

Performance Data

Environmental Pillar	Unit	2024	2023	2022
TOTAL GHG (SCOPE 1 AND 2)	tonnes CO ₂ e	3,845,107	4,160,578*	4,240,720*
Scope 1 ¹	tonnes CO ₂ e	3,800,082	4,120,702*	4,200,139*
Scope 2	tonnes CO ₂ e	45,024	39,875*	40,581*
CO ₂ Biogenic ^A	tonnes CO ₂ e	2,993	1,100*	1,011*
TOTAL SCOPE 1	tonnes CO ₂ e	3,800,082	4,120,702*	4,200,139*
Breakdown by Operations				
Shipping	tonnes CO ₂ e	3,769,047	4,088,748*	4,168,624*
- Gas	tonnes CO ₂ e	2,058,813	2,445,402*	2,566,085*
- Petroleum	tonnes CO ₂ e	1,704,105	1,616,373*	1,555,180*
- Product	tonnes CO ₂ e	94	21,848*	42,704*
- Workboat	tonnes CO ₂ e	6,034	5,125*	4,655*
Non-Shipping	tonnes CO ₂ e	31,035	31,954*	31,515*
TOTAL SCOPE 2	tonnes CO ₂ e	45,024	39,875*	40,581*
Breakdown by Operations				
Shipping	tonnes CO ₂ e	25	-	-
- Workboat	tonnes CO ₂ e	25	-	-
Non-Shipping	tonnes CO ₂ e	44,999	39,875*	40,581*
TOTAL SCOPE 3 (MATERIAL CATEGORIES)	tonnes CO ₂ e	2,198,289	2,345,620*	2,447,044*
Breakdown by Category				
Category 1 – Purchased goods and services from MISC's Marine and Heavy Engineering Business	tonnes CO ₂ e	91,315	131,267*	88,285*
Category 3 – Fuel & Energy Related Activities	tonnes CO ₂ e	1,073,381	1,133,237*	1,155,712*
Category 8 – Upstream Leased Assets	tonnes CO ₂ e	12,951	44,310*	78,919*
Category 13 – Downstream Leased Assets	tonnes CO ₂ e	984,057	999,402	1,094,822
Category 15 – Investments	tonnes CO ₂ e	36,585	37,404*	29,306*
TOTAL SCOPE 3 (NON-MATERIAL CATEGORIES)	tonnes CO ₂ e	18,590	19,396	17,138
Breakdown by Category				
Category 6 – Business Travel	tonnes CO ₂ e	12,144	12,280	8,554
Category 7 – Employee Commuting	tonnes CO ₂ e	6,446	7,116	8,584
AIR EMISSIONS				
NO _x emissions ⁶	tonnes	39,723	43,829*	43,295*
SO _x emissions ^{7A}	tonnes	3,746	3,933*	3,671*
PM ₁₀ emissions ^{8B} (Reported data are for non-shipping only)	tonnes	3.40	3.76*	3.54*
REFRIGERANT				
Ozone Depleting Substances (ODS)	tonnes	0.13	0.17	0.24

