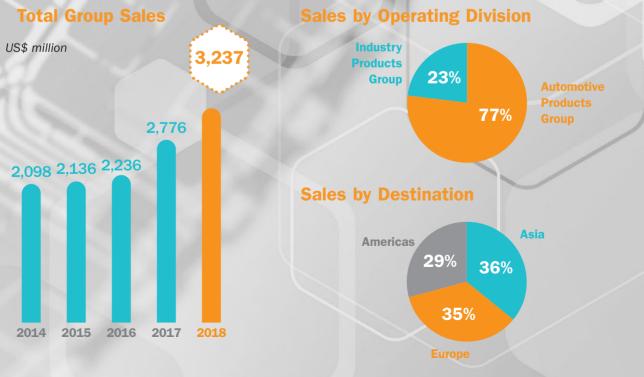
Johnson Electric's automotive products include: thermal management subsystems such as powertrain cooling fans, battery cooling fans for hybrid/electric vehicles, coolant valve actuators, and auxiliary electric water pumps; heating, ventilation and air-conditioning actuators; engine and transmission oil pumps; electric power steering motors; electric parking brake actuators and motors; headlamp actuators and levelers; washer pump systems



**Engine Coolant Valve Actuator** 

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.



## United Nations (UN) SUSTAINABLE DEVELOPMENT GOALS (SDGs) IN OUR SUSTAINABILITY REPORT

This year's report is structured into five key sustainability areas:

- Corporate Governance and Risk Management
- Sustainability in Johnson Electric Products
- Industrialisation and Innovation
- Environmental Responsibility

Communities

• Investing in People and Communities

In addition, we have assessed 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 business scope.

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

Core SDGs where we believe we can have the greatest impact	9 INDUSTRY INNOVATION AND INFRASTRUCTURE	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Our report	SDG 9 Industry, Innovation and Infrastructure	SDG 12 Responsible Consumption and Production
Corporate Governance and Risk Management		•
Sustainability in Johnson Electric Products	•	•
Industrialisation and Innovation	•	•
Environmental Responsibility		•
Investing in People and Communities		•

Supporting SDGs that give further focus to our activities	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	11 SUSTAINABLE CITIES	13 CLIMATE	17 PARTNERSHIPS FOR THE GOALS
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	•		•	•	•
Industrialisation and Innovation					•
Environmental Responsibility			•	•	•
Investing in People and	•	•	•		•

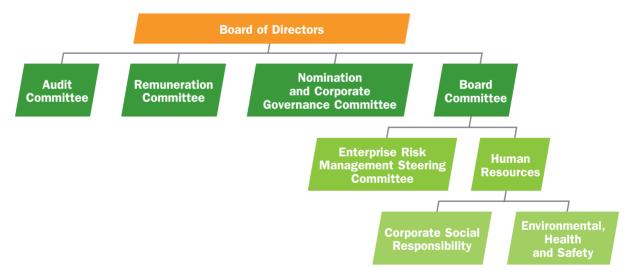
## **CORPORATE GOVERNANCE AND RISK MANAGEMENT**



Johnson Electric is committed to maintaining high standards of corporate governance that properly protect and promote the interests of all of our stakeholders. We devote considerable effort to building a sound governance structure and to identifying and formalising 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 nonexecutive directors (of whom five are independent). Profiles of the Directors can be found on pages 184 to 187 of the Annual Report 2018. The Board is accountable for the sustainable development and performance of the Group. 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' appointment, succession planning, enterprise risk management, major acquisitions, disposals and capital transactions and other significant operational and financial matters.



The Board is ultimately responsible for leading, reviewing and monitoring the Company's policies. The Audit Committee considers the effectiveness of our enterprise risk management and internal control systems and annually 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 being 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 undertakes the supervision of the day-to-day management of our sustainability issues, assisted by the Enterprise Risk Management Steering Committee and the Human Resources ("HR") department. 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.

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 2018.

## **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 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. 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. Our management processes for customer relationships are designed to ensure that each of our business units understands its customer businesses and markets. 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 whistle blower hotline, accessible globally at any hour by phone or email. This enables employee to make anonymous reports of any ethical or business conduct concerns, with any such reports 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 FY17/18, there was no concluded legal case (FY16/17: one) regarding corrupt practices brought against the Group or our employees.

## **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 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 32 to 35 of the Annual Report 2018.

## SUSTAINABILITY IN JOHNSON ELECTRIC PRODUCTS



Johnson Electric keeps track of emerging trends and continues to develop products that offer the best solutions to our customers. Apart from creating value for our customers, we take into consideration the environmental and social aspects of our products. This includes the imperatives to consume responsibly, reduce emissions, lower fuel consumption and energy usage, and make efficient use of resources.

Our 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 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, Johnson Electric delivers.

Sustainability is intrinsic in our product development process too, as a direct result of engineering for efficiency. Our engineers strive to "make customers successful" by developing products that consume less resources in their manufacture and use less energy to deliver the required performance and functionality. Johnson Electric is a technology leader for low-weight 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 the 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 and enclosed by a circle to represent motion.

## **Automotive Products Group**

The automotive industry enables the mobility that shapes industry, cities and communities, gives access to economic opportunity and improves individual life. 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, support the development of autonomous vehicles and offer safety features for all vehicles. Examples include:

 Thermal management subsystems and motors play an essential role in meeting the specific operating temperature requirements of the traction motor, battery, power electronics and additional electronics subsystems of hybrid and allelectric vehicles. It is also key to optimising the performance of internal combustion engine vehicles to reduce fuel consumption and engine emissions. This creates complex cooling requirements that require the controlled, efficient cooling-on-demand that can only be delivered by electrifying coolant pumps and valves; not by conventional mechanical solutions.

In particular, the number of electric coolant pumps on hybrid and all-electric vehicles will likely increase to four or five per vehicle. Demand for Johnson Electric's range of advanced water pump solutions is growing rapidly, particularly in China and is set to become a major new source of revenue growth over the next decade.

 Braking, steering and suspension subsystems and components are a new focus area for improving the sustainability performance of light vehicles. Traditional power braking systems and power steering systems use 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 force as older conventional vehicles. APG's thermal management solutions include electric water pumps; electric oil pumps; coolant valves and actuators; power train cooling fans and battery cooling fans.



Coolant valve actuator

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 light-weight durable powder metal components for suspension systems.  Engine, transmission and driveline subsystems and components including products to manage the flow of oil, air and fuel gases; start-stop components; light-weight, durable powder metal components; actuators and motors for smart power transfer units and axles and a wide range of other engine, transmission and driveline applications.

The electrification of engine, transmission and driveline components for improved performance and efficiency includes pumps, compressors, throttle control, valve lifting, turbo chargers and many 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.

