BUSINESS REVIEW

OPERATING SAFELY AND SUSTAINABLY

Further details on Operating Safely and Sustainably
https://www.misc.com.my/sustainability

KEY HIGHLIGHTS

Received
Notable Achievement in Environmental Performance
of the Prime Minister's Hibiscus Award 2019/2020

60% and **31%**
annual reduction on LTIF and TRCF respectively

0
major spills since 2013

~100%
hazardous waste generated from shore operations
recycled, reused or recovered

GHG
12%
reduction on total GHG emissions from 2016

CAPTAIN SACHITHANANTHAN ATMALINGAM
Head of Group Health, Safety, Security & Environment (GHSSE)

OPERATING SAFELY AND SUSTAINABLY

HEAD OF GHSSE'S REMARKS

As a global maritime player, MISC's excellent HSSE performance has been a critical building block in our brand reputation to inspire customers and stakeholders' confidence. In 2020, the Group demonstrated our organisational resilience in transitioning our HSSE policies, systems and practices to one that is more resilient and sustainable to ensure employees, operations, suppliers and customers are safe at all times. This is further strengthened by the Group's drive towards a generative HSSE culture, in which the emphasis is on each and every employee taking ownership of their personal safety by adhering strictly to the standard operating procedures (SOPs) that had been implemented. As a result, the entire Group was able to deliver performance to the satisfaction of the Board and our efforts were recognised by the Malaysian Society for Occupational Safety and Health (MSOSH) which presented us with five awards within various segments of our business.

Although operating in different business segments, MISCs operations were mostly designated as essential services (including transportation, energy, oil and gas, ports and terminals) and when lockdowns were announced, we continued with our operation across each of our business segments, and within all geographic regions worldwide. As a global integrated oil and gas marine related service provider, MISC gained advantage by swiftly incorporating COVID-19 mitigation measures into our pre-existing Pandemic Action and Response Plan. Our well-defined HSSE structure, compliance culture and the best practices embedded in our business operations allowed for the rapid rollout of the new SOPs.

Pandemic Response Teams (PRT) were established at Group level, as well as within each of our subsidiaries. Inputs from the PETRONAS Pandemic Response Team (PPRT) augmented our own teams' actions ensuring comprehensive and robust response to the pandemic. We shared data within the fraternity, while PETRONAS shared its analytics at the regular management meetings held. This forum has proven to be a strong management safety net, as it enabled us to collaboratively identify the best solutions for all types of issues related to the pandemic.

The members of our HSSE Council, which is chaired by the President/ Group CEO, is represented by the Vice Presidents and MD/CEOs of all our business segments including heads from Group Corporate Communications (GCC), Group Internal Audit (GIA) and Group HSSE (GHSSE) along with their HSSE managers. We stepped up the pandemic review by our PRT to regular basis, to ensure we maintained continuous and comprehensive oversight on all pandemic-related impacts. We established end-to-end SOPs across all our operating segments, which adopted guidelines and recommendations by not only the Malaysian authorities, but also from all the jurisdictions that the Group operates in.

The COVID-19 related SOPs, advisories and guidelines, covered all operational aspects, and each office, dock, yard, ship and floating unit had been developed taking into consideration the unique circumstances of that particular operation. We developed specific Incident Management Plans adapted from our existing incident plans, which detailed our response should a COVID-19 incident occur.

As a global business, a large portion of our employees such as ship crew, workers on offshore floating units, and those at docks and shipyards, were required to continue travel arrangements to workplaces. To ensure their safety, we rolled out a comprehensive Journey Management Plan, which covered all aspects of how our employees should manage their journey from one location to another, as well as provided them the support they required. These included mental health support, to help our employees through a difficult and challenging time.

Whilst COVID-19 is our current main health and safety concern, we continue to focus on the safety aspects of our operations. Despite our focus on safety, an unfortunate accident, which has deeply saddened us, was a fatality case we recorded during the year, which occurred during a vessel unmooring operations. We extend our deepest and most heartfelt condolences to the family. To mourn our employee's loss, we had a HSSE Stand Down on 23 September 2020 throughout all our operations worldwide.

A thorough investigation was conducted to identify the fatal incident's root causes. As a result of the findings, several focused recommendations were made which have since been fully implemented. These include re-emphasising the empowerment of the crew to 'Stop Work' and intervene in cases where danger is imminent and improving management of 'line-of-sight' through more effective supervision of work areas. We also conducted Focus Lesson Learnt workshops to gain insights on other similar activity across the Group that can help us ensure that incidents such as these are never repeated.
In 2020, we continued our journey in establishing a Maritime Centre of Excellence that will work with internal stakeholders, industry experts, academia and regulators, to leverage on the plural vantage points and perspectives MISC Group has to propagate and improve best practices in the areas of HSSE. In line with social distancing guidelines, our Focused Lesson Learnt workshops were held through the virtual platform. It was well received among the MISC group subject matter experts, with many breakaway discussions, information, knowledge sharing and expertise emanating from the exercise and this was the seed and catalyst that kick started the further refinement of the Maritime Community of Practice.

We transitioned our learning and development programmes to online platforms. In addition, Work From Home (WFH) arrangements also utilised digital and mobile technologies to enable new ways of working. As we accelerated group-wide digitalisation, cybersecurity risks naturally heightened during the year. However, we were able to ensure a robust cybersecurity infrastructure due to enhancements conducted in line with our risk management approach of sustainably managing cybersecurity risks as low as reasonably practicable (ALARP).

A significant milestone in May 2020 was bringing on board a new Chief Information Security Officer (CISO), and Information Security Manager to oversee this function group-wide. As a matter of priority, the CISO, working with ICT team, has incorporated an enhanced Five-Year Cybersecurity Strategy, which will be rolled out from 2021 onwards. By using the National Institute of Standards and Technology (NIST) Cybersecurity Framework, we have further improved our cybersecurity posture across the areas of 'identify, protect, detect, respond and recover'. This includes introducing several enhancements such as Multi Factor Authentication (MFA) and our password protocols, as well as limiting access to external storage devices. There were regular phishing email drills conducted throughout the year as way of educating the employees about one of the most vulnerable gateway for potential cyberattacks.

As one of the leading global shipping conglomerates, MISC has always maintained our environmental stewardship efforts to protect marine biodiversity. In 2020, we rolled out the MISC Biodiversity Conservation Flagship Programme in Mersing islands, Johor. The Programme aims at improving ocean health through supporting coral reef conservation and taking positive actions to prevent and reduce plastic litter in our oceans. The programme is a partnership between MISC and Reef Check Malaysia, a non-governmental organisation specialising in marine conservation. Under the programme, various activities to support sustainable reef management of the Mersing islands were carried out in addition to baseline assessment on waste management. Due to the pandemic, we were not able to get our employees physically involved in the programme as we had originally intended. This aspect of the programme has been put on hold, and we hope to resume it in 2021.

A momentous award MISC Group received during the year was the Notable Achievement in Environmental Performance at the Malaysian Prime Minister's Hibiscus Award. Additionally, we have been certified as Green Seal® Green Office Partners for our offices – MISC Berhad (KL), Eaglestar (KL), AET (KL), MHB (KL), ALAM, as well as MMS (KL, Sg. Udang Port, Kimanis and Miri). This brings the total number of MISC Group offices certified as Green Seal Green Office Partners to 10 offices, with four AET offices having been certified earlier. Under the programme, various improvements were implemented covering aspects of waste segregation, employees education, energy savings on IT equipment and switching to the usage of paper certified as harvested from sustainable forests.

Our priority for 2021 is to embed the MISC Sustainability Strategy 2021–2025 into HSSE touch points such as cybersecurity, health and safety, decarbonisation, promoting the circular economy and biodiversity conservation. Managing the ongoing COVID-19 pandemic along with strengthening our HSSE culture remains our utmost priority in our bid to keep our employees safe. As a Group which recorded more than 45 million man-hours this year serving major international energy providers, process safety remains a critical component of our HSSE agenda. Through our concerted efforts, we are confident of retaining our excellent HSSE reputation, as a highly reliable and credible partner for gold standard customers in the maritime industry.

CAPTAIN SACHITHANANTHAN ATMALINGAM
Head of Group Health, Safety, Security & Environment (GHSSE)

HSSE GOVERNANCE

MISC's HSSE culture is driven by the management's strong commitment and implemented by the various HSSE committees throughout the Group. The MISC Group HSSE Council is chaired by our President/Group CEO with members consisting of the respective VPs and MD/ CEOs of the various subsidiaries, Head of Group HSSE, Head of Group Internal Audit (GIA) and Head of Group Corporate Communications (GCC). The Council oversees all HSSE matters related to the Group and meets on a monthly basis to review HSSE performance as well as ongoing efforts to improve performance.