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CARBON INTENSITY AND ANNUAL EFFICIENCY RATIO				
ANNUAL EFFICIENCY RATIO (AER)				
MISC Shipping Fleet (GAS and Petroleum) ^c	gCO ₂ /ton-nm	5.07	5.71'	6.23'
ANNUAL EFFICIENCY RATIO (AER^{CO₂e})				
MISC Shipping Fleet (GAS and Petroleum)	gCO ₂ e/ton-nm	5.20	5.95'	6.43'
CII RATING				
Vessels rated A	%	17.65	18.95	12.50
Vessels rated B	%	28.24	23.16	21.88
Vessels rated C	%	30.59	40.00	34.38
Vessels rated D	%	16.40	12.63	17.71
Vessels rated E	%	7.06	5.26	13.54
OPERATIONAL DATA				
Total distance traveled by vessels GAS, Petroleum ¹¹	nautical miles (nm)	5,398,956	5,453,030'	5,369,174'
AVERAGE ENERGY EFFICIENCY DESIGN INDEX (EEDI⁵) FOR NEW VESSELS				
LNGC	gCO ₂ e/ton-nm	-	4.691	-
VLEC	gCO ₂ e/ton-nm	-	-	-
LNG Dual-Fuel DPST	gCO ₂ e/ton-nm	-	-	-
Conventional DPST	gCO ₂ e/ton-nm	-	-	2.738
LNG Dual-Fuel VLCC	gCO ₂ e/ton-nm	-	1.665	1.937
Shuttle Tanker	gCO ₂ e/ton-nm	2.7491	-	-
ENERGY				
TOTAL GROUP ENERGY CONSUMPTION ²	GJ	56,084,855	59,997,493'	61,670,834'
Heavy Fuel Oil ³	tonnes	72,137	72,728'	64,769'
Very-Low Sulphur Heavy Fuel Oil	tonnes	305,555	416,653'	379,280'
Ultra-Low Sulphur Heavy Fuel Oil	tonnes	1,111	3,928'	6,018'
Very-Low Sulphur Light Fuel Oil	tonnes	82,891	-	-
Ultra-Low Sulphur Light Fuel Oil	tonnes	2,076	-	-
Marine Gas Oil	tonnes	47	109	225'
Very-Low Sulphur Marine Gas Oil	tonnes	6,670	3,922'	2,138'
Ultra-Low Sulphur Marine Gas Oil	tonnes	146,740	163,927'	222,449'
Liquefied Natural Gas	tonnes	608,139	672,031'	678,836'
Propane	litre	100	-	-
Diesel	litre	2,553,337	419,889	347,189
Biodiesel (from shipping)	tonnes	12,905	5,329	-
Biodiesel (from non-shipping)	litre	3,791,840	6,625,386'	6,084,838'
Petrol	litre	68,492	49,189	39,274
Compressed natural gas	m ³	470,254	405,000	419,712
Liquefied petroleum gas	tonnes	7	6	8
Electricity	kWh	67,621,966	59,881,813'	60,910,170'

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Ethane	tonnes	13,790	1,221	20,001'
Renewable energy ^{4D}	MWh	8,826	8,827	8,957
ENERGY INTENSITY RATIO				
Breakdown by Subsidiaries				
Shipping operations - GAS and Petroleum & Products	(GJ per million transport work)	76	86'	94'
Heavy & Marine Engineering ^E	(GJ per thousand man hours)	11	12	14
Maritime Education & Training	(GJ per million sales in RM)	185	160'	164
Marine Services (Maritime Services)	(GJ per hour)	4	4	4
WASTE				
NON-SHIPPIING OPERATIONS				
TOTAL GENERATION GENERAL WASTE/ NON-HAZARDOUS	tonnes	2,630	5,220'	5,307'
Total recycled/reuse/recovered	tonnes	250	151'	136'
Total final disposal	tonnes	2,380	5,069	5,171'
NON-SHIPPIING OPERATIONS				
TOTAL GENERATION HAZARDOUS WASTE	tonnes	16,739	19,904	16,449
Total waste recycled/reuse/recovered	tonnes	16,198	19,087	20,942
Total waste sent for disposal (incineration/landfill)	tonnes	42	17	182
SHIPPING OPERATIONS				
Ship oil sludge	m ³	6,799	6,537	6,186
Ship operational effluent discharge - comprises bilge water and cargo residues	m ³	58,696	63,761	47,791
Operational effluent discharge per vessel per month - bilge water	m ³	29.76	30.41	28.82
Ship garbage	m ³	6,826	6,974	6,689
Ship garbage disposed to reception facility	m ³	5,829	5,995	5,683
Ship garbage discharged to sea - Category B	m ³	460	470	484
Ship garbage incinerated onboard	m ³	537	509	522
WATER				
TOTAL FRESHWATER WITHDRAWAL ^F	m ³	931,216	883,033	799,532
Total freshwater withdrawal from surface water	m ³	0	0	0
Total freshwater withdrawal from third party	m ³	931,216	883,033	799,532
WATER CONSUMPTION				
Water consumption (from vessels' freshwater generator)	m ³	294,461	308,930	313,388
BALLAST WATER				
Percentage of Fleet Implementing Ballast Water Exchange and Treatment				
- exchange ¹²	%	NIL	1	6
- treatment ¹³	%	100	99	94



