We are aware of the significant risks posed by climate change, environmental pollution, resource scarcity and freshwater shortage. As part of our commitment to excellence, we endeavour to incorporate more sustainable approaches in our business operations. This is achieved by optimising energy usage and reducing carbon emissions, lowering the amount of pollution and waste we generate, conserving and protecting water supplies as well as protecting biodiversity. We find that measuring and managing our environmental performance helps to lower environmental impacts.

In FY2019, we modified our Health, Safety and Environment ("HSE") Policy statement into two separate policies – Environment Policy and Occupational Safety and Health ("OSH") Policy. The change to the policies was a result of our continuous engagement with the Department of Environment, who highlighted a need for a stand-alone policy on environment today.

We place a high level of importance and are committed to protecting the environment, an intended outcome of the Environmental Management System ("EMS"). The Construction and Industry Divisions comply with the EMS ISO 14001:2015, whilst the Property Division is in the midst of obtaining the certification. By managing all environmental risks and capitalising on the opportunities for improvement, we not only reduce the impact of pollution from its activities, but also elevate our capabilities to operate in a more sustainable manner.

We practice self-regulation, ensuring that all practices are in-line with the necessary requirements to keep the sites safe and the surrounding environment protected. The environmental quality monitoring has been carried out to ensure compliance with regulatory limits as defined in the Environmental Impact Assessment ("EIA") approval conditions or relevant Malaysian Standards. We did not receive any notification of non-compliance with environmental laws and regulations in FY2019.

PREVENTING POLLUTION

Keeping the environment safe from harm and pollution is a collective responsibility. IJM Group is committed to controlling and preventing environmental pollution from occurring in our business activities. All Divisions adhere to the Environmental Pollution Control Guidelines on air, noise and water pollution control in line with the objectives of our Environment Policy.

We maintain best management practices to control erosion and sedimentation impact from construction and quarrying activities. We actively identify and assess environmental aspects to determine controls that are best suited to manage potential pollution at sites. These controls have been implemented at all workplaces based on the needs and site conditions which include silt fences, sand bag barriers, sediment basin or silt traps. Controls have also been put into place for periodic monitoring of air quality, noise and vibration levels at sites.



Employees performed environmental audit at a project site



Employees of the Property Division engaged on environmental protection and the benefits of the Environmental Management System



Silt trap with noise barrier in the background at one of the project sites

In the case of a spill, IJM workplaces have identified and planned actions to respond to the situation. The area of the spill shall be cordoned off and restricted from entry, with designated and trained personnel cleaning up the spill with proper equipment and clothing. In the event of a major spill that has an impact on a large area or can lead to risk of injury or explosion, the Hazardous Materials (Hazmat) team will be notified with instructions to contain the situation. The Port Division conducts oil spill drills and have the Oil Spill Emergency Response Team ready for emergencies. Kuantan Port abides to all local and international regulations, including the Marine Oil Pollution Convention (MARPOL 73/78 Convention) and the International Safety Guide for Oil Tankers and Terminals (ISGOTT). No significant spills were reported for the Group during the reporting period.

Responsible handling of materials

The Port Division exports bauxite, the sedimentary mined rock that is the principal ore for aluminium, amongst other dry bulk cargoes such as iron ore, palm kernel expellers and fertilisers. Since the lifting of the moratorium on bauxite mining activities in April 2019 following a Federal Government halt on 15 January 2016, the Port Division is taking extra precautions which include implementing a stringent Standard Operating Procedure ("SOP") by the Ministry of Water, Land and Natural Resources. On pollution control, the new SOP allows only two berths at the Kuantan Port to handle bauxite for export, via the conveyor system to transport bauxite directly to the ships from the centralised transit stockpiles. The warehouse storing bauxite has only two entry-exit points covered with netting to reduce 75% of wind and a 3 metres high boundary hoarding.