• Exhaust treatments assist in reducing emissions in the vehicle exhaust system.

Selective catalytic reduction and diesel exhaust fluid convert harmful nitrogen oxides into harmless nitrogen and water, contributing to sustainable cities and communities through cleaner air.

Oil separators remove oil from the exhaust for cleaner air. Potentially, if this oil is returned to the sump, this 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 a key focus point in efforts to extend the range of next-generation hybrid and all-electric vehicles and to improve fuel consumption and reduce engine emissions from internal combustion engine vehicles.

APG assists this with lightweight energy-efficient solutions for existing electrified applications such as power seat

APG offers motors for exhaust gas recirculation, selective catalytic reduction, diesel exhaust fluid and oil separator applications.



Exhaust gas recirculation motor

adjustment, power windows and HVAC. APG also enables the replacement of heavier mechanical and hydraulic systems with lighter electric motion systems. Examples include brake-by-wire, electric power steering. As an additional benefit, if the mechanical or hydraulic system drew its power from the engine, then replacing this with an electric motion system reduces the overall power demand on the engine, further improving fuel efficiency and reducing emissions.

Safety requirements for vehicles are continuously becoming more stringent, driven by both 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.



Electronic stability control motor

## **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. As long as products with better environmentally friendly performance come with a higher cost, the adoption of high-performance environmentally products will remain slow. Consumers are likely to opt for technologies with a lower cost but a shorter life-cycle or poor energy efficiency, posing a negative impact to the environment.

Johnson Electric seizes this opportunity to apply our innovative technology and application expertise to bring environmentally friendly products to market with reasonable pricing as well as the expected functionality and performance.

For example, many range hood and ventilation fan products still contain cheap shaded-pole and induction motors despite their low efficiency of only 10% to 25%. Instead, brushless motors achieve 80% efficiency, have a much longer operating life and consume less copper and steel in their manufacture but cost more. IPG's focus on delivering this technology at an attractive cost is raising demand for its brushless motors for these applications. Brushless motors offer energy and life-cycle longevity for other domestic uses too, such as pumps for washing machines and dishwashers.



Washing machine drain pump

Governments are also one of the key stakeholders that influence demand for energy efficient technologies. Often, they issue directives limiting the power consumption of certain types of appliances or tightening the requirements for energy efficient buildings. 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.

In many cases, our customers already have the aspiration, but elements of the technology are not yet capable of delivering the required performance. For example, the conventional two-stroke engines used in lawn mowers burn an oil–gasoline mixture. Replacing these with battery-electric lawn mowers effectively reduces pollution including smoke, carbon monoxide, hydrocarbons and particulate matter. IPG's brushless motors have been capable of replacing combustion engines for lawn mowers and other garden tools for several years. However, battery development lagged behind and has only recently reached the required levels for these applications. Improved battery capabilities has begun to transform the lawn mower market. Similar changes are taking place in other gardening tools including chainsaws, string trimmers and hedge trimmers and IPG expects growth in sales of products for all of these applications.

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, customers are increasingly asking IPG to provide sustainability solutions with a more complete subsystem, including the motor, the switch, gears and the controlling electronics. As well as being cost-effective for the customer, this simplifies the customer's logistics flow and reduces 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 motorised instruments for minimally invasive surgery, miniaturised precision drug delivery devices, patient care and vital signs monitoring technology.

IPG's innovative energy-efficient products for smart meters, include:

- Motorised shut-off valves for use in gas meters Smart meter manufacturers can choose between IPG's ball-valves with zero pressure drop in the valve to prevent energy loss or lower-cost lowpressure-drop valves; and
- Disconnect relays for electric meters.



Brushless chainsaw motor



Complete subsystems reduce the customer's environmental impact

## **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 necessary health, safety and environmental protection requirements by recognised external testing laboratories and bodies.

## 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 \* These international standards include:

- IS09001 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
- IS013485 quality management system for meeting regulatory requirements for the medical devices industry
- IS014001 for environmental management systems
- IS017025 for testing and calibration laboratories

standard tools and methodologies such as advanced product quality planning, V-model product development, quality function deployment, failure mode effects analysis ("FMEA") including design FMEA, process FMEA, simulation testing, risk assessment and capability analysis to create differentiated products that deliver high performance, superior quality, reliability and safety.

#### **Continuous Improvement**

Johnson Electric's manufacturing processes are integrated with our product development and quality management systems to ensure product, production processes and business operations are "designed-in" with full capabilities. This is achieved by 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 tool 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, FTA and DOE.

## **Recall and Traceability**

In 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.



Dual clutch transmission actuator with a QR code for traceability

## Integrating Sustainability into Our Supply Chain

Our engagement with suppliers is driven by our focus on "Innovation" and "Safe Choice". From supplier selection and qualification procedures to performance monitoring, these core values are incorporated throughout the business engagement with suppliers. Robust supplier qualification procedures that outline supplier considerations such as cost, quality, delivery, environmental awareness, ethical behaviour and social responsibility are in place at Johnson Electric.

### **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 Organisation ("ILO")'s "ILO Declaration on Fundamental Principles and Rights at Work" and the United Nations' "UN Guiding Principles on Business and Human Rights" which

- \* Relevant international standards such as:
  - IS09001 for quality management systems
  - IS014001 for environmental management systems
  - ISO/TS 16949 (which contains particular requirements on applying ISO9001 in the automotive industry)
  - IS013485 on applying IS09001 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

adhere to the 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 at work.

## INDUSTRIALISATION AND INNOVATION



## **Building a Global Manufacturing Footprint**

The key goals of Johnson Electric's 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 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 creates multiple benefits to our economic and sustainability performance at several levels:

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

## Industrial Logic – Automation Is the Future of Manufacturing Industry

We are upgrading design and production processes, making significant investments in advanced automation and machine learning, standardisation of product design and the digitalisation of business processes. This will deliver growth in productivity, improved transparency of manufacturing operations, higher product quality and improved resource efficiency.

This reflects the imperatives to ensure consistent quality of output everywhere we do business, flawlessly execute new product launches in high volumes across multiple regions and adaptable operations where some of the more labour-intensive assembly processes are increasingly performed by more capital-intensive automation.

The structural changes in the way work is done will inevitably change the balance of economic, ecological and social concerns. On one hand, increased automation will improve resource and energy efficiency, assisting in the sustainable development goal of decoupling economic growth from environmental degradation. It will also increase employee safety through the separation of hazardous processes. On the other hand, the profile and size of our workforce can be expected to change over time as processes become less labour intensive.