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SPILLS				
Total spills ⁹	number	2	2	4
Average volume of spills and releases to the environment ¹⁰	litre	6	16 [*]	18,177-18,187
FINES/PENALTIES AND AUDITS				
Fines/penalties on environmental related non-compliance	number	2	0	2
Fines/penalties on environmental related non-compliances	RM	4,000	0	73,500
Audits conducted on environmental [#] related matters	number	170	153	122
ISO CERTIFICATION				
ISO 50001 Energy Management System	%	35	32	14
Breakdown by Business Unit				
Gas Assets & Solutions		No	No	No
Petroleum & Products		No	No	No
Offshore		No	No	No
Marine & Heavy Engineering		No	No	No
Marine Services (Ship Management)		Yes	Yes	Yes
Marine Services (Maritime Services)		No	No	No
Maritime Education & Training		No	No	No
ISO 14001 Environmental Management System	%	85	86	43
Breakdown by Business Unit				
Gas Assets & Solutions		No	No	No
Petroleum & Products		No	No	No
Offshore		Yes	Yes	Yes
Marine & Heavy Engineering		Yes	Yes	Yes
Marine Services (Ship Management)		Yes	Yes	Yes
Marine Services (Maritime Services)		No	No	No
Maritime Education & Training		No	No	No

Note:

¹⁻¹² Referring to SASB indicator.^{*} Restated the numbers post-third party GHG verification and updates in performance data as part of our ongoing improvement in environmental data inventory and reporting.[#] Environmental audits including compliance audit that covers the following aspect; management system, waste, pollution, water, energy use and biodiversity.^A Data excludes six vessels fitted with scrubbers as the system configuration for quantifying SOx emissions from scrubber is ongoing.^B Data for non-shipping only.^C AER data calculated for total CO₂ emissions without any corrections or adjustment applied.^D Renewable energy from renewable energy certificate bought.^E Change in measurement metric to align with metric used for the GHG intensity.^F Data for 2024 is based on estimated values.

Performance Data

Training and Awareness Conducted in 2024

No	Training Type	Total Number of Programmes	Total Number of Participants
1	Environment	6	891

Scope of ISO certification

Certification	Entity	Scope
ISO50001:2018 Energy Management System	Eaglestar Shipmanagement (L) Pte Ltd	• Provision of Fleet Management Services
ISO50001:2011 Energy Management System	Eaglestar Shipmanagement (S) Pte Ltd	• Shore Management of tanker operations
ISO 14001:2015 Environment Management System	Eaglestar Shipmanagement (L) Pte Ltd	• Provision of Fleet Management Services
	Eaglestar Shipmanagement (S) Pte Ltd	• Shore Management of tanker operations
	MISC Berhad (Offshore)	• Provision of Engineering, Procurement and Construction Management of Subcontractors, Installation, Commissioning, Operation & Maintenance and Decommissioning of Offshore Floating/Mobile Facilities
	Malaysia Marine and Heavy Engineering Holdings Sdn. Bhd.	• Repair and refurbishment, and conversion of ship and marine vessel • Engineering, procurement, construction, hook up, and testing and commissioning of production system and its facilities • Maintenance of onshore production systems and its facilities including fabrication, and testing and commissioning • Project management for transportation and installation of offshore production system and its facilities • Construction, hook up, testing and commissioning of production system and its facilities

IUCN RED LIST OF THREATENED SPECIES AT ALAM'S MANGROVE AREA

No	Species	IUCN Status
1	Cave Nectar Bat (Lesser Dawn Bat) - <i>Eonycteris spelaea</i>	Least Concern
2	Dusky Leaf Monkey (Dusky Langur) - <i>Trachypithecus obscurus</i>	Endangered
3	Long-Tailed Macaque - <i>Macaca fascicularis</i>	Endangered
4	Plantain Squirrel - <i>Callosciurus notatus</i>	Least Concern
5	Civet Species - <i>Paradoxurus sp.</i>	Least Concern
6	Wild Cat Species - <i>Prionailurus sp.</i>	Least Concern
7	Wild Boar - <i>Sus scrofa</i>	Least Concern