All operating units have similar committees or fixed agenda in their senior management committees that exhibits the strong leadership commitment towards HSSE which comprises MISC representatives from both the employer (i.e. MISC) and employees.

HSSE managers within the Group meet every quarter during the MISC HSSE Managers meeting where HSSE performance and pertinent HSSE matters were shared and discussed. This forum acts as another avenue for enhancing the professional knowledge of core HSSE practitioners, and enabling engagement and governance within the Group to ensure effective HSSE practice and implementation.

SAFETY

HEALTH, SAFETY AND ENVIRONMENT MANAGEMENT SYSTEMS (HSEMS)

The HSEMS is a system pursuant to the HSE policy instituted by MISC top management. Our management system is developed in reference to PETRONAS HSE Management System and other recognised international best practices. Eaglestar, MHB and the Offshore Business segment are certified with the ISO 45001:2018 Occupational Health and Safety Management System which recognises the pursuit for HSSE excellence.

OPERATING SAFELY AND SUSTAINABLY

Health and Safety is one of the key deliverables of our sustainability framework and the risks associated with these are managed through strict adherence to prevailing regulatory and industry requirements. In 2020, we rolled out a group-wide MISC HSSE Non-Compliance Management Guideline for managing cases of non-compliance with MISC Safety Rules. System and procedures are in place to manage unsafe behaviour and HSSE non-compliance incidents, covering incident reporting, investigation, improvement actions and lessons learnt.

To drive excellence in our HSSE culture, we embarked on various health and safety programmes through behavioural Health, Safety, Security and Environment (b-HSSE) to engender a generative HSSE culture in MISC where the key fundamentals of health and safety are fully integrated into every aspect of our business, operations and processes.

Another key element in safety is the determination of causality in incidents and accidents through proper investigation procedures which identified the immediate and root causes through Causation Modeling techniques. The dominant factor in root causes for incidents continues to be issues related to risk management, inadequate hazard identification, application of risk controls and change management. In response to this, we further enhanced our Contractor Intervention Plan within the MISC Group.

EMPLOYEE HSSE PARTICIPATION, CONSULTATION, AND COMMUNICATION

Employees are represented on HSSE matters through the HSSE committees within the group. At the individual level, employees are also given the opportunity to participate in various 'b-HSSE' initiatives organised throughout the year such as the Road Safety campaign, HSSE Recognition Day, as well as through Unsafe Condition Unsafe Act (UCUA) reporting on HSSE matters.

In addition to the communication of HSSE matters at the respective Council and Committee levels, disclosure of HSSE matters and performance including HSSE Alerts and Lessons Learnt are also communicated regularly throughout the Group via various channels (i.e. Workplace, MISC intranet portal, e-mail blasts).

UNSAFE ACT UNSAFE CONDITION

We have always placed great emphasis on proactive interventions to prevent incidents. Thus, the Unsafe Condition Unsafe Act (UCUA) reporting and analytics have been enhanced in the form of a digital UCUA application. The digital application, which is available on mobile and web platform, allows for efficient reporting and the analysis to be performed quickly even on a daily basis. In 2020, a total of 81,500 UCUA reports were received from employees and contractors, and these reports have been resolved by the relevant onsite functions.

Findings from UCUA analysis are communicated through daily Toolbox Talks with the workforce and during HSSE campaigns.

UNSAFE CONDITION UNSAFE ACT REPORTING PROCESS

Employee observes unsafe acts and conditions at workplace

Employee reports to HSSE team

HSSE team investigates and implements corrective actions

HSSE ASSURANCE IN 2020

HSSE Assurance is carried out with the objective to verify, evaluate and review the HSSE operational activities to ensure their integrity and reliability are always maintained, consistent with international regulations, HSSE controls and internal policies. Moreover, Group HSSE reviews the adequacy and effectiveness of HSSE controls, assessment on compliance with regulatory requirements and HSSE procedures.

In 2020, a total of 21 HSEMS Assurance assignments were completed comprising of a subsidiary company, seven floating assets and 13 contractors. Due to the pendemic, five out of the 21 assignments were carried out remotely or off-site. The Remote HSEMS Assurance is a new norm that the Internal HSSE team established to ensure continual HSEMS Assurance is in place throughout the year.

Unfortunately, the HSEMS Assurance on shipyards could not be carried out during this period due to the COVID-19 pandemic which resulted in extended travel restrictions throughout the year, thereby making site visits not feasible.

HSEMS Assurance Conducted for 2020

A total of 14 HSEMS Assurance were conducted in 2020 as depicted in the table below:

Description of Assurance Programme	2020 Initiatives
HSEMS Assurance on subsidiaries' contractors - *initiative towards improving HSE Performance within Subsidiaries' HSEMS implementation on contractors*	**6 MHB Contractors:** • 2 physical site visits prior to the enforcement of the Movement Control Order (MCO) • 4 physical site visits after the MCO was lifted when domestic travel was allowed with strict adherence to the SOP **3 ALAM Contractors:** • Physical site visits prior to the MCO **3 Eaglestar Contractors:** • Remote assurance conducted via virtual platform **1 MMS Contractor:** • Site visit after the MCO was lifted when domestic travel was allowed with strict adherence to the SOP
HSEMS Tier-2 - *part of MISC's effort to verify that the Subsidiaries' HSEMS is implemented effectively and to identify areas for improvement*	**1 ALAM HSEMS:** • Physical site visit conducted post-MCO when domestic travel was allowed with strict adherence to the SOP

STOP WORK AUTHORITY

Due to the high risk working conditions of our operations, the implementation of a strong safety culture is both necessary and emphasised. The Stop Work Authority is one of the several initiatives developed to further promote the practice of safe behaviour amongst all employees including seafarers on board vessels.

SAFETY TRAINING

MISC Group has a comprehensive HSSE training regime for all the frontliners throughout the year. Apart from statutory requirements as per the job requirement, additional training are conducted regularly.

Various trainings and events were conducted virtually during the year under review which include:

- Road Safety Reflection: What More Can We Do?
- HSSE Stand Down 2020
- HSSE Lesson Learnt Workshop
- HSSE Non-Compliance Management Employees Briefing

The virtual events received overwhelming participation from employees when compared to the physical events conducted in previous years.

SAFETY PERFORMANCE

In 2020 we recorded one fatality due to an unmooring accident onboard one of our petroleum vessel. One life lost is one too many. All accidents are deemed intolerable as we believe it is our collective responsibility to ensure the safety of our employees.

Following the incident, we immediately conducted an investigation to identify the root causes by using causation modelling technique. As a result of the investigation, several recommendations were made, which have since been implemented such as reinforcing crew empowerment for Stop Work and intervention. In addition, enhancement was made on the line of sight for more effective work areas supervision. We also conducted Focused Lesson Learnt Workshop to gain insights that can help us ensure that incidents such as these never gets repeated. The workshop, which consists of of 31 marine subject matter experts including 13 representatives from the non-HSE fraternity and 10 leadership representatives. Key takeaways from the lessons learnt were also shared with our customers.

OPERATING SAFELY AND SUSTAINABLY

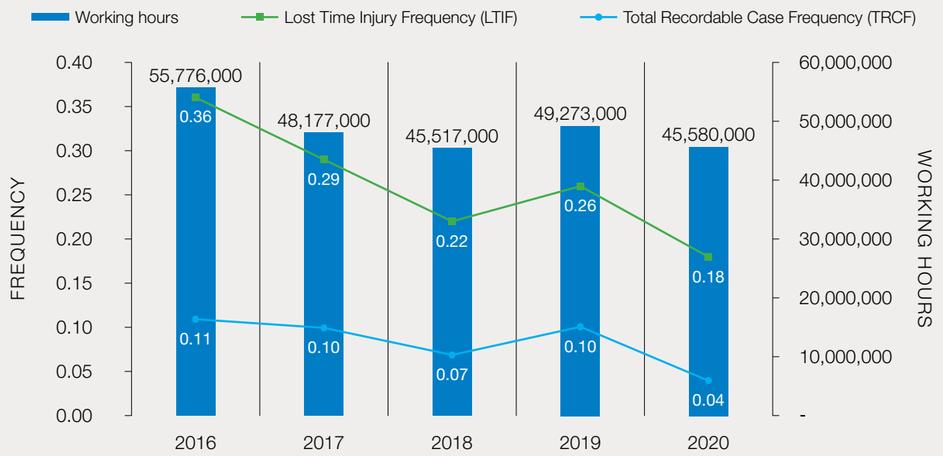
SPECIAL FEATURE – HSSE STAND DOWN

On 21 September 2020, colleagues from all over the world at sea and shore, gathered to participate in the MISC Group HSSE Stand Down to pay tribute to late able-bodied seaman. Reflective thoughts were shared by Mr Yee Yang Chien, President/ Group CEO, Captain Raja Sager, Managing Director/CEO of Eaglestar and Captain Rajalingam, President & CEO of AET. This incident served as a reflection for all of us to always stay vigilant, and to not take safety for granted.