Separation of hazard through automation in Bedzin, Poland

To encourage our employees to consider this evolution in manufacturing technologies, our management team invited all employees around the world to submit entries in an Industrial Logic poster competition as part of the core theme of the Group's December 2017 "One Johnson Celebration". The entries, together with videos of senior managers discussing elements of industrial logic were uploaded to JE in Motion, our inhouse social media platform, initiating discussion on the implications of these changes for Johnson Electric.





The One Johnson event in Shenzhen, China, was attended by close to 10,000 employees

## **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 motor and motion system solutions available in the market today – incorporating DC & AC motors, stepper motors, actuators, solenoids, switches, relays, precision gears, powder metal components, pumps and flexible printed interconnects.

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 less materials, improving health and well-being, improving safety standards and increasing mobility and controllability. – and how these changes can 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 endproduct's entire life-cycle. Johnson Electric invests in innovation to provide unique motion solutions to customer problems.

We employ over 1,600 engineers around the world, providing a wide variety of tools in our laboratories, from wind tunnels and immersion tanks to electron microscopes.

We filed over 750 patent applications in FY 17/18.



## **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 its environmental management is "No damage to the environment wherever Johnson Electric operates."

To achieve this goal, we require the business to:

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

The environmental activities and performance are discussed and analysed in the following sections:

- Environmental Management
- · Energy Consumption and Greenhouse gases
- Materials Consumption
- Pollution Prevention and Management
- Waste Management
- Water Stewardship
- Environmental Improvements



## **Environmental Management**

Our progressive EHS management structure and robust management system enables us to proactively address and manage environmental issues, to monitor and control environmental risks and to track critical measurable factors worldwide

We identify significant environmental aspects for each manufacturing location and devote resources to managing these, with specific objectives and targets. Management reviews ensure that continuous improvements are made. 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.



Johnson Electric's largest manufacturing site

All of our operating facilities have gained certification under the internationally recognised ISO14001 standard for environmental management systems. This year, the Chennai plant in India, the Bedzin plant in Poland, the Arujá plant in Brazil and the Ózd plant in Hungary obtained ISO14001 certification. Sites with existing certifications under older IS014001 versions are now focusing on the transition to the ISO14001: 2015 standard.

#### **Energy Consumption and Greenhouse Gases**

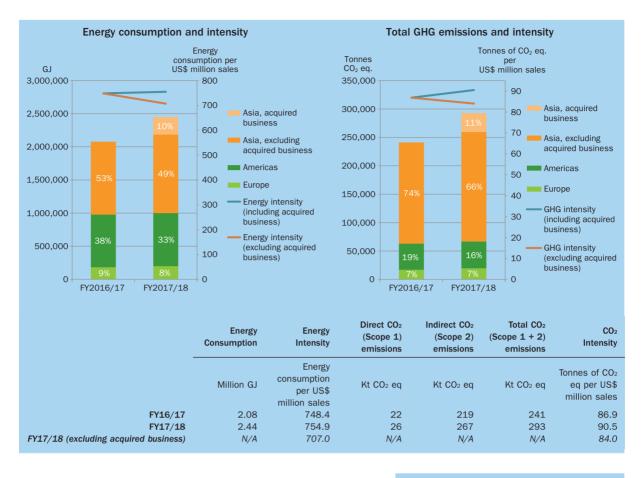
In line with our manufacturing philosophy of maximising efficiency and reducing waste as part of our efforts to be a responsible consumer and producer, Johnson Electric pays keen attention to reducing energy consumption and greenhouse gas ("GHG") emissions in all of our plants around the world.

Our energy management is becoming increasingly systematic. Our largest site in Shenzhen, China is certified under the IS050001 standard on energy management and some other sites have also achieved or are working towards this standard.

In FY17/18, our Shanghai factory passed a key milestone in its sustainability journey, gaining ISO50001 certification for its energy management system. An Energy Saving Committee is responsible for identifying and overseeing the implementation of energy saving projects in the factory, which are regularly reviewed and audited to ensure that the principles of energy efficiency are fully executed. The factory's efforts in this voluntary initiative are being recognised by an award from the Shanghai Foreign Economic and Information Commission.



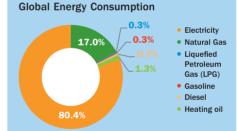
#### Sustainability Report 2018



Our operations consumed more energy than the previous year due to the combined effect of the acquisition of HSC and higher production volumes from organic growth. On a like for like basis, the underlying trend of energy consumption per dollar of revenue decreased as a result of energy saving projects across our global operations. We anticipate further increases in total energy consumption due to business growth in FY18/19, however we expect the impact of this to be mitigated by energy savings initiatives with further reductions in our energy intensity.

Our GHG emissions and GHG intensity increased, largely due to the acquisition of HSC, which manufactures sintered metal components for the automotive industry in China and South Korea. Higher production volumes from organic growth, especially in China, also increased GHG emissions. However the GHG intensity of our existing operations benefited significantly from the impact of energy / GHG saving projects across the Group (see chart above) and our underlying trend is one of reducing GHG emissions.

More renewable and nuclear energy is used in countries such as Canada, Switzerland and France and that partly explains why the proportion of GHG emissions is smaller in Europe and the Americas.



The pattern of energy consumption was similar to the previous year. 80% of our energy consumption was in the form of electricity 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.

**China's Carbon Emission Trading Scheme:** In our fifth year of participation in China's pilot carbon emission trading scheme, our Shenzhen factories generated 45kt of excess carbon credits in 2017. Following this successful pilot project, in December 2017 this trading scheme has expanded to cover the whole country, initially focusing on the electricity generation sector only. This is expected to encourage power companies in China to adjust their fuel mix to reduce their carbon footprint. We anticipate that this will have a beneficial impact on our overall GHG emissions and GHG intensity.

**Energy** / **GHG saving projects:** Around the world, projects in FY17/18 to reduce energy consumption and carbon emissions included:

- Improvements to the efficiency of presses in Shenzhen, China, Hirson, France and Asti, Italy
- The replacement of electrostatic epoxy powder collectors with more energy efficient units in Shenzhen, China
- More efficient usage of compressed air in production processes in Shenzhen, China and the installation of heat exchangers to recover waste heat from air compression in Bedzin, Poland
- A 75% reduction in electricity consumed by nitrogen injection and heat treatment furnaces in Shenzhen, China



Hirson, France: New injection moulding machine consuming 40% less electricity

- Modernisation of facilities in China, Italy, Poland, India and France including more efficient air-conditioning units, updates to lighting control systems and the installation of solar energy collectors
- The replacement of neon lights with LED lights in many facilities around the world
- Organised training including classroom discussion and case studies to improve energy / GHG saving awareness

Our factories in Shenzhen, China, replaced about 1,330 fluorescent tubes with LED lights and removed a further 336 fluorescent tubes, giving an estimated energy saving of 720GJ (200 MWh) a year

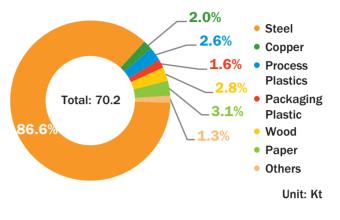
Electricity only from Renewable Sources: The factory in Asti, Italy, amongst other energy / GHG saving
measures, signed a contract with the electricity supplier and declared that it would only purchase electricity
generated from renewable resources with zero carbon emissions. This is a significant step that will be
explored across the Group's global operations where the opportunity arises to reduce the Group's carbon
footprint in this way

### **Materials Consumption**

Manufacturing of products consumes 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. We may sell this scrap for further recycling (e.g. steel, copper, plastic and wood) or recover it through collection and direct reuse as raw material (e.g. aluminium scraps and epoxy powder).

