

SUSTAINING TRUST SHAPING TOMORROW



SUSTAINABILITY
REPORT
2024

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OVERVIEW



ABOUT THIS REPORT

[GRI 2-2, 2-3, 2-5]

This is Malaysia Aviation Group's ('MAG' or the 'Group') fourth sustainability report, presenting a comprehensive overview of the Group's sustainability performance for the 2024 calendar year. Specifically, it outlines MAG's environmental, social, and governance (ESG) performance, initiatives, and progress in line with our sustainability agenda.

This report builds on our sustainability disclosures in previous reporting, emphasising our commitment to continuous improvement by increasing stakeholder transparency and applying lessons learnt. Current and past editions of MAG's Sustainability Report are available in the [Sustainability Publications](#) section of our website.

Reporting Scope and Boundary

Unless otherwise stated, this report covers sustainability performance data for MAG and our wholly owned entities for the period from 1 January to 31 December 2024. It encompasses business segments under MAG's airline business, aviation services, and loyalty and travel services operating in relevant domestic and international contexts. This includes MAG Catering Operations, which previously operated under AeroDarat Services and became a standalone business entity in 2024. The data in this report has been sourced from individual business units and consolidated by the Group's Sustainability Office. All financial data is reported in Ringgit Malaysia, unless stated otherwise.

Reporting Assurance

Verifavia Singapore Pte Ltd ('Verifavia') has conducted reasonable assurance on MAG's carbon inventory data for Scope 1 and Scope 2, and limited assurance for Scope 3 metrics and diversity data from 1 January to 31 December 2024.

Reporting Frameworks

Our reporting is guided by internationally recognised frameworks, providing stakeholders with a thorough understanding of MAG's initiatives and performance. This report was prepared based on the **Global Reporting Initiative (GRI) 2021 Universal Standards** and relevant indicators from the **International Air Transport Association (IATA) ESG Core and Extended Metrics**.

For the first time, this report references the **Sustainability Accounting Standards Board (SASB) Standards for Airlines and Air Freight and Logistics**. We have begun aligning with SASB as part of our broader commitment to adopting the International Sustainability Standards Board (ISSB) IFRS S1 and S2 Standards in future reporting. To ensure consistency, comparability, and connectivity between sustainability-related disclosures and financial reporting, this report refers to IFRS S1, General Requirements for Disclosure of Sustainability-related Financial Information.

GRI and SASB disclosures are included throughout the report and referenced under headings or subheadings as GRI XXX-XX and SASB TR-AF-XXXx.x or TR-AL-XXXx.x.

Many of our initiatives are also aligned with the **United Nations Sustainable Development Goals (SDGs)**, reflecting our commitment to supporting both national and global efforts.

Disclaimer Concerning Forward-Looking Statements

This report may contain forward-looking statements intended to give stakeholders insight into MAG's perspectives, intentions, and plans. These projections, which may include terms such as 'believe', 'expect', 'forecast', 'intend', or 'estimate', do not guarantee or assure future performance. Although the data has been carefully compiled and reviewed, unintentional collection or processing errors might have occurred. Consequently, these statements should not be considered definitive forecasts, and readers are advised not to unduly rely on them for analysis or decisions that may be beyond the context of this report.

MESSAGE FROM THE GROUP MANAGING DIRECTOR

[GRI 2-22]



“ I am pleased to present the Malaysia Aviation Group (MAG) Sustainability Report 2024 – a reflection of a year marked by purposeful progress in embedding sustainability at the core of our recovery and growth. Guided by our purpose of *Shaping a Sustainable Tomorrow*, we have strengthened our environmental, social, and governance (ESG) commitments, delivering tangible benefits across our operations, communities, and the broader aviation ecosystem. ”

Sustainability is now deeply ingrained in how MAG operates, innovates, and grows. In 2024, we advanced our ambitions through fleet modernisation, welcoming Malaysia Airlines' first Airbus A330-900 (A330neo) in December, alongside three new Boeing 737-8 aircraft. Both offer substantial improvements in fuel efficiency and reduced emissions, with the A330neo achieving up to 11% lower fuel burn and carbon emissions compared to its A330ceo predecessor. With 20 A330neo and 25 Boeing 737-8 aircraft scheduled for delivery by 2028, we are building a modern, fuel-efficient fleet to support our long-term operational resilience.

Beyond the skies, our ground handling arm, AeroDarat Services, expanded the use of electric ground handling equipment, adding nine Mototok units to further reduce our ground energy consumption and emissions. We also launched carbon offset programmes for corporate and cargo customers, enabling them to play an active role in reducing their emissions footprint while supporting verified climate projects. The Ministry of Natural Resources and Environmental Sustainability (NRES) became the first corporate customer to enrol in the corporate carbon programme.

Our people and communities remain central to our progress. We increased women's representation to 35% across MAG, welcomed the first Orang Asli cabin crew to Malaysia Airlines, and deepened inclusivity through our involvement in the CEO Action Network (CAN) diversity, equity, and inclusion (DEI) workstream. MAG Sustainability Day brought together employees, partners, suppliers, and stakeholders to foster shared ownership of our sustainability agenda.

Through our partnership with the National Cancer Society Malaysia (NCSM), MASKargo advanced access to healthcare by transporting over 80,000 HPV vaccines to remote communities in Sabah and Sarawak. On the industry front, we co-hosted the International Air Transport Association (IATA) Aviation Energy Forum (AEF) and convened the Aviation Decarbonisation Roundtable in Malaysia, reinforcing our role in advancing collective action.

As we look ahead, MAG remains steadfast in pursuing innovative solutions, fostering collaboration, and upholding our responsibilities as a national aviation leader. Our efforts continue to align with key United Nations Sustainable Development Goals (SDGs), including Climate Action (SDG 13), Gender Equality (SDG 5), and Responsible Consumption and Production (SDG 12).

I extend my sincere appreciation to our employees, partners, and stakeholders whose commitment drives our journey towards a more resilient, inclusive, and sustainable future for aviation.

DATUK CAPTAIN IZHAM ISMAIL

Group Managing Director
Malaysia Aviation Group

2024 HIGHLIGHTS

ENVIRONMENT

CARBON OFFSET PROGRAMMES:



Launched **corporate and cargo carbon programme**



Added **Kuamut Rainforest Conservation Project** in voluntary carbon offsetting programme, totalling **4**



Developed **Carbon Trading Policy Framework**

EXPLORING SUSTAINABLE AVIATION FUEL (SAF) OPPORTUNITIES:



Local SAF development, including **feedstock availability studies** with Airbus



Used cooking oil exploration with FatHopes Energy



152,147 tCO₂ saved through fuel-saving initiatives, **78% more** than 2023



Improved carbon efficiency by an average of 8.9% across all subsidiaries since 2023



Strengthened Scope 3 emissions reporting



7.5% reduction in building energy intensity since 2023



15.2% of total energy use generated from solar PV panels



15.4 million plastic items eliminated from flights



Embarked on **Phase 1 of climate risk assessment**



Chair of Malaysia SAF Task Force alongside Civil Aviation Authority of Malaysia (CAAM)



Co-hosted **Aviation Decarbonisation Roundtable** with UN Global Compact Network Malaysia & Brunei (UNGCMYB) and **International Air Transport Association (IATA) Aviation Energy Forum (AEF)** with Petronas



Strengthened upcycling initiatives by streamlining the upcycling inventory management



Completed first cabin waste audit to inform waste reduction strategies



Contributed to the **development of Malaysia Aviation Decarbonisation Blueprint (MADB) 2024**



Advised on policy development and incentives under **MADB Steering Committee**

2024 HIGHLIGHTS

SOCIAL

WOMEN'S REPRESENTATION IN:



Total workforce: **35%**

Management: **46%**

Executive positions: **52%**



>1,300 staff attended ESG training



> 97% of customer complaints closure rate achieved for all airlines



>74% Customer Satisfaction Index (CSI) rate achieved for all airlines



Chartered freighter relief to El-arish, Egypt, delivering items for **Gaza Humanitarian Mission**



Sponsored air freight to deliver over **81,000 HPV vaccine doses** to East Malaysia



Lowered turnover rates for employees under the age of 30: from 15.4% in 2023 to **11.3% in 2024**



2,579 total man-days spent on crisis management by **MH Rangers**



>600 sling and tote bags made from upcycled MAG products, in collaboration with *Jabatan Penjara*

GOVERNANCE



Conducted double materiality assessment (DMA) to identify sustainability-related risks and opportunities



Revised Sustainable Procurement Blueprint with targeted 2030 goals



Embarked on **ESG Data Lake Project**



First Airline Group in Malaysia to meet **ISO 37001 Anti-Bribery Management System Standard**



Firefly completed first **IATA Operational Safety Audit (IOSA)** audit with a **92% conformance rate**



97% of whistleblowing cases raised closed



77% of total procured goods and services from local suppliers



>115 vendors engaged in ESG

OPERATIONS



Inducted **3 x Boeing 737-8 and 1 x A330neo** into MAG's fleet, with more planned for 2025



Official operation of **MAG Catering Operations (MCAT)** at MCAT West facility



Launched **strategic projects** to improve aircraft reliability and customer experience

ABOUT MAG

[GRI 2-1, 2-6]

Rooted in a proud legacy that began in 1937 with the establishment of Malaysia Airlines, Malaysia Aviation Group ('MAG' or 'the Group') was formed in 2016 to steer the nation's aviation ecosystem towards sustainable growth. Building on decades of service excellence and national pride, MAG continues to evolve in step with the nation's progress, proudly serving as its national carrier. Today, MAG is headquartered in Malaysia as a privately owned global aviation organisation. Our multifaceted portfolio encompasses three business segments: Airlines, Aviation Services, and Loyalty and Travel Services.

Operational Profile

AIRLINE BUSINESSES

At the heart of MAG is Malaysia Airlines, the nation's flagship carrier, renowned for its extensive global and domestic services.



As the national carrier, **Malaysia Airlines (MAB)** offers superior connectivity to over 900 destinations in 170 countries and territories worldwide through our **oneworld** global airline alliance and code-sharing agreements.

Complementing the national airline are Firefly and MASwings, regional carriers that connect the Malaysian diaspora. AMAL, our charter subsidiary, operates several important pilgrimage routes. MAG Catering Operations, serving the catering needs of our airlines.



Firefly (FY) operates from regional hubs in Penang, Subang, and Kota Kinabalu, providing fast, affordable, and seamless connections to multiple destinations across Malaysia, Thailand, Singapore, and Indonesia.



MASwings (MW), also known as the Pulse of Borneo, is East Malaysia's first commuter airline, providing the communities of Sabah and Sarawak with affordable fares and convenient flight schedules for travel within and between the two states.



AMAL, the Hajj and Umrah pilgrimage division of MAB, offers scheduled and chartered flights to Jeddah and Madinah, with a global presence in key markets including Indonesia, China, Pakistan and parts of Africa.*

MAG Catering Operations (MCAT) is the Group's catering division, providing exceptional food and beverage (F&B) options while maintaining uncompromising standards of food safety and customer satisfaction. MCAT was previously a temporary F&B distribution centre at KLIA; in 2024, it became a standalone entity with expanded operations at KLIA.

*Note: AMAL operates under MAB and does not maintain its own fleet.

AVIATION SERVICES

MAG delivers many essential services through MAB Engineering, MASKargo, Aerodarat Services, and MAB Academy.

These subsidiaries maintain the highest standards in maintenance, repair, and overhaul (MRO), cargo logistics, efficient ground handling, and industry-leading training programmes.

AeroDarat

AeroDarat (ADS) provides comprehensive ground support, including ramp and cargo at Kuala Lumpur International Airport (KLIA) and 15 other airports across Malaysia.



MASKargo (MK) serves nearly 100 international destinations through multiple partnerships and provides scheduled and chartered air cargo services, warehousing, logistical solutions, and cargo terminal operations.



MAB Engineering (MABES) is a globally renowned MRO facility that serves the aviation sector with 11 aircraft bays across three hangars; it operates from our state-of-the-art engineering facilities in Sepang and Subang.



MAB Academy (MABA) delivers quality education, hospitality, and service training for MAG and other international airlines and organisations.

ABOUT MAG

LOYALTY AND TRAVEL SERVICES

MAG's Loyalty and Travel Services division offers a premium travel experience from start to finish. It features Journify, a streamlined travel companion; Enrich, the Group's loyalty programme; and MHholidays, our comprehensive holiday packages. Together, they provide an integrated suite of products that not only meet the evolving needs of travellers but also ensure memorable journeys and enriching experiences.



Enrich, Malaysia Airlines' rewards programme, unlocks a multitude of customer loyalty benefits. Enrich points can be redeemed for flights, travel benefits, and lifestyle perks with Malaysia Airlines, Firefly, **oneworld** members as well as other partner airlines.



Journify, our mobile app, helps our guests plan their entire itinerary by offering travel tips, shopping and delivery options, and seamless integration with Enrich for earning reward points.



MHholidays is Malaysia Airlines' integrated travel portal, offering a convenient one-click booking experience.



ABOUT MAG

Network Overview

As of December 2024, MAG's passenger network serves 91 destinations across 24 countries, including Malaysia, while its cargo network covers 17 destinations across 10 countries, including Malaysia and its territories.

MAG Destination Network as of December 2024 Passenger Travel and Cargo Route Destinations



MAB			MW		FY		AMAL	MK	
ADL	HAN	NRT	BKI	BBN	BTJ	AOR	JED	AMS	BKI
AKL	HKG	PEN	BTU	BKM	DMK	BKI	MED	BKK	KCH
AMD	HKT	PER	KCH	LBP	HKT	JHB	PKU	BOM	LBU
AOR	HYD	PKX	LBU	LGL	KNO	KCH	YIA	BWN	KUL
ATQ	ICN	PNH	LDU	LKH	SIN	KBR	BPN	CAN	
BKI	JHB	PVG	LMN	LWY	XSP	LGK	UPG	DOH	
BKK	KBR	RGN	MKM	MUR	BKK	MYY	KUL	HKG	
BLR	KCH	SBW	MYY	ODN		PEN	JHB	MAA	
BOM	KIX	SDK	MZV	TGC		SDK		MNL	
BTU	KJT	SGN	SBW			TGG	Hajj Season	MST	
CAN	KNO	SIN	SDK			TWU	AOR	PER	
CCU	KTM	SUB	TWU			SZB	JHB	PVG	
CGK	KUA	SYD				KUL	KBR	SYD	
CMB	LBU	TGG			Charter Flights		TGG		
CNX	LGK	TPE			NKG		BKI		
COK	LHR	TRV			CKG		KCH		
DAC	MAA	TWU			HAK		PEN		
DAD	MEL	XMN			MFM				
DEL	MLE	KUL			TFU				
DOH	MNL								
DPS	MYY								

ABOUT MAG

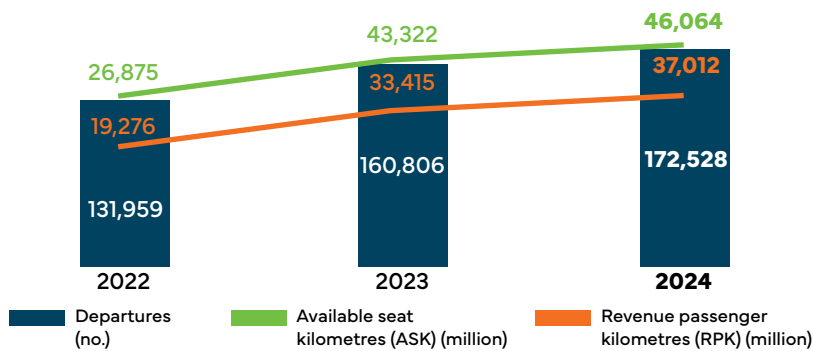
Fleet and Passenger Overview

[SASB TR-AF-000.A, 000.B, TR-AL-000.A, 000.B, 000.C, 000.D, 000.E, 000.F]

As part of our long-term business strategy, our fleet size, destinations served, and flight frequencies have steadily increased each year. In 2023 and 2024, we welcomed Boeing 737-8 aircraft and our first Airbus A330-900 (A330neo), expanding MAG’s fleet to a total of 107 aircraft.

In 2025, we expect to take delivery of 18 new aircraft, including nine Boeing 737-8s and nine A330neos, while retiring four older aircraft. We are focused on expanding our fleet, with 20 A330neo and 25 Boeing 737-8 aircraft currently on order and scheduled for delivery by 2028. This will enable the Group to better serve high-growth markets, improve fleet fuel efficiency, and reduce our average aircraft age.

ASK, RPK, and Number of Departures 2022–2024



In 2024, we recorded 172,528 take-offs – an increase of just over 30.7% compared to 131,959 total departures in 2022. Thanks to our dedicated efforts to further improve sales and drive customer loyalty, we are pleased to report that passenger occupancy has substantially risen from 70% in 2023 to 80% in 2024.

MAG’s Operational Highlights 2022–2024

Description	2022	2023	2024
Number of landings and take-offs (LTO)	131,959	160,806	172,528
Number of passengers carried (million)	9.9	14.5	16.6
Revenue tonne-kilometres (RTK) (million)	2,488	3,511	3,968
Passenger load factor (PLF)	0.72	0.77	0.80
Capacity tonne-kilometres (CTKM) – passenger flights	969,584,402	1,177,842,607	1,201,667,802
CTKM – freighters	626,317,856	494,012,888	588,151,086



ABOUT MAG

Aircraft Fleet Overview as of December 2024

Average Aircraft Fleet Age: 11.9 years

Total Aircraft Fleet: 107

Aircraft type				Average age
 A350-900	7			6.5
 A330-900	1			0.1
 A330-300	15			12.4
 A330-200	6			17.2
 A330-200F	3			13.1
 B737-8	5			0.8
 B737-800	42	5		12.3
 ATR72-500		9	8	15.1
 DHC6			6	10.9
Total	79	14	14	

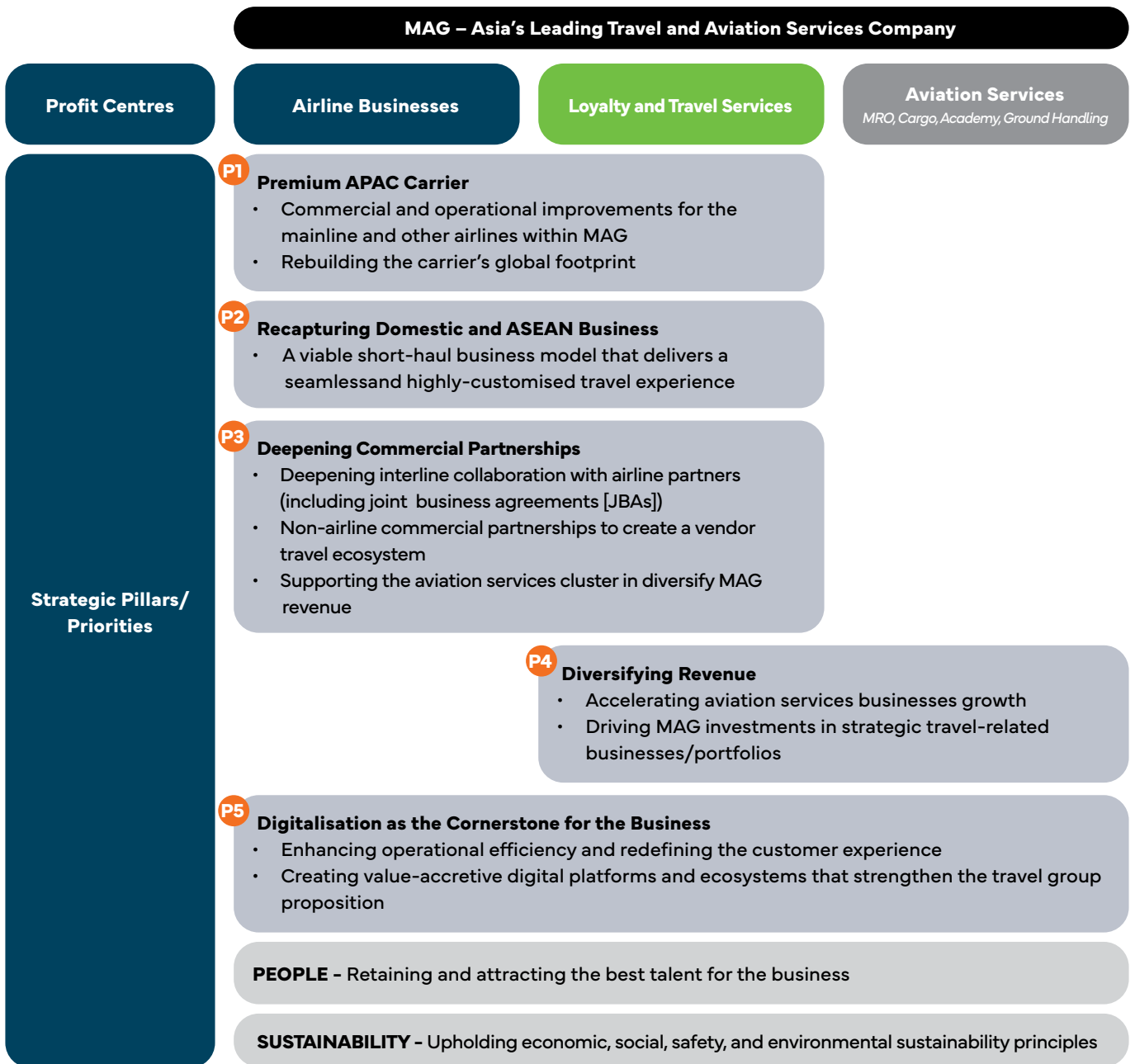
Note: MAB is inclusive of AMAL flights.

ABOUT MAG

Our Business Strategy

In 2021, MAG launched the second version of our Long-Term Business Plan (LTBP 2.0), a five-year strategy to transform the company from an aviation business into a leading travel and aviation services group in Asia. The roadmap focuses on five strategic pillars, covering our three core business portfolios and leveraging our investments in technology and resources.

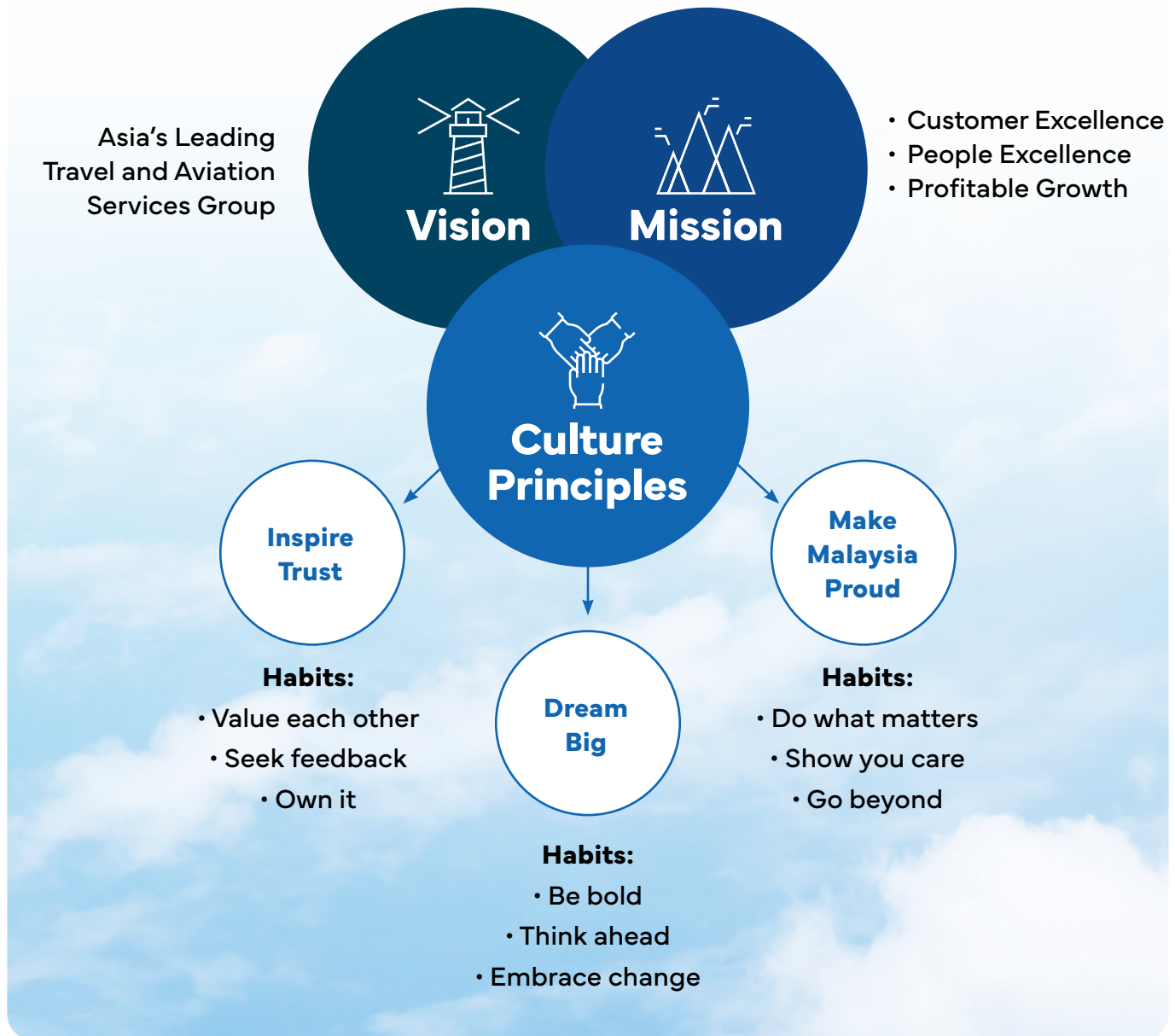
As we transition to the next phase of our long-term strategy, we are developing LTBP 3.0 as a blueprint for the next five years: 2026–2030. The plan will be based on two key principles: operating as a financially sustainable entity by ensuring financial viability and delivering strong shareholder returns, and playing a catalytic role in national development.



ABOUT MAG

MAG Culture

In 2024, we refined MAG Culture Principles to ensure our behaviours align with who we are and what we stand for. Built around our mission of driving **Customer Excellence, People Excellence, and Profitable Growth**, these Culture Principles guide how we act, collaborate, and serve our customers and nation.





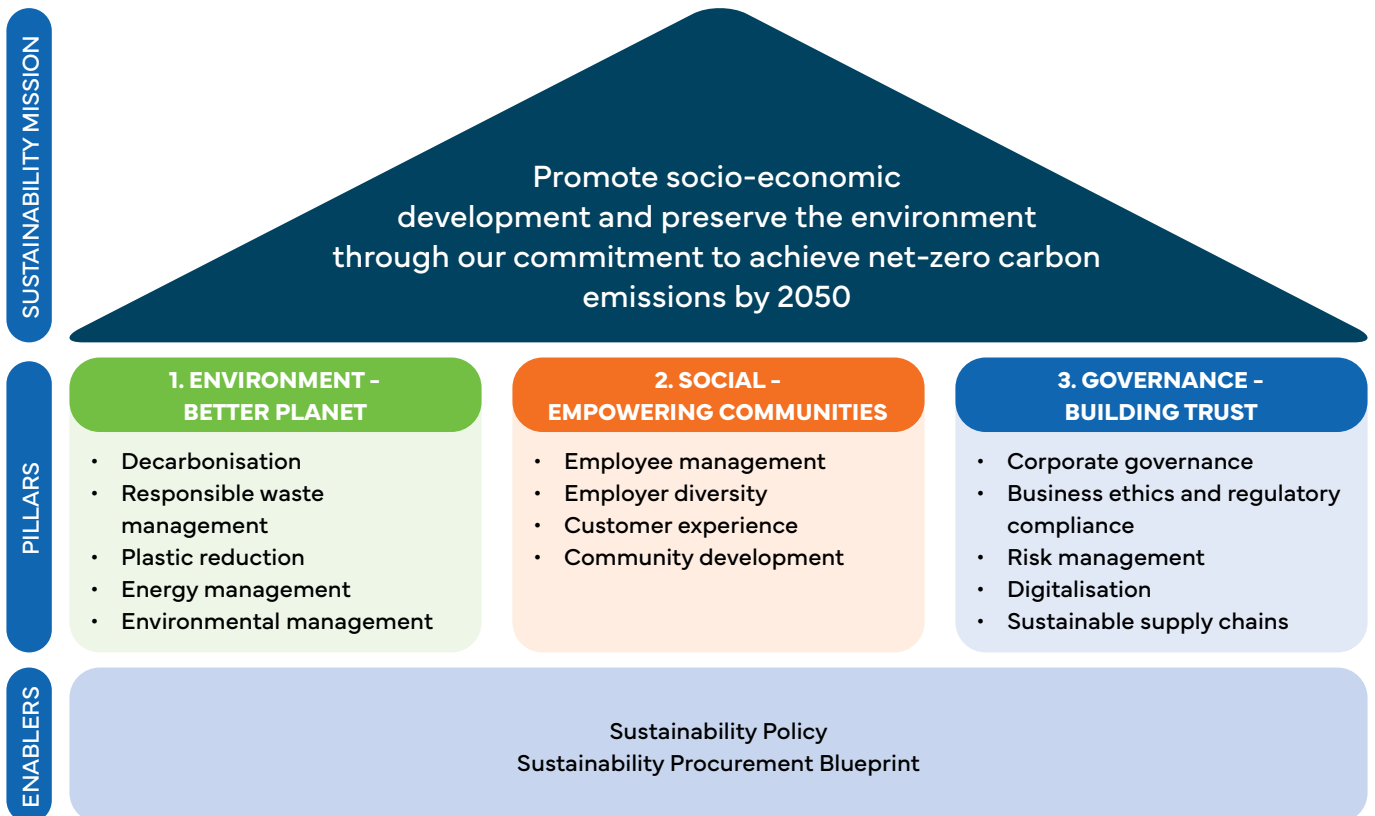
Sustainability lies at the core of MAG’s business strategy. Our sustainability commitments adhere to international standards and best practices, focusing on reducing environmental impacts while promoting socio-economic development. Our Group-wide Sustainability Framework guides policies, strategies, and implementation based on the three pillars of environment, social, and governance (ESG). This framework includes our overarching commitment to achieving net zero by 2050.