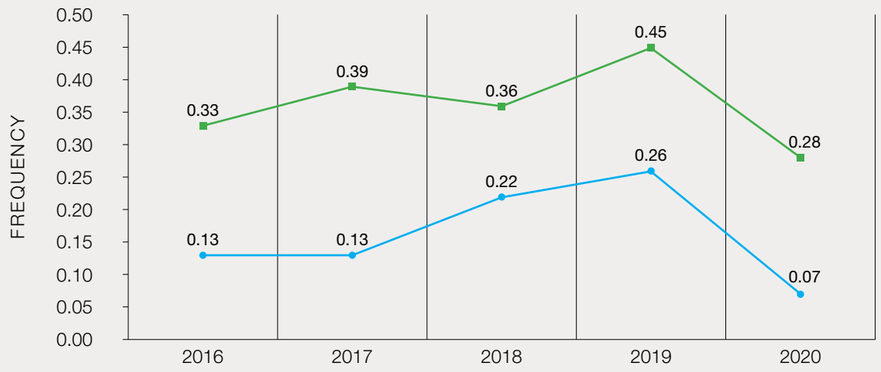
Loss Time Injury Frequency (LTIF) and Total Recordable Case Frequency (TRCF)

In 2020, our LTIF and TRCF, showed improvements of 60% and 31% respectively compared with 2019. The higher emphasis placed on safety culture by increasing HSE supervision at site and implementation of Non-Compliance Management had resulted in an encouraging decline in contractor LTIF and TRCF. Incidents are investigated to identify the underlying causes and Lessons Learnt are shared group wide. Reflective learnings are carried out in groups to instill deeper understanding of incidents and preventative measure.

MISC GROUP SAFETY PERFORMANCE



MISC GROUP CONTRACTORS SAFETY PERFORMANCE



SPECIAL FEATURE – MISC HSSE RECOGNITION DAY 2019

HSSE is our number one priority, and each year we run an annual MISC Group HSSE Recognition Day which aims to increase the commitment of employees towards upholding high quality HSSE at the workplace. It is also an avenue to share HSSE experiences and good practices across the Group, as well as acknowledging the HSSE heroes.

In 2020, we included a special programme, "#SayNotoPlastic", which was graced by our special guest by Y.A.M Tengku Zatashah Binti Sultan Sharifuddin, who is a strong advocate for zero plastics campaigns in Malaysia.

A total of 10 exhibitors from government bodies, non-governmental organisations (NGOs) and corporate companies showcased health, safety, environment, security and cyber security products and programmes.

The event saw the participation of about 300 employees from the Menara Dayabumi office and was also broadcasted live to colleagues in other offices.

SAFETY AWARDS

Malaysian Society for Occupational Safety and Health (MSOSH) Award

- *FPSO MaMPU 1* won the Gold Merit Award for Petroleum, Gas, Petrochemical and Allied Sectors while *FSO Orkid* has been awarded with Gold Class 1 Award
- MISC Maritime Services Sdn Bhd (MMS) Sungai Udang Port clinched the Gold Class 2 under the same category
- Malaysia Marine and Heavy Engineering Sdn Bhd won the Gold Class 1 Award for Construction & Engineering Construction Sectors.
- Akademi Laut Malaysia have garnered the Gold 2 Award for Educational Sectors.

A total of 54 ships and four workboats were awarded the Jones F. Devlin Awards by the Chamber of Shipping of America (CSA)

FSO Orkid was awarded the Repsol Marine Vessel Safety the Operational Excellence Award

Eaglestar's Site Manager Mr. Anwarussahil has been awarded with the Honorary Police Officer title by the Geoje City Police Station

HEALTH

MISC had introduced the b-HSSE campaign in 2018 to improve the general health and wellbeing of our employees. The campaign encourages them to be more physically active, improve their intake of healthy nutrition and develop a healthier mind. In 2019, the campaign was complemented by the Move, Mind, Munch (3Ms) programme to further focus on their health and wellbeing. Various activities were also conducted for employees that included group workouts, Muay Thai classes, group walking challenge, heath talks, monthly health advisories and healthy food campaigns across the Group. In 2020, two health risk assessments (HRA) were completed at both floating storage units.

During the COVID-19 pandemic, MISC has taken various measures towards ensuring the health and safety of its employee which include:

i) Clear and prompt communication – MISC has been monitoring the pandemic situation closely both in Malaysia and internationally; and provide regular update / Health and Safety Advisory. This include employees working arrangement, visitors and contractors' management, business travel, etc.
ii) Case management – MISC through its network of health service providers around the globe ensure access towards prompt testing, quarantine and treatment of employees affected by COVID-19. This is in accordance with the local authorities' procedure.
iii) Sign-on and sign-off procedure for seafarers – due to the pandemic, many seafarers were on extended contract. MISC has been working closely with the authorities and enhanced its procedure to allow for our seafarers to sign-on and sign-off safely. In 2020, we have successfully conducted crew change for 7,767 seafarers. In addition, early this year, we signed the Neptune Declaration on Seafarer Wellbeing and Crew Change in a worldwide call to action to end the unprecedented crew change crisis caused by COVID-19.
iv) Ongoing b-HSSE programme – secondary issues due to COVID-19 such as anxiety and stress, are managed through ongoing b-HSSE activities e.g. health talks, mindfulness sessions, stress management and personal resilience online workshop.

As many of our employees worked from home during the year, we initiated the following health programmes virtually:

- Introduction to Mindfulness
- Mindfulness : Managing Anxiety
- Mindfulness: Gratitude
- Mindfulness: Mind-Heart Coherence
- Mindfulness: Better Sleep

OPERATING SAFELY AND SUSTAINABLY

PETRONAS Walk4trees Challenge

PETRONAS Walk4trees Challenge was commenced in November 2019 and aims at improving our employees' health whilst saving the environment. For every one million steps collected, one tree will be planted. Our goal is to collect 20 billion steps with 20,000 trees to be planted in various locations within Malaysia.

The virtual team-based walking challenge was held using the Bookdoc App. Participants used their fitness tracker and mobile phones to track the number of steps they walked. In 2020, the challenge encouraged our employees, especially those who were working from home due to the pandemic, to have a healthy active lifestyle. It also helps to strengthen teamwork, as they worked towards a common purpose of contributing to a better environment for the future.

Live Workout Sessions

During the year, we replaced our face-to-face workout sessions with virtual live workout sessions by qualified trainers. Employees could live stream these events from the fitness centre's social media channels.

Employee Assistance Programme

The new realities of working from home, home schooling of children, and lack of physical contact with other family members, friends and colleagues, take time to get used to. Adapting to lifestyle changes such as these and managing the fear of contracting the virus and worrying about people close to us who are particularly vulnerable, were challenging for all of us.

MISC understands the challenges faced by our employees and therefore during the year, we initiated the Employee Assistance Programme, a hotline which our people can call to speak to specialist consultants who provide them independent counselling. The programme not just provides help on pandemic-related health issues, but also other aspects such as legal matters, financial difficulties and family issues. The counselling service is provided by a third party service provider, and all communications that take place remain private and confidential.

ENVIRONMENT

ENVIRONMENT MANAGEMENT SYSTEMS

In support of the overarching governance approach and framework of environmental management and in compliance with national and international regulations that are mandatory such as the IMO MARPOL we manage the impact of our operations on the environment via a combination of internal and external management frameworks and systems. As part of our approach, our operations are subjected to comprehensive standards such as the PETRONAS Mandatory Control Framework (MCF) and fleet environmental management system. Eaglestar, MHB and the Offshore Business Unit have been certified with the ISO 14001 Environmental Management System, while LNG and petroleum fleets have been certified with ISO 50001 Energy Management System.

MISC Group Environmental Minimum Requirements

In 2020, we rolled out a new procedure known as the MISC Group Environmental Minimum Requirements with the objective of strengthening environmental governance and compliance with environmental legislation through prescriptive requirements. This procedure provides the base standard for the management of six focus areas of significant environmental risks associated with MISC's operations, namely:

1. Air Emission Management
2. Hazardous Waste Management
3. Wastewater Management
4. Soil and Groundwater Management
5. Environmental Management of Projects
6. Environmentally Hazardous Substances Management

Compliance of our operations to this corporate procedure are regularly assessed as part of MISC's internal verification and assurance.