Our main source of recoverable solid materials is steel scrap, accounting for 87% of the total. The remaining 13% comes from copper, processed plastics, packing plastics and wood. In FY17/18, we recycled and sold approximately 70kt of recoverable solid materials, mostly in Asia due to the scale of our operations in China.

#### **Global Recyclable Solid Materials**



Additionally, following last year's successful implementation of the recovery of epoxy powder from waste steam, our operations in Shenzhen and Beihai, China recovered and recycled a total of 109 tonnes of epoxy powder in the calendar year 2017.

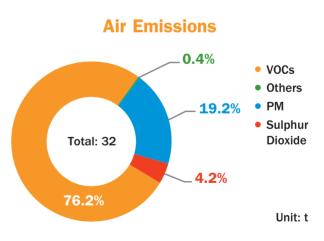
Our factory in Asti, Italy, rolled out a new initiative this year. The factory began to recover plastic sprue from injection moulding processes. The plastic sprue is ground into granules and subsequently reused in other applications or sold to a recycling company. A similar project to reduce plastic consumption was adopted in Hirson, France, using a hot runner injection moulding machine to reduce plastic consumption by up to 30%.

### **Pollution Prevention and Management**

Johnson Electric's main non- $CO_2$  emissions are volatile organic compounds ("VOCs") although we also have some particulate matter ("PM") emissions. These are generated by the application of glues for parts assembly; solvents for parts cleaning, injection moulding and ink printing; and various powder processes.

In FY17/18 we undertook several projects to manage and reduce these pollutants, including:

- Improvement of air emissions in die-casting processes, Shenzhen, China
- Initiating a 2-year project in our Shenzhen factories to phase out the use of hydrochlorofluorocarbon solvents for precision cleaning. These compounds are low but not non-zero ozone depleting



 Initiating a project to control emissions of VOCs in Johnson Electric's China operations including waste gas treatments as well as strategies to introduce "low VOC" or even "no VOC" processes.

#### Waste Management

In FY17/18, we generated approximately 5.3kt of non-hazardous waste and approximately 9.6kt of hazardous waste. General 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 minimise general and hazardous waste through the development, implementation and continuous improvement of site-specific programmes for all waste streams. Highlights in FY17/18 included:



- Optimising our procedures to reduce hazardous oily waste from magnet production in Nanjing, China
- Standardising operating processes and encouraging employee awareness to reduce copper contaminated wastewater in Zacatecas. Mexico
- Recycling electronic waste in Zacatecas, Mexico by donating components to the College of Scientific and Technological Studies of the State of Zacatecas for use by students in their practical work in electronics, physics, robotics and other relevant activities. This reduces both the monetary and environmental costs involved in disposing of these electrical parts that would otherwise be scrapped and treated as hazardous waste.

#### Water Stewardship

Our manufacturing processes do not consume a significant amount of water and none of our major operations are located in water-stressed regions. Nevertheless we take a cautious approach to water stewardship, seeking to maximise efficiency and reduce waste. We engage employees on the need to conserve water. We also seek to reduce water usage, reuse water and improve the quality of wastewater discharged from our factories.

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 Consumption

#### **Environmental Improvements**

#### Brownfield site in Mississauga, Canada

When we acquired Stackpole in 2015, the assets acquired included a brownfield site adjacent to our Mississauga facilities. This land was found to be contaminated with heavy metals and petroleum hydrocarbons.

Consequently, we formulated a plan to restore the environmental condition of this land and prepare the site for future expansion. We treated 31,000 tonnes of contaminated soil to certified standards and ensured safe disposal. The decontaminated site will be used for construction of a new plant to meet our expansion needs.

#### Drainage improvements in Shenzhen, China

The Maozhou River, an important water resource, flows near our Shenzhen factories. This river is severely polluted due to the lack of separation of storm water and sewage over the past decades. We are working with the local authority and government contractors to upgrade the drainage system in the area, as well as contributing to improvements across the wider district. Once the entire Shenzhen municipal drainage system is completed, this is expected to greatly improve the water quality in the river.



Decontamination of Stackpole's brownfield site

Our contribution towards this project has been recognised by an exchange of commemorative flags with the main contractor of Shenzhen Bao'an Water and Environmental Authority.

## **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. Other than ensuring competitive compensation and benefits, we implement a range of talent management and development programmes that aim to match the right people to the right jobs. In doing so, our goal is to offer our people an inclusive and rewarding work environment at different phases of their careers.

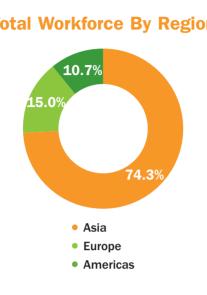
To achieve this, we cultivate an environment where employees can benefit from three key value propositions.



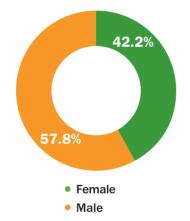
These value propositions are in turn supported by a three-pronged people strategy to attract and develop the **Right People**, put them in the **Right Jobs** and provide them with the **Right Environment** to excel at what they do. Together, they contribute to fulfilling Johnson Electric's people vision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

### Profile of the Workforce

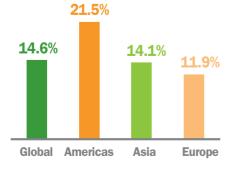
As of 31 March 2018, our total headcount stood at over 40,000, with the following profile:



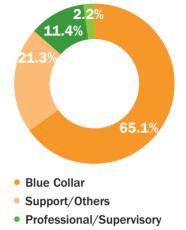
#### Total Workforce By Gender



### Turnover Rate by Region (excl. blue collar)

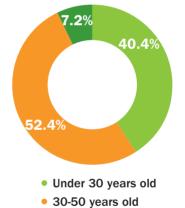


#### Total Workforce By RegionTotal Workforce By Category



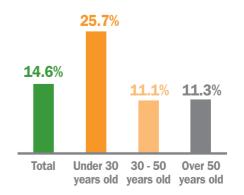
Managerial

### **Total Workforce By Age Group**



• Over 50 years old

### Turnover Rate by Age Group (excl. blue collar)



## Attracting, Retaining and Developing Talent

Johnson Electric is highly selective in its hiring decisions, so that we recruit great people who excel in our corporate culture and make things happen. Johnson Electric thrives on innovation and never stops investing in the next generation of engineers, to bring new ideas and insights. It is also Johnson Electric's ambition to become the employer of choice for engineers.