MAG strives to improve our measures and policies to guide Group-wide actions that remain responsive to our stakeholders’ needs and reflect our capabilities. Among our key milestones was the 2024 launch of our dedicated [Sustainability Policy](#), which expands our previous

environmental policy to encompass comprehensive commitments across environmental, social, and governance pillars. We also conducted a comprehensive double materiality assessment (DMA), which goes beyond evaluating ESG impact on MAG as a business (outside-in) to now formally reflect an inside-out approach to MAG’s impacts on the environment and society.

Moving forward, our Sustainability Framework will be revised based on lessons learnt, outcomes from the latest policies and assessments, and our forthcoming Long-Term Business Plan (LTBP) 3.0. To support this, we are currently developing a five-year ESG Mid-Term Strategy Roadmap to guide our sustainability priorities from 2026 to 2030.

FRAMEWORK¹







¹ The topics under each pillar will be updated in the Sustainability Framework of the next report.

FRAMEWORK

MAG's Contributions to the SDGs

MAG acknowledges the vital role that businesses play in advancing the global United Nations' Sustainable Development Agenda and the importance of its Sustainable Development Goals (SDGs) in establishing a common language for tracking sustainability progress. MAG has identified four priority SDG goals, which are embedded in several of our core business objectives.

Relevant SDG goals	SDG-related targets	MAG's progress
 <p>5 GENDER EQUALITY Achieve gender equality and empower women and girls</p>	<p>As part of MAG's commitment to gender equality, we are striving to increase the representation of women in senior leadership positions and underrepresented business divisions. This objective aligns with the International Air Transport Association (IATA) target of achieving 25% women's representation by 2025.</p>	<p>See Empowering Diversity</p>
 <p>7 AFFORDABLE AND CLEAN ENERGY Ensure access to affordable, reliable, sustainable, and modern energy for all</p>	<p>MAG aims to facilitate access to affordable, reliable, sustainable, and modern energy solutions in tandem with our dedication to developing infrastructure and facilities for generating renewable energy, enhancing energy efficiency, and digitalising the energy system.</p>	<p>See Energy Management</p>
 <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION Ensure sustainable consumption and production patterns</p>	<p>In 2024, we eliminated 15.4 million single-use plastic items on board our aircraft by replacing three types of material and completing an inventory of all plastics used on board. Our efforts form part of a phased approach to reducing plastic consumption and increasing recycling rates.</p>	<p>See Waste Management</p>
 <p>13 CLIMATE ACTION Take urgent action to combat climate change and its impact</p>	<p>MAG aims to achieve net-zero carbon emissions by 2050 through fuel-efficiency initiatives, continued fleet modernisation, the development and use of sustainable aviation fuel (SAF), and participating in market-based measures.</p>	<p>See Climate Strategy</p>

SUSTAINABILITY GOVERNANCE

[GRI 2-9, 2-11, 2-12, 2-13, 2-14, 2-16, 2-17, 2-18]

MAG has established a robust sustainability governance structure. Our Board of Directors ('Board') plays a pivotal role in advancing our sustainability agenda and maintains the highest form of oversight. The Board, currently chaired by Dato' Amirul Feisal, comprises **nine Directors**, including **seven Non-Executive Directors, one Executive Director, and one Alternate Director**, of whom four are **Independent Non-Executive Directors**.

The Board, supported by the Group Executive Committee (GEXCO) and our Sustainability Strategic Committee (SSC), is responsible for setting the Group's sustainability strategic direction, ensuring our sustainability goals align with the Group's overall business objectives. To enhance the Board's understanding of ESG issues and support effective oversight of the Group's sustainability strategy, in 2024, Board members participated in sustainability-related training, including the IATA SAF programme and Airbus greenwashing workshops.

The Group's corporate scorecard includes several ESG key performance indicators (KPIs), which account for 10% of the overall scorecard weighting. This ensures we remain accountable for sustainability at the corporate level and allows us to monitor performance against specific targets. Additionally, Group functions and business units incorporate ESG KPIs relevant to their operations in their corporate scorecards. These KPIs are reviewed annually.

Guided by the Board, GEXCO, and SSC, the MAG Group Sustainability Office (GSO) oversees daily sustainability issues by leading the implementation of strategy and initiatives in collaboration with cross-functional members of dedicated ESG working groups. These groups meet as required to discuss progress and challenges related to specific sustainability issues such as fuel efficiency or women's empowerment. The GSO provides monthly updates to GEXCO on sustainability matters and seeks guidance when needed.

SUSTAINABILITY GOVERNANCE STRUCTURE AND ROLES

Board of Directors (Board)

The Board holds ultimate oversight of MAG's sustainability agenda, including approval of the corporate scorecard ESG KPIs, sustainability targets, resource allocation, and budgeting. It ensures accountability and the alignment of sustainability priorities with the Group's Annual Strategic Review (ASR) and Annual Business Plan (ABP).

Biannual

Group Executive Committee (GEXCO)

This committee comprises 16 senior leaders from Group functions and business entities, and determines the strategic direction for MAG's sustainability efforts. It ensures key priorities are integrated into the corporate strategy, approves initiatives, and recommends critical sustainability issues, which are submitted to the Board for approval.

Monthly

Sustainability Strategic Committee (SSC)

The SSC is made up of ten core GEXCO members and relevant department heads, and reviews ESG performance, emerging issues, and strategic focus areas. It provides guidance to the GSO and ESG working groups on key matters requiring escalation.

Biannual

ESG working groups

ESG working groups are led by the GSO to implement approved ESG strategies and initiatives throughout the Group. It includes cross-functional representatives from Group functions and business units, each responsible for driving specific sustainability focus areas in line with MAG's overall goals.

Note: The orange text represents the reporting frequency for the entity (or entities) directly beneath it.

STAKEHOLDER ENGAGEMENT

[GRI 2-28, 2-29]

MAG engages directly with several stakeholder groups that either influence or are impacted by our operations and the broader issues affecting our sector. Key stakeholder groups include investors, Board members, senior management, government agencies, the Civil Aviation Authority of Malaysia (CAAM), suppliers, employees, corporate clients, customers, the oneworld Alliance, and financial institutions.

Stakeholder Engagement Process

We use a range of engagement methods, including task forces, meetings, surveys, interviews, and workshops, to gather diverse stakeholder perspectives. MAG customises our engagement strategy for each group, selecting the appropriate frequency, method, and focus based on the nature of our relationship and shared issues. To make informed adjustments that enhance sustainability practices,

we effectively address any concerns by carefully analysing their feedback.

MAG is also committed to industry-wide discussions with multiple stakeholders and forming issue-focused partnerships to share best practices and address emerging challenges and opportunities. These pre-competitive collaborations are critical for developing innovative solutions to overcome common industry challenges, particularly in meeting net-zero pledges in this hard-to-abate sector.

Alongside feedback from external stakeholders, we evaluate ESG impacts, potential risks, and opportunities by gathering input from key internal specialists across several departments.

NOTABLE 2024 PARTNERSHIPS AND ENGAGEMENTS:



Signed a Memorandum of Understanding (MoU) with Airbus to advance Emissions Studies for further assessing SAF production and availability of local SAF feedstock in Malaysia ([see page 25](#)).



Partnered with FatHopes Energy to examine SAF production and supply chains ([see page 25](#)).



Served as Chairman of the Malaysian National SAF Task Force ([see page 26](#)).



Hosted the Aviation Decarbonisation Roundtable with UN Global Compact Network Malaysia & Brunei (UNGCMYB) ([see page 26](#)).



Organised the IATA Aviation Energy Forum (AEF) to support sustainable aviation industry efforts in the Asia-Pacific region ([see page 26](#)).



Collaborated with key stakeholders to support several events that champion women ([see page 41–42](#)).



Supported several corporate social responsibility (CSR) initiatives with key partners such as transporting vaccines to rural areas of Sarawak and Sabah ([see page 53–55](#)).



Served as a committee member in the International Civil Aviation Organisation (ICAO)–United Nations High Commissioner for Refugees (UNHCR) Working Group ([see page 62](#)).



Contributed to the Kuala Lumpur International Airport (KLIA) anti-wildlife-trafficking task force established by Malaysia Airports Holdings Berhad (MAHB) ([see page 63](#)).



Forged a new partnership with Google to drive travel innovations ([see page 67](#)).



Joined the CEO Action Network (CAN) – a coalition of over 70 leaders advocating for sustainability, capacity building, action and performance. In particular, MAG will play an active role in the diversity, equity, and inclusion (DEI) workstream.

STAKEHOLDER ENGAGEMENT

Stakeholder Engagement Overview

Stakeholder group	Engagement method	Engagement frequency	Key interests and considerations	Our response
Customers	<ul style="list-style-type: none"> Physical engagement through focus group sessions, mystery shopper programmes, and various MAG events Digital/online customer experience surveys (CES) 	<ul style="list-style-type: none"> Quarterly engagement Monthly survey programmes Ad-hoc (as and when required) 	<ul style="list-style-type: none"> Measuring customer feedback and insights while effectively managing their expectations Monitoring Customer Satisfaction Index (CSI) and Net Promoter Score (NPS) performance for all MAG customers 	<ul style="list-style-type: none"> Driving product improvement and future development through customer focus groups and experience surveys. These provide feedback on our products and services, and also involve field-testing such as meal tastings and product concept evaluations
Communities	<ul style="list-style-type: none"> Offering assistance through CSR activities that support non-profit organisations 	<ul style="list-style-type: none"> Annually When necessary or on request 	<ul style="list-style-type: none"> Community engagement, support, and development in line with our CSR framework, focusing on education, humanitarian needs, and the environment 	<ul style="list-style-type: none"> Partnering with non-profit organisations in CSR initiatives
Employees	<ul style="list-style-type: none"> Digital 	<ul style="list-style-type: none"> Quarterly MAG Culture Principles, modules, and animated videos Weekly culture articles and updates 	<ul style="list-style-type: none"> Educating our employees on the company's vision and MAG Culture Principles Providing our employees with regular updates on our content and culture initiatives 	<ul style="list-style-type: none"> Open and honest communication through leadership messaging and animated videos Maintaining a consistent dialogue by publishing condensed, engaging content on PulseDaily and Viva Engage
	<ul style="list-style-type: none"> Physical 	<ul style="list-style-type: none"> Monthly cultural on-the-ground engagement with business units Weekly culture leaders' clinics and performance coaching 	<ul style="list-style-type: none"> Employees value direct interaction and an opportunity to share insights Leaders may face challenges in steering their teams through cultural transformations 	<ul style="list-style-type: none"> Conducting interactive sessions with tailored activities to address specific topics with business units Organising clinics to empower leaders with productive ways of thinking, tools, and support

STAKEHOLDER ENGAGEMENT

Stakeholder group	Engagement method	Engagement frequency	Key interests and considerations	Our response
Government and regulators	<ul style="list-style-type: none"> Physical 	<ul style="list-style-type: none"> Quarterly engagement When necessary or on request 	<ul style="list-style-type: none"> Different initiatives by various ministries resulting in misalignment of mandate to airlines Supporting understanding of sustainability requirements 	<ul style="list-style-type: none"> Regular stakeholder updates Participating in key meetings
Industry stakeholders	<ul style="list-style-type: none"> IATA: World Sustainability Symposium (WSS), Aviation Energy Forum (AEF) oneworld: Environment Social Board Association of Asia Pacific Airlines (APPA): Environment Working Group Malaysia Aviation Decarbonisation Blueprint (MADB) Steering Committee, National SAF Task Force 	<ul style="list-style-type: none"> Annually Bi-annually Quarterly 	<ul style="list-style-type: none"> Promoting industry-wide collaboration on sustainability initiatives and addressing the sector's challenges in transitioning to a low-carbon economy Communicating effectively on the progress of sustainability efforts 	<ul style="list-style-type: none"> Offering MAG's perspective through active participation in collaboration activities such as forums, workshops, and task forces Effectively communicating MAG's sustainability progress through regulatory and annual sustainability reporting
Shareholders	<ul style="list-style-type: none"> General meetings Performance update sessions 	<ul style="list-style-type: none"> Annually Periodically When necessary or on request 	<ul style="list-style-type: none"> Strategic Financial performance Governance 	<ul style="list-style-type: none"> In-person meetings Virtual meetings Emails
Suppliers	<ul style="list-style-type: none"> Digital Physical 	<ul style="list-style-type: none"> Onboarding sessions Periodic When necessary 	<ul style="list-style-type: none"> Risk analysis and ESG requirements Service-level agreements (SLA) and KPIs Contract renewal Clarification sessions for business units and vendors 	<ul style="list-style-type: none"> Engaging with vendors through registration, performance evaluation, contract renewal discussions, and quality assurance audit

MATERIALITY

[GRI 2-14, 3-1, 3-2]

In 2024, we took an important step forward in our sustainability journey by deepening our understanding of what is material to our business and stakeholders by initiating our first double materiality assessment (DMA). This evaluation builds on our environmental and social operational impacts and integrates a financial materiality perspective to determine how ESG factors could influence MAG’s financial performance and long-term resilience.

The assessment process involved identifying material topics and their related sustainability risks and opportunities (SROs) through market research, benchmarking, and alignment with the LTBP. Using MAG’s Enterprise Risk Management (ERM) framework, Group functions and business units risk champions and risk owners evaluated the impact and financial materiality of each topic. The results of this assessment were validated by GEXCO, on behalf of the Board.

The economic implications of high-priority material topics were quantified, and a strategy was developed to manage

any relevant SROs identified at the time of this report’s publication. These were subsequently aligned with MAG’s draft ESG Mid-Term Strategy Roadmap.

Our DMA was a crucial step in MAG’s strategic planning. It will complement our readiness to comply with the National Sustainability Reporting Framework (NSRF)’s requirement to adopt IFRS S1 when MAG becomes within the scope of reporting in 2027. While this report presents our double materiality findings, a detailed breakdown of key topics will be included in future reports alongside the ESG Mid-Term Strategy Roadmap.

Changes to Material Topics

Following the double materiality review, MAG refreshed and prioritised several material topics. We streamlined and updated the previous 20 topics to 15, and categorised them as high, medium, or low priority. Some topics were merged, while others were renamed to better align with MAG’s priorities and industry best practices.

SUMMARY OF CHANGES

Revised topic names

- Energy management practices > Energy and resource efficiency
- Supplier relationship management > Supply chain management
- Waste management practices > Responsible waste management
- Labour practices and D&I > Diversity + Human rights (to two standalone topics)
- Employee engagement and talent development > Employee management

Merged topics

- Managing GHG emissions + Climate change related strategies > Climate change and emissions management
- Employee health and safety + Aircraft safety > Aircraft and employee safety
- Risk management + Corporate governance and business ethics > Corporate governance, risk management, and business ethics
- Customer welfare and management + Brand management > Customer welfare and branding

New topics

- Economic growth and performance

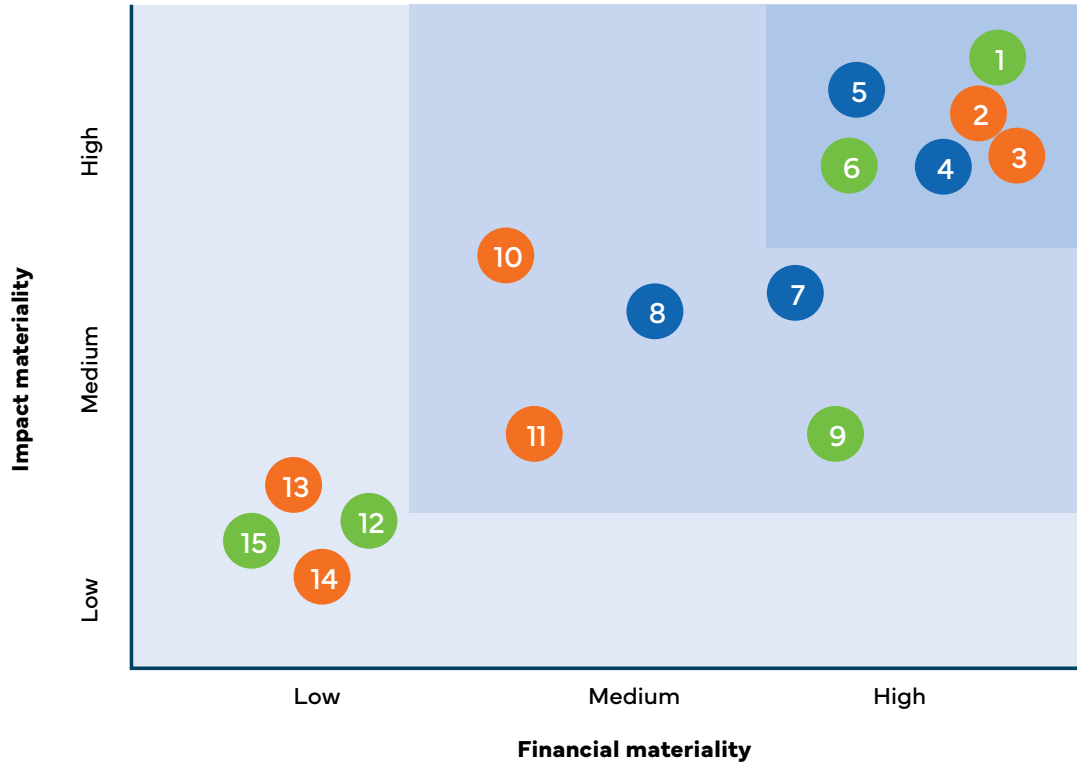
Changed in importance*

- ↑ Data privacy
- ↑ Employee engagement
- ↑ Customer welfare and branding (specifically a branding sub-topic)
- ↓ Corporate governance, risk management, and business ethics
- ↓ Human rights

* Changes in importance are noted if the topic’s priority level has changed.

MATERIALITY

2024 Materiality Matrix



Legend: Environmental Social Governance

Material Topic Prioritisation

Impact Materiality	Topic
High	1 Climate change and emissions management
	2 Aircraft and employee safety
	3 Employee management
	4 Economic growth and performance
	5 Supply chain management
Medium	6 Energy and resource efficiency
	7 Data privacy
	8 Corporate governance, risk management, and business ethics
	9 Responsible waste management
	10 Customer welfare and branding
	11 Diversity
Low	12 Noise reduction
	13 Human rights
	14 Community welfare
	15 Biodiversity preservation

i See more: [Material Topic Definitions](#).

ENVIRONMENT

MAG recognises our responsibility to reduce the impact our operations have on the environment. At the core of these commitments is integrating sustainable practices into our daily activities, including reducing emissions, conserving energy, managing resources, and responsibly handling waste. In 2021, we pledged to reach net zero by 2050 in line with the industry's Long-Term Aspirational Goal (LTAG) and are significantly investing to reduce our emissions and advance opportunities to support this industry-wide goal.

CONTENTS:

- Climate Strategy
- Energy Management
- Waste Management
- Environmental Management

2024 HIGHLIGHTS

CARBON OFFSET PROGRAMMES:



Launched **corporate and cargo carbon programme**



Added **Kuamut Rainforest Conservation Project** in voluntary carbon offsetting programme, totalling **4**



Developed **Carbon Trading Policy Framework**

EXPLORING SUSTAINABLE AVIATION FUEL (SAF) OPPORTUNITIES:



Local SAF development, including **feedstock availability studies** with Airbus



Used cooking oil exploration with FatHopes Energy



152,147 tCO₂ saved through fuel-saving initiatives, 78% more than 2023



Improved carbon efficiency by an average of 8.9% across all subsidiaries since 2023



Strengthened Scope 3 emissions reporting



7.5% reduction in building energy intensity since 2023



15.2% of total energy use generated from solar PV panels



15.4 million plastic items eliminated from flights



Embarked on **Phase 1 of climate risk assessment**



Chair of Malaysia SAF Task Force alongside Civil Aviation Authority of Malaysia (CAAM)



Co-hosted **Aviation Decarbonisation Roundtable** with UN Global Compact Network Malaysia & Brunei (UNGCMYB) and **International Air Transport Association (IATA) Aviation Energy Forum (AEF)** with Petronas



Strengthened upcycling initiatives by streamlining the upcycling inventory management



Completed first cabin waste audit to inform waste reduction strategies



Contributed to the **development of Malaysia Aviation Decarbonisation Blueprint (MADB) 2024**



Advised on policy development and incentives under **MADB Steering Committee**

CLIMATE STRATEGY

[GRI 3-3]

Although aviation accounts for only a small share of global emissions (about 2.5% of energy-related carbon emissions),² decarbonising the sector is disproportionately challenging compared to other industries. MAG is dedicated to tackling the challenges of mitigating climate change, driven by global trends and regulatory initiatives that strongly emphasise emissions reporting. We are also taking steps to identify adaptation measures in response to rising climate change impacts.

2024 Climate Risk Assessment

[GRI 201-2]

The aviation industry is increasingly affected by rising temperatures, extreme weather events, and escalating regulatory pressures, all of which threaten the resilience and long-term viability of air travel. For MAG, these challenges can lead to operational disruptions, higher costs, and an urgent need to decouple business growth from emissions.

In 2024, we launched the first phase of a two-part climate risk assessment to better understand and quantify the impacts of climate change and emissions management. The evaluation involves a climate scenario analysis to examine the business impacts of two plausible economic pathways. The first is a **business-as-usual (BAU)** scenario, assuming that social, economic, technological, and climate policy environments remain aligned with current market expectations. The second pathway is the **2 degrees Celsius (2DS)** scenario, which matches with Malaysia’s and International Air Transport Association’s (IATA) long-term climate goal of achieving net-zero carbon emissions by 2050 and limiting global warming to well below 2°C above pre-industrial levels by 2100.³ To assess these scenarios, we have adopted three timeframes (short-term [2025–2030], medium-term [2030–2040], and long-term [2040–2050]). Based on these scenarios, we have identified the following transition and liability risks:

Risk Overview	Description	Timeline
TRANSITION RISKS		
Policy	Under a 2DS scenario and increasingly ambitious climate policies, MAG would face growing transition risks. Regulations such as sustainable aviation fuel (SAF) blending mandates, carbon offsetting under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA), and carbon pricing schemes like the European Union Emissions Trading System (EU ETS) would increase compliance costs. These policies would require MAG to invest in sustainable alternative fuels, improve emissions tracking, and manage higher operating expenses.	● ○ ○ ○ ○ ○ Short- to medium-term
Technology – SAF	SAF is one of the most critical decarbonisation levers for MAG, but its widespread adoption is challenged by limited global supply and slow technology deployment. SAF currently costs three to five times more than conventional jet fuel, creating significant cost pressures. As mandates such as ReFuelEU Aviation come into force, MAG must carefully balance regulatory compliance with the realities of supply constraints and financial impact.	● ○ ○ ○ ○ ○ Short- to medium-term
Technology – Aircraft	The development of next-generation aircraft, such as hydrogen- or electric-powered propulsion systems, is still in its infancy. Current projections indicate that new-generation narrow-body aircraft will only become commercially viable by the mid 2040s. Any further delays in technological advancement or infrastructure deployment could significantly hinder the aviation industry and MAG’s ability to meet our long-term decarbonisation efforts.	● ● ● ● ● ● Long-term
Market Preferences	Increasing climate awareness is shifting passenger and business preferences, potentially impacting demand for air travel and cargo. This impact would be considerably amplified if increased decarbonisation costs are passed on to the consumer, particularly in a 2DS context. In a 2DS scenario, the expansion of high-speed trains and improved rail connectivity could lead to slower growth in short-haul travel and non-critical cargo, as customers seek lower-emissions alternatives. This shift presents both risks and opportunities for airlines to adapt through sustainable offerings and route optimisation.	● ● ● ○ ○ ○ Medium- to long-term

² Lombardo, T. (2025, January 16). Aviation. International Energy Agency. <https://www.iea.org/energy-system/transport/aviation>
³ To develop the assumptions for our transition scenarios and highlight trends and issues at the global, local, and industry level, MAG consulted with a range of credible sources, including the International Civil Aviation Organization (ICAO), International Air Transport Association (IATA), the World Economic Forum (WEF), Malaysia’s National Energy Transition Roadmap (NETR), the Malaysia Aviation Decarbonisation Blueprint (MADB), and other relevant reports.

CLIMATE STRATEGY

Risk Overview Description Timeline

LIABILITY RISKS

Climate Litigation

The aviation industry faces increasing liability risks from inaction on climate-related regulations and a failure to address environmental impacts. Simultaneously, there is growing scrutiny concerning greenwashing and misleading claims related to climate targets and progress. To maintain trust and credibility, MAG must continue to communicate its decarbonisation efforts clearly, accurately, and transparently, backed by verifiable data.

● ○ ○ ○ ○ ○
Short- to medium-term

In 2025, we will complete the remaining part of the first phase of our assessment. To mitigate any potential threats, we will specifically quantify the financial impacts of transition risks and explore potential opportunities or action plans. This will be followed by Phase 2, which will focus on identifying acute and chronic physical climate risks and hypothesise how often these events might occur over the medium to long term.

MAG's Focus on Decarbonisation

[GRI 305-5] [SASB TR-AF-110a.2, 110a.3, 430a.1, TR-AL-110a.2, 110.a.3]

MAG continues to build on a strong foundation in our decarbonisation journey, highlighting both the challenges and opportunities of cutting emissions in a rapidly evolving market. **Our climate response is anchored in a four-lever decarbonisation strategy that aligns with global frameworks such as International Civil Aviation Organization's (ICAO) Long-Term Aspirational Goal (LTAG) and IATA's Net Zero by 2050 pledge. These four levers – operational efficiency, fleet modernisation, sustainable**

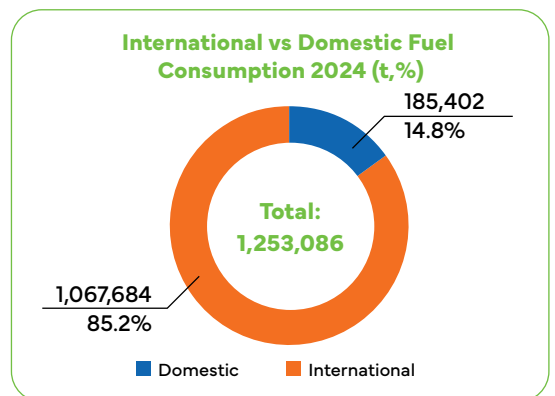
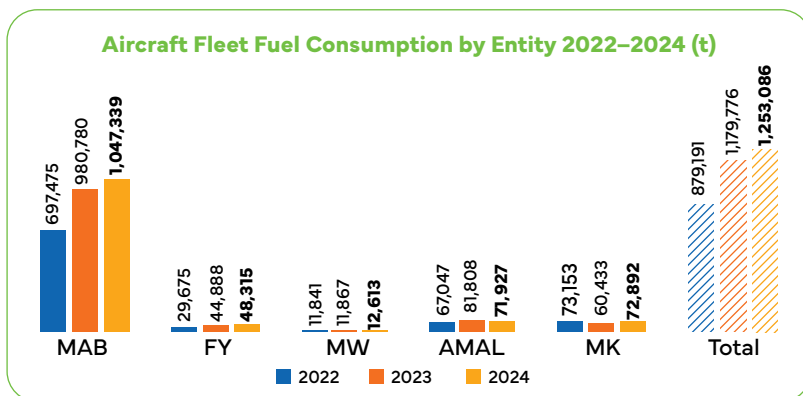
aviation fuel (SAF), and market-based measures – form the core of our approach, driving both immediate and long-term emissions reductions across our aviation and ground operations.