Kuantan Port's Emergency Response Team conducts an oil spill drill

The warehouse is equipped with a washing bay and a high-pressure water jet, perimeter drains and a retention pond to ensure that all cargo trucks are cleaned before going on the road. The SOP states that the monthly capacity of bauxite is capped at 600,000 tonnes.

The Port Division recently installed a conveyor belt at the New Deep Water Terminal that will later connect the Kuantan Port to an iron and steel plant belonging to Alliance Steel (M) Sdn Bhd. This conveyor belt improves productivity as it helps move both heavy and light materials, such as iron ore and coal, to and from Kuantan Port to Alliance Steel. The conveyor system is equipped to cater 180,000 tonnes of storage area which is surrounded by perimeter drains. Washing bays are also available to wash lorries before they exit onto the main road. Any contaminated surface runoff water is treated via the treatment plant. The 700 metres conveyor belt connects the storage area to the vessels, thus minimising cargo spillage from the stockpile to the wharf area, and hence avoiding pollution.

Port Division's Throughput by Cargo Type in FY2019 (Freight Weight Tonnes)



REDUCING AND MANAGING WASTE

Total Scheduled and Non-Scheduled

Waste Generated in FY2019 (MT)

We aim to reduce the amount of waste we generate and to reuse or recycle materials. In FY2019, we generated 44,494 tonnes of waste as a Group, a significant drop from the previous year of 68,607 tonnes. The highest volume of waste generated in the reporting period were from Construction, Industry and Toll Divisions. Around 12% of our total waste footprint was reused or recycled in the reporting year.

Toll 6,848 15.39% Port 8 0.02% Total Plantation 44.494 3,003 6.75% Construction 18.101 40.68% Industry 12,517 28.13% Property 4.017 9.03%

Our Construction Division practices waste management by segregating timber, steel and concrete wastes. All sites ensure availability of adequate receptacles for temporary collection of waste that are removed from sites by licensed contractors.

Reused or Recycled Construction Waste

| Waste Type | Reused (MT) | Recycled (MT) |
|------------|-------------|---------------|
| Timber | 5 | 1,177 |
| Steel | Less than 1 | 360 |
| Concrete | 455 | 444 |

Our Industry Division continues to reclaim concrete waste generated from operations since January 2016. The concrete reclaimer is used to segregate sand, aggregates and slurry effluents from unused concrete resulting in cost savings and effective waste management. In FY2019, the system reclaimed 455 tonnes of sand and 652 tonnes of aggregates for production use instead of landfilling. The recovered sand and aggregates are mixed into the stockpile and reused in production. Slurry effluents from the concrete reclaimer flows into the tank and allows suspended particles to settle out of water as it flows slowly through the tank, thereby providing recycled water. Water separated by this method, totalling 2,058 m³, is reused for concrete batching, truck washing, sprinkler systems and cleaning purposes.

Handling scheduled wastes

We manage scheduled wastes according to the stipulated legislations where a designated storage area is constructed at all sites based on guidelines and specifications. Licensed contractors are appointed to transport these wastes off site to a treatment facility. We emphasise on reducing the generation of such wastes through proper handling of chemicals or materials that are disposed as scheduled wastes. We inspect and maintain our machineries and equipment frequently to avoid any spillage or leaking that may contribute to the generation of scheduled wastes.



Recovering energy from waste and making good use of organic materials exemplify how waste can be a resource. One example is the collection of methane gas from our oil palm mills. In FY2019, the Plantation Division generated 481,435 MT of biomass residues from by-products generated from mill operations.

By-products Generated from Mill Operations

| Raw Material | Percentage Recycled from Raw Materials | Usage |
|------------------------|-------------------------------------------|----------------|
| Fiber | 100% | Fuel |
| Shell | 99% | Fuel |
| Empty fruit bunches | 96% | Mulch and fuel |

At present, the management and control of electronic waste or e-waste is regulated under the Environment Quality (Scheduled Wastes) Regulations 2005. Under this regulation, e-waste is categorised as scheduled waste. Most e-waste contains precious metals (such as gold, silver, platinum and palladium), iron, copper, aluminium and plastics that can be extracted and sold. We practice the disposal of scheduled wastes via contractors registered with the state environmental department.