Our talent management is overseen by a Corporate Human Capital Committee ("HCC"), comprised of our most senior executives. The HCC oversees succession plans for mission critical roles, building our talent pipeline and assessing organisational effectiveness.

The HCC has established a people calibration process, a formal system to evaluate, define and assess each employee's capability. The process forms the backbone of a sustainable leadership pipeline. Succession planning reviews are conducted twice a year. Each review looks into employee development needs, succession management and employee capability to underpin the group's overall strategy. This regular review accelerates the readiness of high potential employees and ensures that emerging requirements are considered when the market and business model changes.

We also place great emphasis in developing local talent for the future. Part of local management's role is to uncover and develop talent, guide and create meaningful career experience for our employees, and shaping their career path to build their career success and contribute to Johnson Electric's success at the same time.

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% of staff-level employees, including all management staff.

Additionally, our 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 that vest only if stringent financial conditions are achieved.

### **Investing in Training and Development**

To enhance and broaden career opportunities for Johnson Electric's employees, we foster a culture of "promoting from within". An internal talent management programme, "My Career In Motion", was launched in March 2018 to empower employees for their career growth and development by working in partnership with their managers and the human resources department. At the heart of this programme is a self-nomination process that encourages employees to apply for open positions for which they are qualified.

The Johnson Electric Learning Institute, established in 2016, provides global direction for all employee workrelated learning and development activities. A Steering Committee comprising representatives from all regions meets once a month to guide and shape policies and practices. This is supported by a strong network of learning and development teams in each location, delivering local learning programmes in response to business priorities and the organisation's talent needs.

Our 70/20/10 learning and development model unlocks people's full potential through formal and informal learning. Under this self-directed, self-paced approach, 70% of employee learning is acquired through real-life and on-the-job experiences, 20% through interactions with others including feedback, social learning, coaching, mentoring and collaborative learning and 10% from attending formal training. The wide variety of development channels includes stretch assignments and international secondments that provide employees with

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 and development activities are facilitated by a "Learning In Motion" hub. Launched in 2018, this global learning platform makes over 200 courses available to Johnson Electric employees, covering key business and soft skills and allowing our employees to learn anytime, anywhere, on any device, at their own pace.

In FY17/18, Johnson Electric employees received around 200,000 training hours, excluding on-the-job experience.

Additionally, operating from campuses in China and Mexico, the Johnson Electric Technical College, targets underprivileged youth and provides a way for the new generation to choose engineering as a viable career option and join our workforce upon graduation. Founded in Shenzhen, China in 2004, JETC provides a mix of general and technical education to youth over a three-year course. Since its establishment, JETC has accepted a total of 1,324 students, including a further intake of 92 expected to join in China and Mexico later in 2018. Of this total, 1,079 are still with us today.

A similar programme in Serbia, provides training schemes in partnership with a local secondary mechanical school and with the University of Niš. Students participating in these schemes spend 2 days a week in the factory, following detailed programmes based on the JETC concept, bringing together theory and practical experience. In FY17/18, 23 secondary school students and 5 master's degree students were accepted onto these schemes.

### Fostering an Engaging and Inclusive Workforce

We comply with the International Labour Organisation's "ILO Declaration on Fundamental Principles and Rights at Work" and have formal policies on non-discrimination, respecting the dignity of every individual in the workplace, providing a safe work environment free from acts and threats of violence and lawful and ethical business conduct. For more details of these policies, please see page 38.

We also seek to maintain open and honest communication with employees, which we see as inseparably linked to the high performance culture that we constantly seek to instil. To achieve this, we utilise a variety of channels, including:

- JE In Motion: A digital two-way communication platform for managers and employees to post and share multimedia news with all employees, globally, or with targeted groups, who can respond, comment and contribute ideas to facilitate knowledge sharing and team collaboration.
- Regular all-staff meetings: Held in every Johnson Electric location, the meeting provides updates on business performance and the development of key projects.
- Annual employee survey: The survey measures employee engagement and 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.
- One Johnson Global Celebration: This annual event includes all employees, in all sites, celebrating "One Johnson around the world". The theme for 2017's celebration was Industrial Logic, which engaged our employees in exploring key concepts of the evolution of industry towards automation and digitisation.
- Newsletters, open forums and employee contests

With employees in 22 countries, spanning 4 continents, Johnson Electric celebrates a diversity of cultures across the Group.



Dragon boat racing for the Tuen Ng Festival in Hong Kong



Eating traditional donut treats on Tłusty Czwartek (Fat Thursday) in Bedzin, Poland



Calaverita and altar contests to celebrate the Day of the Dead, in Zacatecas, Mexico



Worshiping and giving thanks to machines and equipment for facilitating trouble free operations during Ayudha Pooja in Chennai, India

#### Maintaining a Healthy and Safe Work Environment

Johnson Electric is committed to protecting employees' good health and well-being and believes that 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."

To achieve this goal, we endeavour to:

- Comply with applicable health and safety laws and regulations;
- Design products and processes that are safe for employees;
- Continuously improve our Global EHS management system to set and maintain rigorous standards for managing its various health and safety risks;
- Improve our occupational safety management by defining appropriate objectives and targets on a regular basis;
- Promote a positive safety culture with regular communications to our employees.
- · Commit appropriate resources and leadership to the Global EHS management system; and
- Communicate our health and safety performance to stakeholders and seek their involvement wherever applicable.

Our management structure addresses and manages occupational health issues through our EHS management system, monitoring and controlling health and safety risks and tracking critical safety performance indicators, worldwide.

We identify significant occupational health aspects in every factory and devote resources to ensuring employee safety, with specific objectives and targets. Management reviews ensure continuous improvement in health and safety performance, everywhere. Our Chairman and Chief Executive and the Executive Committee receive regular reports on key safety performance.

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. To assure compliance, most of the Group's operating locations, including all of our major sites, have achieved OHSAS18001 certification on the occupational health and safety management systems.

We continue to focus on creating a safety culture and on further reducing the rate and potential severity of incidents. There is unceasing emphasise on safety matters in the workforce and continuous improvement to eliminate potential causes of incidents.