Lever 1: Operational Efficiency

Since fuel consumption remains the biggest contributor to Scope 1 greenhouse gas (GHG) emissions, improving the fuel efficiency of our aircraft and ground service equipment is crucial for our decarbonisation efforts.

Aircraft Fleet Fuel Management

In 2024, MAG's total aircraft fuel consumption was 1,253,086 tonnes, with 85.2% for international travel and 14.8% for domestic routes. While this represents an increase from 2022 (879,191 tonnes) due to increased flight activity, overall fuel usage remains below the estimated 2019 baseline,⁴ reflecting the positive impact of ongoing fleet renewal and fuel-efficiency initiatives.



Note: While AMAL operates under MAB flights, data is presented separately for emissions and energy reporting.

⁴ In line with Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), 2019 is now used as a baseline following the International Civil Aviation Organization's (ICAO) decision to revise the initial 2019–2020 average because of a considerable COVID-19-related fall in air travel. From 2024, the baseline equals 85% of 2019 emissions. The 2019 baseline remains unverified.

CLIMATE STRATEGY

MAG has implemented several behavioural initiatives, procedural improvements, and digital tools to lower fuel burn and associated emissions. In 2024, through increased adoption of key best practices, flight operations achieved a reduced fuel consumption of over 48,147 tonnes, equivalent to approximately 152,147 tonnes of carbon dioxide (tCO₂). Specifically, this was a **78.4% increase in fuel savings** compared to 2023, primarily due to improvements made with Firefly.

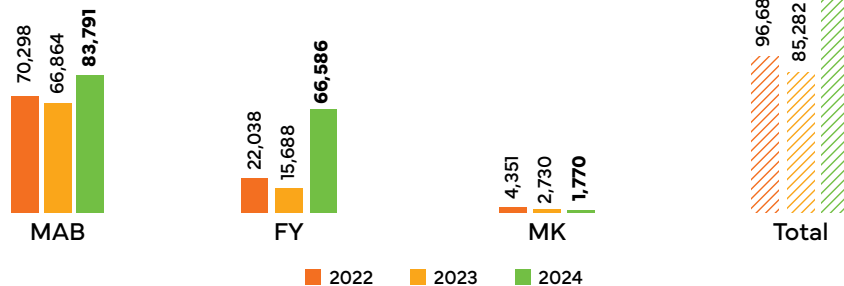
These fuel savings best practices include:

The **use of continuous descent operations (CDO)** for the descent phase, **optimised flap settings** during approach and landing, **Required Navigation Performance – Authorization Required (RNP-AR) approaches** for our narrow-body fleet across all Malaysian domestic airports (except KUL), **idle reverse thrust on landing, engine-out taxi-in procedures, and the use of Direct Track (DCT)**, which enables aircraft to follow the most direct routes. To further minimise unnecessary fuel uplift and burn-off, these initiatives incorporated **accurate zero-fuel weight calculations** and **pilot extra-fuel management**.

Increasing use of **GE FlightPulse** – a digital tool that provides pilots with data-driven insights on flight performance and operational efficiency.

Several of these initiatives can be attributed to MAG’s latest strategic project to improve aircraft reliability, which provides more explicit guidance and performance tracking to better support the flight crew in adopting fuel-saving practices.

Carbon Dioxide Avoidance from Fuel Savings 2021–2024 (tCO₂)



Note: MAB data covers Malaysia Airlines and AMAL reporting.

Moving forward, MAG will strengthen the implementation of its fuel-saving measures by:

- Collaborating with the Civil Aviation Authority of Malaysia (CAAM) to improve air traffic management.
- Expanding CDO by maintaining a steady descent profile from cruise altitude to landing.
- Optimising performance-based navigation procedures.
- Supporting the broader shift towards more efficient airspace management.

Ground Service Equipment Service

Total ground fuel consumption across AeroDarat Services (ADS), MASKargo (MK), and MAB Engineering Services (MABES) amounted to 2,926,107 litres in 2024, with diesel accounting for 95.1% and petrol making up 4.9%.

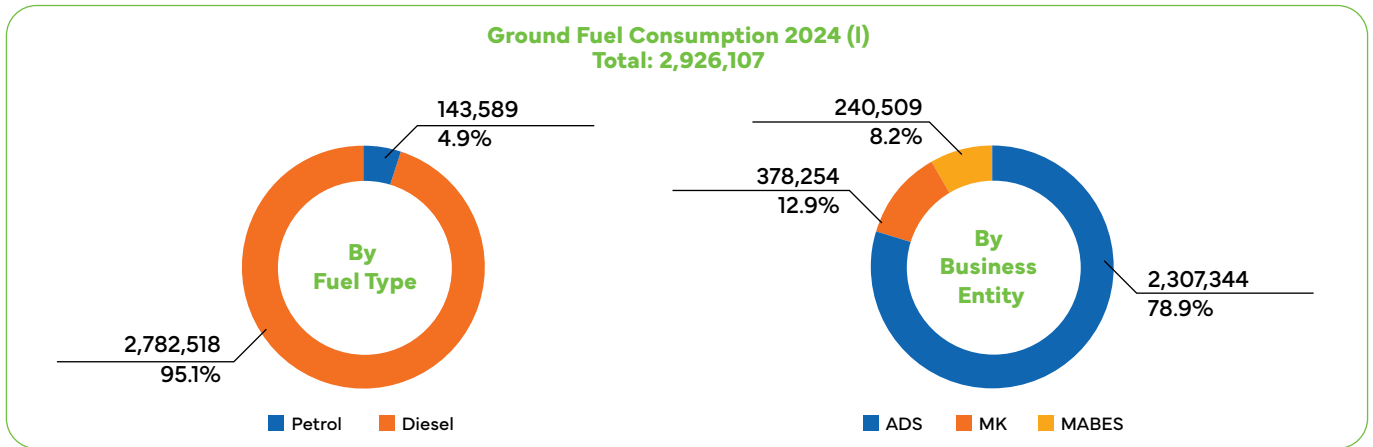
ADS accounts for the largest share of fuel consumption, making up 78.9% of total fuel usage. This has risen over the years as operations expanded. Acknowledging this, ADS is

actively working to enhance the energy efficiency of service equipment, including exploring electrification options where feasible.

Building upon the 2023 milestone of operating Asia’s first electric pushback and supporting pushback operations for all Malaysia Airlines’ narrow-body aircraft, ADS has successfully implemented the Remote-Controlled Aircraft Pushback (RAP) at Kuala Lumpur International Airport (KLIA). To further support this initiative and enable precise, emission-free aircraft movement, we expanded our RAP capability by adding nine Mototok units. The RAP is expected to reduce carbon emissions by up to ten tonnes each year while optimising labour deployment during pushback activities.

Looking ahead, ADS will expand its electrification trajectory in 2025 by introducing electric baggage tractors, further reducing environmental impact and enhancing productivity across KLIA ground operations.

CLIMATE STRATEGY



Note: Refer to the [Performance Data](#) for a further breakdown of fuel type by business entity.

Level 2: Fleet Modernisation

As part of MAG’s fleet renewal and modernisation efforts, the Group is gradually phasing out existing B737-800 NG narrow-body and A330-200/A330-300 wide-body aircraft and replacing them with the latest next-generation models. This fleet renewal programme is a key lever in MAG’s decarbonisation strategy, since the next-generation planes with improved aerodynamics and engines are significantly more fuel-efficient than their predecessors.

Airbus A330-900 (A330neo) Emission Reduction Features

The latest Airbus A330neo incorporates several features that contribute to emissions reductions and sustainability initiatives, including:

- Lightweight material:** A redesigned airspace cabin with lighter sidewalls, ceiling panels and door-frame linings, reducing weight by approximately 100 kg while elevating comfort.
- Fuel efficiency:** Consumes up to 11% less than previous A330 models.
- Advanced engines:** Features Rolls-Royce Trent 7000 high-bypass turbofan engines, designed for greater fuel efficiency and lower emissions.
- Aerodynamic design:** Incorporates new composite sharklets to reduce drag.
- Noise reduction:** Delivers quieter take-offs and landings due to advanced engines and improved wing design.
- SAF compatibility:** Certified to operate with up to a 50% SAF blend.

CLIMATE STRATEGY

Lever 3: Sustainable Aviation Fuel (SAF)

MAG is committed to adopting SAF as a key part of the aviation sector’s long-term decarbonisation efforts. SAF has the potential to reduce lifecycle carbon emissions by up to 80% compared to conventional jet fuel,⁵ making it a critical enabler in the industry’s transition to net zero. However, the sector continues to face persistent challenges in scaling up SAF adoption, including high production costs, limited availability, and supply chain constraints.

Since 2021, we have conducted 20 SAF demonstration flights, through which we developed dynamic partnerships and progressive initiatives. This plays a crucial role in our trajectory towards achieving net-zero carbon emissions by 2050.

Innovating with Industry Peers

MAG plays an active role in shaping SAF development at both national and regional levels. Our partnerships with industry peers are a key part of our overall strategy to drive innovation and set new standards for environmental responsibility in aviation.

AT THE FOREFRONT OF SAF DISCUSSIONS: 2024 ENGAGEMENTS

Collaborating with Airbus on SAF Emissions Studies

In February 2024, MAG signed a Memorandum of Understanding (MoU) with Airbus to accelerate emissions research in support of our SAF deployment strategy. The research focuses on analysing the lifecycle of local SAF feedstocks, assessing infrastructure readiness, and integrating supply chains. MAG will also assess SAF performance in regular flight conditions to identify efficiency gains and optimal usage pathways. This partnership demonstrates MAG’s commitment to combining innovation with sustainability to achieve industry emissions targets, including reduced take-off and landing noise through state-of-the-art engines and wing design.



Exploring Waste-Based SAF with FatHopes Energy

MAG expanded its SAF efforts through a partnership with FatHopes Energy, a prominent Malaysian waste-to-energy company focused on developing sustainable fat, oil, and grease solutions. Our collaboration focuses on producing SAF from used cooking oil and other waste feedstock, supporting Malaysia’s ambition to become a regional SAF hub. By using locally sourced feedstock, the initiative reduces lifecycle carbon emissions and encourages circular economy practices in the aviation sector. Together, MAG and FatHopes Energy aim to boost SAF production and develop a supply chain to facilitate broader adoption in Malaysia and the surrounding regions.



CLIMATE STRATEGY

Co-hosted the Aviation Decarbonisation Roundtable in Malaysia

In August 2024, MAG helped organise this event, in conjunction with the UN Global Compact Network Malaysia & Brunei (UNGCMYB). This inaugural session was attended by key aviation industry players, including the Economic Planning Unit, Airbus, Boeing, Khazanah Nasional Berhad, the University of Malaya, and Bursa Malaysia. Our joint discussions on decarbonising the local aviation sector led to the publication of the Sustainability Roundtable Report 2024: [Accelerating Decarbonisation in Malaysia's Aviation Industry](#), which is now available to the public.



Co-hosted the IATA Aviation Energy Forum (AEF)

In November 2024, MAG and AEF jointly hosted this leading industry gathering for the global aviation fuel community. The conference brought together several global industry players to explore the Asia-Pacific jet fuel landscape, CORSIA compliance, and SAF progress. We also showcased Malaysia's robust jet fuel supply ecosystem, supported by strategic infrastructure and refining capabilities at KLIA.

The event bolstered Malaysia's ambition to achieve a 47% SAF blending by 2050, as set by the Ministry of Transport (MOT) under the National Energy Transition Roadmap (NETR) and Malaysia Aviation Decarbonisation Blueprint, reaffirming its commitment to global decarbonisation, despite challenges such as cost and supply chain logistics.

Chairman of the Malaysian National SAF Task Force

This task force was set up by the MOT in collaboration with the CAAM to support national efforts to adopt and accelerate the use of SAF.

⁵ International Air Transport Association (IATA). (2023) Developing Sustainable Aviation Fuel (SAF). <https://www.iata.org/en/programs/sustainability/sustainable-aviation-fuels/>

CLIMATE STRATEGY

Lever 4: Market-Based Measures (Carbon Offsetting)

Given the challenges of reducing emissions in the aviation sector and the ongoing development of other decarbonisation strategies, market-based solutions such as carbon offsetting are crucial for closing any short-to-medium-term emissions gaps. MAG's offsetting strategy is based on two main approaches: complying with the **mandatory carbon offsetting** obligations under the CORSIA and **promoting voluntary emissions offsetting** through passenger and corporate programmes.

Mandatory Carbon Offsetting

In 2024, MAG focused on enhancing its preparedness for mandatory offsetting under CORSIA, which obliges aviation members to comply during the first implementation phase from 2024 to 2026. MAG has aligned its internal tracking and reporting systems to accurately monitor international emissions and prepare for purchasing eligible offset credits.

Nevertheless, despite an increasing demand for eligible credits, the industry is facing challenges to CORSIA's effectiveness, as a limited number of qualifying projects constrains available supply chains. Furthermore, the successful implementation of CORSIA's requirements could be hindered by a lack of harmonisation stemming from host countries' geopolitical or policy agendas and the emergence of competing decarbonisation regulations.

In light of these challenges, airlines must approach credit procurement cautiously, weighing not only cost but also long-term reliability and compliance. In response, in 2024, **MAG has developed a comprehensive Carbon Trading Policy Framework** to serve as a guide for carbon credit procurement decisions and to prepare for CORSIA's mandatory requirements. In line with ICAO's CORSIA eligibility criteria, the framework outlines clear procedures for sourcing, purchasing, accounting for, and retiring carbon credits. This ensures robust governance, transparency, and risk mitigation, while also allowing for flexibility in response to changing market and regulatory conditions.

MAG is also actively monitoring guidance from ICAO and IATA on the approved offset credit programme. We are collaborating in relevant industry forums to stay informed in the constantly changing carbon market landscape.

Voluntary Carbon Offsetting

In 2024, MAG further enhanced its services for both passengers and corporate clients, enabling us to support high-quality, certified carbon-reduction projects.

Passenger Carbon Offset Programme

MAG's passenger-facing offset platform continued throughout 2024, allowing travellers to voluntarily calculate and offset the emissions for their upcoming trip during the booking process. Thanks to this initiative, passengers can now make direct contributions to independently verified global carbon-reduction projects.

Corporate and Cargo Carbon Programme

Corporate-led offsetting recorded substantial growth in 2024. Notably, the Ministry of Natural Resources and Environmental Sustainability (NRES) became the first government ministry to join the programme, thereby aligning with its strategic objectives and honouring MAG with a prestigious endorsement. In addition to its corporate portfolio, MAG will begin expanding its offset solutions for cargo clients.

Projects Supported in 2024

Offsets purchased through MAG's programme directly supported a diverse portfolio of nature-based and renewable energy projects, including:



Katigan Mentaya and Rimba Raya Projects, Indonesia

Peatland forest protection and biodiversity restoration projects, critical for orangutan habitats and regional climate resilience.



Fusui Biomass Project, China

A clean energy project that reduces coal dependence by converting sugarcane waste into biomass electricity.



Alisios Grouped Wind Project, Costa Rica

A renewable energy initiative that promotes local economic growth by generating clean wind power.



New in 2024: Kuanut Rainforest Conservation Project, Sabah, Malaysia

Launched in 2024 as MAG's flagship domestic initiative, this forest carbon project protects and restores over 83,000 hectares of tropical rainforest in Sabah, preserving vital species, including the Bornean orangutan and helmeted hornbill. The scheme also integrates community-led conservation and equitable benefit sharing with local and Indigenous communities.

CLIMATE STRATEGY

Going forward, MAG will align our voluntary offset offerings more closely with our overall decarbonisation strategy, including CORSIA compliance and SAF adoption. We aim to further build stakeholder trust by increasing transparency, reporting on impact, and continuously improving our voluntary carbon programmes.

Group Carbon Dioxide Emissions

[GRI 305-1, 305-2, 305-3, 305-4] [SASB TR-AF-110a.1, TR-AL-110a.1]

In 2024, our Group Scope 1 and Scope 2 carbon dioxide emissions⁶ were 3,999,122 tCO₂, with Scope 1, primarily from jet fuel, constituting 99.2% of total emissions. Scope 2 from purchased electricity for our buildings accounted for the remaining 0.8%.

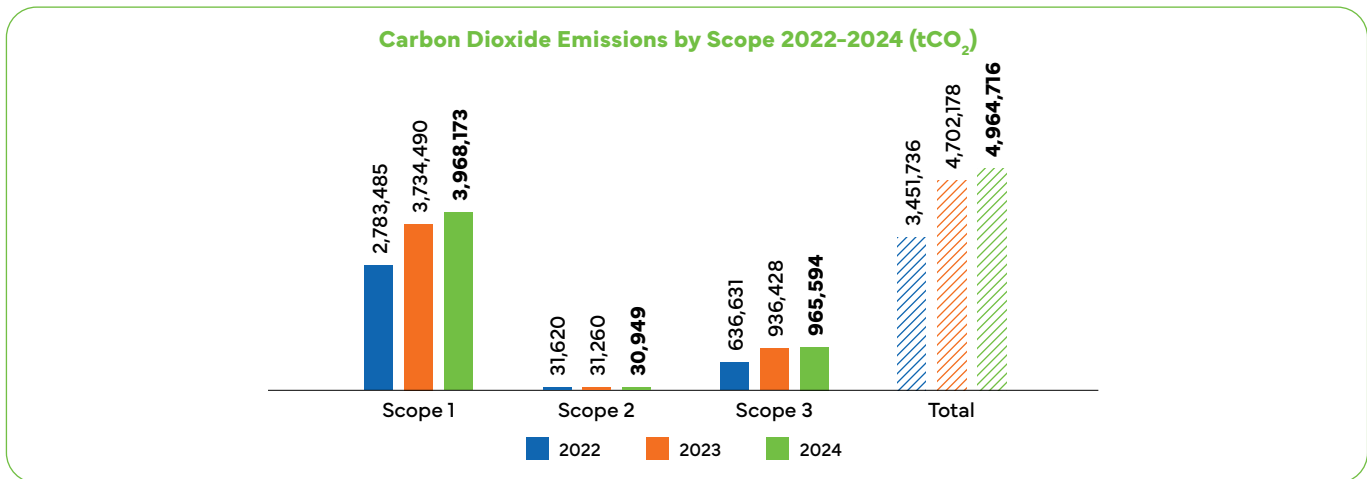
Combined with Scope 3 emissions from our value chain, our net emissions totalled 4,964,716 tCO₂. Compared to 2023, our total emissions increased by 5.6% in 2024, mainly due to the expansion of our fleet and operational changes in our buildings. Nonetheless, we remain firmly committed to our decarbonisation efforts and will build a foundation for further reductions beyond 2025 by reducing our carbon intensity. This includes not only aircraft and ground upgrades but also enabling technologies, data-driven decision making, and regulatory compliance frameworks.

Jet fuel is the primary source of Group emissions, accounting for over 79.9% of total Scope 1, 2, and 3 emissions in 2024.

Absolute Scope 1 emissions increased with network expansion but stayed below 2019 levels due to newer aircraft and operational efficiencies. Malaysia Airlines (MAB) was the largest Scope 1 contributor, while Firefly's (FY) share grew due to the expansion of its international network.

Scope 2 emissions were highest for MK and MABES. There were also notable increases for Aerodarat Services and MAG Catering Operations (MCAT), attributable to changes in MAG's catering operations and an increased demand for refrigeration. Other subsidiaries exhibited mixed trends driven by operational changes such as the conversion of the administrative building into Malaysia Airlines Berhad Academy's (MABA) training academy, the enhancement of the ADS office to support 24-hour MCAT operations, MABES' expansion to provide third-party maintenance, repair and overhaul (MRO) services, and increased energy use at MK KUL following the ramp-up of its large, automated storage and conveyor system.

In 2024, we improved our allocation methods and expanded our Scope 3 reporting to include nine categories – up from the two that we previously reported. Fuel- and energy-related activities, not included in Scope 1 or 2, are the most significant contributor, accounting for 86.3% of total Scope 3 emissions. These emissions mainly arise from upstream fuel production and distribution, providing a clearer focus area for targeted reduction strategies.



Notes:

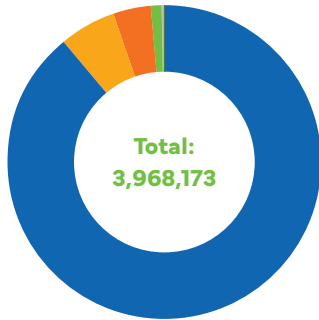
- In line with best practices for GHG accounting, MAG has recalculated its 2022 and 2023 emissions figures to reflect improved data accuracy and expanded reporting boundaries. The data now includes chilled water consumption and two new Scope 3 categories.
- Scope 2 data is location-based. MAG's market- and location-based Scope 2 emissions are the same.

⁶ In line with the International Civil Aviation Organization's (ICAO) Long-Term Global Aspirational Goal Report (LTAG) for international aviation, only CO₂ emissions are monitored and reported. For more information, please see the ICAO's LTAG report: <https://www.icao.int/environmental-protection/ltag-report>

CLIMATE STRATEGY

Scope 1 and 2 Emissions by Entity 2024 (tCO₂, %)

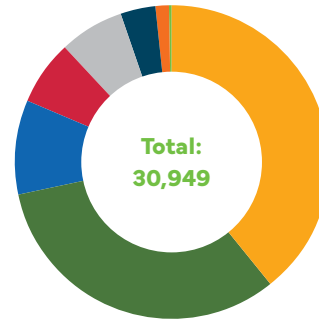
Scope 1



Entity	Emissions (tCO ₂)	Percentage (%)
MAB	3,536,880	89.13 %
MK	231,280	5.83 %
FY	152,845	3.85 %
MW	39,856	1.00 %
ADS	6,675	0.17 %
MABES	638	0.02 %

Note: MAB data includes AMAL.

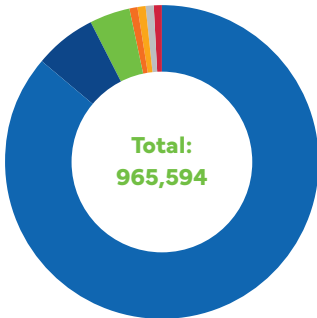
Scope 2



Entity	Emissions (tCO ₂)	Percentage (%)
MK	12,205	39.4 %
MABES	10,053	32.5 %
MAB	2,934	9.5 %
MABA	2,074	6.7 %
ADS	2,112	6.8 %
MCAT	1,083	3.5 %
FY	466	1.5 %
MW	23	0.1 %

Note: MAB data includes AMAL.

Scope 3 Emissions by Category 2024 (tCO₂, %)



Category	Emissions (tCO ₂)	Percentage (%)
Fuel- and energy-related activities	833,405	86.3 %
Processed goods and services	62,486	6.5 %
Employee commuting	38,360	4.0 %
Other	10,125	1.0 %
Investments	7,352	0.8 %
Capital goods	7,320	0.8 %
Upstream leased assets	6,546	0.7 %

Note: The Other category includes waste generated from our operations, business travel, upstream transport, and distribution.

CLIMATE STRATEGY

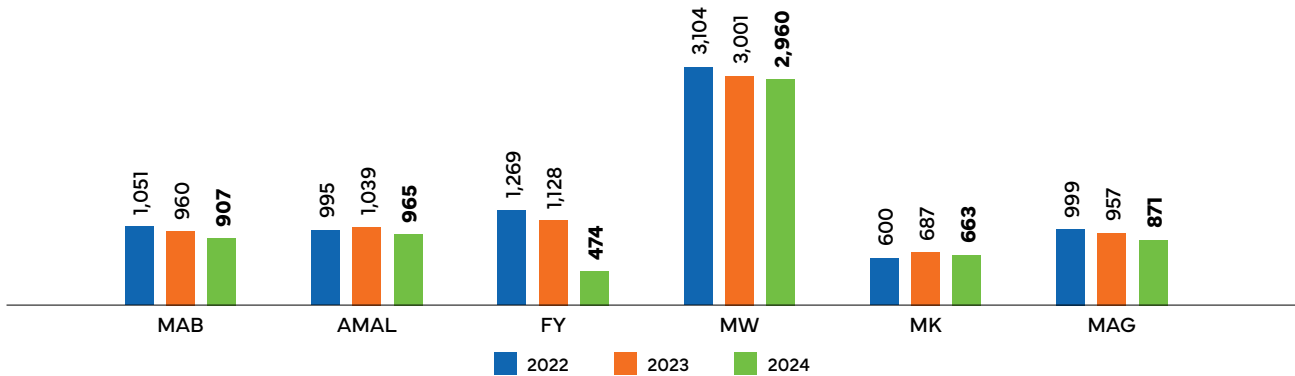
Improving Carbon Efficiency

At the Group level, total load-tonne kilometre (LTK) increased by 63%, demonstrating strong growth in network and capacity. Despite this expansion, total emissions rose by 42%, driven by the combined effects of fleet renewal and operational efficiency measures. Consequently, MAG's carbon efficiency improved by 12.7% since 2022, illustrating tangible progress in separating growth from emissions. These improvements were supported by the deployment of more efficient aircraft, better route planning, and disciplined fuel management across our passenger and cargo operations.

Between 2022 and 2024, MAG saw ongoing improvements in carbon efficiency across most subsidiaries, measured in grams of carbon dioxide per LTK (gCO₂/LTK). MAB's intensity steadily declined from 1,051 to 907 gCO₂/LTK, while AMAL's intensity dropped to 965 gCO₂/LTK in 2024, having peaked in 2023. FY saw the biggest reduction, falling from 1,128 to 474 gCO₂/LTK, driven by higher load factors and longer jet routes. MW was the highest in emissions intensity due to its short-haul operations, but it saw a slight decline from 3,104 to 2,960 gCO₂/LTK. MK recorded a higher carbon intensity of 663 gCO₂/LTK, likely owing to increased cargo operations and heavier payloads, despite more efficient freighter use.

As we look to the future, MAG anticipates further gains in carbon efficiency through fleet renewal, network expansion, route optimisation, and operational efficiency measures, with fuel-saving initiatives pivotal for lowering emissions across both our passenger and cargo operations.

Carbon Efficiency by Entity 2022–2024 (gCO₂/LTK)



ENERGY MANAGEMENT

[GRI 3-3]

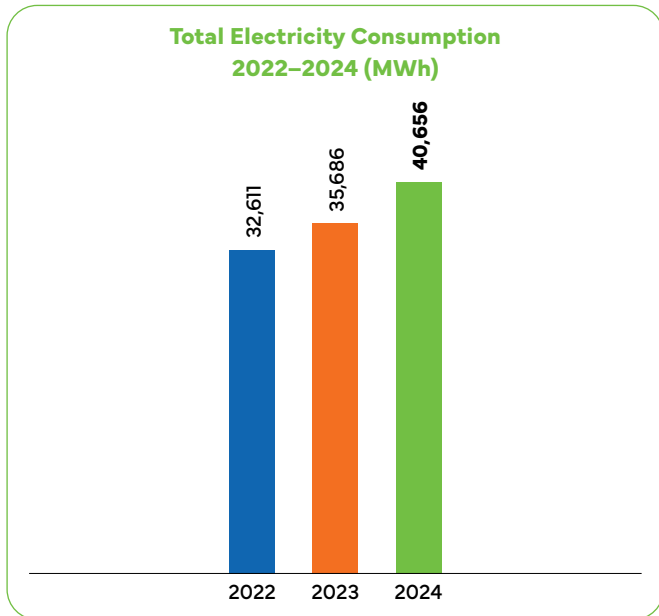
Recognising that operating our large buildings consumes a large amount of energy, MAG is focused on boosting energy efficiency across our facilities, which will help reduce Group Scope 2 GHG emissions while aligning with national goals that highlight building energy efficiency as a key net-zero lever, as outlined in Malaysia’s National Energy Transition Roadmap (NETR).