GREENHOUSE GAS (GHG) EMISSIONS

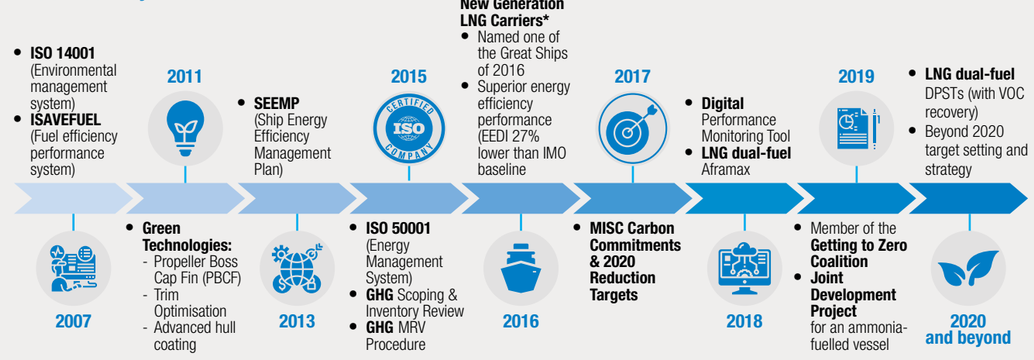
MISC embarked on our carbon and energy efficient journey in 2007 with the intention of minimising our operations' environmental footprint. Our journey began with obtaining the ISO 14001 Environmental Management System certification and the 'ISAVEFUEL' programme as a fuel efficiency and performance system for our LNG and chemical vessels. Since then, we have incorporated various green technologies and energy efficiency measures in our vessel management to progress with our journey.

These include incorporating green technologies such as Propellor Boss Cap Fin and advanced hull coating. We incepted the Ship Energy Efficiency Management Plan in 2013, and by 2015 had obtained certification for the ISO 50001 Energy Management System for the petroleum fleet. Since 2016 onwards, we have taken delivery of vessels such as the Seri C Moss Type LNG carrier and more recently LNG dual-fuel vessels which incorporate eco-friendly technologies, reinforcing our commitment to operate responsibly and care for the environment.

In 2017, we launched the MISC Carbon Commitments and set ourselves targets in relation to these. Since then, we have been focusing on delivering on these commitments. In 2019, MISC became a member of the Getting to Zero Coalition, a partnership between the Global Maritime Forum, the Friends of Ocean Action, and the World Economic Forum that is committed to developing commercially viable zero-emission vessels by 2030. In line with this, MISC embarked on a Joint Development Project (JDP) with our strategic partners, to develop an ammonia-fuelled vessel to support shipping's drive towards a decarbonised future. See page 120 for The Castor Initiative.

CARBON AND ENERGY EFFICIENY

MISC Fleet Key Milestones

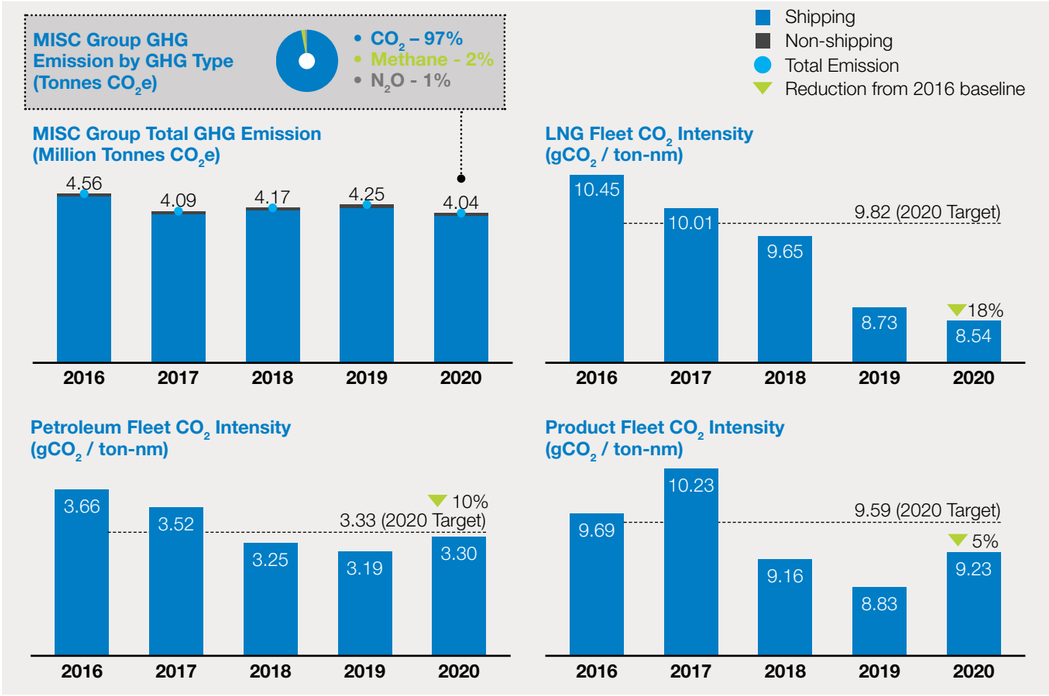


*Recognition by Maritime Reporter & Engineering News for Seri Camellia, i.e. the first LNGC in a series of five of its kind

Our greenhouse gas (GHG) emissions monitoring and reporting is guided by the following key standards and references: the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), Third IMO GHG Study 2014, and the American Petroleum Institute (API) Compendium of GHG Methodologies for the Oil and Gas Industry.

The Group's organisational boundary for GHG reporting is defined based on the operational control approach. Based on this approach, 100% of GHG emissions over the operations that are controlled by MISC are included in the MISC Group GHG accounting. Our GHG accounting includes Scope 1 (direct) and Scope 2 (indirect emissions from the generation of purchased energy) GHG emissions, while types of GHG included in the accounting for CO_2e are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). The percentage of each gas contribution to the total CO2 equivalent is provided in MISC Group GHG Emissions by GHG Type diagram below.

In 2020, we invested approximately RM164 million for our environmental protection initiatives where RM3.8 million was spent in supporting the mitigation of climate change.



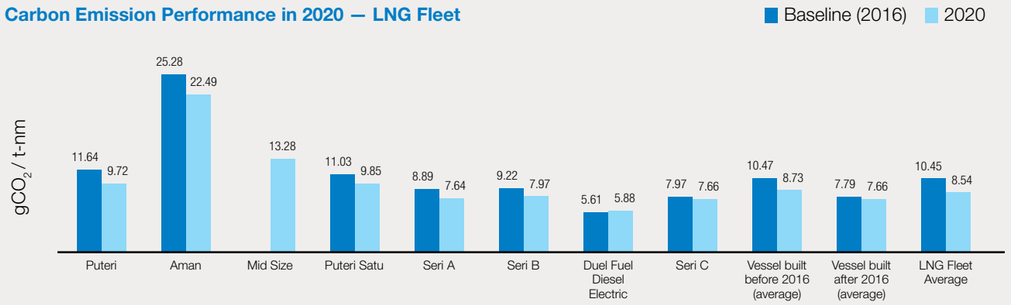
OPERATING SAFELY AND SUSTAINABLY

In 2020, we reduced our GHG emissions from all our operations by an overall 12%, compared to 2016, although transport work increased by 1% within the same period. Additionally, all three vessel segments achieved the CO_2 intensity targets of 9.82, 3.33 and 9.59 measured in unit of gCO_2/ton-nm, for LNG, petroleum and product fleet, respectively. The reduction was contributed by the addition of newbuild vessels with improved carbon efficiency as well as the overall energy efficiency improvement of the existing fleet through technical and operational measures.

MISC FLEET CARBON CO_2 INTENSITY PERFORMANCE

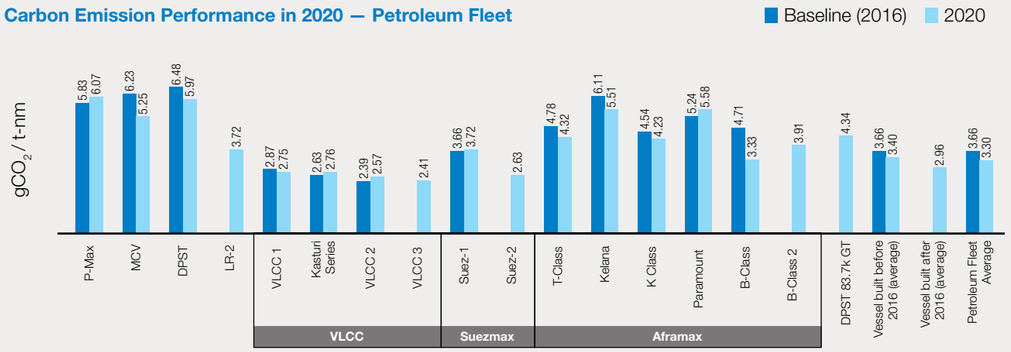
The following graphs present our five-year trend lines for our various fleets' CO_2 Intensity Performance. The performance is compared with our MISC2020 carbon emission targets, against a baseline year of 2016.