We carefully investigated all incidents that resulted in first aid or recordable injuries, to determine ultimate root causes and prevent or reduce the likelihood of recurrence. Through this analysis, we identified that the majority of injuries occurred when working with machines or equipment and that most of these were finger injuries.





As we are now strongly focusing on automation and robotics in manufacturing processes to replace repetitive and high-risk manual procedures, we expect the injury rate will be reduced in future. Our safety programmes for automation incorporate best practices and lessons learnt to ensure safe implementation in manufacturing and assembly processes. Some of the programmes in FY17/18 are:

- In Shenzhen, China, the Group provided robotics safety training and implemented a lock-out and tag-out ("LOTO") programme, fail-safe protection and carried out hazard separation projects and safety assessments on automated lines; and
- In Bedzin, Poland, new assembly lines require employees and robots to work cooperatively in the production process. Robots carrying out hazardous operations are isolated in cages.

We will continue to seek opportunities to create a safer working environment and to strengthen the



Robot and worker, together

safety culture in our workforce. We encourage employees to report hazards and near misses to identify areas for further improvement in safety performance. In day-to-day activities, leaders set a common theme of "injury-free". This is reinforced by regular safety inspections, drills and proper incident analysis to ensure that lessons learnt are embedded in process and machine improvements, job-specific training and e-learning. We constantly seek to consolidate, reduce or eliminate the use of chemicals in all sites, especially potentially hazardous chemicals. The induction of newly hired employees in our factories includes a safety orientation. Additionally, June, every year, is designated as International Safety Month, providing a platform for continuous improvement in our safety practices and in nurturing a safety culture.

**Safety Month, June 2017:** This financial year's Safety Month focused on "*Leading with Safety*" and emphasised the importance of leadership in building a great safety culture. The key message was that "Excellent safety performance could also bring good performance in all other aspects of the business." Our leaders from Dr. Patrick Wang, Chairman and Chief Executive, to front-line supervisors around the world exchanged their understanding and practices of "Leading with Safety" through videos and other communication tools. Every site also carried out safety activities promoting this theme and sharing what actions they could take to contribute to our safety culture. We also presented "Safety Leadership Awards" to recognise operational leaders demonstrating outstanding safety performance or safety leadership.

**Enhancing health and safety through E-Learning:** Proper training is a critical element in building health and safety awareness and reducing the number and severity of incidents. In addition to traditional training workshops, we are using our "Learning in Motion" e-learning platform to enhance safety training across the Group. Safety training materials are uploaded onto the system which allows employees to learn with flexibly.

**Managing contractor safety:** Our safety culture extends to contractors constructing new plants and renovating existing facilities. Project safety starts with the issue of safety guidelines to contractors during tendering. This is followed by a safety induction and the creation of a safe work environment before work commences. Regular inspections and reviews throughout the project ensure continued compliance with our safety requirements. Applying this safety regime, we began construction of our new magnet manufacturing facility in Nanjing, China in FY17/18 and had zero lost time accidents during the period.

## Safety Month across the world

Some of the promotional materials, video broadcasts, games and competitions, drills, workshops, case studies, town hall meetings and safety awards from Safety Month, June 2017













In addition to Safety Month, more safety initiatives took place across our global operations in FY17/18. Highlights of these include:

Asti Italy	Physical Safety	Improvements to workstations to prevent work related musculo-skeletal disorders from repetitive movements in assembly processes		
Bedzin Workplace Poland Noise		Installation of noise indicators with an embedded alert system to ensure that noise exposure in the factory is always under control		
Changzhou Physical China Safety		Forklifts were prohibited from entering manufacturing areas and were replaced by tugger trains and automated guided vehicles		
Hong Kong China Workplace Air Quality		Automation to separate hazard from the potential generation of carbon dust in mixing processes		
Isle of Wight Chemical United Kingdom Safety		Reduced the number of chemicals used in the plant by more than 40%		
Izmir Turkey	Physical Safety	Advanced vehicle restraint systems prevent trucks from leaving the loading dock until released. This has been adopted as a <b>safety best practice</b> for our global operations		
Mississuaga Canada	Physical Safety	Pedestrian safety improved by slowing forklift traffic and segregating it from busy manufacturing spaces, equipment substitution and reducing the quantity of material transported		
Murten Switzerland	Chemical Safety	Manual washing stations now use a water-based eco-friendly solvent		
Nanjing China	Workplace Noise	Enclosing a vibrating disk used in magnet production reduced shop-floor noise by $15 \mbox{dB}(\mbox{A})$		
	Workplace Air Quality	Installed housings to fully enclose trickling glue processes and good ventilation systems to improve air quality in workshops		
Niš Serbia	General Safety	Machine safety, automation and ergonomics improvements and the development of a set of "Golden Rules on Safety"		
Shenzhen China	Chemical Safety	Non-hazardous solvent replaced methanol for cleaning machinery. Laser etching technology replaced solvent-based inks in some processes. Trialling water-based VOC-free paints for renovations and machine coatings		
	Workplace Air Quality	Improvement of exhaust emissions from aluminium die-casting processes		
	Workplace Noise	Construction of a noise isolation room for the plastic component workshops and full noise enclosure for a dobby stamping machine		
	Hazard Monitoring	80% increase in the number of hazard monitoring points		
Stratford Canada	Workplace Noise	Noise abatement features installed when upgrading and expanding the site, reducing noise levels at the property boundary by 10dB(A)		
Wuxi Physical China Safety		Manual dragging and pulling of heavy items reduced by the use of automated guided vehicles for the transfer of materials		

**Good Health and Well-being Beyond the Fence**: Johnson Electric encourages employees to take care of their good health and wellbeing in all areas of life. Activities organised at a local level in pursuit of this goal included:

- · Sports teams and events around the world;
- Health talks and flu vaccinations;
- A Happy Family Programme to guide line leaders in balancing work life and parenting in Shenzhen, China;
- A 12-week weight loss contest in Vandalia, USA;
- · Health & Wellness Month in Springfield, USA;
- Free or discounted entry to fitness centres and swimming pools in several European locations (Bedzin, Poland; Hatvan and Ózd, Hungary; Murten, Switzerland); and



Hirson, France: A road safety campaign featured a car barrel roll to increase seat belt awareness

· Road safety and other safety awareness campaigns

### **Contributing to Our Community**

Johnson Electric seeks to make a meaningful contribution to the communities where we operate by encouraging quality education and an interest in Science, Technology, Engineering and Mathematics subjects. Our flagship theme, "technical education", comprises two main initiatives:

- Johnson Electric Technical College, discussed on page 29, serves a dual purpose, providing the Group
  with a stream of well-educated future employees and giving back to society by enabling underprivileged
  youngsters in China and Mexico to obtain a quality general and technical education. Additionally, in Serbia,
  the Group provides a local technical high school with access to JE facilities and staff, using similar
  concepts to JETC, to assist students in receiving a quality education.
- Junior Engineer, a simple but effective global community outreach programme, encourages children to take an early interest in science, technology, engineering and mathematics subjects. Initiated in 2016, Junior Engineer has expanded to include 29 Johnson Electric locations. In FY17/18 nearly 1,000 children between 6 and 12 took part in building and racing 4-wheel drive cars powered by Johnson Electric motors. In preparation for FY18/19's Junior Engineer programme, Johnson Electric announced a competition, open to all employees globally, to design an exciting activity using a Johnson Electric motor, suitable for the target age-group.