Monitoring Energy Consumption

[GRI 302-1]

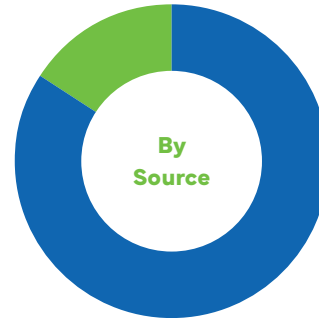
MAG monitors energy usage across all our facilities, including administrative offices, flight operations offices, engineering hangars, storage facilities, and cargo warehouses. In 2024, our total electricity consumption rose to 40,656 megawatt-hours (MWh). This is an 13.9% increase from 35,686 MWh in 2023 and a 24.7% rise from 32,611 MWh in 2022, mainly due to our recent expansion and new buildings starting operations. Key factors include:

- MAB Academy at South Support Zone (SSZ), KLIA: This new training centre replaced the previous facility at Kelana Jaya. The building is subject to higher footfall and more employees, which increases energy consumption.
- MAG Catering Operations (MCAT) food assembly and warehouse building: The addition of MCAT catering operations from MCAT significantly increased energy demand by introducing additional chillers, cool rooms, and operational areas.

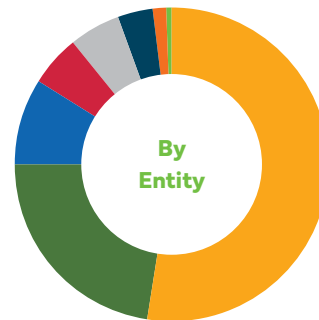


Note: Data covers electricity consumption sourced from the grid and solar.

Total Electricity Consumption by Source and Entity 2024 (MWh,%)
Total: 40,656



Source	Consumption (MWh)	Percentage (%)
Grid	34,259	84.3 %
Solar	6,397	15.7 %



Source	Consumption (MWh)	Percentage (%)
MK	21,326	52.5 %
MABES	9,202	22.6 %
MAB	3,595	8.8 %
MABA	2,206	5.4 %
ADS	2,163	5.3 %
MCAT	1,399	3.4 %
FY	601	1.5 %
MW	163	0.4 %

Note: MK’s electricity consumption data includes both grid electricity and solar.

ENERGY MANAGEMENT

Improving Our Energy Footprint

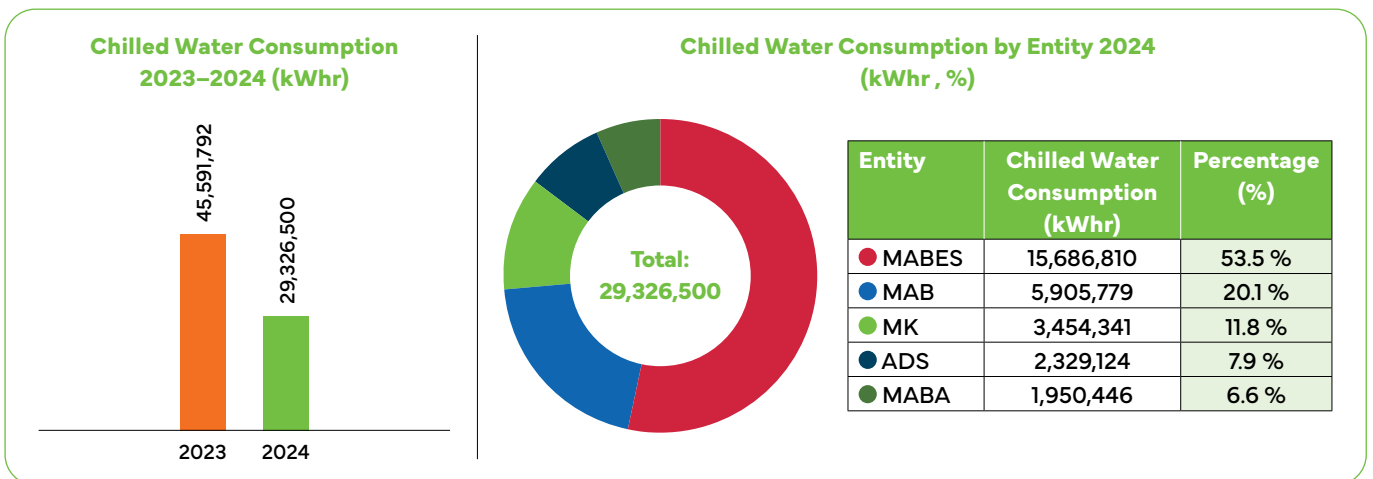
Since 2014, and as part of our efforts to reduce our reliance on the grid, MAG has heavily invested in installing solar photovoltaic (PV) panels on the rooftops of our MK building at KLIA, with a generation capacity of 5.28 megawatt-peak (MWp). In 2024, this initiative generated 6,397 MWh of renewable energy, accounting for 15.7% of MAG’s total energy consumption. We are always looking for ways to improve energy efficiency in our buildings, such as replacing traditional light bulbs with LED alternatives. We are also focusing on our most energy-intensive facilities: the MABES hangars and MK warehouses. In 2024, we completed a thorough audit of these buildings to identify energy-saving opportunities.

We are also planning to adopt green building certification for our newer assets. Our upcoming simulator building at KLIA, scheduled for completion in 2025, has already undergone a Green Building Index (GBI) design assessment, which recognises the facility as having been acknowledged by an independent body for its energy, water, and resource efficiency.

Chilled Water Consumption

[GRI 302-5]

In 2023, to monitor chilled-water consumption for cooling, MAG installed British Thermal Unit (BTU) meters in facilities connected to the district cooling system. Based on two years of data, overall chilled water consumption decreased in 2024 compared to 2023, mainly due to the construction of a new transfer station between the SSZ facilities and the district cooling provider, which enhanced chilled water flow and control. The property team also continues to implement related efficiency measures, including replacing insulation and repairing chilled-water leaks as required.



Building Energy Index (BEI)

[GRI 302-3]

MAG has also enhanced energy-efficiency monitoring in our buildings. We have specifically calculated our energy intensity footprint using the national BEI, which considers our total energy consumption and chilled water use (for cooling) relative to our total floor space. Through capturing intensity data, we can identify areas for improvement by better understanding how efficiently we use resources to power our buildings.

After analysing two years of data, we found that our BEI decreased from 241 kilowatt-hours per square metre per year (kWh/m²/year) in 2023 to 223 kWh/m²/year in 2024. This 7.5% decline was mainly due to the installation of a new heat transfer station, which is helping to stabilise our facility’s secondary chilled-water circulation loop.

Moving forward, we will continue conducting energy audits at high BEI-consumption facilities to identify and prioritise energy-saving measures.

WASTE MANAGEMENT

[GRI 3-3, 301-1, 306-1, 306-2, 306-3, 306-4, 306-5]

MAG is taking a structured approach to operational waste management. This includes reducing overall waste, recycling whenever possible, and disposing of scheduled waste responsibly. Our waste reporting is organised into three main categories: in-flight, ground, and scheduled.

In-Flight Waste Management

Our in-flight waste falls into two categories: galley waste (primarily food and beverage items) and cleaning waste (non-food residue from passenger service items and lavatories). The volume of cabin waste varies each year, depending on flight frequency and operational activity. As a result, total aircraft waste increased in 2024 because of increased flight activity.

In 2023, our partnership with a former in-flight catering partner ended. Prior to this, our third-party contractor managed the collection and disposal of post-landing food waste. After establishing MAG’s dedicated catering division in 2024, all food and beverages for MAG flights are now sourced, managed, and distributed internally, including post-flight waste handling.

Although recycling processes remain in place, we experienced a temporary decline in recycled cabin waste during the transition to our in-house catering operations, as staffing levels and infrastructure were being adjusted. Consequently, waste diverted from landfill fell from 93 tonnes in 2023 to 57 tonnes in 2024 – a 39% reduction. This short-term impact is being addressed through an enhanced recycling plan in 2025 aimed at restoring and improving our waste recovery performance in line with our broader sustainability objectives.

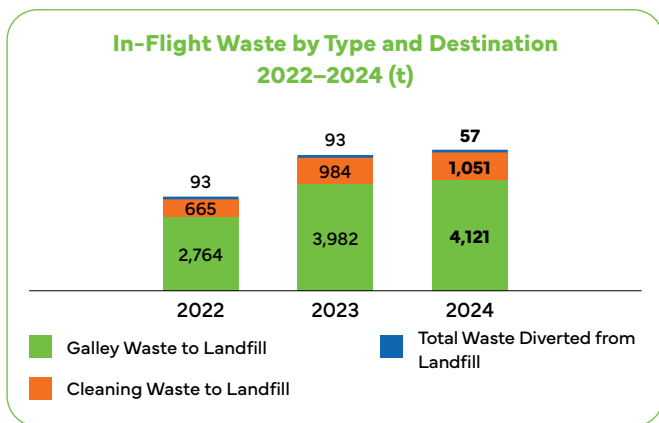
Harnessing Data to Improve Cabin Waste Strategies

In 2024, MAG conducted several cabin waste composition audits of our in-flight waste to gain a better insight into waste streams and quantities. The complete audit covered three sample flights, while our food-specific assessment covered an additional nine flights using the industry-standard Cabin Waste Composition Audit (CWCA) methodology, developed by IATA and the Aviation Sustainability Forum (ASF).⁷

We conducted this exercise in response to increasing calls for aviation companies to systematically monitor waste data using a data-driven approach to guide waste-reduction strategies. The audit enabled us to systematically categorise waste types, improve data-driven tracking, and establish baselines. To measure the quantity of edible food waste, we also conducted a separate food waste audit focusing on uneaten meal trays and uplifted catering items.⁸

Our efforts have yielded a comprehensive waste profile for MAG’s operations, guiding both current and future waste reduction strategies. It includes supporting initiatives such as better segregation, additional onboard recycling capabilities, and more effective catering practices. MAG will continue to align with emerging industry standards by adopting a data driven, practical approach to minimising cabin waste.

MAG is also planning to reuse specific unopened food and drink items, such as sealed peanut packages and juice cartons, in accordance with stringent health and safety guidelines. To further reduce unnecessary food leftovers, we are developing a prevention and reduction strategy that will not only reduce food waste but also lower fuel consumption by reducing aircraft weight.



Ground Waste Management

Ground waste comprises materials from our buildings and ground services, mainly non-hazardous refuse from daily and domestic activities. Waste streams include paper, plastic, food waste, and food containers. In 2024, we generated 3,551 tonnes of ground waste from our facilities at KUL – 14% more than in 2023 (3,111 tonnes). While total waste increased, recycling more than doubled year-on-year, mainly due to the recovery and recycling of wood pallets from MK operations. As a result, waste sent to landfill remained relatively on par with 2023 levels (2,748 tonnes vs 2,736 tonnes), indicating that additional waste was effectively diverted from landfill into recycling streams.

⁷ Between November 2023 and April 2024, the Cabin Waste Composition Audit (CWCA) methodology was tested on 25 short-, medium-, and long-haul flights departing from Singapore’s Changi Airport. The findings indicated that the airline industry generates around 3.6 million tonnes of cabin and catering waste each year. Of this, 65% consists of food and drink waste, with 34% being uneaten by passengers. The audit also revealed that each passenger generates an average of 0.94 kg of waste. Although this is 34% lower than a similar Heathrow Airport study from a decade earlier, increased access to data and standardised approaches to managing in-flight waste make it easier to implement targeted interventions and improve recycling initiatives.

⁸ Uplifted catering items refer to food, beverages, and other pre-flight service items that are loaded onto an aircraft.

WASTE MANAGEMENT

MAG is actively exploring the most effective ways to segregate waste in line with our operational requirements. In 2025, we plan to map generated waste and identify reduction measures for MAG’s two highest waste-generating facilities: our cargo building and hangars. We are also working closely with our waste management vendors to streamline our waste handling processes. Our key objectives are to increase recycling rates and reduce the amount of waste to landfill. To achieve this, we are exploring initiatives such as implementing organic waste pilot composting schemes and evaluating alternative recovery methods for other materials. An example of this is our partnership with selected local communities. See [Upcycling MAG Waste](#).



Scheduled Waste Management

MAG has established a scheduled waste management strategy for all classified waste listed under the First Schedule of the Environment Act. This ensures we remain fully compliant with waste handling and disposal regulations outlined in the Environmental Quality (Scheduled Waste) Regulations 2005. Employees who manage scheduled waste are required to attend monthly briefings. We also separate domestic rubbish from scheduled waste at the point of disposal, making it easier to identify the proper refuse-handling procedures for different types of waste. This also boosts recycling rates and reduces overall waste management costs.

Upcycling MAG Waste

In 2023, MAG launched our **Scrap2Fab** upcycling initiative, which works with local communities to turn end-of-life products into valuable resources. The programme has multiple objectives: reducing waste, raising environmental awareness, and driving industrial collaboration.

Although this initiative is led by MABES, MAG’s sustainability office, and our women’s association (W@M), it encourages participation across the entire Group, with all business units and departments encouraged to join. MAG’s sustainability office provides the initial seed funding for upcycling and identifying reusable waste such as old uniforms, expired life jackets, magazines, leather covers, and bags.

Our first year of the programme began with *Komuniti Tukang Jahit (KTJ)* and *Jabatan Penjara* working to repurpose scrap into usable items that are then sold through MAG’s platforms. This supports our goal of improving livelihoods and generating income for local communities. Building upon the success of the programme’s first year, MAG expanded the initiative in 2024 by:



Conducting a comprehensive inventory management review of all potential usable project waste. This includes streamlining storage systems to track and protect reusable materials and finding ways to prevent damage or degradation of items set aside for upcycling.



Developing formal upcycling guidelines to standardise projects. This involves briefing key stakeholders and distributing a company-wide circular outlining the framework to all business units. Our formal guidelines were published in the first quarter of 2025.



Renewing contracts with key vendors. This maintains project momentum by ensuring continuous material recovery pipelines.

Reducing Single-Use Plastics

The aviation industry faces increasing pressure from regulators and consumers to reduce reliance on single-use plastics, especially in cabin services. As we await harmonised regulations or revised industry standards, it is essential to consider all options when developing a comprehensive strategy to phase out single-use plastics, including the availability of alternative materials, adherence to strict hygiene standards, and the limitations of onboard storage.

WASTE MANAGEMENT

MAG launched its single-use plastic reduction programme in 2022, focusing on minimising plastic use across cabin operations. To strengthen this initiative, a comprehensive mapping exercise was conducted in 2024 using procurement data to identify 58 types of onboard plastic materials across comfort items, food and beverage packaging, and other cabin products. The findings helped underpin a prioritisation matrix to assess which items could be reduced, replaced, or redesigned based on environmental impact, operational feasibility, and the availability of sustainable alternatives. Based on this assessment, customer-facing products such as comfort items and food and beverage packaging were prioritised for reduction and replacement. This structured approach provides a clear pathway for MAG's ongoing efforts to transition towards more sustainable materials and reduce single-use plastics across our operations.



As of December 2024, we have removed or replaced a total of **15.4 million** plastic items throughout all our in-flight operations (an increase from 10.1 million in 2023).

This includes the following:

Removed/Replaced Plastic Items 2023–2024 (no.)

	2023	2024
Wooden disposable cutlery packs	4,390,500	6,640,500
Biodegradable dental kits	49,000	107,000
Wooden stirrers	5,710,000	8,650,000
Total	10,149,500	15,397,500

Note: In addition, MAG now offers recyclable or compostable packaging for our business-class pyjama and slipper sets.

MAG is taking a measured approach to replacing plastics, ensuring we have accurate insights needed to make well-informed decisions. First, this involves understanding the market and verifying claims or certifications for 'eco' labelled items, using data to assess their actual environmental performance against market claims. The next phase will be to collaborate closely with potential suppliers to evaluate material standards, explore alternatives, and adopt a lifecycle design approach to inform procurement and design decisions. Future efforts will focus on potential unexamined cabin service items and analysing the broader operational impacts, including possible fuel savings from reducing onboard weight.



ENVIRONMENTAL MANAGEMENT

Noise Management

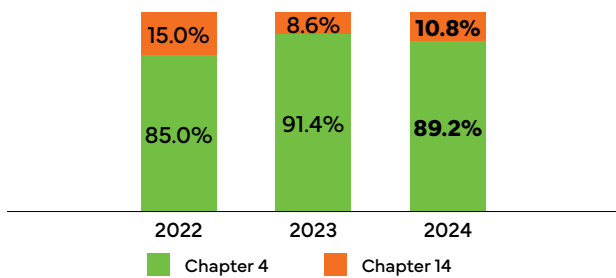
[GRI 3-3]

We recognise the potential noise impacts that aircraft have on employees, passengers, and communities residing near airports.

ICAO Certification

MAG's ongoing commitment to noise abatement is evident in maintaining our full certification to the ICAO aircraft noise standards. As of December 2024, 89.2% of our fleet was certified under Chapter 4, and 10.8% under the more rigorous Chapter 14, which requires newer aircraft to be at least seven Effective Perceived Noise Decibels (EPNdB) quieter than those meeting the Chapter 4 standard.

Fleet-Certified ICAO Aircraft Noise Chapters 2022-2024 (%)



Managing Workplace Noise

Occupational noise-related hearing disorders (ONRHD) are among the most commonly reported work-related illnesses in the aviation industry. The effects of ONRHD are cumulative and can be permanent, posing a serious risk to our workforce. MAG operates two key programmes to address potential health hazards associated with high noise levels:

Noise-exposure monitoring (NEM) programme:

NEM complies with national noise-exposure regulations, facilitating continuous monitoring of workplace noise levels across several workstations. This helps us identify the potential risks of noise-induced hearing loss, so we can adjust our noise control measures and take appropriate corrective actions. In 2025, NEM will target workstations across seven airports in Kuala Lumpur, Subang, Tawau, Sandakan, Sibul, Bintulu, and Kota Bharu, aiming to cover 90% of all MAG stations by the end of the year.

Hearing conservation programme:

Using workstation noise levels and risk as a baseline, MAG implements targeted schemes, including providing hearing protection, delivering operational guidance and training, and offering regular auditory testing to monitor the hearing health of employees who are exposed to excessive noise.

Bird-Strike Monitoring and Reduction

Bird strikes pose a serious threat to aircraft, potentially causing minor structural damage, clogged engine intakes, or windshield cracks. These safety and operational issues can lead to costly repairs, flight delays, and alterations. MAG has a dedicated Wildlife Hazard Management Committee that collects and analyses data on bird strikes or wildlife hazards. This information is shared with the Airport Wildlife Hazard Management Committee, which studies the data and implements the necessary mitigation measures.

At KLIA, wildlife hazard management activities are overseen by Malaysia Airports Holdings Berhad (MAHB), including daily inspections, habitat management, and deterrent measures to reduce bird activity near runways. Although preventing bird strikes is primarily the responsibility of airport authorities, MAG continues to monitor and report incidents. We support information sharing, collaboration with the Department of Wildlife, and the exchange of best practices to collectively and proactively minimise risks.

MAG closely monitors bird strikes across all our aircraft and assesses their potential impact on flights. In 2024, we recorded 338 bird strikes, of which seven resulted in damage to our planes, while the remaining 331 did not harm our fleet.

SOCIAL

MAG prioritises social responsibility to create value that extends beyond our core business. Our efforts focus on improving employee welfare, promoting diversity and inclusion, safeguarding health and safety, striving for an outstanding customer experience, and engaging with communities to make meaningful contributions.

CONTENTS:

- Employees
- Customers
- Community

2024 HIGHLIGHTS

WOMEN'S REPRESENTATION IN:



Total workforce: **35%**

Management: **46%**

Executive positions: **52%**



>1,300 staff attended ESG training



> 97% of customer complaints closure rate achieved for all airlines



>74% Customer Satisfaction Index (CSI) rate achieved for all airlines



Chartered freighter relief to El-arish, Egypt, delivering items for **Gaza Humanitarian Mission**



Sponsored air freight to deliver over **81,000 HPV vaccine doses** to East Malaysia



Lowered turnover rates for employees under the age of 30: from 15,4% in 2023 to **11.3% in 2024**



2,579 total man-days spent on crisis management by **MH Rangers**



>600 sling and tote bags made from upcycled MAG products, in collaboration with *Jabatan Penjara*

EMPLOYEES

[GRI 2-7, 2-8, 3-3]

MAG's employees are at the heart of our business, and we continue to prioritise their growth and well-being. This became even clearer in 2024, when the Malaysian aviation sector struggled with a widespread shortage of skilled staff, mainly due to a post-pandemic surge in air travel and the departure of experienced personnel through retirement and industry competition. Meanwhile, the inherently high-pressure, safety-first nature of airline operations underscored the importance of prioritising employee health, safety, and well-being.

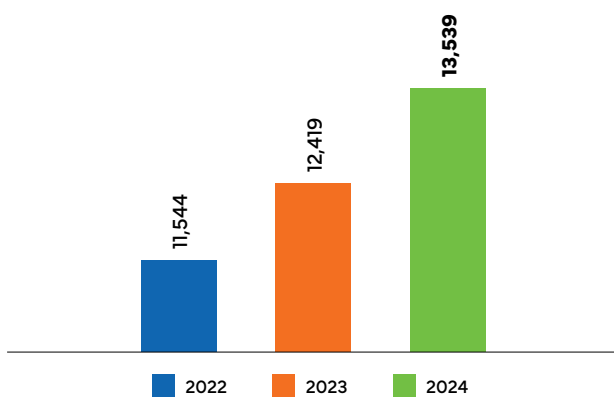
Workforce Overview

[GRI 401-1] [SASB TR-AF-000.C]

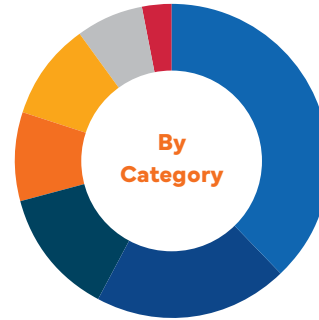
As of December 2024, we employ 13,539 people across the Group. Concurrent with our expanding fleet network, our total number of employees has steadily grown each year, increasing by 18.6% since 2022.

Employees in management-level positions have risen by 38.9% over the same period, reflecting leadership growth across several business units. Meanwhile, employees under 30 have increased by 68.4% since 2022, driven by targeted recruitment campaigns on digital platforms such as Meta, JobStreet, and TikTok, and participation in career fairs and university outreach programmes. A strategic shift from LinkedIn and our corporate career site also expanded our reach and strengthened MAG's brand presence among young talent, especially for operational roles and entry-level positions.

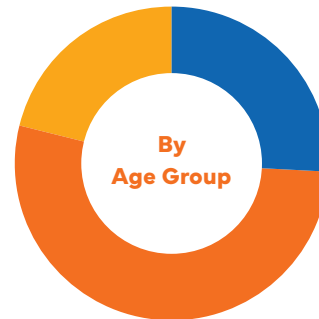
Total Workforce 2022–2024 (no.)



Employees 2024 (no., %) Total: 13,539



Category	Number of Employees (no.)	Percentage (%)
● Non-executive	5,112	38 %
● Cabin crew	2,636	20 %
● Executive	1,776	13 %
● Technicians	1,182	9 %
● Pilots	1,412	10 %
● Management	985	7 %
● Aircraft engineers	436	3 %



Age Group	Number of Employees (no.)	Percentage (%)
● Over 50 years old	2,872	21 %
● 30–50 years old	7,227	53 %
● Under 30 years old	3,440	26 %

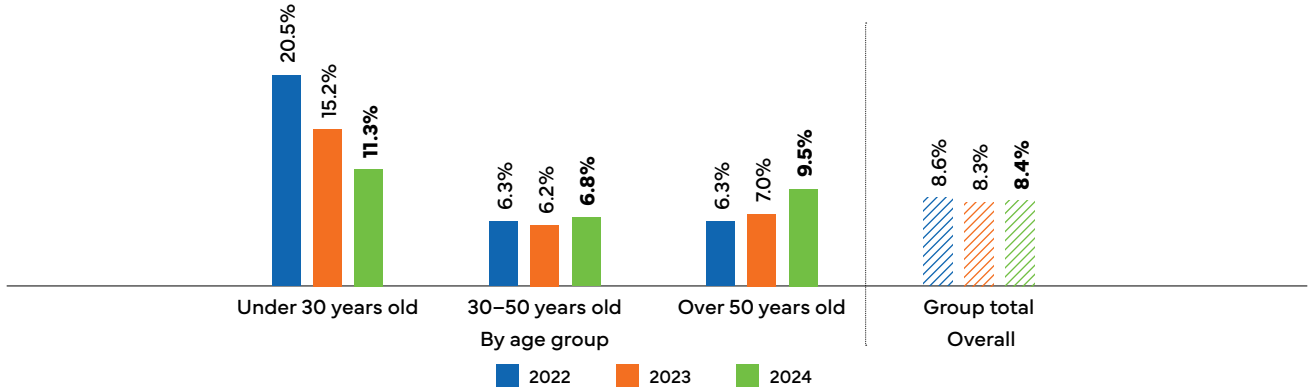
EMPLOYEES

New Employees and Turnover

In 2024, MAG welcomed 1,763 new hires, with women accounting for 46.3% of this total. The majority of our recruits were under 30, accounting for over two-thirds of all new employees.

MAG recognises that our employees are vital to achieving our corporate Long-Term Business Plan (LTBP) goals, which is why developing and retaining talented staff remains a key focus area. Overall attrition rates across the Group have remained relatively stable since 2022 at slightly above 8%. Through our proactive efforts in employee engagement, career development, and maintaining an inclusive workplace, turnover among employees under 30 has improved significantly, from 20.5% in 2022 to 11.3% in 2024.

Turnover Rates by Age Group 2022–2024 (%)



EMPLOYEES

Empowering Diversity

[GRI 2-9, 405-1]

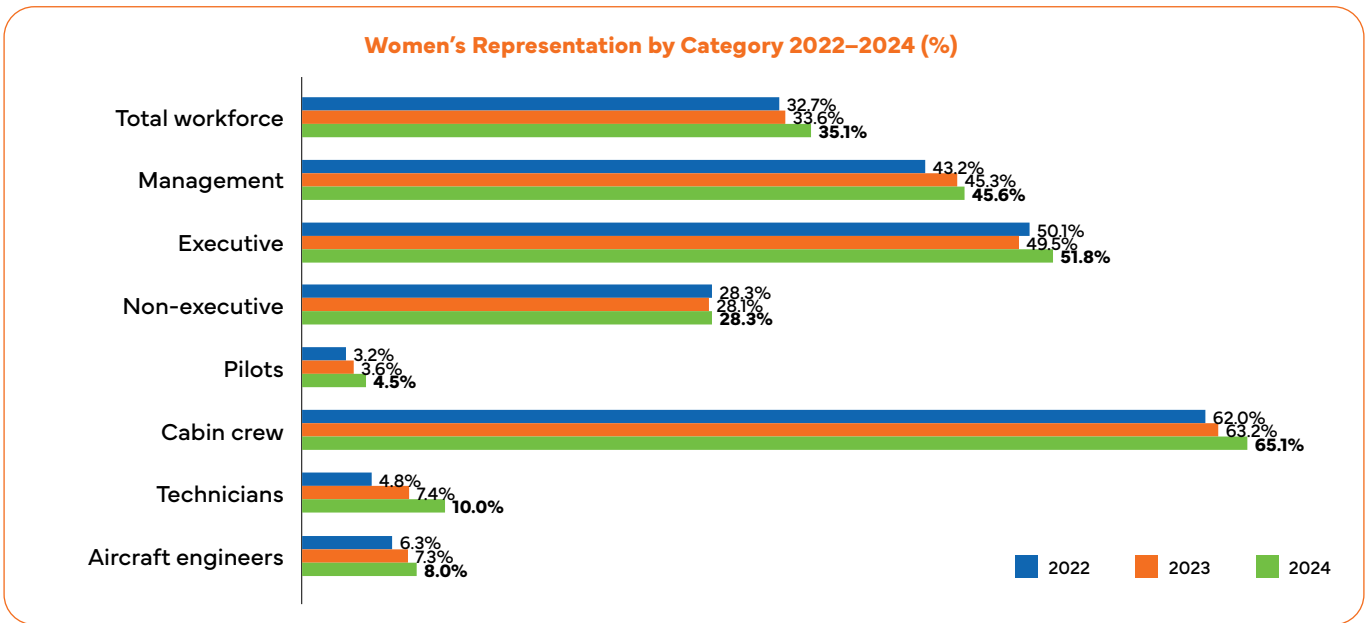
MAG's proactive approach to diversity and inclusion focuses on creating equal opportunities, removing systemic barriers, and ensuring all employees have the chance to thrive. We embed diversity into the heart of our Group by promoting gender equality and Indigenous participation.