Carbon Emission Performance in 2020 — LNG Fleet



Generally, most of our LNG vessel classes showed a CO_2 intensity reduction in 2020 from 2016 with an average fleet reduction of 18%. LNG newbuilds built after 2016 have been, on average, 17% more carbon efficient than the older LNG fleet average, as a result of greener technologies that have been incorporated.

Carbon Emission Performance in 2020 — Petroleum Fleet



The Petroleum fleet has scored a 10% reduction in CO_2 intensity against a 2016 baseline. New vessels built since 2016 have been, on average, more carbon efficient than older vessels as follows:

- New Aframax vessels – 24% more carbon efficient
- New VLCC vessels – 10% more carbon efficient
- New DPST vessels – 27% more carbon efficient
- New Suezmax vessels – 29% more carbon efficient

Note : Third party assurance on our carbon emissions
Each of our vessel's fuel consumption and relevant activity data have been verified by a third party i.e. DNVGL confirming the data were collected and reported in accordance with the methodology and processes set out in the ship's Ship Energy Efficiency Management Plan (SEEMP) as required by Regulation 22A of Annex VI of MARPOL Convention.

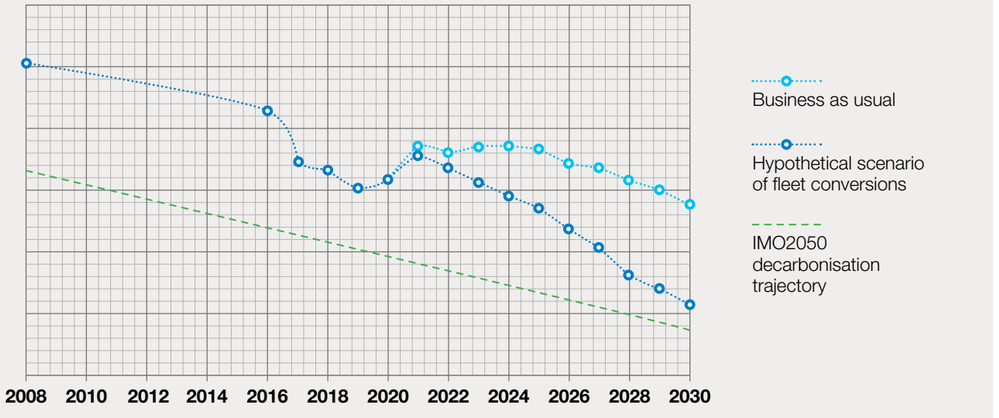
Moving Forward

Our journey ahead is focused on achieving the IMO 2050 aspiration. Going into 2021, we will be reviewing our organisational boundary, baseline year and setting new targets that are aligned with IMO 2030 and IMO 2050 aspirations.

In 2020 we carried out an analysis to calculate our fleet CO_2 emission projections up to 2030. The analysis also served to benchmark our current fleet emissions and emission projections with IMO's decarbonisation trajectory which represents IMO's ambition to reduce total GHG emissions by 50% in 2050 compared to 2008.

Several scenarios were assessed which considered MISC's prospective fleet expansion plan, possible introduction of IMO's regulation mandating operational GHG reduction, and vessel's existing engine upgraded to higher efficiency engines. Hypothetical scenarios on vessels' conversions were also included in the analysis to assess the potential CO_2 reduction possible with CAPEX-intensive solutions such as re-engine to convert steam vessels to diesel engine vessels.

MISC FLEET AVERAGE (LNG & PETROLEUM) CO_2 EMISSION PROJECTIONS (gCO_2 / ton-nm)



The chart above shows our fleet's average CO_2 emission projections to 2030, comprising of LNG and petroleum vessels (measured in gCO_2/ton-nm), providing two key scenarios of lowest and highest reduction. The 'Business as usual' line represents the smallest CO_2 reduction scenario, while the most effective reduction is represented by the line 'Hypothetical scenario of fleet conversions'.

A summary of the analysis of the projection chart is as follows:

- Between 2020 to 2030, we are narrowing the gap between our average fleet CO_2 intensity and IMO's 2050 trajectory.
- Even with the hypothetical scenario of fleet conversion, our average fleet emission in 2030 will still be above IMO's 2050 trajectory, at approximately 16% above the trajectory.

Additionally, our analysis also shows that several of our vessels existing in the fleet currently have CO_2 intensity below the IMO's 2050 trajectory. These include our two dual-fuel diesel electric (DFDE) propulsion system LNG carriers, our VLCCs delivered after year 2013 and our Suezmax vessels delivered in 2018.

Our Future Plan

Based on our projection analysis, while we are narrowing the gap with the IMO 2030 aspiration, we still need to do more to achieve the IMO 2050 target by making a progressive radical shift to move to zero-carbon emission vessels by 2030.

In light of this, MISC has embarked on a Joint Development Project (JDP) by collaborating with other key maritime players to develop an ammonia-fuelled vessel as a zero-carbon emitting vessel in order to achieve the shipping industry's goal of a decarbonised future by 2050. The JDP is a joint effort between MISC, Samsung Heavy Industries (SHI), Lloyd's Register (LR), MAN Energy Solutions, Yara International ASA and the Maritime and Port Authority of Singapore (MPA). Ammonia is just one of the various decarbonisation pathways that the shipping industry is exploring towards the industry's decarbonisation by 2050. More information on the JDP can be found in the Anchoring Sustainability @ MISC section page 120.

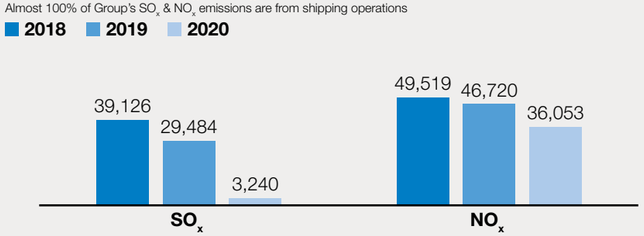
In 2020, methane emissions accounts for 2% of our total GHG emissions. However, we are cognisant of the issue of methane slip emitted from our LNG-fueled engines. We will continue to monitor our methane emissions and consider technologies which reduces methane levels in our future investment.

OPERATING SAFELY AND SUSTAINABLY

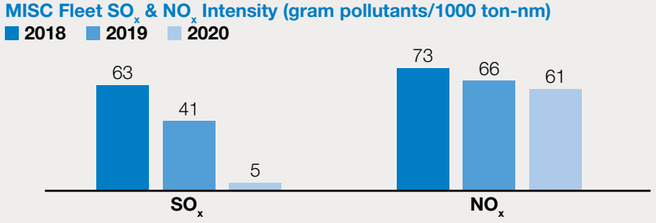
SOx and NOx EMISSIONS

MISC Group Total SO_x & NO_x Emissions (tonnes)

Almost 100% of Group's SO_x & NO_x emissions are from shipping operations



MISC Fleet SO_x & NO_x Intensity (gram pollutants/1000 ton-nm)



AIR EMISSIONS

Under the new global IMO 2020 Global Sulphur Cap limit which came into effect on 1 January 2020, ships will have to use fuel oil on board with a sulphur content of no more than 0.50% m/m, against the current limit of 3.50%. MISC is fully compliant with this by changing our fuel to low sulphur fuel and LNG, as well as having retrofitted a number of vessels with scrubbers. MISC has recorded a significant reduction in SO_x and NO_x intensity as a result of the various intiatives that we have implemented. We have a higher proportion of natural gas consumption in our energy mix. Another significant factor is since 2018, the newbuild vessels in our fleet have been fitted with lower NO_x emission engines.