Additionally, we encourage our various sites around the world to partner with local non-profit organisations to take part in a variety of charitable activities and actions such as health education and action, poverty action, children, elderly, underprivileged groups, animal welfare, environmental protection and community order.



JETC prize ceremony held in Shenzhen, China

For example, employees in Shenzhen, China have formed a volunteering team that organises many local community services. During FY17/18, their activities included:

- Setting up a Johnson Electric branch of the Municipal Library
- Visiting the elderly
- · Removing fly posters from the streets
- Caring for the homeless by helping them find rescue stations
- Keeping shared bicycles in order
- Keeping the train station in good order during the peak time of workers returning to the district from their hometowns after major festivals.



Volunteering team in Shenzhen, China

Johnson Electric's commitment to social responsibility is reflected in the awards and recognition around the world during the year, including:

- Springfield, USA "Strength" award from the YMCA ABC (After Breast Cancer) Awareness Programme
- Hong Kong Caring Company Award from The Hong Kong Council of Social Service; and Outstanding Fundraiser Award from Oxfam
- Shenzhen, China Excellent Volunteer Contribution Award of XinQiao Street and Excellent Volunteer Group of XinQiao Street from XinQiao Volunteer Federation
- Bedzin, Poland Business Fair Play 2017 from the Polish Chamber of Commerce

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

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

Our global labour and human rights policies include:

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, religion, sex, sexual orientation, or any other legally protected status.
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.
Harassment free workplace	Johnson Electric is committed to providing a workplace in which the dignity of every individual is respected.
Workplace violence and weapons	Johnson Electric's objective is to provide a safe work environment that is free from acts and threats of violence.
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 whistle blower policy, please refer to page 8 of this Report.

# APPENDIX II: MARBLE VALUES AND IMPERATIVES

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

Make customers successful	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.
Attract and develop great people	Johnson Electric aims to offer its people a superior career development experience that rewards results, enterprise, coaching and teamwork. We recognise that our business thrives on the diversity of our people and their ideas.
Reach higher	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 will bring about extraordinary results. We make Johnson Electric a great company and a great place to work.
Believe in practical solutions	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.
Lead by example	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.
Excel in execution	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.

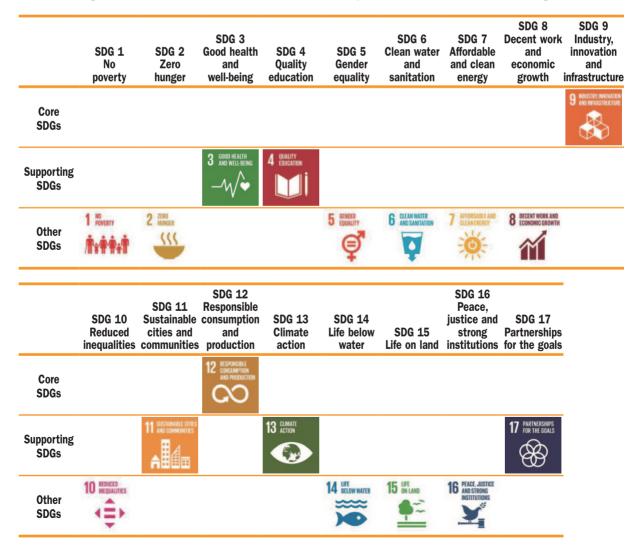
A group-wide "Living MARBLE" programme recognises employees who exemplify the MARBLE values. Since its inception in 2014, including 250 awardees in FY17/18, the programme has awarded over 800 employees whose outstanding behaviour illustrates the MARBLE values in action.

# **APPENDIX III: UN SDG**

In 2015, the United Nations adopted seventeen Sustainable Development Goals ("SDGs") as part of a sustainable development agenda that charts the course toward a more inclusive and environmentally sustainable future. The SDGs explicitly call on all businesses to apply creativity and innovation to solve sustainable development challenges. The SDG Compass, a guide for business action on the SDGs, encourages companies to define their priorities, based on an assessment of the SDGs that are most relevant to the business and its stakeholders. This enables businesses to "seize the most important business opportunities presented by the SDGs and reduce risk."

This year, we reviewed the alignment of Johnson Electric's business strategy with the SDGs to identify those that are most relevant to Johnson Electric's current activities and business scope. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with another. Considering this, we were able to classify the SDGs as follows:

- Core SDGs where we believe that we can make the greatest impact and "move the needle". These goals are closely aligned with our product strategies and with our industrial logic
- Supporting SDGs that give further focus to our activities. Efforts towards achieving these goals will also contribute towards success on our core SDGs
- Other SDGs. Efforts towards these goals may contribute towards our success on the core SDGs and supporting SDGs but do not provide the same opportunity for us to make an impact on a global level



# **APPENDIX IV: HKEX ESG REPORTING GUIDE**

Environmental,	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/		
KPI A1.1	The types of emissions and respective emissions data.			
KPI A1.2	Greenhouse gas emissions in total (in tonnes) and where appropriate, intensity			
KPI A1.3	Total hazardous waste produced (in tonnes) and where appropriate, intensity	Performance indicators		
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: Us	e of Resources			
General disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.			
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kwh in '000s) and intensity	Environmental Responsibility/		
KPI A2.2	Water consumption in total and intensity	Performance		
KPI A2.3	Description of energy use efficiency initiatives and results achieved.	indicators		
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiative and results achieved.			
KPI A2.5	Total packaging material used for finished products (in tonnes), and if applicable, with reference to per unit produced.	Performance Indicators		
Aspects A3: The Environment and Natural Resources				
General disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Environmental		
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Responsibility		