Boosting Women's Representation

Across the Group, MAG employs 4,749 women, accounting for 35.1% of our workforce. With women representing 45.6%

of MAG's management, we have far surpassed International Air Transport Association's (IATA) 25 by 2025 target of 25% women's representation. Furthermore, 44% of the MAG Board of Directors are held by women.

Since 2022, we are also pleased to report that women's presence in unrepresented technical roles has steadily increased across specific employee categories, including pilots, licensed aircraft engineers (LAE), and technicians.



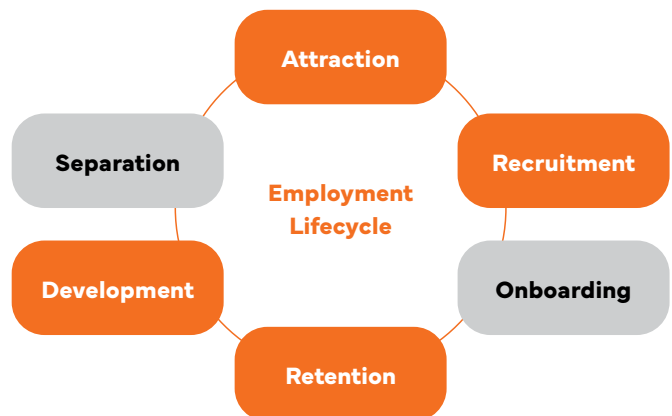
Supporting Women's Participation in the Workforce

In the aviation industry, technical roles, such as LAE, pilots, and technicians, are traditionally dominated by men. In 2024, as part of our broader efforts to promote women's participation, we held management workshops and focus group discussions to review current practices, identify obstacles to entry and retention, and gather direct insights from women occupying these roles. The findings will help us develop practical recommendations for 2025, which MAG is addressing through a comprehensive employee lifecycle approach, covering recruitment, development, retention, and advancement.

MAG's gender equality initiatives extend beyond the workplace. In 2024, MAG supported the second TCS Sustainability Malaysia event. This national competition encourages female university students to develop technology-based solutions to bridge the gender gap in science, technology, engineering, and mathematics (STEM). A total of 204 women students from 30 universities and colleges developed innovative technology solutions to improve STEM curricula, showcase successful women in

STEM-related roles, and support women's career progression in STEM fields.

We also supported the International Day for the Elimination of Violence Against Women by sponsoring the 2024 Orange Run in partnership with the Ministry of Women, Family, and Community Development and the United Nations Population Fund (UNFPA).



EMPLOYEES

W@M

Established in 2022, Women@MAG (W@M) promotes gender equality by increasing women’s participation in technical roles, enhancing leadership representation, and supporting career development throughout the Group. Since its launch, W@M has demonstrated our employees’ strong commitment to inclusivity by growing into a thriving community of 1,292 members across all our business units.

Summary of Key Activities in 2024



Selangor Aviation Show Collaboration

In partnership with Women in Aviation Asia (WiAA), the event celebrated emerging women leaders in the aviation industry and honoured those who have already broken through the glass ceiling. The event, attended by Selangor Executive Council (EXCO) members and industry leaders, featured our W@M logo on all award trophies, increasing its visibility and reinforcing its position as a regional women’s aviation champion.



HPV Vaccination Drive

Partnered with the National Cancer Society Malaysia (NCSM) to provide free HPV vaccines for our workforce and their families, thereby safeguarding employee health while extending support to family networks across the Group.



Dialogue Sessions

Engaged with PayNet and Women in Rail through discussion forums to empower women in industries that are typically dominated by men. This dialogue fostered external collaboration, shared knowledge, benchmarked best practices, and strengthened professional networks.



Volunteer Appreciation Lunch

MAG hosted an appreciation lunch to recognise W@M active members whose contributions have driven key initiatives and fostered a culture of engagement.



EMPLOYEES



International Women’s Day Video

To deliver a strong message of empowerment and increase W@M’s visibility within MAG, we released a video showcasing women across diverse aviation roles.



Festive Celebrations

Supported the HC Culture Department in organising inclusive Lunar New Year and Deepavali events, strengthening cultural diversity and belonging across the Group.



Breakfast Walks

Launched Breakfast Walk sessions to encourage networking among women outside office hours, promoting healthy lifestyles and a work-life balance. Participants were also encouraged to bring their families.



In addition to these key activities, W@M also organised various webinars, charity donations, and bake sales.

Some of W@M’s upcoming or planned initiatives aim to tackle specific challenges women often encounter by offering flexible work arrangements and re-entry programmes, while promoting gender diversity in hiring and increasing outreach to schools and universities to raise awareness for aspiring aviation professionals.

Boosting Indigenous Representation

In support of our commitment to strengthening equal employment opportunities, MAG has continued to implement targeted recruitment and role-specific interventions for the Orang Asli community. In 2024, we monitored the progress and performance of our first cohort of four Orang Asli cabin crew members by evaluating their integration and identifying ways to offer further support. We also focused on expanding recruitment opportunities for the community, particularly through our Cadet Pilot Programme.

Through targeted outreach initiatives, we engaged directly with Orang Asli youth at key events to raise awareness of aviation careers and support the development of an inclusive talent pipeline. In August 2024, we organised two recruitment

drives: *Majlis Anugerah Murid Cemerlang (AMC)* for SPM and STPM 2023 and *Karnival Belia Orang Asli (K-BOARDS) Madani Tahun 2024*, which were attended by 138 and 240 Orang Asli, respectively.

Our initial phase of Orang Asli hiring will guide improvements in recruitment selection processes and support systems for future intakes.



EMPLOYEES

Health and Safety

[GRI 3-3, 403-1, 403-2, 403-3, 403-4, 403-6, 403-7, 403-8, 403-9] [SASB TR-AF-320a.1]

MAG places the utmost importance on safety and security by actively investing in initiatives to support and protect our employees’ well-being. We maintain strict health and safety protocols, with all our workforce covered under our Safety Management System (SMS). One of our entities SMS, MASKargo’s, is certified to ISO 45001:2018. By proactively managing risks, continually enhancing procedures, and adhering to rigorous safety standards and best practices, MAG strives to set a high benchmark for excellence in occupational health and safety – guided by our safety commitments and domains.

MAG’s Safety Commitments and Key Domains

 <p>VISION To be the safest Travel and Aviation Services Group in Asia by 2030</p>	 <p>MISSION Ensuring safe and secure operations</p>	 <p>GOALS Maintaining zero accidents and 100% compliance</p>	 <p>SAFETY IN 2030 To be among the world's top 10 safest airlines</p>					
<p style="text-align: center;">SAFETY DOMAINS</p> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>  <p>Future of Flying</p> </td> <td>  <p>Safety Culture</p> </td> <td>  <p>Safety Leadership</p> </td> <td>  <p>Workforce Health Protection</p> </td> <td>  <p>Pandemic Preparedness</p> </td> </tr> </table>				 <p>Future of Flying</p>	 <p>Safety Culture</p>	 <p>Safety Leadership</p>	 <p>Workforce Health Protection</p>	 <p>Pandemic Preparedness</p>
 <p>Future of Flying</p>	 <p>Safety Culture</p>	 <p>Safety Leadership</p>	 <p>Workforce Health Protection</p>	 <p>Pandemic Preparedness</p>				

MAG’s 2023–2030 Safety Strategy

The Group’s 2023–2030 Safety Strategy serves as our short-term roadmap, setting out our strategic initiatives, goals, key value drivers, and challenges. It is anchored in the five safety domains listed above.

As part of operationalising the Group’s Safety Strategy, MAG is developing an Annual Safety Business Plan to transform strategic objectives into actionable, year-on-year initiatives. The plan will also provide a framework for airlines and aviation services business units to develop their own operational safety action plans, ensuring a coordinated, Group-wide approach to safety initiatives. The 2025 Safety Business Plan will focus on five key areas: aviation safety and compliance, occupational safety and health, radiation safety, workforce well-being, and emerging risks, including potential future pandemics and climate change.

EMPLOYEES


2023–2030

SAFETY STRATEGIC INITIATIVES

Domain	Strategic Initiatives
Future of Flying	<ul style="list-style-type: none"> Anticipating emerging and evolving risks Simplifying a complex system
Safety Culture	<ul style="list-style-type: none"> Behaviour enhancement towards Sustainable Generative Safety Culture
Aviation Safety Leader	<ul style="list-style-type: none"> Aviation safety leader at regional and global level
Workforce Health Protection	<ul style="list-style-type: none"> Physical wellness Mental well-being
Pandemic Preparedness	<ul style="list-style-type: none"> Future pandemic preparedness through collaboration and standardisation

END-STATE SUCCESS MEASURES

 <p>Top 5 Asia Pacific, Skytrax's Top 10 Global Airlines</p>	 <p>Generative Safety Culture</p>	 <p>Aviation Safety Centre of Excellence</p>	 <p>100% Resilient Workforce</p>	 <p>Pandemic Ready MAG</p>
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Strengthening Radiation Safety Compliance

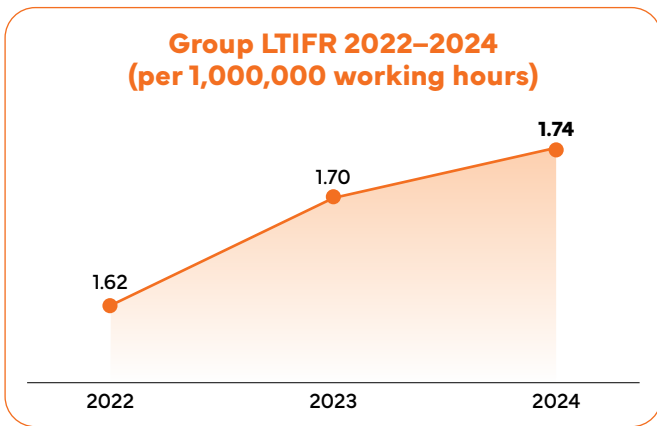
Radiation safety applies to employees who work with radiation-emitting equipment such as cargo screening and non-destructive testing X-ray machines used in aircraft maintenance. These operations are regulated by Atom Malaysia, with Malaysia Airlines Berhad (MAB) holding a valid X-ray machine operating licence. In 2024, Atom Malaysia conducted an audit to assess our compliance and safety performance, with zero findings reported. Consequently, our licence was renewed until 2027.

EMPLOYEES

Accident Reporting

In 2024, a total of 48 accidents occurred across the Group, with manual equipment handling identified as the leading cause of work-related injuries. MAG's lost-time injury frequency rate (LTIFR) rose slightly from 1.70 in 2023 to 1.74 in 2024 due to higher operational activity, workforce transitions, and lapses in safety compliance in specific units. Although this is not a drastic increase, this rate exceeds our internal safety targets, highlighting the need for stronger safety interventions. In response, MAG is strengthening preventive measures, training, and monitoring efforts to improve safety performance in 2025.

We continue to maintain a zero-fatality record.



Note: Lost Time Injury Frequency Rate (LTIFR) measures the number of work-related injuries that result in employees taking time off. It is calculated by dividing the total number of accidents by the total hours worked, then multiplying the result by one million.

Mental Health and Well-Being

Since 2020, MAG's Employee Assistance Programme (EAP) has offered structured psychosocial support to enhance our employees' overall mental health and well-being. The EAP addresses three key aspects of mental health interventions and is the basis for MAG's wellness initiatives.

EAP Overview

Mental and emotional health
(Main focus: mental and emotional well-being)

- MHeart: A digital platform that provides continuous, personalised mental health support through virtual counselling and self-help tools.
- Mental health webinars: Led by expert counsellors to raise awareness and share practical tips on managing cognitive well-being.
- Naluri CARE programme: An initiative that trains MAG managers to foster psychological safety and drive practical mental health initiatives across their teams.

Social health
(Main focus: financial well-being, diversity, and inclusion)

- Financial webinars featuring a Monthly Talk series, one-on-one financial consultations, and financial wellness courses.
- In 2024, we conducted four webinars covering financial fundamentals, tax optimisation, investment strategies, and retirement planning.

Spiritual health
(Main focus: spiritual well-being)

- *Sembang Santai*: This personal development forum features guest speakers and focuses on developing healthy behaviours and a positive mindset.
- In 2024, we hosted four webinars on spiritual well-being, exploring topics such as values, connection, unity, and trust.

MHeart Programme

MAG's MHeart programme is operated in partnership with Naluri, a Malaysia-based digital health and wellness company. The scheme combines digital tools and professional coaching to offer our employees accessible psychological support. It also provides tools – such as health-tracking devices, self-reflection journals, food logs, and gamified wellness planners – that help employees actively manage their well-being. The scheme's core components include the Naluri smartphone app, English- and Bahasa Malaysia-language webinars, workshops, consultation sessions, and a dedicated careline. Employees also have access to multidisciplinary coaches, including psychologists, dietitians, trainers, and physicians.

Since its launch in 2021, the initiative has seen 75% of employees register for the Naluri app, benefiting from 315 hours of counselling as of December 2024. App engagement logins have risen by 61% since 2021, indicating both broader adoption and more frequent use of well-being resources.

EMPLOYEES

Employee Benefits

[GRI 201-3, 401-3]

We offer a comprehensive range of benefits to support the well-being and lifestyle needs of our employees. These extend beyond the workplace to include healthcare, travel, and retirement. They include the following:



Travel benefits

Employees enjoy extensive travel privileges, including Annual Privilege Travel (ID00), ID75 Firm, ID90 Subload, and ZED tickets, making air travel more accessible for both personal and family use.

Key:

- ID00 (free annual confirmed ticket)
- ID75 Firm (confirmed ticket at 75% discount)
- ID90 Subload (standby ticket at 90% discount)
- ZED (discounted standby tickets with our global airline partners)



Cargo rebates

Employees are eligible for a 75% discount on air cargo services for shipments up to 100 kg, offering significant savings for personal or family logistics.



Medical benefits

MAG prioritises health protection, providing coverage for employees and their immediate families, including hospitalisation, outpatient care, health screenings, and dental benefits. Dependents include spouses and children up to age 24.



MYRA and mandatory retirement benefits

To support employees transitioning into retirement, MAG provides customised retirement benefits in two categories:

- MAG Early Retirement Application (MYRA) benefits: Employees receive a three-month extension of remaining medical entitlements (excluding health screening), three months' gratuities (based on basic salary plus work-related allowances), and access to Retirees' Tickets that include four ID90 Subload tickets on Malaysia Airlines and unlimited ZED tickets for the employee, spouse, and dependents under 24 years old (as long as they are declared before their final day of service).
- Mandatory retirement benefits: retirees receive the same Retiree's Tickets package as they would in MYRA.

To qualify, employees must meet certain conditions. For MYRA benefits, their last working day must be at least six months before reaching retirement age. For Retiree's Tickets, employees must have completed at least ten years of service.

We offer parental leave in line with legal requirements: 98 days of maternity leave and 7 days of paternity leave. In 2024, a total of 45 employees (42 women and 3 men) took parental leave, with return-to-work rates of 88.1% and 100% respectively.

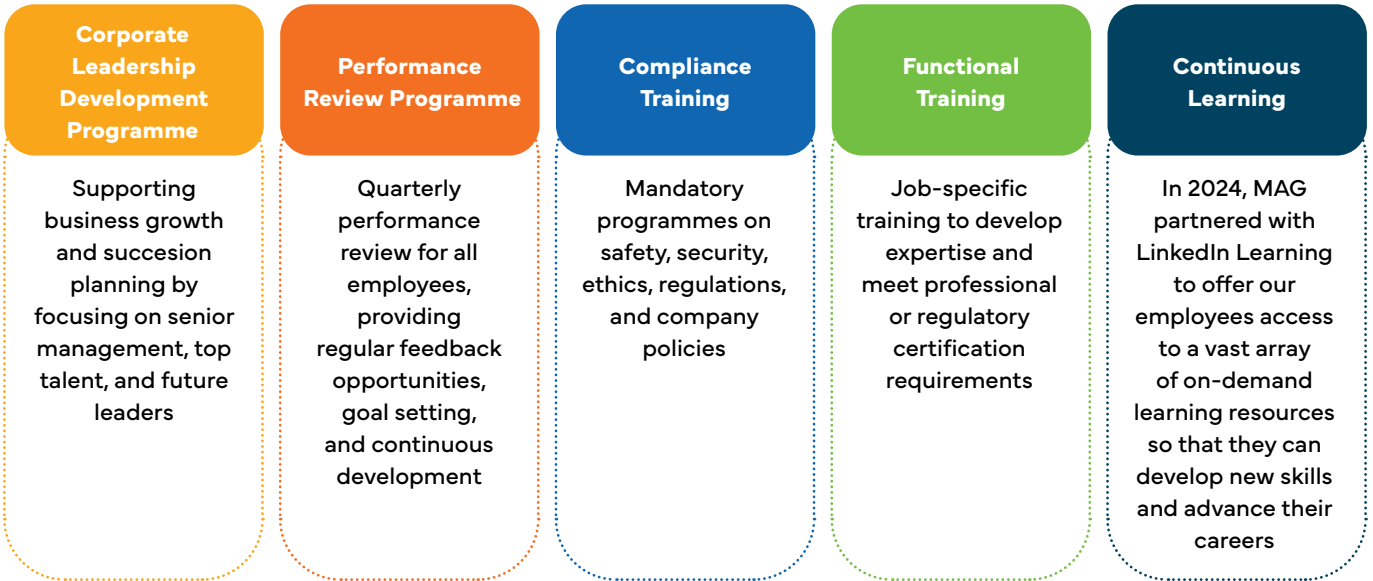
EMPLOYEES

Training and Development

[GRI 404-2, 404-3]

Our employees are our most valuable asset; their skills, knowledge, and dedication are crucial for driving the Group's success. By providing structured training and development programmes, we aim to cultivate a culture of continuous improvement and innovation.

Training and Development Initiatives



In 2024, the number of employees trained increased significantly from 4,995 to 16,033, driven by Malaysia Airlines Berhad Academy's (MABA) introduction of non-mandatory aviation-related courses at the end of 2023. These include leadership, communication, and other soft skills courses offered to MAG employees. We hope to enhance our training framework by adopting a more systematic approach to capturing data on training hours, enabling a more comprehensive and transparent assessment of employee development.

MAG ESG Capacity Building

MAG's environmental, social, and governance (ESG) capacity building programme aims to raise sustainability awareness across all levels of the Group, from junior staff to Board members. Aligning with our long-term aspiration to reach net-zero emissions by 2050, the scheme provides employees with the knowledge and tools to integrate ESG considerations into their roles. The programme is organised into three progressive modules:

- **Module 1: ESG Basics** | General ESG knowledge for all staff.
- **Module 2: Sustainable Aviation** | Industry-specific sustainability issues and global trends.
- **Module 3: Technical ESG topics** | Integrating ESG into our daily operations through customised content tailored to specific functions and roles.

We have now entered the foundational phase of our 2023–2026 implementation plan. This includes introducing ESG concepts, industry updates, regulatory requirements, and emerging expectations through training modules and tracking systems, while engaging departments to identify ESG priorities and align with MAG's sustainability obligations.



A total of 1,382 employees have been trained as of December 2024.

This provides us with a solid foundation for developing our future capacity-building initiatives. Moving forward, we will continue to refine our approach through regular evaluation, ongoing improvement, and alignment with global best practices.

EMPLOYEES

New MABA Campus Launched

MAG is working to establish a regional hub of excellence for aviation and hospitality training. In 2024, we launched our new MABA campus in Sepang, following its relocation from Kelana Jaya. The campus now features enhanced facilities, including collaborative spaces and extensive employee training programmes.

As an approved training organisation certified by the Civil Aviation Authority of Malaysia (CAAM), MABA offers nearly 200 courses, ranging from flight operations training to digital innovation. The campus includes a heritage walkway, an i-Learn Hub, and realistic cabin emergency training simulations.

To further enhance our training capabilities, we have begun constructing a state-of-the-art flight simulator centre, scheduled for completion in 2025. Equipped with six simulator bays – including the latest A330neo, Boeing 737-800 NG, and ATR 72-500 training devices – the facility will expand training capacity in flight operations, safety, and service.

These facilities and programmes support MAG’s ambition to continue nurturing talent and contributing to national aviation growth.



CUSTOMERS

[GRI 3-3, 417-1]

MAG is proud to offer genuine Malaysian Hospitality (MH) across all our services through ticket booking and customer support to airport check-in, lounges, and in-flight service. Our goal is to deliver exceptional service and complete satisfaction.

Customer Experience

Over the years, MAG has continuously evolved in step with changing customer expectations, preferences, and market dynamics. In 2024, to maintain our competitive edge, we redefined our customer value proposition (CVP) with the launch of Project Orion, a strategic internal initiative to elevate every aspect of the travel experience – from enhanced cabin comfort and refined onboard dining to the hospitality of our award-winning cabin crew.

As part of our in-flight experience, MAG has implemented several innovative and improved initiatives in 2024, including:





WIFI

Complementary
in-flight Wi-Fi



Enhanced in-flight
entertainment featuring
the latest international
and Hollywood releases



Expanded child
giveaway packages

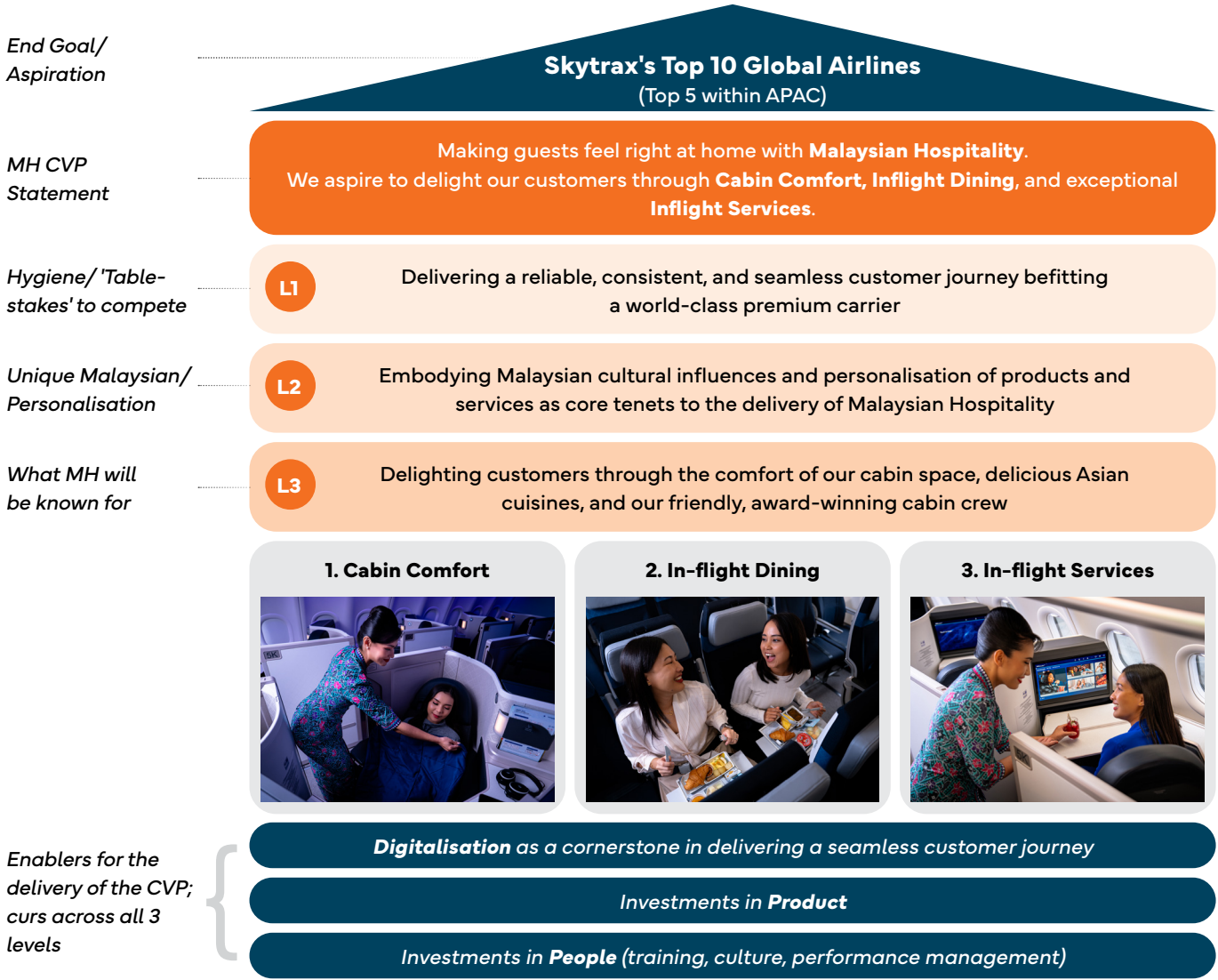


An improved business
class bedding experience

We have also elevated our digital experience by refining the design and functionality of our website and mobile apps, ensuring a more intuitive and personalised booking and account management process for our customers.

Simultaneously, we have enhanced sustainable travel options for our passengers by partnering with CHOOOSE to offer voluntary carbon offsetting. Additionally, we have introduced a private terminal transfer service with state-of-the-art electric vehicles exclusively for Enrich Platinum, Business Suite, and Business Class passengers at Kuala Lumpur International Airport (KLIA). We are also minimising waste across our cabin operations by replacing single-use plastics.

CUSTOMERS



CUSTOMERS

Managing Customer Concerns

We remain deeply committed to resolving customer concerns in a timely, transparent, and effective manner. Our approach to handling grievances reflects our broader commitment to maintaining customer trust, service accountability, and regulatory compliance.

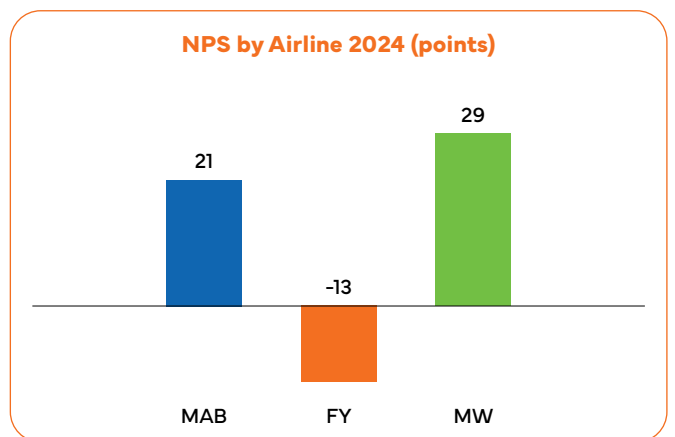
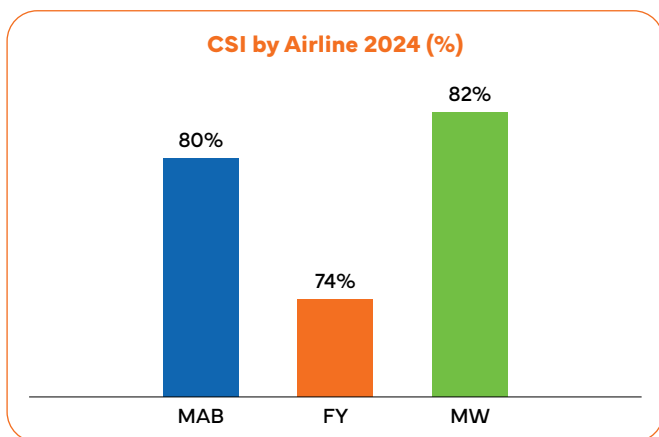
Customer feedback is primarily submitted through an online feedback form on our website’s support page, ensuring accessibility and traceability across all customer touchpoints. Effective 1 August 2025, with the consolidation of the Malaysia Aviation Commission (MAVCOM) functions and responsibilities, complaints management across the airline industry is now regulated under the Malaysia Aviation Consumer Protection Code (MACPC), overseen by the CAAM. In accordance with MACPC requirements, all airlines must resolve at least 90% of customer complaints within 30 calendar days.