Electrical and Electronic Equipment Wastes (By Number of Units)

| E-waste Type | 2015 | 2016 | 2017 | 2018 |
|-----------------------------------------------------------------------------------------------|------|------|------|------|
| Monitors | 23 | 57 | 96 | 50 |
| Desktop computers | 196 | 93 | 78 | 101 |
| Notebook computers | 32 | 16 | 59 | 39 |
| Printers | 54 | 73 | 37 | 31 |
| Servers | 8 | 4 | _ | 27 |
| Others i.e. scanner, fax machine, AVR, UPS, keyboard, hard disk, projector, network equipment | 183 | 80 | 56 | 122 |

MEASURING AND MANAGING OUR WATER FOOTPRINT

Malaysia is blessed with rich water resources, receiving an average annual rainfall of 3,000mm, equivalent to 990 billion m³ of water. Yet, we are faced with water shortages and crisis in some parts of the country during the dry season. We respect water as a precious resource and focus on its sustainable use. Water management is a key

component of our social license to operate and crucial in meeting future water needs. This is in line with SDG 6 in ensuring the availability



and sustainable management of water, as we proactively increase water-efficiency across all businesses.

As a Group, our water usage decreased by 2% from 2.72 million m³ in FY2018 to 2.65 million m³ in FY2019. The Plantation and Port Divisions were the largest consumers, accounting for 74% of our total water footprint. The Plantation Division used over 1.4 million m³ to process fresh fruit bunches in the palm oil mills. Sourced from the catchment ponds, this processed water saw an increase of 13% from FY2018 in line with the increased production in the Indonesian operations.



Total Water Consumption by Division (m³)



Total Water Consumption by Source in FY2019 (m³)

We invest in technologies to treat, reuse and recycle water from our operations so that we can responsibly manage our water footprint while meeting environmental standards. For instance, the Construction Division adopts the CLEARTEC wastewater treatment equipment to remove suspended solids below 50mg/litre from both construction site rainwater runoff and selected industrial waste water. This is to allow the treated water to either be discharged into the public drainage system or recycled for further use. This system has been implemented at or planned in several of our construction projects. The Plantation Division has in place a water management plan in all its estates, including stringent periodic audits to ensure the adherence to the environmental management plans and policies. The Division treats the Palm Oil Mill Effluents ("POME") that is generated from the milling activities in order to meet with the stringent environmental limits. The treated POME is then channelled to the field for land irrigation.

Total POME Generated from Oil Palm Mill Operations (m³)



Rainwater harvesting

Several Divisions have implemented rainwater harvesting systems to reduce our consumption of water.

| Division | Examples of Harvested Water Usage | |
|------------|------------------------------------------------------------------------------------------------------------------------------|--|
| Property | Landscaping at Menara Prudential at TRX, Kuala Lumpur; The Arc at Bandar Rimbayu, Selangor; and The Light Waterfront, Penang | |
| Industry | Road cleaning at all quarries and factories | |
| Plantation | Mill processing, nursery irrigation and domestic use | |
| Port | Washing bays | |
| Toll | Landscaping and road cleaning at Loke Yew and Eco Majestic Toll Plazas | |

CASE STUDY: WATER USAGE AT THE PRETENSIONED SPUN CONCRETE PILE FACTORIES

Our Industry Division, the first commercial manufacturer of pretensioned spun concrete ("PSC") piles in Malaysia and the largest in South East Asia, has 11 PSC pile factories in Peninsular Malaysia. PSC piles are often used in the construction industry to construct bridges, build foundations, civil engineering works, marine structures, and piled embankments. In this reporting period, the factories produced 1.46 million tonnes of piles.

Aside from the materials used to create spun piles such as aggregates, cement, prestressing steel and spiral wire, water is also used in the manufacturing process. Water is mostly used in mixing concrete at the batching plants, where the concrete is discharged via the feeding hoppers during the concrete feeding process. Water is used in the boilers to produce steam for the steam curing process and the sprinkler systems as well as facility cleaning during the other stages of the manufacturing process.