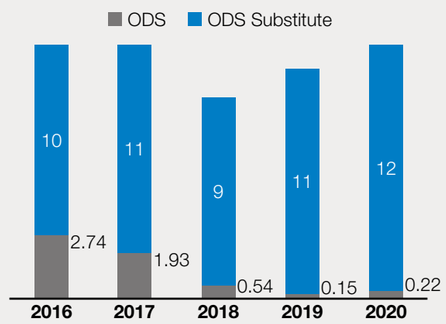
EMISSIONS — REFRIGERANT MANAGEMENT AND OZONE DEPLETING SUBSTANCES (ODS)

MISC has been implementing an Ozone Depleting Substances (ODS) Programme as follows:

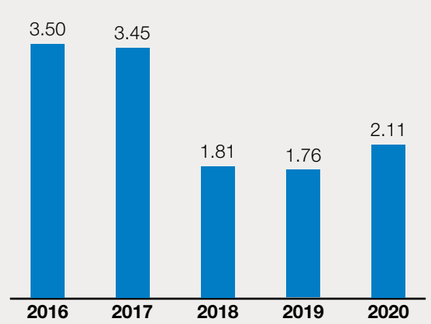
- Removal of ODS by switching to non-ODS refrigerants on vessels and offshore floating assets
- Implementing Refrigerant Management Procedures onboard vessels and offshore assets
- Tracking and regular monitoring of refrigerant consumption

During the year, there were no significant changes in shipping refrigerant consumption compared to the 2016 baseline. A total of 98% of refrigerants used on our vessels were of the non-ozone depleting type. As for ODS consumption, we recorded a 40% reduction by 2020, compared to the 2016 baseline.

MISC Fleet Total Refrigerant Consumption (tonnes)



MISC Group ODS Consumption (tonnes)



ENERGY EFFICIENCY

MISC recognises the importance of adopting energy efficient practices to reduce our dependency on natural resources and non-renewable energy. This approach will play a key role in the Group achieving our carbon emission reduction strategy.

We have in place an Energy Efficiency Reduction Programme for both the shipping and non-shipping aspects of our operations. In 2020, an additional two vessels were installed with the Propeller Boss Cap Fin energy saving device where the refinements in the vessel's fin shape and height enables enhanced propeller thrust and reduced torque, which should lead to fuel savings of between 2% and 5%.

We continue to maintain advanced low friction anti-fouling paint on selected vessels to reduce hull friction by weakening the capability of marine organisms to attach to the coated surface. This correlates to the projection of 4% to 6% reduction in the fleet's carbon emissions emissions.

In 2018, we had upgraded our vessel performance monitoring and analysis system by adopting DNVGL's Navigator and Eco Insight monitoring and reporting tool. This customised software has improved data accuracy through improved monitoring and enhanced performance analysis, enabling informed decisions to be made to improve vessel energy efficiency performance.

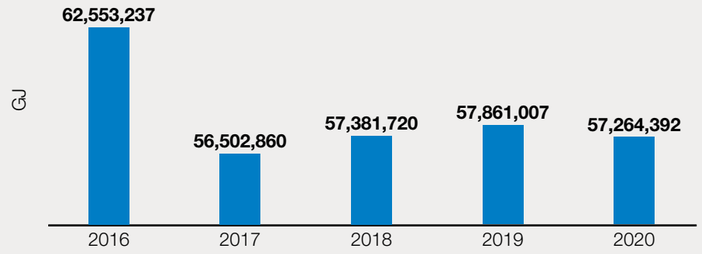
Continuous improvements to our vessels as a result of our Energy Efficiency programmes will also improve our performance in the years to come.

All of our vessels built in 2013 onwards have a better Energy Efficiency Design Index (EEDI) than mandatory requirements. For our newer vessels in 2020, the average EEDI is 3.77 gCO_2 per ton-nm.

With each ship having its individual Energy Efficient Management Plan, we are also well placed to continue with our upward trajectory on operational optimisation.

As for non-shipping operation, seven buildings at MHB's yard have been selected to be installed with total of 8 MWp solar power capacity to generate electricity. The installation is targeted to be completed in early 2021 with an estimated RM8.5 Million cost savings over a period of 21 years. To date, more than 126 LED lights have been installed in our maritime academy, ALAM's campus and will continue to replace the conventional light with energy savings lights.

MISC GROUP TOTAL ENERGY CONSUMPTION



MISC Group has significantly increased its energy efficiency (EE) since strengthening on EE initiatives in 2016. This is evident by the improvements in carbon emissions intensity of our fleet between 2016 to 2020 as shown in Greenhouse gas emission section. In 2020, our energy consumption had shown a reduction of 8.5% compared to 2016.

WASTE MANAGEMENT

Waste from Vessels

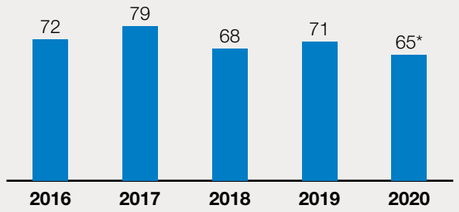
Reducing waste is a key part to lowering our environmental footprint. In this regard, we are proud to share that in 2020 almost 100% of the hazardous waste generated from our non-shipping operations are either recycled, reused or recovered.

Waste management for our shipping operations is governed by MARPOL as stipulated by the IMO. All of our vessels have a garbage management plan in place to ensure that the waste that was produced are managed in a responsible manner and in compliance with the requirements under MARPOL. Waste separation is carried out on board. Recyclables and all wastes collected are sent to shore reception facilities for onwards recycling, treatment, recovery or disposal, while waste which are permitted for on board incineration are disposed in the shipboard incinerator. The only waste that is allowed to be disposed at sea is food waste, and the disposal is carried out in compliance with the MARPOL requirements.

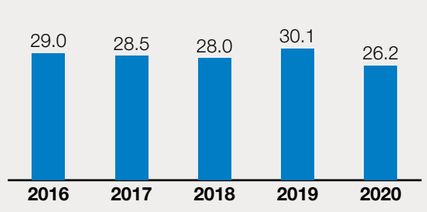
OPERATING SAFELY AND SUSTAINABLY

SHIPPING — GARBAGE GENERATION

MISC Fleet Garbage Generation Per Vessel (m^3)



MISC Fleet Plastic Waste Generation Per Vessel (m^3)



*An amount of 1,500m^3 of anchor chains and shackles were removed from one of our vessel and this data has been excluded from the total garbage generation

In 2020, our total garbage generation per vessels had reduced by 10% compared to 2016. Plastic waste generation per vessels also had reduced by 10% from 2016. These reductions were contributed through key initiatives carried out by the vessels such as reduction of single use plastics onboard all vessels and utilisation of drinking water filtration system instead of supplying drinking water bottles. In order to minimise the generation of packaging waste, we purchased consumable items in bulk where possible.

Reducing Single-Use Plastic in our Operations

Programme onboard our Vessels

Onboard our vessels, we have in place a programme that aims to reduce and ban the use of non-essential single-use plastics, by replacing them with reusable non-plastic alternatives or biodegradable options wherever possible. In 2020, the following measures were undertaken in conjunction with the programme:

- A guide developed and issued to all ships in Jan 2020, providing guidance on the programme to discontinue the use of single use plastics.
- Each ship was required to prepare an inventory of single use plastics used onboard.

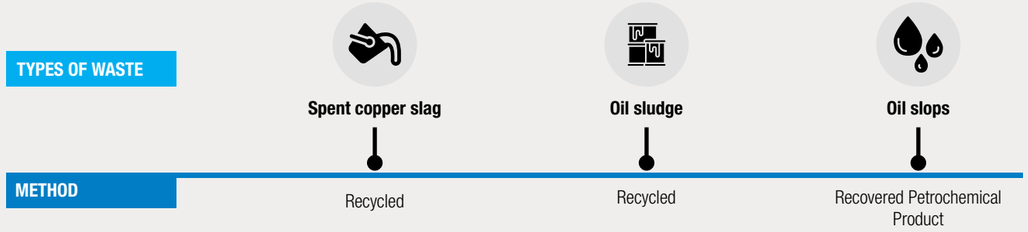
Each ship was required to prepare an execution plan to reduce single use plastics with quantified targets set and monitored based on the inventory where from October 2020 onwards, the target is to prohibit more than 90% of the inventory items.

Among the actions taken by crew members to meet the targets were:

- Stopped the requisition of plastic garbage bags and replaced this with paper-based garbage bags / jumbo bag / gunny sacks.
- Reusable bags were brought along by crew members during shore leave.
- Use of supplies that come in bulk packaging.
- All plastic-based cutlery, plates and cups and small containers were replaced with reusables.
- Plastic food wrapping material were replaced with non-plastic materials like aluminium foil.