Environmental,	Notes / Sections				
B. Social – Employment and Labour Standards					
Aspect B1: Emp	ployment				
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			
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	Communities			
KPI B1.2	Employee turnover rate by gender, age group and geographical region.				
Aspect B2: Hea	Ith 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			
KPI B2.1	Number and rate of work-related fatalities.	People and Communities			
KPI B2.2	Lost days due to work injury.	Communities			
KPI B2.3	Description of occupational health and safety measures adopted, how they are implemented and monitored.				
Aspect B3: Dev	elopment and Training				
General disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Investing in People and			
KPI B3.1	Percentage of employees trained by gender and employee category	Communities			
KPI B3.2	Average training hours completed per employee by gender and employee category.	N/A			
Aspect B4: Lab	our 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 and forced labour.	Johnson Electric's Labour			
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	and Human Rights Policies			
KPI B4.2	Description of steps taken to eliminate such practices when discovered.				
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			

Environmental,	Notes / Sections				
Aspect B6: Product					
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 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 products 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.	Please refer to Annual Report 2018			
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			
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.	Governance and Risk Management			
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	FY17/18	FY16/17	Unit	HKEx indicators <sup>1</sup>	Page
Energy consumption	2.44	2.08	million GJ	A2.1	21
Direct CO <sub>2</sub> (Scope 1) emissions <sup>2, 3</sup>	26	22	$\mathrm{Kt}  \mathrm{CO}_2  \mathrm{eq}$	A1.1 / A1.2	21
Indirect CO <sub>2</sub> (Scope 2) emissions $^{2, 4}$	267	219	${\rm Kt}\ {\rm CO}_{_2}\ {\rm eq}$	A1.1 / A1.2	21
Total CO <sub>2</sub> emission	293	241	$\mathrm{Kt}  \mathrm{CO}_2  \mathrm{eq}$	A1.1 / A1.2	21
Air emissions <sup>5</sup> , e.g. VOC, Sulphur Dioxide, PM	32	18	t	A1.1	23
Hazardous waste produced	9.6	N/A	Kt	A1.3	24
Non-hazardous waste produced	5.3	N/A	Kt	A1.4	24
Water consumption	2,449	N/A	Kt	A2.2	24
Waste water discharged	2,164	N/A	Kt	A1.3	24
Packaging materials used <sup>6</sup>	14.2	N/A	Kt	A2.5	N/A
% of suppliers by region Asia Europe Americas Others	37.8 45.0 16.0 1.2	N/A N/A N/A N/A	%	B5.1	N/A
Total workforce	42,197	39,984	no.	B1.1	27
Total workforce by region Asia Europe Americas	74.3 15.0 10.7	76.4 14.0 9.6	%	B1.1	27
Total workforce by category Blue collar Support / others Professional / supervisory Managerial	65.1 21.3 11.4 2.2	64.6 21.9 10.9 2.6	%	B1.1	27
Total workforce by gender Male Female	57.8 42.2	54.6 45.4	%	B1.1	27
Total workforce by age group Under 30 years old 30 – 50 years old Over 50 years old	40.4 52.4 7.2	43.8 49.3 6.9	%	B1.1	27

#### Sustainability Report 2018

Items	FY17/18	FY16/17	Unit	HKEx indicators <sup>1</sup>	Page
Turnover rate by region <sup>7</sup> Asia Europe Americas Global	14.1 11.9 21.5 14.6	N/A N/A N/A N/A	%	B1.2	27
Turnover rate by age <sup>7</sup> Under 30 years old 30 – 50 years old Over 50 years old Total	25.7 11.1 11.3 14.6	N/A N/A N/A N/A	%	B1.2	27
Total training hours	200,000	N/A	hours	B3.1 / 3.2	29
Number of work-related fatalities	Zero	Zero	cases	B2.1	31
Number of recordable injuries ("RI") $^{\rm 8}$	196	147	cases	B2.2	31
Recordable injury frequency ("RIF") <sup>9</sup>	0.37	0.30	per 100 employees	B2.2	N/A
Lost time accidents ("LTA") <sup>10</sup>	55	53	cases	B2.2	31
Lost time accident rate <sup>11</sup>	0.10	0.11	per 100 employees	B2.2	N/A
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 issue or its employees	Zero	1	cases	B7.1	8

<sup>1</sup> HKEx indicators refer to the KPI listed in the Environmental, Social and Governance Reporting Guide under Appendix 27 of the Listing Rules of the Stock Exchange of Hong Kong Limited.

<sup>2</sup> The calculation involved the use of country specific conversion factors and in reference to Greenhouse Gas ("GHG") Protocol. Scope 2 emission in FY16/17 is restated based on a more reliable Average Carbon Dioxide Emission Factors for the China Regional Power Grids published by China's National Development and Reform Commission ("DRC").

<sup>3</sup> Direct GHG (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>4</sup> Indirect CO<sub>2</sub> (Scope 2) emissions refer to the indirect emission of CO<sub>2</sub> eq from purchased electricity.

<sup>5</sup> Air emissions are estimated based on single or periodic measured air pollutant concentrations multiplied by average air flow rates and total working hours in a year.

<sup>6</sup> The data covers only the major operating locations of the Group.

<sup>7</sup> Turnover ratio is calculated as number of employees leaving during the year (voluntarily and involuntarily) per total workforce as of 31 March 2018. Blue collar is excluded from the calculation.

<sup>8</sup> Recordable injuries include injuries except first aid cases as defined by US Occupational Safety and Health Administration ("OSHA") regulation.

<sup>9</sup> Recordable injury frequency is calculated as the number of recordable injuries per 100 employees working each year.

<sup>10</sup> Lost time accident refers to recordable injuries with lost time of more than one working day.

<sup>11</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") towards the material sustainability aspects and the progress of achievement attained in this regard. The Report covers the period of 1st April 2017 to 31st March 2018.

The aim of this verification is to provide a reasonable assurance on the completeness and accuracy of the information stated in 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

Our verification process was designed to obtain a reasonable level of assurance for devising opinions and conclusions. The extent of this verification process undertaken was provided for the criteria set in the ESG Guide.

The verification process included verifying the system and process for collecting, collating and reporting sustainability performance data, reviewing relevant documentation, interviewing responsible personnel with accountability for preparing the reporting contents and verifying selected representative sample of data and information. Raw data and supporting evidence of the selected samples were also thoroughly examined during the verification process.

#### 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

On the basis of our verification results and in accordance with the verification procedures undertaken, it is the opinion of HKQAA that:

- The report is prepared in accordance with the ESG Guide and the key performance indicators are clearly addressed with evidence supported;
- The information stated in the Report illustrates the sustainability performance of Johnson Electric during the reporting period in a structured, balanced and consistent manner; and
- The data and information disclosed in the Report are factual, accurate and reliable.

In conclusion, the Report provides a transparent disclosure to stakeholders regarding the sustainability performance of Johnson Electric in a responsive, consistent, fair and truthful manner.

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

Connie Sham Head of Audit June 2018

#### Johnson Electric Holdings Limited

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