Eighty-eight percent of the total water consumed by Industry Division was used at the PSC pile factories. In 2000, we invested in rainwater harvesting systems for our factories, collecting 12,908 m³ of water in FY2019. Water from the rainwater harvesting system is used for cleaning purposes for the batching plants, hoppers and mixers; as well as for the sprinkler systems. Wastewater is either discharged directly or recycled, after on-site treatment.





Water Consumption by Source for Industry Division in FY2019 (m³)

Our water usage was at its peak in FY2009 due to the commencement of the Senai Factory, adding to a total of nine factories. The use of autoclaves in the production process consumed large amounts of water.

In FY2009, water usage was high also owing to a trial test on an additive i.e. Polycarboxylic Ether (PCE) in three factories (Jawi, Klang and Kapar). The additive has better adhesive strength thus reducing the cement used in the production process which gradually eliminated the need for autoclaves, in the ensuing years. In September 2010, we eliminated the use of autoclaves from the manufacturing process along with the normal cast's steam curing process, significantly reducing water usage.

In FY2011, we saw a 36% decrease in water use from its peak in FY2009, having successfully optimised the use of cement and water in the concrete mix. We conducted further studies to improve on our cement-water ratio without affecting the quality. In September 2012, we started using the additive in large-diameter pile production at our Lumut factory allowing further water use reduction in FY2013.

In FY2014, we started seeing a hike in water usage as a result of introducing the concrete pumping process at the Jawi factory in December 2012. During the initial stages of the process, more water was used as we were in the trial stages of concrete pumping. In the following years, we continued to review and improve the concrete pumping cement-water ratio. We saw a gradual decrease in the average water usage from FY2014 to FY2017.

In FY2018, we saw an increase in water usage to 308,434 m³, a 9% increase from FY2017. This hike was due to the increase in production of the Grade 90 and Grade 100 piles. We are now installing water meters in our factories in stages to monitor water usage in our operations.



PSC Pile Factories' Water Usage (m³)

CONSERVING LAND AND BIODIVERSITY

We seek to understand and respond to any potential impacts our activities may have on the biodiversity and ecosystems in our projects and operations. All projects and operations undergo EIA prior to project approval and implementation. We seek to minimise our impact to the ecosystem and carry out biodiversity conservation in areas where we operate.

Our Construction Division, through its Erosion and Sedimentation Control Plan, enhances project aesthetics and eliminates damage to natural resources. Best management practices include usage of sand bunds for land reclamation works along the seaside to prevent sea pollution, control of surface water runoff by constructing temporary drainage systems to prevent flooding and use of temporary measures such as groundcover, turfing, vegetation and hydroseeding to prevent slope erosions.



HCV-HCS reassessment in Antutan Estate, PT Primabahagia



Ongoing collaboration with Sabah Wildlife Department in Honorary Wildlife Wardens Training

Responsible planting practices

Our Plantation Division is committed to No Deforestation, No Peat and No Exploitation ("NDPE") which were released in February 2019, to ensure a Deforestation-Free and Exploitation-Free supply chain. We are committed to no deforestation of High Conservation Value ("HCV") and High Carbon Stock ("HCS") areas in any new plantings. Integrated HCV and HCS assessments will be conducted, apart from the social and environmental impact assessments prior to any new land development activities. The Division has set aside 4,308 hectares of HCV areas in our Malaysian and Indonesian operations for conservation, biodiversity enhancement and rehabilitation purposes.

We also work with our supply chain to ensure adherence to the NDPE commitments. We adopt a zero burning policy in new planting and replanting activities. Recognising the importance of adopting the landscape approach in managing HCV areas, we engage with neighbouring communities to mitigate wildlife poaching and encroachment. The Plantation Division commits to the principles under the national sustainability standards which include the MSPO and ISPO.