WASTE FROM MHB YARD

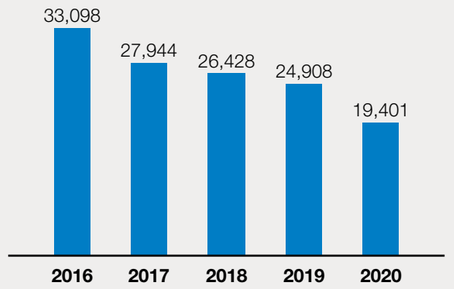
NON-SHIPPING OPERATIONS WASTE MANAGEMENT



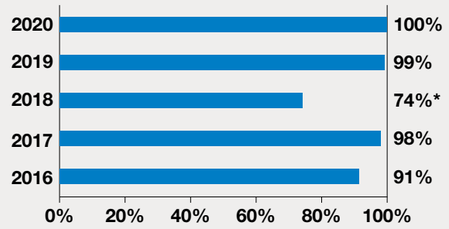
A significant amount of our hazardous waste generation comprises spent blasting materials generated from our shipyard operations in Pasir Gudang. Our spent copper slag waste is fully recycled into raw material for cement manufacturing. MHB continues to explore solutions to reduce wastes generated from blasting operations by looking at alternative blasting materials which allows increased usage before the material is considered wastes.

NON-SHIPPING — HAZARDOUS WASTE

Total Hazardous Waste Generation (Tonnes)



3R (Reuse, Recover & Recycle) Rate (%)



*Low 3R rate is due to cleaning of sludge and slops for the decommissioning of Techno Indah Sdn Bhd

Since 2016, MISC has reduced the total hazardous waste generated from non-shipping operations by 41%. The majority of hazardous waste generated from shore operations emanate from offshore and marine projects at MHB's yard. The use of non-hazardous and high durability blasting materials on certain operations that allow for the repeated use of the material, has led to a significant reduction in hazardous waste produced from MHB's operations. As of end 2020, almost 100% of hazardous waste produced from our shore operations is recycled, reused or recovered.

OPERATING SAFELY AND SUSTAINABLY

Reducing Paper Consumption

With the aim of reducing paper consumption, MISC has been progressively implementing a digital signature programme for internal documents that require approval signatures. MISC partnered with DocuSign to allow its employees to conveniently obtain and deliver digital signatures and thus reduce the need for printing.

Since its introduction in October 2018, we have avoided the following:

Fabric Recycling Drive

A fabric recycling drive was initiated in partnership with Kloth Cares as part of the save our oceans campaign. We adopted our own fabric recycling bin which has been placed at our Headquarter Office in Dayabumi. The initiative was launched during the Group's HSSE Recognition Day held in February 2020. Unwanted fabric that is in good and wearable condition is donated to charitable organisations or exported to developing countries as second-hand fabrics, while fabric that cannot be worn any longer is upcycled as industrial wiping cloth, garments or is used as engineered fuel for cement kilns.

As part of the drive, awareness amongst the employees were also created through the circulation of posters to inform them of the pollution caused by fabric disposal at landfills and the benefits of the collection drives where the fabric will be diverted away from landfills and put into beneficial use through reuse and recycling.

A total of around 400 kg of unwanted fabric was collected in 2020, equivalent to 720 kg of CO_2 avoided and 6.4 million litres of water saved.

Toward A Zero-Waste Culture – 4R Programme

During the year, MMS conducted a Household Electronic Waste (e-Waste) Campaign in Conjunction with National Environment Day (HASN) 2020. The campaign was a joint effort between MMS (Sungai Udang Port), Malaysian Refining Company Sdn Bhd (MRCSB) and the Regasification Terminal in Sungai Udang (RGTSU) and aims to raise awareness among the employees on the proper management of household e-waste in accordance with the Environmental Quality Act 1974. Approximately 755kg of e-waste was collected.

MMS (East Coast Region) embarked on a programme to promote 4R within its operations through a month-long group competition that also involved its contractors. The programme involved the recycling of damaged lifebuoys into usable product. The contest required each group to submit and share their recycling initiative to promote the sustainability of their product. About eight broken lifebuoys were recycled into creative display signages.

CHSSE and the IT Department of AET have worked with a licensed vendor on electronic waste management to establish a collection point of e-waste bins in the Singapore office. Employees are encouraged to dispose e-waste generated both from their home and the office responsibly through the use of this bin instead of disposing it in the general waste. Similarly, for the Houston and UK offices, e-waste collection points have been established and made accessible to the employees.

In addition to that, our Offshore Business Unit has also embarked on the same programme to encourage their employees to collect and dispose their household e-waste responsibly. To date, a total of 16 kg of e-waste has been collected.

AET
In 2018, AET had begun its journey to minimise single use plastics by banning single-use plastic bottles from their offices. AET has continued with its efforts by strengthening communication to educate and improve awareness by displaying posters at strategic locations. These act as reminders to the employees on the importance of minimising single use plastics due to their impact on land, oceans and marine life. In addition, an awareness briefing on single use plastics are given to new joiners during their onboard induction.

MHB
The objective of MHB's 'Bring Your Own' campaign is to reduce the generation of plastic waste in the yard and promote the zero-waste lifestyle amongst its employees whilst increasing their awareness and knowledge on environmental matters.

Green Recycling of Offshore Assets and Vessels

Disposing of assets after it reaches the end of its service life leaves a huge amount of waste, posing a potential hazard to the environment. While shipbreaking has emerged as the most common method of ship disposal, dirty shipbreaking practices have resulted in the dumping of dangerous toxic materials such as asbestos and Polychlorinated Biphenyls (PCBs) on beaches and other open spaces. As a way of responsible ship recycling, since 2018 all of MISC's offshore floating assets which services have been terminated having reached end of their useful life were sold for recycling in accordance with the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships 2009 (Hong Kong Convention). In 2020, two assets i.e. *FSO Cendor and FSO Angsi* were sold for recycling in compliance with the Hong Kong Convention. For more details please refer to the Anchoring Sustainability @ MISC section on page 120 of this Integrated Annual Report.

New Solid Waste Regulation

An evaluation of compliance (EOC) assessment was conducted to assess MISC's operations compliance to the newly enforced regulation, namely the Solid Waste and Public Cleansing Management (Scheme for Commercial, Industrial and Institutional Solid waste) Regulations 2018. The regulation was enforced in 2020 in Kuala Lumpur, Putrajaya, Johor, Melaka, Negeri Sembilan, Pahang, Kedah and Perlis.

The evaluation involved the following elements:

1. Development of an evaluation of compliance register to identify applicable requirements and compliance actions required.
2. Development of a Compliance Action Plan for any non-conformity to the regulations as identified during the assessment.
3. Implementation of Compliance Action Plan.
4. A sharing session by the enforcement agency, Perbadanan Pengurusan Sisa Pepejal dan Pembersihan Awam (SW Corp), was organised for MISC employees to better understand the requirements in order to ensure full compliance with the regulation.

Green Seal® Green Office Partnership Certification

In 2020, we were certified as Green Seal® Green Office Partners for the following offices – MISC Berhad (KL), Eaglestar (KL), AET (KL), MHB (KL), ALAM, and MMS (KL, Sg Udang Port, Kimanis, and Miri). This brings the total of MISC Group offices with Green Seal certification to 10, in addition to four AET offices which had been certified previously.

The Green Seal Green Office Partnership is an internationally recognised certification that implement standards on office sustainability, with a focus on those areas within the direct control of office managers which include waste management, educating the employees, office and pantry supplies, IT equipment management, transportation and office operations.

WATER

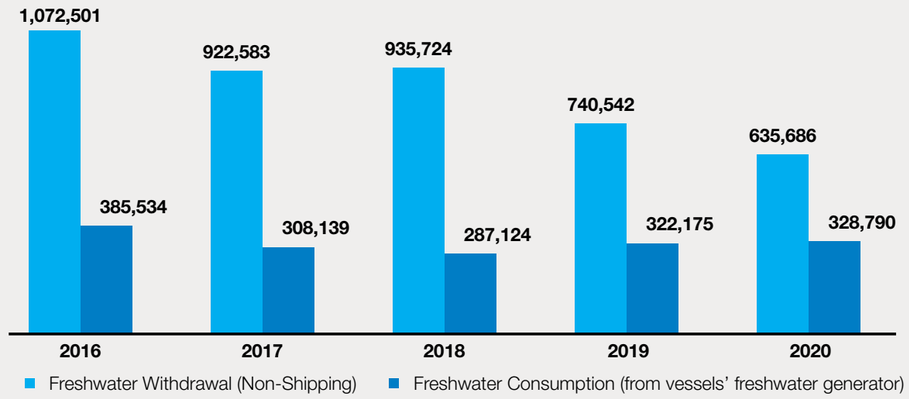
It is anticipated that water will be a critical resource in the future, especially with rising population growth and increasing levels of resource consumption due to the increasing global population. In recognition of this, at MISC, where water is used at both our shore and sea facilities, we remain cognisant of our commitment to ensure water resource efficiency.

Freshwater consumption by our vessels are produced onboard each vessel's freshwater generator, hence, the depletion of freshwater resources is not considered material for our sea operations. Nevertheless, we recognise that water usage on our vessels for domestic and the running of machineries are tied to energy use as energy consumption because a significant amount of energy is required to generate freshwater from these generators.