In 2024, MAB achieved a 97.3% complaint closure rate, maintaining its strong track record of surpassing the 90% regulatory benchmark every year since 2019. Firefly (FY) (99.7%) and MASwings (MW) (100%) reflected this strong performance, reinforcing MAG’s Group-wide culture of accountability, transparency, and continuous improvement in customer care. These results reflect not only operational excellence but also our commitment to social sustainability through fair, timely, and customer-focused resolution practices. By embedding robust governance, data transparency, and empathy into our complaint-handling framework, MAG continues to strengthen customer trust and uphold the principles of responsible business conduct and stakeholder stewardship across all airlines within the Group.

Aside from addressing complaints, we monitor customer sentiment through two key metrics: the Customer Satisfaction Index (CSI) and the Net Promoter Score (NPS). Together, these indicators measure both the service experience and customer loyalty. The CSI, calculated from post-journey surveys across critical touchpoints such as bookings, check-ins, boarding, in-flight experience, and baggage handling, has steadily improved each year, reaching 80% in 2024 – on track to meet our target of 83% by 2025.

NPS, which measures customers’ likelihood to recommend our services, rebounded strongly to +21 points in 2024, following a temporary decline in 2023 due to in-flight catering disruptions. A strong upward trend has since emerged, supported by recovery initiatives and improved service quality standards. We remain on track to meet our target of +27 points by 2025.

This year also marks the first reporting of CSI and NPS results for FY and MW as we continue to improve transparency and consistent measurement of customer experience performance across all airlines within MAG.



Note: CSI is measured through post-journey surveys across key stages of the customer journey, from booking to baggage handling, while NPS indicates how likely customers are to recommend MAG’s services.

CUSTOMERS

Food Safety

[GRI 416-1, 416-2]

Maintaining high standards of food safety is essential to ensuring service quality and passenger well-being. MAG Catering Operations (MCAT) applies a structured and proactive approach, with strict controls in place to ensure all in-flight meals meet health and safety requirements.

Risk assessments are conducted by the appointed caterer in accordance with Hazard Analysis and Critical Control Point (HACCP) standards, while our internal team performs daily checks at the base to verify compliance with food safety standards. Any complaints are promptly investigated through traceability checks to identify the root causes and implement corrective actions. In 2024, there were no incidents of non-compliance related to in-flight food safety or health impacts.



COMMUNITY

[GRI 3-3, 203-1, 203-2, 413-2]

MAG is committed to generating positive social impacts through our corporate social responsibility (CSR) initiatives. These programmes promote socio-economic growth and support vulnerable local communities. Our community development initiatives focus on three key areas:



Community empowerment
Collaborating with NGOs and local communities to support disadvantaged groups through CSR initiatives and flight sponsorships.



Environmental sustainability
Promoting conservation efforts such as tree planting and protecting wildlife.



Employee engagement
Fostering a sense of corporate citizenship by encouraging staff to participate in volunteer and charitable activities.

CSR Activities 2024

Environmental sustainability




Tanjung Aru beach clean-up
MAG employees volunteered for the Green Buddy initiative, taking part in a community beach clean-up at the Tanjung Aru Beach Festival in Kota Kinabalu, Sabah. Over two hours, they removed 370.8 kg of debris, mainly plastic, cans, and cardboard, while also assisting with installing waste traps, painting rubbish enclosures, pruning trees, cutting grass, cleaning drains, managing stray dogs, and spraying for mosquitoes.




MAB AVSEC Family Day and beach clean-up at Gold Coast Morib
Our MAB Aviation Security (AVSEC) team hosted a Family Day and sustainability event at Gold Coast Morib, Selangor. The gathering included a beach clean-up to promote marine conservation and raise environmental awareness among staff and their families.




MABA joins KUDAH - Kutip Sampah Sambil Riadah
As part of its *Mari Kita KUDAH - Kutip Sampah Sambil Riadah* initiative, MABA co-hosted an event at Taman Tasik Cyberjaya, Selangor, which brought together community members, environmental advocates, and MAG representatives for a park clean-up and mudball-throwing activity to help restore polluted waters.

In partnership with Malaysian Green Technology and Climate (MGTC) and Akademi Latihan Alam Sekitar Fakulti (ALAF) of Universiti Kebangsaan Malaysia (UKM)

COMMUNITY

Humanitarian aid



MASkargo Freighter Charter Flight to El-Arish for Gaza Humanitarian Mission

MASkargo (MK) chartered a flight to El-Arish, Egypt, to support relief efforts in Gaza. Operated on behalf of the Malaysian Government and several NGOs, the mission overcame severe operational challenges, including limited ground support, fuel shortages, and proximity to a conflict zone. Thanks to meticulous planning, risk assessments, and strong cross-functional teamwork across MAG business units, the Airbus A330-200F flight safely delivered critical aid within a narrow operational window.

In recognition of this successful charter flight, MK was honoured with the *Anugerah Way of Working (WOW) 2024*, the Group's annual accolade celebrating outstanding employee achievements and innovative contributions within the MAG family.

Healthcare support



BerMakna Bersama MAG campaign

As part of the *BerMakna Bersama* MAG campaign, MAG provided complimentary flights within our route network to ease the financial burden of underprivileged cancer patients, ensuring they received vital medical treatment without the extra anxiety of travel expenses.

In partnership with *Majlis Kanser Negara (MAKNA)*



CANSUPPORT initiative

Under the CANSUPPORT initiative, MAG provided 50 return tickets on MAG-operated airlines for childhood cancer patients and caregivers. The scheme ran from 1 October 2023 to 30 September 2024, helping to facilitate better access to life-saving care.

In partnership with National Cancer Society Malaysia (NCSM) and Tata Consultancy Services (TCS)



HPV vaccination programme

Co-sponsored by MK, MAG joined forces with the NCSM's HPV vaccination programme by sponsoring air freight services to deliver over 81,000 HPV vaccine doses to Sabah and Sarawak. MAG covered all air logistics costs to help support the government's efforts to reach underserved and marginalised communities.



Medical repatriation support

MAG supported the medical repatriation of Jade Saffiya, a 17-year-old Malaysian dental student who suffered a stroke while studying in Madrid, Spain. MAG organised a stretcher flight and return travel with her mother from London to Kuala Lumpur.

COMMUNITY

Education and youth empowerment



The Adventure of Trainers 2.0: Fly High Together Trainers programme

MAG supported The Adventure of Trainers 2.0: Fly High Together Trainers programme, enabling 81 participants, including students with autism and Down syndrome as well as teachers and family members from low-income (B40) households, to participate in a developmental programme to foster inclusivity and empowerment.

In partnership with *Pusat Pemulihan Dalam Komuniti* (PPDK) organisation of the Universiti Sains Malaysia (USM)



Support for international robotics competitions

MAG sponsored a team from Sekolah Kebangsaan Putrajaya Presint 11 (3) to represent Malaysia at the World Robot League 2024 in South Korea and the 2024 Global Junior Botball Challenge in China. The group, comprising eight students and four teachers, has consistently performed well in international robotics competitions. In recognition of our support, the school named MAG as the official sponsor and featured our MHexplorer student travel programme in its outreach activities.



Jejak Ilmu Murid Orang Asli Bersama Malaysia Airlines programme

MAG supported Sekolah Kebangsaan Titom through the *Jejak Ilmu Murid Orang Asli Bersama Malaysia Airlines* programme, sponsoring travel for 20 Orang Asli students and ten teachers for an educational study trip to Kuching. The trip offered valuable exposure to new perspectives and experiences.



Oceans Assemble 3.0 programme

In support of environmental education and literacy access, MAG provided additional baggage allowance for Universiti Teknologi MARA (UiTM)'s Student Chapter Neighbourhood Association as part of the Oceans Assemble 3.0 programme. This facilitated the delivery of books and educational materials to underserved communities in Tawau and Semporna, Sabah.

Flight Ticket and Logistics Sponsorship 2024

Description	Support provided
The Adventure of Trainers 2.0: Fly High Together Trainers programme	114 tickets
<i>BerMakna Bersama</i> MAG campaign	6 tickets
Medical repatriation support	2 tickets
Support for international robotics competitions	21 tickets
Oceans Assemble 3.0 programme	Additional commercial load weight
CANSUPPORT initiative	36 tickets
HPV vaccination programme	81,000 bottles
<i>Jejak Ilmu Murid Orang Asli Bersama</i> Malaysia Airlines programme	30 tickets
Gaza Humanitarian Mission to El-Arish	Freighter charter

COMMUNITY

MAG provides flight ticket sponsorships to support the mobility of vulnerable groups, including the B40 community, Orang Asli, and cancer patients, enabling them to travel for essential purposes such as medical treatment, education, and community development programmes. As part of our continued commitment to social responsibility, we also provide logistical support for the transport of critical medicines, medical supplies, and humanitarian aid.

MH Rangers

MH Rangers is a dedicated team of employees from across all MAG departments and entities. They are either volunteers or were selected for their skills and experience to mobilise and serve during times of crisis and internal initiatives. As part of the MAG Employee Volunteering Programme, our MH Rangers serve as ambassadors for Malaysian Hospitality (MH), supporting crisis response activations led by the Emergency Operations Centre (EOC), contributing to humanitarian aid and staff volunteering efforts, and embodying MAG’s Culture Principles of inspiring trust, dreaming big, and making Malaysia proud.

As of December 2024, there were:



MH Rangers Activities



MH Rangers Deployment Details in 2024

Description	Priority	No of days	Total MH Rangers activated	Total workdays
On-Site Support KLIA Departure to CNY Balik Kampung	Low	14	38	175
On-Site Support KLIA Departure to Raya Balik Kampung	Low	18	35	210
On-Site Support Matta Fair, March 2024	Low	3	350	894
On-Site Support Customer Call Centre	Moderate	30	102	400
On-Site Support Matta Fair, September 2024	Low	3	372	750
On-Site Support MAB Engineering Services, Supply Chain Management Warehouse	Moderate	60	85	150
MAG Flood Relief*	High	0	195	0
Total		128	1,177	2,579

Note: *Although the MAG Flood Relief operation did not deploy, the MH Rangers remained on standby throughout, maintaining readiness while closely monitoring the evolving situation.

COMMUNITY

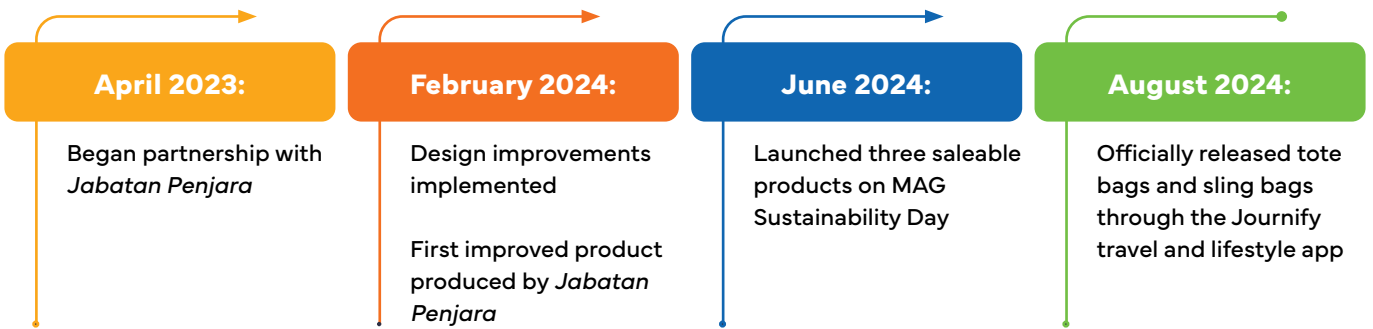
Upcycling Collaborations for Social Impact

Since 2023, MAG has implemented the **Scrap2Fab** upcycling programme. In its first year, we partnered with two groups, *Komuniti Tukang Jahit (KTJ)* and *Jabatan Penjara*, to repurpose MAG's aircraft operations' discarded materials, such as retired uniforms, obsolete life vests, magazines, leather covers, and luggage bags, into functional products that are sold through MAG's platforms. The programme repurposes waste to support community livelihoods while providing prisoners with opportunities for rehabilitation.

In 2024, MAG continued its upcycling programme in partnership with the *Jabatan Penjara*, repurposing scrap materials into creatively designed new products. Prison inmates upcycled old life vests and retired uniforms into tote bags, sling bags, and leather pouches. This initiative not only diverts waste from landfills but also empowers inmates by honing their sewing skills, providing financial support, and preparing them for successful reintegration into society.

We are now in our second year of the project and have built on our 2023 experiences to refine our processes and create even more functional, durable, and highly marketable products. Consequently, we have improved our existing items while halting production of others that are in low demand or face difficulties in securing the necessary raw materials.

Scrap2Fab with Jabatan Penjara



Highlights as of December 2024

 <p>322 sling bags made</p> 	 <p>376 tote bags made</p> 	 <p>> 50% of the products made have been sold or distributed through events, online platforms, or as a gift for our VIP guests</p> 
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Each year, MAG's business units lead dedicated upcycling initiatives, identifying key vendors and products to support the programme. Although previous programmes have been completed for the specific year, we remain in touch with key organisations for potential future collaboration.

GOVERNANCE

As the foundation of our operational and strategic direction, MAG maintains a robust corporate governance framework. We aim to ensure that our corporate governance framework complies with the Malaysian Code on Corporate Governance (MCCG) and international best practices, while balancing the interests of all stakeholders by maintaining oversight, transparency, and accountability throughout our organisation.

CONTENTS:

- Corporate Governance
- Ethics and Compliance
- Risk Management
- Digitalisation
- Sustainable Procurement

2024 HIGHLIGHTS



Conducted double materiality assessment (DMA)

to identify sustainability-related risks and opportunities



Revised Sustainable Procurement Blueprint

with targeted 2030 goals



Embarked on **ESG Data Lake Project**



First Airline Group in Malaysia to meet **ISO 37001 Anti-Bribery Management System Standard**



Firefly completed first **IATA Operational Safety Audit (IOSA)** audit with a **92% conformance rate**



97% of whistleblowing cases raised closed



77% of total procured goods and services from local suppliers



>115 vendors engaged in ESG

CORPORATE GOVERNANCE

[GRI 2-12, 3-3]

MAG's Board of Directors (the 'Board') is committed to upholding strong corporate governance as a foundation for high performance and sustainable growth. It ensures strategic oversight by reviewing the company's vision, mission, core values, and key operational matters. The Board approves and monitors our corporate plan, aligning it with financial and non-financial key performance indicators (KPIs) to drive accountability and results. It also oversees risk management, ensuring effective internal controls and compliance systems are in place.

Ethical leadership is indispensable to the Board. It sets and enforces rigorous codes of conduct and behavioural standards, while maintaining a diverse and effective Board through sound governance policies and procedures. Leadership development is a priority, with the Board responsible for appointing, evaluating, and supporting the top management. It also oversees succession planning to ensure continuity and capability within the leadership

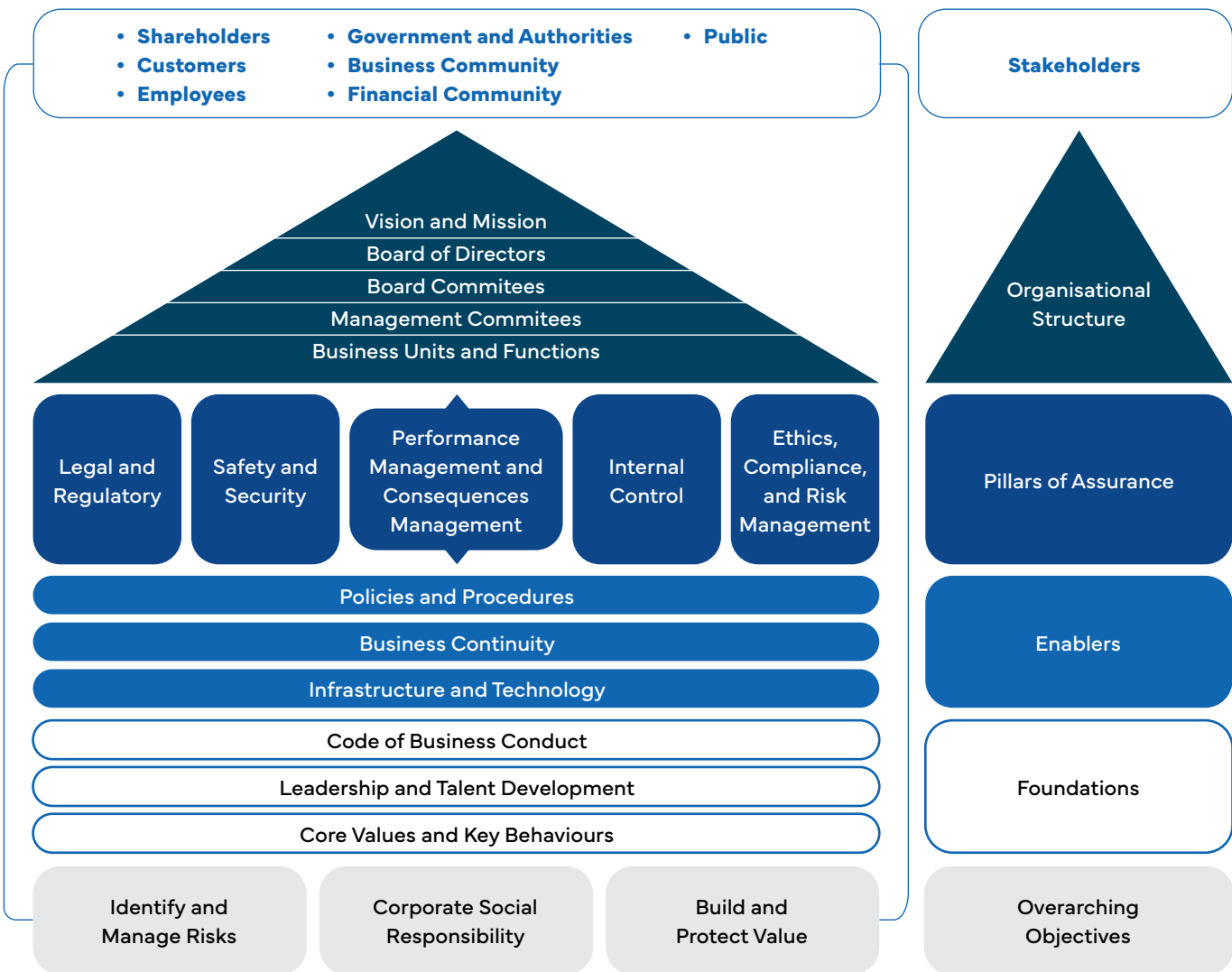
pipeline. Board responsibilities are supported by various committees, including the Audit Committee, Nomination and Remuneration Committee, and Safety and Security Committee. They assist members in facilitating efficient strategic planning and ensuring proper oversight and governance in specific areas.

The Board meets regularly, with complete access to information and professional advice for informed decision making.

The Board monitors the implementation of environmental, social, and governance (ESG) initiatives and ensures transparent communication with shareholders and stakeholders, reinforcing trust and confidence in MAG's governance framework.

 See more: [MAG's Board of Directors](#)

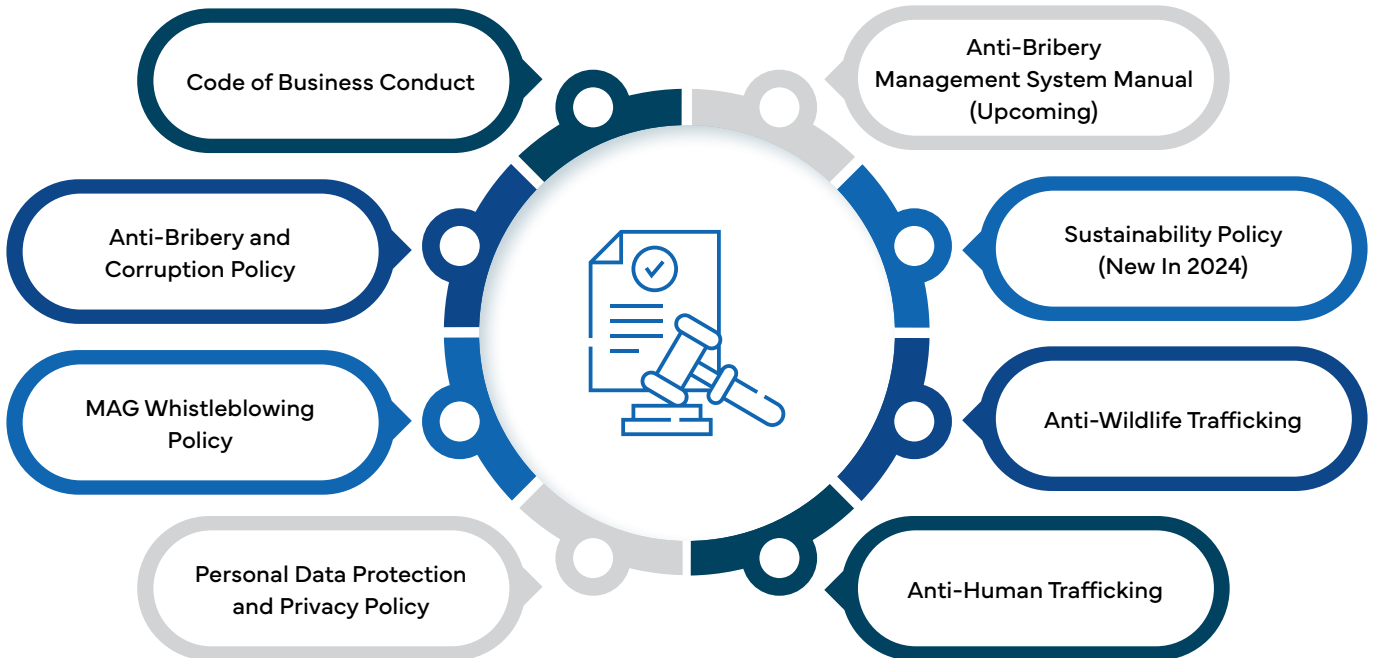
Business Ethics and Regulatory Compliance Overview with Key Functions



ETHICS AND COMPLIANCE

[GRI 2-23, 2-24, 2-27, 3-3, 205-3, 206-1, 406-1, 409-1] [SASB TR-AF-310a.2]

MAG is committed to conducting our business ethically and in full compliance with all relevant laws and regulations. Our adherence to these commitments and regulatory requirements is outlined in our policies, which include:



In 2024, there was one confirmed case of corruption and no incidents of non-compliance or sanctions related to environmental regulations and labour laws. The case was investigated, closed, and referred to the Malaysian Anti-Corruption Commission (MACC) for further action.

Anti-Bribery and Corruption

[GRI 205-1, 205-2, 205-3]

MAG is committed to conducting our business fairly and ethically, prohibiting all forms of corruption and bribery. We endeavour to foster a culture of respect and uphold high ethical standards across the Group. **We maintain a robust Anti-Bribery Management System (ABMS). In 2024, to ensure local and global recognition, we applied for ISO 37001 dual certification through the Department of Standards Malaysia (DSM) and the United Kingdom Accreditation Service (UKAS).** We expect to obtain the certifications in 2025. MAG has established structured procedures to prevent, detect, and manage bribery risks across our operations. As part of our certification, we have updated our Anti-Bribery and Corruption Policy, MAG Code of Business Conduct, and MAG Whistleblowing Policy to align with the new requirements. We are currently developing an ABMS Manual to guide the implementation of the Anti-Bribery Management System, covering training, system management, action plans, management. The manual will also include audit activities to assess system effectiveness and is scheduled by 2025.

Recognising that aviation services are sometimes particularly vulnerable to corruption, in 2024, we conducted a comprehensive Group-wide corruption risk assessment to determine the scope of ABMS implementation.

Anti-bribery and anti-corruption (ABAC) training is mandatory for all new employees and is conducted in two sessions per month, covering the current Anti-Bribery and Corruption Policy, the MAG Code of Business Conduct, and our Whistleblowing Policy. In addition to onboarding for new hires, all existing MAG employees across Group functions received refresher ABAC training in 2024, ensuring continuous awareness of policies and updates across the organisation. We achieved a 100% completion rate in 2024.

Our business partners, vendors, contractors, and suppliers are encouraged to adhere to MAG's Anti-Bribery and Anti-Corruption Policy, as outlined in our Supplier Code of Conduct (SCOC). In 2024, one case of corruption was confirmed through our whistleblowing channel. The investigation is now complete and closed, and the matter has been referred to MACC for further action. To avoid future occurrences, we remain committed to strengthening internal controls, training, and monitoring.

ETHICS AND COMPLIANCE

Aircraft Reliability and Safety Management

[GRI 3-3, 403-7] [SASB TR-AF-540a.1, 540a.2, TR-AL-540a.1, 540a.2, 540a.3]

Operational safety remains a core priority for MAG. In common with the broader global aviation sector, MAG has encountered recent headwinds, including technical unreliability and operational disruptions in 2024, which led to network downsizing. These challenges were further amplified by several factors, mainly related to a growing global demand for aircraft carriers, widespread supply chain bottlenecks that led to a backlog of unfulfilled orders, limited availability of aircraft spare parts,⁹ and strong demand for skilled labour. In response, MAG proactively reduced network capacity to ensure operational reliability.

Although technical issues led to some flight disruptions, they were minimal and quickly resolved, with no incidents affecting aircraft safety management or resulting in sanctions for non-compliance with flight safety regulations. Nevertheless, as part of MAG’s broader business recalibration and transformation plan, we are conducting a benchmark assessment to determine new baselines on aircraft worthiness procedures and to ensure sanctions compliance in the aviation sector. These assessments are also carried out as needed, in conjunction with our Enterprise Risk Management

(ERM) process, to support the Group’s commitment to robust governance and risk controls. A Group-wide framework for sanctions compliance has also been established to strengthen operational integrity and alignment with Project Phoenix, our strategic initiative to enhance reliability, coordination, and overall business resilience.

Firefly Completed Its Inaugural IOSA Audit

MAG adheres to the most rigorous global safety standards set by the International Air Transport Association’s (IATA) Operational Safety Audit (IOSA). We undergo annual audits, including a comprehensive evaluation of airline systems, procedures, and performance. This ensures alignment with international regulations, identifies potential risks, and drives continuous improvement in safety practices throughout the industry. In 2024, Firefly (FY) completed its first IOSA audit with a 92% conformance rate. Moreover, Malaysia Airlines achieved a significant milestone by completing the Risk-Based IOSA (RBI) from 19 to 22 February 2024, with seven findings and four observations – reflecting a 99% conformance rate.

Project Phoenix

Maintaining aircraft reliability remains MAG’s overarching priority. To strengthen this commitment, in 2024, we launched a comprehensive strategy: Project Phoenix. This initiative aims to enhance aircraft reliability, stabilise our operations, and continue prioritising operational safety in all we do. Developed in late 2024, it focuses on improving various aspects of aircraft management, from technical oversight of engines and quality to personnel, resourcing, finance, and revenue. It also enhances coordination among different Group functions, minimising the risk of flight delays and cancellations. Our objective is to make this a routine approach across our operations.

	Phoenix	Phoenix 2.0	Business as usual (BAU)
Focus area	Crisis Management 1. Operational stability 2. Improving reliability	Play to Win, Transition to BAU 1. Operational efficiency 2. Adopting best practices 3. Cost management 4. Revenue generation	Reliability and best-in-class airline engineering and maintenance, repair, and overhaul (MRO)
Work traces	1. Engine installation 2. Supply chain: parts availability 3. Quality: case studies, reliability 4. Labour: MAG resource handling 5. Finances: purchasing	1. Engine management 2. Supply chain: parts management 3. Quality: best practices 4. Labour: handling MAG and third parties 5. Finances: cost management 6. Third-party revenues	1. High fleet reliability 2. Efficient turnaround times (TAT) 3. Cost efficiency 4. Quality and standardisation 5. Data-driven decision making 6. Skilled workforce 7. Advanced technology integration 8. Regulatory compliance 9. Customer focus
Period	26 August to 31 December 2024 (4 months)	1 January to 30 June 2025 (6 months)	

⁹ International Air Transport Association (IATA). (2024, December 10). Supply chain issues continue to negatively impact airline performance into 2025 [Press release]. <https://www.iata.org/en/pressroom/2024-releases/2024-12-10-02/>

ETHICS AND COMPLIANCE

Whistleblowing Policy

[GRI 2-25, 2-26]

MAG’s Whistleblowing Policy and procedures were established in 2016 and are accessible to all employees and external stakeholders. They offer a secure, confidential way for anyone to report concerns, non-compliances, or grievances related to unethical behaviour, misconduct, or legal breaches within the organisation. The process ensures the anonymity of whistleblowers, including our workforce, who can lodge complaints without fear of retaliation or dismissal. This system is readily accessible through various channels. For employees, this includes posters and signage on MAG premises, all training materials, and participation in awareness and briefing sessions conducted as part of our annual ABAC training. Members of the public can also access the system through our commercial websites.