TACKLING CARBON FOOTPRINT

Malaysia is committed in addressing climate change and has been actively involved in international conventions and developed several policies to address climate change such as the National Policy on Climate Change. Understanding the diversity of our businesses, we are long-term stewards of various assets and we recognise the challenge that climate change presents as highlighted

by the international community. In line with SDG 13 and the national policy, we are raising awareness on climate change amongst employees.



In 2018, Bursa Malaysia published the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). With the effects of climate change becoming increasingly visible and a stronger determination to prevent a detrimental global temperature increase of 1.5 degrees, we do our part and carry out activities which help to mitigate climate change and promote sustainable energy. As a Group, we used over 77.5 million kWh of electricity in FY2019. The biggest consumption of electricity was by the Plantation, Industry and Toll Divisions. Each business has its own specific guidelines on strategic initiatives, performance standards and specific requirements relating to energy efficiency and climate change mitigation measures. Plantation Division consumed approximately 38.8 million kWh of electricity, where more than 75% of its energy is generated using renewable sources.

Total Energy Consumption by Division in FY2019 (kWh)



Since FY2009, the Industry Division has been progressively reducing carbon emissions at its factories. In the reporting period, the biggest reduction was seen in Scope 1 and Scope 3 at 51% and 43% respectively.



Total CO₂ Reduction by Source (tCO₂e)

Note:

- Scope 1: Direct CO₂ emissions that are emitted from sources owned or controlled by our organisation such as from stationary combustion of light fuel oil, diesel and natural gas to produce steam
- Scope 2: Indirect CO₂ emissions that are consumed by our organisation such as purchased electricity for factory use, that may be offset by using renewable energy such as solar PV systems
- Scope 3: Other CO₂ emissions by related activities not owned or controlled by our organisation such as cement purchased for our consumption

We have installed rooftop solar photovoltaic (PV) systems at the Industry Division's factories. About 3,730 tonnes of CO₂ emission was avoided in the last three financial years due to the usage of renewable energy.

| Factories | Kapar | Jawi | Senai | Ulu Choh | Lumut |
|------------------------------------|---------|---------|---------|----------|---------|
| Solar capacity (kWp) | 445 | 700 | 666 | 900 | 776 |
| Total solar energy generated (kWh) | 494,427 | 725,582 | 303,741 | 859,773 | 721,646 |

Our Toll Division have implemented energy saving efforts. The light emitting diode ("LED") lamps installed at our toll highways since 2015 have shown significant savings. In FY2019, we saw 51% and 47% cost savings for Besraya Highway ("BESRAYA") and New Pantai Expressway ("NPE") respectively against the base year FY2016. This resulted in a cumulative reduction of 1,916 tonnes of CO₂ for BESRAYA and 2,996 tonnes of CO₂ for NPE since the installation of LEDs.

Annual CO₂ Emission Reduction Following Installation of LED Lighting (tCO₂e)



The future of green construction and buildings

We realise the projects we undertake for our customers are investment for the future. They create jobs and build the economy; improve the resilience of the world's infrastructure, increase access to energy, resources and vital services; and make the world a safer, cleaner place. The market and client demand have been major forces in driving green construction and buildings. Lowering greenhouse gas emissions, reducing construction waste and conserving natural resources are some of the environmental concerns that are forcing us to re-evaluate how buildings are constructed.

The market and client demand for green buildings sets the tone for our growing list of project portfolio with green building certifications.

Project Portfolio with Green Building Certifications

| Green Building Index ("GBI") | The Light Linear | |
|---------------------------------|---------------------------------------------|--|
| | The Light Point | |
| | The Light Collection I | |
| | The Light Collection II | |
| | The Light Collection III | |
| | The Light Collection IV | |
| | • The Address | |
| | • Bandar Rimbayu | |
| | Kondominium Altitude 236 | |
| GreenRE | Pantai Sentral Park (Parcel 2) | |
| LEED | Menara Prudential | |



Employee-initiated information session on green buildings by an external consultant who volunteered his time and expertise to educate our employees on green buildings