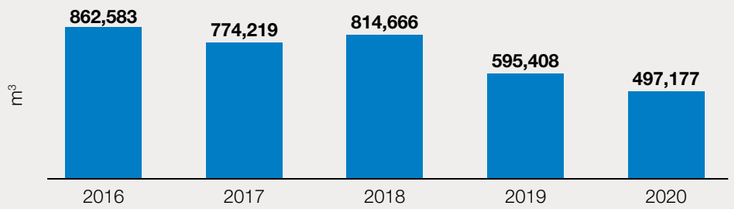
In 2020, the volume of Operational Effluent Discharge from Engine Room reduced by an average of 7% compared to 2019, which exceeded the target of 1.5% we had set ourselves. In order to achieve the objectives, we had tightened our programme for rectification of leakages to reduce water and oil accumulation in the engine room as well as tracking and analysing the effluent to identify and rectify anomalies. Overall, we had reduced our freshwater consumption by 41% from non-shipping operations against a baseline of 2016, and a 15% reduction in freshwater consumption from vessels in 2020 against the 2016 baseline. The reduction for non-shipping was contributed through 4R (Refused, Reduced, Reuse and Recycle) campaigns in addition to installation of water saving fittings in MHB.

OPERATING SAFELY AND SUSTAINABLY

MISC GROUP TOTAL FRESHWATER (M^3)

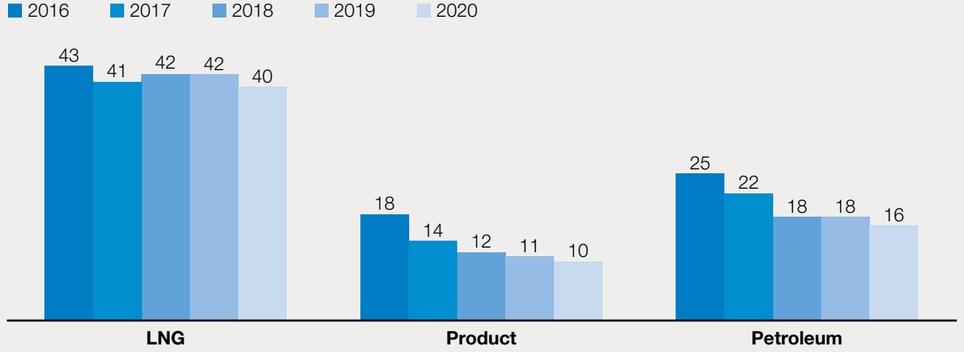


MHB FRESHWATER WITHDRAWAL



WASTEWATER / EFFLUENT DISCHARGE

MISC Fleet Operational Effluent Discharge From Engine Room Per Vessel Per Month (m^3)



BIODIVERSITY

At MISC, we aim to reduce the impact of our shipping operations on marine biodiversity through proper management of ballast water and spill prevention. All our vessels are equipped with ballast water management plans and since 2016, all newbuilds are equipped with Ballast Water Treatment Systems (BWTS) and in 2020, an additional 13 vessels were retrofitted.

SPECIAL FOCUS: HEART OF THE OCEAN

heart OF THE OCEAN

In 2020, MISC Group launched the Heart of the Ocean campaign to improve ocean health by conserving the marine ecosystem and reducing the impact of human activities on the oceans. This is in line with our commitment to ensure the sustainable use of the ocean and the preservation of marine diversity as outlined in UNSDG 14 - Life Below Water.

The Heart of the Ocean icon was created to provide an identity for MISC's biodiversity conservation initiatives and embodies MISC's commitment, conviction and steadfast belief to continuously safeguarding the ocean and its marine biodiversity. It portrays an image of the hands protecting the sea and tells a story of passion and care where MISC is positioned as the guardians of the marine environment through the pair of hands forming a heart shape and filled with images of healthy marine life.

Two signature programmes have been rolled out under this campaign, namely the Marine Biodiversity Conservation Flagship Programme led by the MISC Group and the UMT-MMS Sea Turtle Conservation Programme led by MMS. These two marine biodiversity programmes are focused on the conservation of coral reefs and protection of sea turtles which are critical in maintaining the ocean's health.

Marine Biodiversity Conservation Flagship Programme

The Marine Biodiversity Conservation Flagship Programme in Mersing Islands is MISC's inaugural conservation programme under the Group's Heart of the Ocean campaign. The Programme is focused at improving oceans health through supporting conservation initiatives of coral reefs and taking positive actions to prevent and reduce plastic litter in our oceans. The programme is a collaboration between MISC and Reef Check Malaysia, a non-governmental organisation specialising in marine conservation. The programme kick started in January 2020 and throughout the year, various activities on coral reef conservation, surveys, baseline data collection, stakeholder's engagement, and management programmes on the Mersing Islands were implemented.

Turtle Conservation Programme

A 5-year marine biodiversity conservation programme starting 2020 through a strategic collaboration between UMT-SEATRU and MMS focusing on conserving and protecting the sea turtles.

We support the development of UMT-SEATRU Centre of Excellence on sea turtle conservation which focuses on these components:

i. Facilities Improvement Management to upgrade the facilities and management of the sea turtle sanctuary

ii. Outreach and Volunteer Programme with participation from MISC's employees and the public

MMS also conducted a Sea Turtle Contest aimed to create awareness amongst MISC employees on the importance of preserving our endangered species - sea turtles.

OPERATING SAFELY AND SUSTAINABLY

Eco Movie Screening

In conjunction with World Ocean's Day, a two-part virtual screening of the film "Chasing Corals" was held and the invitation was extended to all employees. The screening is aimed at raising awareness amongst our employees on the underlying issue that is threatening the coral's health, the film follows a team of divers, photographers and scientists out to photograph the elusive process of coral bleaching.

Environmental Fines And Penalties

As a result of our heightened commitment to ensuring full compliance to all the relevant environmental regulations, MISC has not been sanctioned with any fines and penalties with regards to environment in 2020.

SECURITY

During the year, MISC continued to implement MISC's Security Policy by adopting effective security management system across the Group despite facing a COVID-19 pandemic including conducting assurance and investigation processes remotely and providing regular security analysis and travel advisory for the Group to ensure the safety and security of our people, environment, asset and reputation.

In 2020, we focused on raising the security awareness among employees on related and latest security issues by holding the annual security awareness programme and for the first time, held it virtually. The programmes we held during the year are as follows:

- Federation of Malaysian Consumers Associations (FOMCA) - Online Shopping Scams: An ounce of prevention is worth a pound of cure
- International SOS - Consideration for Safe Travel in the New Normal

We also accelerated our engagements with our stakeholders, including the authorities such as local enforcement and government agencies. These engagements discussed and exchanged views on related security issues and concerns and succeeded in enhancing relations at the working level.

CYBERSECURITY

A key move during the year was the establishment of the MISC Cybersecurity team as led by the Chief Information Security Officer (CISO). An Enhanced Cybersecurity Strategy has been constructed based on the PETRONAS Cybersecurity Governance Framework and the National Institute of Standards and Technology (NIST) Cybersecurity Framework (CSF) which is the global standard in cybersecurity. The CSF is currently being rolled out in phases, and will further strengthen MISC's cybersecurity, and concurrently meet the maritime cybersecurity requirements.

Cybersecurity standards, guidelines and technologies are being updated and fortified across the Group to ensure alignment to the strategy and the increasingly challenging cyber landscape. Further initiatives and awareness programmes will be conducted group-wide in early 2021, with assurance programmes held later in the year to gauge the level of compliance.

A five-year plan has been formulated under MISC Sustainability Strategy 2021 - 2025 plan to chart the path for continuous maturity of cyber security in MISC, with the aim of achieving ISO27001 group-wide by the end of 2023. Progress on the initiatives is reported regularly to MISC HSSE Council and the Board.

BUSINESS CONTINUITY PLANNING (BCP)

MISC's Business Continuity Management (BCM) aims to build the capability of the Group to recover and continue the operations of critical business functions in the event of any disruption. The Business Continuity Plan (BCP) was established through the BCM process to enhance MISC's preparedness to recover and restore businesses' critical functions within a reasonable period of time towards sustaining the Group's activities and minimising disruptions to stakeholders.

Simulation exercises of test scenarios validate the effectiveness of recovery strategies, as well as maintain a high level of competence and readiness as identified in the BCP. Different levels and scenarios of BCP simulations are conducted throughout a period of 1-3 years. Business Impact Analysis and recovery plan reviews are carried out on an annual basis.

The Group's persistence in exercising and maintaining BCP has paid off when business disruption was successfully avoided during the onset of the COVID-19 pandemic and the consequential enforcement of lockdowns imposed by governments globally.