To ensure absolute confidentiality and anonymity, the platform is outsourced and managed by an independent third-party service provider, with access to cases provided to the Head of Group Business Integrity. If a report is received, an internal investigator is appointed to provide further support in resolving the case. All cases undergo quarterly review by the Board Audit Committee, with MACC providing independent oversight every six months. This strengthened governance approach enhances trust in the process and encourages openness among staff.

In 2024, 153 cases were reported, including fraud, conflict of interest, violation of internal policies, sexual harassment, workplace bullying, attendance or punctuality issues, substance abuse, and improper conduct by third-party suppliers. In the same year, 149 cases were also resolved. We are working with the relevant parties to finalise the four remaining open cases.

In 2024, the policy was revised to align with our newly ISO-certified Anti-Bribery Management System (ABMS) system to support the increasing number of cases in the same year.

Whistleblowing Cases Raised and Closed 2022–2024 (no.)

	2022	2023	2024
Cases reported	88	79	153
Investigated and closed	88	79	149
Cases under investigation at year's end	0	3	4

Combating Human and Wildlife Trafficking

Although aviation is vital for bringing people and places together in an increasingly interconnected world, it also carries significant risks – particularly the potential for exploitation by human or wildlife traffickers who exploit air routes to transport victims across borders. MAG recognises these vulnerabilities and takes our responsibility to prevent them very seriously. To further strengthen early detection, we ensure that our airline personnel, especially cabin crew and frontline staff, undergo extensive training to recognise and report suspected cases.

Human Trafficking

MAG continually enhances our anti-human trafficking policies by training our crew, ground staff, and airport personnel on how to report concerns, ensuring prompt and effective action. In 2024, 240 employees completed anti-human trafficking training, which includes bi-monthly training sessions for all new cabin crew on identifying victims and following appropriate reporting procedures. That year, MAG also strengthened its anti-human trafficking efforts through several key initiatives:

- Renewing our partnership with the Stop Human Trafficking Association (SHUT).
- Supporting SHUT shelter homes for rescued trafficking victims by providing blankets, in-flight amenity kits, and comforting children with our Malaysia Airlines mascot, Pilot Parker.
- Serving as a committee member in the International Civil Aviation Organization (ICAO) – United Nations High Commissioner for Refugees (UNHCR) Working Group to help develop guidelines on addressing human trafficking and modern slavery in aviation supply chains.
- Publishing a public awareness article in the July 2024 edition of *Going Places* (Malaysia Airlines’ in-flight magazine), authored by *Majlis Anti-Pemerdagangan Orang* (MAPO) on identifying potential victims onboard, in conjunction with the United Nations World Day Against Trafficking in Persons.
- Created a specialised digital reporting app, together with a circular and internal memo issued to cabin crew and airport services to raise awareness about the platform and how to effectively submit reports.

There were no reported cases of human trafficking in 2024.

ETHICS AND COMPLIANCE

Wildlife Trafficking

[GRI 3-3]

MAG also employs various measures to address the risk of illegal wildlife trade, primarily through strategic collaboration with airports and field experts. These include:

- Actively contributing to the Kuala Lumpur International Airport (KLIA) anti-wildlife trafficking task force established by Malaysia Airports Holdings Berhad (MAHB). This is a collaborative partnership involving various stakeholders, including the Royal Malaysian Customs Department, the Royal Malaysia Police (PDRM), the Department of Wildlife and National Parks (PERHILITAN), and Batik Air.
- Subscribing to data from Trade Records Analysis of Flora and Fauna in Commerce (TRAFFIC). MAG resumed its partnership with TRAFFIC in 2024, building on the 2017 to 2021 Reducing Opportunities for Unlawful Transport of Endangered Species (ROUTES) programme as part

of our continued commitment to strengthening wildlife trafficking prevention. TRAFFIC's mandate is to ensure that the trade in wild species is legal and sustainable by analysing wildlife smuggling methods and sharing data with ground staff so that they can better observe and identify potential smuggling risks.

- Personnel from Group Business Integrity participated in TRAFFIC's anti-wildlife trafficking awareness workshops, held in partnership with several enforcement agencies, including the US government, airports, and seaports. In 2024, approximately 50 newly hired ADS employees received wildlife trafficking awareness training as part of their mandatory onboarding compliance awareness sessions.

In 2024, three suspected wildlife trafficking incidents were detected and promptly reported, with all cases escalated to the PERHILITAN for further action.



ETHICS AND COMPLIANCE

Addressing and Preventing Sexual Harassment

[GRI 3-3, 406-1]

Preventing sexual harassment is crucial for fostering a safe, respectful, and inclusive workplace where all employees have the opportunity to thrive. MAG maintains a zero-tolerance approach towards sexual harassment. To ensure prompt action and accountability, we encourage employees to report incidents confidently through accessible channels such as our whistleblowing platform and grievance reporting portal.

Sexual harassment awareness and prevention training is provided across the Group, including onboarding for all new hires, as part of our Integrity modules for new cabin crew at the MABA Academy, for new AeroDarat Services (ADS) intakes, and through FY's recently launched toolbox sessions. Refresher courses are also provided to departments or divisions that have reported recent incidents.

In 2024, we recorded a total of 16 sexual harassment cases, all of which were investigated and successfully resolved. Cases with substantiated allegations were escalated to Industrial Relations (IR) for consequence management, with appropriate measures to ensure fair and timely resolution.

Employees Who Completed Sexual Harassment Training 2022–2024 (no.)

2022	2023	2024
<ul style="list-style-type: none"> → All new employees during onboarding → All new cabin crew, as part of the Malaysia Airlines Berhad Academy (MABA) integrity training module → All ADS new employees, per the request of the ADS training team 	<ul style="list-style-type: none"> → All new employees during onboarding → All new cabin crew, as part of the MABA integrity training module → All ADS new employees, per the request of the ADS training team <p>New: All engineering staff</p>	<ul style="list-style-type: none"> → All new employees during onboarding → All new cabin crew, as part of the MABA integrity training module → All ADS new employees, per the request of the ADS training team <p>New: Through Firefly toolbox sessions for all FY staff</p>

Anti-Competition Behaviour

[SASB TR-AL-520a.1]

As Malaysia's national carrier, MAG is dedicated to offering fair pricing and value-driven options for our valued customers, as outlined in our Code of Business Conduct. We also include strict anti-competition clauses in all our contracts and agreements with other airlines. To remain aware of these issues, employees from our legal, business integrity, commercial, and airline partnership teams regularly attend external counsel-led sessions on anti-competitive compliance, case studies, and the latest regulations and sanctions in different jurisdictions. We also stay fully compliant with all laws governing anti-competition behaviour and monopoly practices. To date, there have been no legal cases linking MAG to anti-competition conduct.

RISK MANAGEMENT

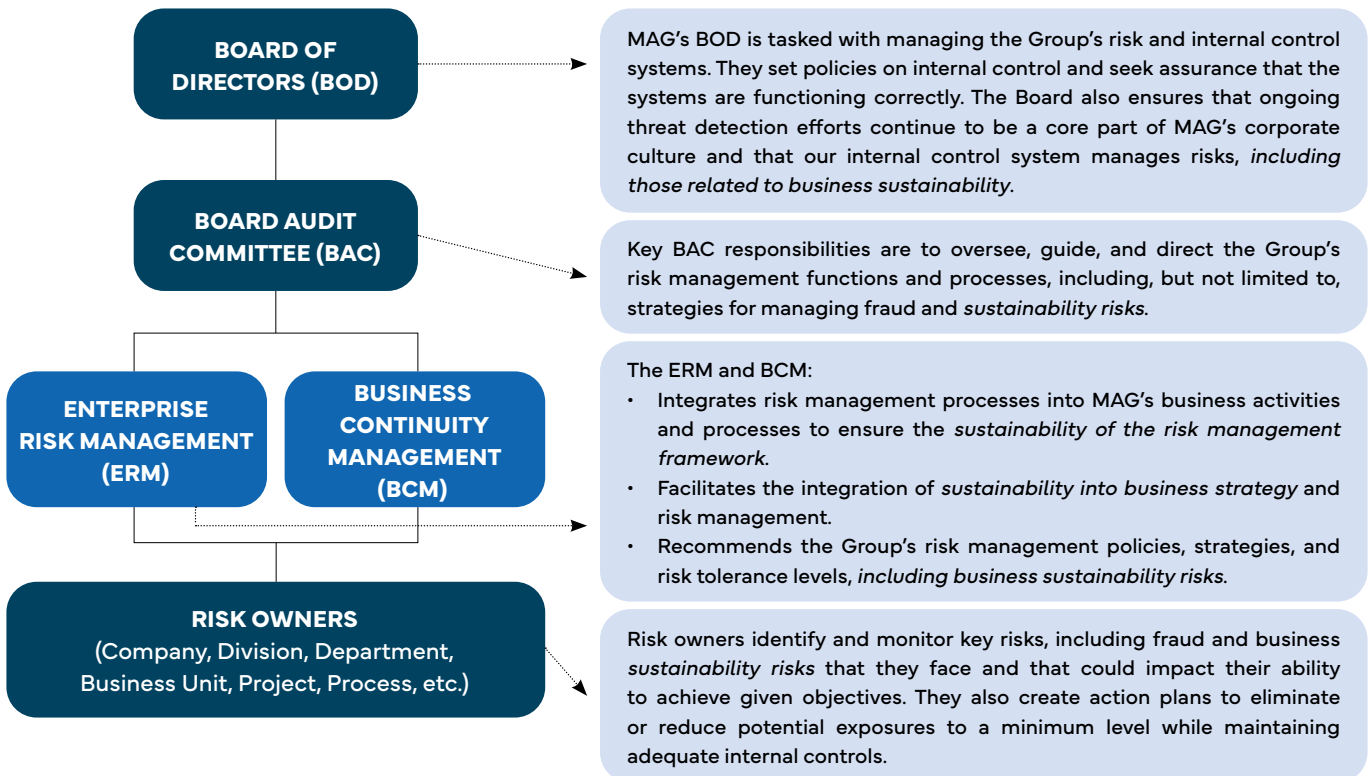
Managing risk is not only crucial for our business objectives, but it’s also at the heart of good corporate governance. MAG’s risk management is integral to our decision-making processes, which are incorporated into business planning throughout the Group. We use the Group Risk Management System, which is based on our official enterprise-wide framework and provides a structured approach to managing risks across the organisation. This framework enhances risk awareness, improves compliance, and builds confidence among decision makers. With this structure in place, MAG can effectively assess, address, monitor, and report risks.

The Risk Management Governance Framework was developed in line with international standards and local regulatory guidance, including ISO 31000:2018 Risk Management Principles and guidelines, ISO37001: 2016 Anti-Bribery Management System (ABMS), the Committee of Sponsoring Organizations of the Treadway Commission Enterprise Risk Management (ERM) Integrated Framework, the Malaysia Code on Corporate Governance (MCCG) 2021, Bursa Listing Requirement (LR) Chapter 15.26 and Bursa Guidelines on Statement on Risk Management and Internal Controls, and the Task Force on Climate-related Financial Disclosures (TCFD). We are continuously working to improve our Risk Management framework and processes to include all future regulatory and compliance requirements.

To strengthen risk management across the Group, we have established independent risk management functions in our main subsidiaries. Each business unit appoints a risk owner who is responsible for managing and reporting risks relevant to their function. This structure is illustrated in our 2024 governance diagram, which depicts the lines of reporting, oversight, and coordination across the Group.

The Board is supported by our dedicated Board Audit Committee (BAC), which provides oversight of risk management and strategic direction. This guidance is then communicated throughout the Group through our ERM function and the Business Continuity Management (BCM) process.

Risk Management Structure



DIGITALISATION

Digitisation is one of MAG's core strategies, helping us to stay ahead of the technological curve so that we can continue to meet our customers' evolving expectations and requirements. In 2024, we further integrated digital solutions into our operations and value chain, focusing on increased efficiency, enhanced stakeholder engagement, and more informed data-driven decision making across the Group.

Digitalisation for MAG

MAG uses several digitalised programmes to improve operational efficiency and decision making. Since 2023, we have fully transitioned to a cloud-based infrastructure, which has streamlined our IT operations. This change has also enhanced scalability, system reliability, and collaboration.

Hub Control Centre

MAG's Hub Control Centre also uses digitalisation for our turnaround management systems, which manage our ground operations and airport passenger connections. By harnessing real-time capabilities, we can deliver end-to-end ground handling services that not only lead to cost savings but also improve resource efficiency and reduce waste through fewer manual interventions.

MAG Data Lake

MAG is also promoting data-driven decision making through the development of a centralised data hub: MAG Data Lake. This ongoing initiative, which began in 2021, is being rolled out in stages to integrate relevant data into the system. The first phase was completed in 2024 and involved integrating commercial and customer data.

The second part will focus on operational data related to MAG's daily activities. By establishing a centralised data hub, MAG will reduce manual oversight, decrease the need for manual interventions and the potential for human error, and streamline decision making by improving communication across various functions through a dedicated platform. Additionally, MAG teams across the Group have access to Microsoft Power BI resources for data visualisation, which supports internal departmental reports.

Using Digitalisation to Improve the Customer Experience

MAG continuously leverages digitalisation to improve the customer experience. In 2024, we launched a customer-facing personalisation project that offers a unified view platform across our airline business websites and mobile apps, tailored to each customer's account. By gathering customer feedback across several MAG's touchpoints, we gain deeper insights into their preferences and behaviours. In addition to personalising the experience, the technology reduces waste by efficiently managing demand. For instance, the platform identifies customers who have booked flights without meals and sends them targeted WhatsApp messages that encourage them to pre-book. This not only boosts operational efficiency but also helps reduce surplus food and packaging waste.

In 2024, in addition to our existing payment methods, MAG introduced Apple Pay, a mobile payment and digital wallet platform. Furthermore, MAG continues to promote contactless payments and digital solutions to minimise reliance on hard-copy cards, tickets, and documents.



DIGITALISATION


Cybersecurity

[GRI 3-3]

As digital adoption increases, so does the responsibility to safeguard data security and privacy. MAG is continually investing in secure digital tools to protect the data of our customers and stakeholders. In 2024, we strengthened our cybersecurity infrastructure and data governance frameworks to ensure that all digital platforms comply with applicable privacy regulations.

Partnering With Google to Advance Travel Innovation

In 2024, Malaysia Airlines entered into a strategic partnership with Google to elevate the customer experience by harnessing the power of artificial intelligence, data-driven marketing, and innovative digital experiences. Using Google’s AI functionality, MAG can now deliver next-generation personalisation across multiple customer touchpoints, leading to an improved customer journey. Malaysia Airlines and Google renewed their commitment in 2025 to further embed AI-driven marketing and comprehensive digital innovation into the airline’s ecosystem.

 See more: [Malaysia Airlines and Google deepen strategic commercial partnership to drive travel innovation.](#)

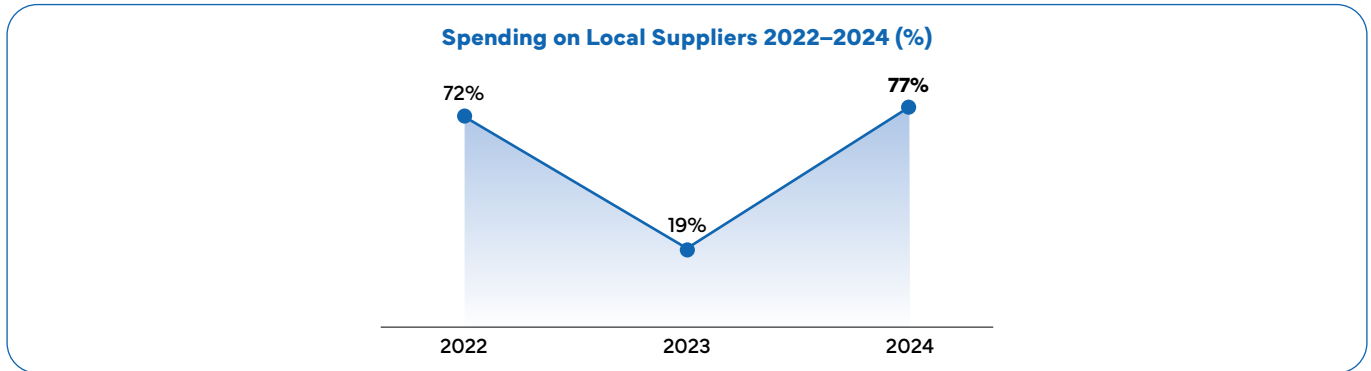


PROCUREMENT

[GRI 2-6, 3-3, 204-1, 308-1, 308-2, 414-1, 414-2] [SASB TR-AF-430a.2]

Supply Chain Overview

Due to the size and scope of our businesses, MAG partners with a wide range of suppliers, vendors, contractors, and business associates who provide goods, materials, or services for the Group. In 2024, we collaborated with 13,314 vendors. We prefer to engage local suppliers wherever possible. In 2024, 77% of total procurement came from local vendors. 2023 was an exceptional year, with most tender contracts awarded to international vendors to meet operational needs at the time. As part of our responsible sourcing efforts, all registered suppliers completed an ESG questionnaire through Ariba.



While supply chain management and meeting the high standards expected by our customers remain top priorities for MAG, in common with other global carriers, we are experiencing operational pressures. These challenges mean that we must continue to strengthen relationships with our key suppliers and adapt our strategies to fulfil our customer commitments. Our approach extends beyond technical and commercial collaboration to address ESG supply chain risks.

Supplier Code of Conduct

Our [Supplier Code of Conduct](#) (SCOC) outlines our expectations for contractors, consultants, suppliers, vendors, service providers, external carriers, and all other third-party entities to uphold specific standards. These include the following:

- Business ethics and integrity, e.g. anti-bribery and anti-corruption.
- Sanctions and export controls, e.g. no dealings with persons or entities subject to sanctions or involved in prohibited transactions.
- Safety, health, and environment, including safe and sanitary facilities, measures to conserve resources and prevent pollution, responsible sourcing, and active participation in carbon-reduction initiatives.
- Other requirements include communicating the SCOC to employees, reporting non-compliances to MAG, and agreeing to verification and audit.
- Labour standards, e.g. zero tolerance for human trafficking and modern slavery, no child labour, complying with regulations on working hours and wages, and upholding no discrimination policies.

Supplier Assessments on ESG

Since 2023, as part of the vendor registration process, we require all our suppliers to complete an ESG assessment survey aligned with the criteria of our Sustainable Procurement Blueprint. In 2024, 1,506 vendors completed the voluntary ESG assessment; as a result, the total number of vendors assessed was lower than our supplier base. Beginning in 2025, completion of the ESG assessment will be mandatory for all suppliers during the registration process.

PROCUREMENT

Sustainable Procurement Blueprint

In 2022, MAG developed our Sustainable Procurement Blueprint, which outlines a three-phase approach to achieving specific goals by 2030. The document was revised in 2024 and includes the following commitments:

<p>100% support for sourcing MAG’s environmental key products (SAF, waste and energy management)</p>	<p>Achieving a 20% baseline improvement in sustainable sourcing for selected products by 2030 (excluding MAG environmental key goals)</p>	<p>Minimum 3 Suppliers under Vendor Development Programs and at least 3 MSME suppliers awarded for each ESG project</p>
<p>Focuses on supporting MAG’s efforts to source key environmental products such as sustainable aviation fuel (SAF), and ensuring efficient waste and energy management.</p>	<p>Consolidates sustainable sourcing for airline and non-airline products, with a target of a 20% improvement in sustainable sourcing practices by 2030.</p>	<p>Engages at least three suppliers under vendor development programmes and three micro-, small- and medium-enterprises (MSME) for ESG projects. This will not only support local supplier capacity building by offering skills and resources but also help to meet MAG’s sustainability objectives.</p>

Phase 1: Reframing ESG in MAG Procurement Practices 2022–2024

Phase 1 of the Blueprint (2022–2024) sets the groundwork for our strategy by redefining ESG in MAG’s procurement practices through awareness and capacity-building initiatives, including workshops and training sessions for vendors and stakeholders. We have made notable progress with our programmes. By December 2024, we had engaged 4,503 vendors on our ESG updates. Of these, 16 vendors – mainly small- and medium-enterprises (SMEs) and MSMEs participating in ESG capacity-building initiatives – received more targeted support. While this represents 1.6% of our total vendor base, the focus in 2024 was on engaging with selected suppliers. In comparison, ESG training in 2023 reached a broader group, covering 16% of vendors.

Phase 2: Capacity Building and Stakeholder Engagement Strategies 2025–2027

As we move into Phase 2, MAG will focus on three main strategies: building supplier capacity through mentorship and training, developing responsible procurement guidelines in line with the United Nations Sustainable Development Goals (SDGs), and strengthening the supplier evaluation process against ESG criteria. Through a structured framework and regular consultations, we will involve a broader range of stakeholders to help develop and refine our ESG policies.

2025	2026	2027	<p>GOAL Enhance supplier capabilities and stakeholder collaborations</p>
<p>Strategy 1 Launch supplier mentorship programme</p>	<p>Strategy 1 Conduct sustainability workshops</p>	<p>Strategy 1 Evaluate and refine mentorship programmes</p>	<p>TIPS</p> <ul style="list-style-type: none"> • Capacity building • Fair procurement • Active engagement
<p>Strategy 2 Develop responsible procurement guidelines</p>	<p>Strategy 2 Implement supplier evaluation process</p>	<p>Strategy 2 Review and update procurement guidelines</p>	
<p>Strategy 3 Establish stakeholder engagement framework</p>	<p>Strategy 3 Facilitate collaborative consultations</p>	<p>Strategy 3 Refine ESG policies using stakeholder feedback</p>	

In 2024, MAG began participating voluntarily in the newly introduced International Air Transport Association (IATA) ESG Implementation Support Project (ISP). Since this initiative is still in the early stages, training and implementation will continue in 2025, and updates will be shared in our next report.



MATERIAL TOPIC DEFINITIONS

Material topic	Definition
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Environmental

Climate change and emissions management	Responsibly managing and reducing greenhouse gas (GHG) emissions through sustainable aviation practices, low-carbon technologies, and climate resilience strategies to mitigate MAG’s environmental impact
Energy and resource efficiency	Optimising and conserving resources (including fuel, electricity and energy, water, raw materials, consumables, etc.) through efficient technologies and practices to enhance MAG’s sustainability and operational performance
Responsible waste management	Minimising waste generation and sustainable disposal practices across MAG’s operations to reduce environmental impact and support wider circular economy goals
Noise reduction	Reducing aircraft noise pollution, limiting negative environmental impacts by complying with regulatory requirements and investing in noise-reduction technology in MAG’s operations
Biodiversity preservation	Managing biodiversity impacts and dependencies within MAG’s operations, supply chain, and products or services by protecting ecosystems, preventing wildlife trafficking, and supporting global biodiversity conservation efforts

Social

Aircraft and employee safety	Implementing policies, practices, and initiatives to minimise risk and prevent harm, ensuring customer safety, satisfaction, health, and well-being. This includes efforts to keep our aircraft in an optimal operating condition through innovations, new technologies, and robust risk management, ensuring passenger and staff safety while complying with aviation regulations
Employee management	Promoting fair labour practices, employee representation, and continuous learning and development to foster a safe, inclusive, and engaged workforce

MATERIAL TOPIC DEFINITIONS

Material topic	Definition
Social	
Customer welfare and branding	Managing all client interactions from booking to post-flight to ensure consistent standards, reliable operations, and effective marketing and communication strategies to maintain customers' expectations of MAG's value and reputation
Diversity	Fostering a fair and inclusive workplace by addressing any imbalances in gender, race, ethnicity, religion and/or other characteristics, ensuring equal pay and eliminating any possible discriminatory practices to create equitable opportunities for all
Human rights	Protecting the fundamental rights and freedoms inherent to all individuals, regardless of nationality, ethnicity, religion, gender, or any other status. This also covers human trafficking and the rights of those potentially affected by MAG's operations
Community welfare	Strategic initiatives to support the sustainable development and well-being of communities impacted by MAG's operations; addressing environmental, social, and economic challenges while promoting equity and inclusion to build resilient, thriving communities
Governance	
Economic growth and performance	Achieving financial sustainability by effectively managing MAG's finances to support long-term growth and resilience, in line with the LTBP 3.0
Supply chain management	Managing and integrating sourcing, procurement, production, and distribution of goods and services within MAG's value chain to optimise efficiency, minimise costs, ensure timely delivery of services and promote sustainable practices. This includes engaging suppliers' key material topics such as resource management and labour rights
Data privacy	Protecting the personal details of clients, employees, and other relevant stakeholders to ensure confidentiality, integrity, and availability of data, by adhering to applicable laws and applying organisational safeguards to prevent unauthorised access, use, or disclosure of data
Corporate governance, risk management, and business ethics	Upholding transparent leadership, robust risk controls, and ethical conduct across our operations to maintain safety, regulatory compliance, and stakeholder trust. This includes managing the complexity of MAG's operations through effective risk management approaches while continuing to comply with industry standards in a transparent and accountable manner

PERFORMANCE DATA

ENVIRONMENTAL					
Description	Breakdown	UoM	2022	2023	2024
Total energy consumption	Total non-renewables	GJ	37,968,848	50,922,305	54,111,241
	Total renewables	GJ	23,283	23,513	23,029
Aircraft fleet fuel consumption performance data	Total domestic and international fuel consumption	t	879,191	1,179,776	1,253,086
		GJ	38,723,648	52,166,733	55,261,085
	Total domestic fuel consumption	t	200,662	203,318	185,402
	MH	t	156,229	150,713	136,888
	FY	t	28,058	36,252	33,398
	MW	t	11,841	11,867	12,613
	AMAL	t	257	652	373
	MK	t	4,277	3,834	2,130
	Total international fuel consumption	t	678,529	976,458	1,067,684
	MH	t	541,246	830,067	910,451
	FY	t	1,617	8,636	14,917
	MW	t	-	-	-
	AMAL	t	66,790	81,156	71,554
	MK	t	68,876	56,599	70,762
	Fuel savings	Total	t	30,597	26,987
MH		t	21,751	20,624	25,933
FY		t	6,974	4,964	21,071
MK		t	1,099	783	1,123
AMAL		t	495	535	583
Ground fuel consumption	Total diesel	l	1,809,864	2,287,162	2,782,518
		GJ	65,372	82,612	100,505
	Total petrol	l	126,497	133,219	143,589
		GJ	4,147	4,367	4,707
	ADS	l	1,407,305	1,873,582	2,307,344
	Diesel	l	1,399,087	1,860,642	2,278,091
	Petrol	l	8,218	12,940	29,253
	MK	l	310,404	313,483	378,254
	Diesel	l	291,206	287,652	355,694
	Petrol	l	19,198	25,831	22,560
	MABES	l	218,652	233,316	240,509
	Diesel	l	119,571	138,868	148,733
Petrol	l	99,081	94,448	91,776	
Energy management	Total electricity consumption	MWh	26,143	29,155	34,259
		GJ	94,116	104,957	123,331
	Total solar energy generated	MWh	6,467.64	6,531.45	6,397.01
		GJ	23,283	23,513	23,029

PERFORMANCE DATA

Description	Breakdown	UoM	2022	2023	2024
Waste management	Total waste generated	t	6,932	8,390	9,054
	Total non-hazardous waste	t	6,744	8,170	8,780
	Directed to landfill	t	6,249	7,702	7,920
	Diverted from landfill	t	495	468	860
	Total hazardous waste (diverted from landfill)	t	188	220	274
	SW109 used fluorescent lamps	t	1	6	3
	SW204 sludge	t	2	10	11
	SW206 spent inorganic acid	t	5	11	14
	SW305 used engine oil	t	69	64	48
	SW312 oil interceptor sludge	t	1	1	2
	SW409 Used contaminated containers	t	18	16	29
	SW410R used rags, paper, or both	t	58	78	137
	SW417 waste ink, paint pigments, lacquer, dye, varnish, etc.	t	26	21	20
	SW411 used carbon, sand, or both	t	8	10	11
	SW401 aqueous alkaline solution	t	0	1	0
	In-flight waste intensity ¹⁰			0.36	0.35

SOCIAL					
Description	Breakdown	UoM	2022	2023	2024
Employee gender diversity	Total workforce	no.	11,414	12,488	13,539
	Men	no.	7,687	8,287	8,790
	Women	no.	3,727	4,201	4,749
	Top management	no.	19	19	19
	Men	no.	16	16	16
	Women	no.	3	3	3
	Senior management	no.	157	184	198
	Men	no.	82	91	103
	Women	no.	75	93	95
	Middle management	no.	528	642	768
	Men	no.	302	355	417
	Women	no.	226	287	351
	Executive	no.	1,384	1,559	1,776
	Men	no.	691	788	856
	Women	no.	693	771	920
	Non-Executive	no.	4,439	4,957	5,112
	Men	no.	3,184	3,566	3,664
	Women	no.	1,255	1,391	1,448
	Management: Pilots	no.	37	43	43
	Men	no.	36	41	41
Women	no.	1	2	2	

¹⁰ Waste intensity is calculated based on the number of passenger (in thousand) and the total weight of in-flight waste.

PERFORMANCE DATA

Description	Breakdown	UoM	2022	2023	2024
	Pilot group	no.	1,215	1,287	1,369
	Men	no.	1,176	1,241	1,307
	Women	no.	39	46	62
	Cabin crew	no.	2,193	2,380	2,636
	Men	no.	834	877	921
	Women	no.	1,359	1,503	1,715
	Aircraft engineer	no.	426	396	436
	Men	no.	399	367	401
	Women	no.	27	29	35
	Technician	no.	1,016	1,021	1,182
	Men	no.	967	945	1,064
	Women	no.	49	76	118
Employee age group diversity	Total	no.	11,414	12,488	13,539
	Under 30 years old	no.	1,978	2,575	3,440
	30–50 years old	no.	7,071	7,362	7,227
	Over 50 years old	no.	2,365	2,551	2,872
New hires	Total	no.	1,180	1,994	1,763
	By gender				
	Men	no.	644	1,099	947
	Women	no.	536	895	816
	By age group				
	Under 30 years old	no.	890	1,264	1,176
	30–50 years old	no.	285	679	548
	Over 50 years old	no.	5	51	39
Employee turnover	Total	no.	997	1,025	1,132
	By gender				
	Men	no.	590	657	683
	Women	no.	407	368	449
	By age group				
	Under 30 years old	no.	418	392	390
	30–50 years old	no.	431	454	492
	Over 50 years old	no.	148	179	250

GOVERNANCE

Description	Breakdown	UoM	2022	2023	2024
Training	Employees who completed human trafficking awareness training	no.	98	240	240

GRI CONTENT INDEX

The Global Reporting Initiative (GRI) is a multi-stakeholder sustainability reporting standard, providing guidance on determining report content and indicators. GRI is the most widely adopted global sustainability reporting standard. It is designed to enhance the comparability and quality of global information on environmental and social impacts, increasing organisational transparency and accountability. This report and its preparation align with the 2021 GRI Standards.

Statement of use	Malaysia Aviation Group (MAG) has reported in accordance with the GRI Standards for the period of 1 January to 31 December 2024.
GRI 1 used	GRI 1: Foundation 2021

GRI Standard	Disclosure	Location of Disclosure/Reason for Omission
1. The organization and its reporting practices		
GRI 2: General Disclosures 2021	2-1 Organizational details	About MAG, p.5
	2-2 Entities included in the organization's sustainability reporting	About This Report, p.1
	2-3 Reporting period, frequency and contact point	About This Report, p.1 Back Cover
	2-4 Restatements of information	Available throughout, if necessary
	2-5 External assurance	About This Report, p.1 Assurance Statement, p.87
2. Activities and workers		
GRI 2: General Disclosures 2021	2-6 Activities, value chain and other business relationships	About MAG, p.5 Procurement, p.68
	2-7 Employees	Employees, p.38
	2-8 Workers who are not employees	Information unavailable for this reporting period
3. Governance		
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	Sustainability Governance, p.14 Empowering Diversity, p.40
	2-10 Nomination and selection of the highest governance body	Information unavailable
	2-11 Chair of the highest governance body	Sustainability Governance, p.14
	2-12 Role of the highest governance body in overseeing the management of impacts	Sustainability Governance, p.14 Corporate Governance, p.59
	2-13 Delegation of responsibility for managing impacts	Sustainability Governance, p.14
	2-14 Role of the highest governance body in sustainability reporting	Sustainability Governance, p.14 Materiality, p.18
	2-15 Conflicts of interest	Information unavailable
	2-16 Communication of critical concerns	Sustainability Governance, p.14
	2-17 Collective knowledge of the highest governance body	Sustainability Governance, p.14
	2-18 Evaluation of the performance of the highest governance body	Sustainability Governance, p.14
	2-19 Remuneration policies	Information unavailable
	2-20 Process to determine remuneration	Information unavailable
	2-21 Annual total compensation ratio	Information unavailable

GRI CONTENT INDEX

GRI Standard	Disclosure	Location of Disclosure/Reason for Omission
4. Strategy, policies and practices		
GRI 2: General Disclosures 2021	2-22 Statement on sustainable development strategy	Message from the Group Managing Director, p.2
	2-23 Policy commitments	Our Approach to Sustainability, p.12 Ethics and Compliance, p.60
	2-24 Embedding policy commitments	Our Approach to Sustainability, p.12 Ethics and Compliance, p.60
	2-25 Processes to remediate negative impacts	Whistleblowing Policy, p.62
	2-26 Mechanisms for seeking advice and raising concerns	Whistleblowing Policy, p.62
	2-27 Compliance with laws and regulations	Ethics and Compliance, p.60
	2-28 Membership associations	Stakeholder Engagement, p.15
5. Stakeholder engagement		
GRI 2: General Disclosures 2021	2-29 Approach to stakeholder engagement	Stakeholder Engagement, p.15
	2-30 Collective bargaining agreements	Information unavailable
Material topics		
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Materiality, p.18
	3-2 List of material topics	Materiality, p.18
Climate mitigation and climate adaptation		
GRI 3: Material Topics 2021	3-3 Management of material topics	Climate Strategy, p.21
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	2024 Climate Risk Assessment, p.21
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Group Carbon Dioxide Emissions, p.28
	305-2 Energy indirect (Scope 2) GHG emissions	Group Carbon Dioxide Emissions, p.28
	305-3 Other indirect (Scope 3) GHG emissions	Group Carbon Dioxide Emissions, p.28
	305-4 GHG emissions intensity	Group Carbon Dioxide Emissions, p.28
	305-5 Reduction of GHG emissions	MAG's Focus on Decarbonisation, p.22
	305-6 Emissions of ozone-depleting substances (ODS)	Information unavailable
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Information unavailable
Aircraft and employee safety		
GRI 3: Material Topics 2021	3-3 Management of material topics	Health and Safety, p.43 Aircraft Reliability and Safety Management, p.61
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Health and Safety, p.43
	403-2 Hazard identification, risk assessment, and incident investigation	Health and Safety, p.43
	403-3 Occupational health services	Health and Safety, p.43

GRI CONTENT INDEX

GRI Standard	Disclosure	Location of Disclosure/Reason for Omission
	403-4 Worker participation, consultation, and communication on occupational health and safety	Health and Safety, p.43
	403-5 Worker training on occupational health and safety	Information unavailable
	403-6 Promotion of worker health	Health and Safety, p.43
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Health and Safety, p.43 Aircraft Reliability and Safety Management, p.61
	403-8 Workers covered by an occupational health and safety management system	Health and Safety, p.43
	403-9 Work-related injuries	Health and Safety, p.43
	403-10 Work-related ill health	Information unavailable
Employee management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Employees, p.38
GRI 201: Economic Performance 2016	201-3 Defined benefit plan obligations and other retirement plans	Employees benefits, p.46
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	Workforce Overview, p.38 Performance Data, p.72
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Information unavailable for this reporting period
	401-3 Parental leave	Employees benefits, p.46
GRI 402: Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	Information unavailable
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	Information unavailable
	404-2 Programs for upgrading employee skills and transition assistance programs	Training and Development, p.47
	404-3 Percentage of employees receiving regular performance and career development reviews	Training and Development, p.47
Economic growth and performance		
GRI 3: Material Topics 2021	3-3 Management of material topics	Procurement, p.68
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	Information unavailable
Supply chain management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Procurement, p.68
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	Procurement, p.68

GRI CONTENT INDEX

GRI Standard	Disclosure	Location of Disclosure/Reason for Omission
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Procurement, p.68
	308-2 Negative environmental impacts in the supply chain and actions taken	100% of the suppliers were screened and required to answer an ESG questionnaire on MAG's online system, Ariba.
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	
	414-2 Negative social impacts in the supply chain and actions taken	
Energy and resource efficiency		
GRI 3: Material Topics 2021	3-3 Management of material topics	Energy Management, p.31 Upcycling MAG Waste, p.34 Reducing Single-Use Plastics, p.34
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Waste Management, p.33
	301-2 Recycled input materials used	Information unavailable
	301-3 Reclaimed products and their packaging materials	Information unavailable
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Monitoring Energy Consumption, p.31
	302-2 Energy consumption outside of the organization	Information unavailable
	302-3 Energy intensity	Building Energy Index, p.32
	302-4 Reduction of energy consumption	MAG's Focus on Decarbonisation, p.22
	302-5 Reductions in energy requirements of products and services	Chilled Water Consumption, p.32
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Water is not material to MAG's operations.
	303-2 Management of water discharge-related impacts	
	303-3 Water withdrawal	
	303-4 Water discharge	
	303-5 Water consumption	
Data privacy		
GRI 3: Material Topics 2021	3-3 Management of material topics	Cybersecurity, p.67
GRI 418: Customer privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Information unavailable for this reporting period
Corporate governance, risk management & business ethics		
GRI 3: Material Topics 2021	3-3 Management of material topics	Ethics and Compliance, p.60

GRI CONTENT INDEX

GRI Standard	Disclosure	Location of Disclosure/Reason for Omission
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Anti-Bribery and Corruption, p.60
	205-2 Communication and training about anti-corruption policies and procedures	Anti-Bribery and Corruption, p.60
	205-3 Confirmed incidents of corruption and actions taken	Ethics and Compliances, p.60 Anti-Bribery and Corruption, p.60
Responsible waste management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Waste Management, p.33
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Waste Management, p.33
	306-2 Management of significant waste-related impacts	Waste Management, p.33
	306-3 Waste generated	Waste Management, p.33 Performance Data, p.72
	306-4 Waste diverted from disposal	Waste Management, p.33 Performance Data, p.72
	306-5 Waste directed to disposal	Waste Management, p.33 Performance Data, p.72
Customer welfare and branding		
GRI 3: Material Topics 2021	3-3 Management of material topics	Customers, p.49
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Food Safety, p.52
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Food Safety, p.52
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	Customers, p.49
	417-2 Incidents of non-compliance concerning product and service information and labeling	There is no non-compliance issue on product and service information, labelling, and marketing communications during the reporting period.
	417-3 Incidents of non-compliance concerning marketing communications	
Diversity		
GRI 3: Material Topics 2021	3-3 Management of material topics	Employee Diversity, p.40 Addressing and Preventing Sexual Harrassment, p.64
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	Information unavailable
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Empowering Diversity, p.40
	405-2 Ratio of basic salary and remuneration of women to men	Information unavailable
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Addressing and Preventing Sexual Harrassment, p.64

GRI CONTENT INDEX

GRI Standard	Disclosure	Location of Disclosure/Reason for Omission
Noise reductions		
GRI 3: Material Topics 2021	3-3 Management of material topics	Noise Management, p.36
Human rights		
GRI 3: Material Topics 2021	3-3 Management of material topics	Employees, p.38 Ethics and Compliance, p.60
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Information unavailable
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	Not applicable to MAG operations
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Information unavailable
Community welfare		
GRI 3: Material Topics 2021	3-3 Management of material topics	Community, p.53
GRI 202: Market Presence 2016	202-2 Proportion of senior management hired from the local community	Information unavailable
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Community, p.53
	203-2 Significant indirect economic impacts	Community, p.53
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	Not applicable to MAG operations
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	Not applicable to MAG operations
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	Information unavailable
	413-2 Operations with significant actual and potential negative impacts on local communities	Community, p.53
Biodiversity preservation		
GRI 3: Material Topics 2021	3-3 Management of material topics	Wildlife Trafficking, p.63
General disclosures		
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Anti-Competition Behaviour, p.64

IATA ESG INDEX

Metric Code	Metric Name	Metric Unit	Location of Disclosure
Core metrics			
E.1	Fuel consumption (flight operations)	t and/or L	Climate Strategy, p.21 No SAF uplift in 2024.
E.2	Scope 1 CO ₂ emissions	tCO ₂	Group Carbon Dioxide Emissions, p.28
E.3	Scope 2 CO ₂ emissions	tCO ₂	Group Carbon Dioxide Emissions, p.28
E.4	NOx emissions	kg	Information unavailable MAG does not currently track NOx.
E.5	Aircraft noise: % of fleet that meets with ICAO Chapter III, IV and XIV	%	Noise Management, p.36
E.6	Energy consumption within the organization, non-renewables and renewables	GJ; MWh	Climate Strategy, p.21 Monitoring Energy Consumption, p.31 Performance Data, p.72
S.1	Community engagement and charitable support	RM, hours, cargo t, passengers	Community, p.53
S.2	Work-related injuries	#, rate of recordable injuries	Accident Reporting, p.45
S.3	Fatalities as a result of work-related injury	#, rate of fatalities	Accident Reporting, p.45
S.4	Employee training: Includes different types of training	Average training hours per employee	Information unavailable Only total training hours data is reported.
G.1	Diversity (gender, grade)	# male/female/non-binary divided by employee category (matrix table)	Empowering Diversity, p.40 Performance Data, p.72
G.2	Total number of confirmed corruption cases	#	Anti-Bribery and Corruption, p.60
Extended ("Core+") metrics			
E.7	Scope 3 CO ₂ emissions	tCO ₂	Group Carbon Dioxide Emissions, p.28
E.8	Carbon offsets (voluntary- airline purchased)	t	Information unavailable
E.9	Carbon offsets (voluntary- customer purchased)	t	Information unavailable
E.10	Carbon offsets (mandatory)	t	Information unavailable
E.11	Waste	t	Waste Management, p.33 Performance Data, p.72
E.12	Recyclables	%; t	Waste Management, p.33 Performance Data, p.72
E.13	Water consumption	L; megaliters	Not material to MAG
E.14	Water consumption in water-stressed areas	L	Not material to MAG
E.15	Single-use plastics (SUP)	#, t	Waste Management, p.33
S.5	Work-related ill-health	number of work-related ill health cases	Information unavailable
S.6	Fatalities as a result of work-related ill health	#	Information unavailable

IATA ESG INDEX

Metric Code	Metric Name	Metric Unit	Location of Disclosure
S.7	Employee satisfaction	Employee satisfaction score/indicator (1 lowest, 10 highest)	Information unavailable
S.8	Number of aviation accidents	#	Aircraft Reliability and Safety Management, p.61
S.9	Risk for incidents of child, forced or compulsory labor	#, %	Not material to MAG
S.10	Pay gap	Ratio of the basic salary and remuneration of women to men	Information unavailable
G.3	Percentage of critical suppliers subjected to environmental and social impact assessments and total spend they represent	%	Supplier Assessments on ESG, p.68
G.4	Percentage of the active workforce covered under collective bargaining agreements	%	Information unavailable
G.5	Losses as a result of legal proceedings associated with anti-competitive behavior regulations	RM, #	Anti-Competition Behaviour, p.60
G.6	Number of government enforcement actions of aviation safety regulations	#	Aircraft Reliability and Safety Management, p.61
Business activity indicators (per annum, as minimum)			
B.1	Available Tonne-Kilometers (ATK)		Fleet and Passenger Overview, p.8 Reported as capacity tonne-kilometers (CTKM).
B.2	Passenger-Kilometers Flown (RPK)		Fleet and Passenger Overview, p.8
B.3	Tonne-Kilometers Performed (RTK)		Fleet and Passenger Overview, p.8
B.4	Departures		Fleet and Passenger Overview, p.8
B.5	Landings and Take-offs (LTOs)		Fleet and Passenger Overview, p.8
B.6	Passengers		Fleet and Passenger Overview, p.8
B.7	Employees		Workforce Overview, p.38
ESG intensity ratios			
I.1	Intensity 1	gCO ₂ /RTK	Group Carbon Dioxide Emissions, p.28 Data reported in gCO ₂ /LTK.
I.2	Intensity 2	gCO ₂ /ATK	Climate Strategy, p.21 MAG accounts for carbon efficiency using LTK instead of ATK, as this reflects the actual carbon efficiency rather than the available efficiency.
I.3	Waste Intensity for cabin operations (for activity table)	t/passenger	Performance Data, p.72 In-flight waste intensity is calculated using the number of departures.
I.4	NOx emissions intensity	kg NOx per LTO	Information unavailable MAG does not currently track NOx.

SASB INDEXES

Airlines					
Sustainability Disclosure Topics & Accounting Metrics					
Topic	Code	Accounting Metric	Category	Unit of Measure	Location of Disclosure/ Reason for Omission
Greenhouse gas emissions	TR-AL-110a.1	Gross global Scope 1 emissions	Quantitative	tCO ₂	Group Carbon Dioxide Emissions, p.28
	TR-AL-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	N/A	MAG's Focus on Decarbonisation, p.28
	TR-AL-110a.3	(1) Total fuel consumed, (2) percentage alternative and (3) percentage sustainable	Quantitative	GJ, %	MAG's Focus on Decarbonisation, p.28 Performance Data, p.72 No SAF uplift in 2024.
Labour practices	TR-AL-310a.1	Percentage of active workforce employed under collective agreements	Quantitative	GJ, %	Information unavailable
	TR-AL-310a.2	(1) Number of work stoppages and (2) total days idle	Quantitative	Number, days idle	No work stoppages happened during reporting period.
Competitive behaviour	TR-AL-520a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behaviour regulations	Quantitative	RM	Anti-Competition Behaviour, p.64
Accident & safety management	TR-AL-540a.1	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behaviour regulations	Quantitative	n/a	Aircraft Reliability and Safety Management, p.61
	TR-AL-540a.2	Number of aviation accidents	Quantitative	Number	Aircraft Reliability and Safety Management, p.61
	TR-AL-540a.3	Number of governmental enforcement actions of aviation safety regulations	Quantitative	Number	Aircraft Reliability and Safety Management, p.61

SASB INDEXES

Activity metrics				
Activity Metric	Code	Category	Unit of Measure	Location of Disclosure/ Reason for Omission
Available seat kilometres (ASK)	TR-AL-000.A	Quantitative	ASK	Fleet and Passenger Overview, p.8
Passenger load factor	TR-AL-000.B	Quantitative	Rate	Fleet and Passenger Overview, p.8
Activity Metric	Code	Category	Unit of Measure	Location of Disclosure/ Reason for Omission
Revenue passenger kilometres (RPK)	TR-AL-000.C	Quantitative	RPK	Fleet and Passenger Overview, p.8
Revenue tonne-kilometres (RTK)	TR-AL-000.D	Quantitative	RTK	Fleet and Passenger Overview, p.8 Reported as capacity tonne-kilometres (CTKM).
Number of departures	TR-AL-000.E	Quantitative	Number	Fleet and Passenger Overview, p.8
Average age of fleet	TR-AL-000.F	Quantitative	Years	Fleet and Passenger Overview, p.8

Air freight & logistics				
Sustainability Disclosure Topics & Accounting Metrics				
Code	Activity Metric	Category	Unit of Measure	Location of Disclosure/ Reason for Omission
TR-AF-110a.1	Gross global Scope 1 emissions	Quantitative	tCO ₂	Group Carbon Dioxide Emissions, p.28
TR-AF-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	N/A	MAG's Focus on Decarbonisation, p.22
TR-AF-110a.3	Fuel consumed by (1) road transport, percentage (a) natural gas and (b) renewable, and (2) air transport, percentage (a) alternative and (b) sustainable	Quantitative	GJ, %	MAG's Focus on Decarbonisation, p.22 No SAF uplift in 2024.
TR-AF-120a.1	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , and (3) particulate matter (PM ₁₀)	Quantitative	t	Information unavailable MAG does not currently track NO _x , SO _x , and PM ₁₀ data.
TR-AF-310a.1	Percentage of drivers classified as independent contractors	Quantitative	%	Information unavailable
TR-AF-310a.2	Total amount of monetary losses as a result of legal proceedings associated with labour law violations	Quantitative	RM	Ethics and Compliance, p.60

SASB INDEXES

Activity Metric	Code	Category	Unit of Measure	Location of Disclosure/ Reason for Omission
TR-AF-320a.1	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Quantitative	Rate	Health and Safety, p.43
TR-AF-430a.1	Total greenhouse gas (GHG) footprint across transport modes	Quantitative	tCO ₂ per t-km	Group Carbon Dioxide Emissions, p.28
TR-AF-430a.2	Discussion of policies and strategies to identify, assess and manage business disruption risks associated with contract carrier safety	Discussion and Analysis	n/a	Procurement, p.68
TR-AF-540a.1	Description of implementation and outcomes of a Safety Management System	Quantitative	n/a	Aircraft Reliability and Safety Management, p.61
TR-AF-540a.2	Number of aviation accidents	Quantitative	Number	Aircraft Reliability and Safety Management, p.61
TR-AF-540a.3	Number of road accidents and incidents	Quantitative	Number	Information unavailable

Activity metrics				
Code	Activity Metric	Category	Unit of Measure	Location of Disclosure/ Reason for Omission
TR-AF-000.A	Revenue tonne-kilometres (RTK) for: (1) road transport and (2) air transport	Quantitative	RTK	Fleet and Passenger Overview, p.8
TR-AF-000.B	Load factor for: (1) road transport and (2) air transport	Quantitative	Rate	Fleet and Passenger Overview, p.8 Load factor for road transport is not reported.
TR-AF-000.C	Number of employees, number of truck drivers	Quantitative	Number	Workforce Overview, p.38 MAG does not directly hire truck drivers.

SUSTAINABILITY POLICY

Malaysian Hospitality Begins With Us.



SUSTAINABILITY POLICY

MAG is committed to upholding these sustainability principles:

ENVIRONMENT

- I. Promote fuel efficiency with operational optimization, new equipment, and Sustainable Aviation Fuel (SAF).
- II. Enhance energy efficiency (EE) and use Renewable Energy (RE).
- III. Use water responsibly and increase non-potable water capacity.
- IV. Foster waste management through waste reduction, segregation, recycling, reuse, and circularity.
- V. Comply with the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA).
- VI. Encourage employee and partner participation in environmental conservation and rehabilitation.

SOCIAL

- I. Foster an inclusive, diverse workplace that empowers women and prohibits discrimination or harassment.
- II. Promotes socio-economic well-being, respect cultural values, and support Corporate Social Responsibility (CSR) initiatives.
- III. Cultivate MAG Culture Beliefs through employee engagement, career development, and change management.

GOVERNANCE

- I. Establish a strong governance structure with policies, risk management, and internal controls.
- II. Enforce business integrity and ethical principles, rejecting bribery, corruption, trafficking, and modern slavery.
- III. Ensure regulatory compliance in all operating markets.
- IV. Engage supply chain partners to adopt sustainable practices and improve sustainability performance.

KEY POLICY ENABLERS

- I. Supporting employees with sustainability awareness, training, capacity building, and resource allocation.
- II. Engaging stakeholders to advance MAG's sustainability agenda in the aviation industry and global market.
- III. Transforming sustainability data digitalization for streamlined data collection and performance analysis.
- IV. Transparently disclosing sustainability strategies, goals, initiatives, and performance metrics through annual reports and website postings.

IZHAM ISMAIL

Group Managing Director

13 February 2025

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ASSURANCE STATEMENT

[GRI 2-5]



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ASSURANCE STATEMENT

Context

NORMEC VERIFAVIA has been engaged by Malaysia Aviation Group (MAG) to perform an independent verification of carbon inventory data with reasonable assurance for Scope 1 & 2, and limited assurance on Scope 3 emissions, carbon intensity (gCO₂/LTK), and diversity data as presented in the Malaysia Aviation Group's Carbon Footprint for calendar year 2024 (January 01, 2024 - December 31, 2024). Scope 2 emissions were calculated using location and market-based emission factors. Scope 3 emissions consist of categories 1, 2, 3, 4, 5, 6, 7, 8, and 15 as per the Greenhouse Gas Protocol – "A Corporate Accounting and Reporting Standard" (Revised Edition).

A summary of the emissions data and carbon intensity reported by Malaysia Aviation Group is given in the table below:

Environmental Footprint		
Source	Unit	Emissions
Scope 1	tCO ₂ e	3,968,173
Scope 2		
Location-based emissions	tCO ₂ e	30,949
Market-based emissions	tCO ₂ e	30,949
Scope 3		965,594
Purchased goods & services	tCO ₂ e	62,486
Capital goods	tCO ₂ e	7,320
Fuel and energy-related activities	tCO ₂ e	833,405
Upstream transportation & distribution	tCO ₂ e	276
Waste generated in operations	tCO ₂ e	3,626
Business travel	tCO ₂ e	6,223
Employee commuting	tCO ₂ e	38,360
Upstream leased assets	tCO ₂ e	6,546
Investments	tCO ₂ e	7,352
Total emissions: location-based	tCO ₂ e	4,964,716
Total emissions: market-based	tCO ₂ e	4,964,716

Carbon Intensity		
Entity	Unit	Intensity
MAB	(gCO ₂ /LTK)	907
AMAL	(gCO ₂ /LTK)	965
Firefly	(gCO ₂ /LTK)	474
MASwings	(gCO ₂ /LTK)	2,960
MABKargo	(gCO ₂ /LTK)	663

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ASSURANCE STATEMENT


NORMEC VERIFAVIA

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A summary of the diversity data, new employee hire, and employee turnover by gender and age group, along with employee parental leave reported by Malaysia Aviation Group, is given in the following tables:

Diversity Data						
Employee Category	Gender			Age group		
	Male	Female	Total	<30	30-50	>50
Top Management	16	3	19	-	9	10
Senior Management	103	95	198	-	123	75
Middle Management	417	351	768	43	497	228
Executive	856	920	1,776	398	999	379
Non-executive	3,664	1,448	5,112	1,566	2,556	990
Management pilot	41	2	43	-	23	20
Pilot group	1,307	62	1,369	259	883	227
Cabin Crew	921	1,715	2,636	750	1,216	670
Tech Engineer	401	35	436	43	312	81
Tech- technician	1,064	118	1,182	381	609	192
Total	8,790	4,749	13,539	3,440	7,227	2,872

New employee hires and employee turnover					
Employee Category	Gender		Age group		
	Male	Female	<30	30-50	>50
New Hiring	947	816	1,176	548	39
Turnover	683	449	390	492	250

Parental leave		
Metrics	Male	Female
Total number of employees took parental leave	303	154
Total number of employees returned to work after parental leave ended	303	154
Return to work rate of employees who took parental leave	100%	100%

All other information in the Malaysia Aviation Group Carbon Footprint report is not subject to our assurance engagement, and we do not report and do not opine on that information. The Group Sustainability Office of Malaysia Aviation Group is responsible for the preparation and presentation of Malaysia Aviation Group's Carbon Footprint report, including the reported annual environmental data and information presented therein.

We are responsible for providing an Assurance Statement on the reported annual environmental data and the diversity data presented in the tables above. NORMEC VERIFAVIA disclaims any liability or responsibility to a third party for decisions, whether investment or otherwise, based on this Assurance Statement.

Criteria

The framework used by Malaysia Aviation Group to report the carbon inventory is the Greenhouse Gas Protocol – "A Corporate Accounting and Reporting Standard" (Revised Edition).

We conducted the independent audit based on the following verification criteria:

- ISO/IEC 17029:2019 - Conformity assessment - General principles and requirements for validation and verification bodies.
- ISO 14064-3:2019 – Greenhouse Gases – Specification with guidance for the validation and verification of greenhouse gas emissions and removals.
- ISO 14065:2020 - General principles and requirements for bodies validating and verifying environmental information.
- The GHG Protocol (Revised Edition) - Corporate Accounting and Reporting Standard.

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Responsibilities

Malaysia Aviation Group is solely responsible for the preparation and reporting of its carbon inventory and diversity data, for any information and assessments that support the reported data, for determining the group's objectives concerning carbon information and management, and for establishing and maintaining appropriate performance management and internal control systems from which reported information is derived.

In accordance with the verification contract, it is our responsibility to form an independent opinion, based on the examination of information and data presented in the Carbon Footprint report, and to report that opinion to Malaysia Aviation Group. We also report if, in our opinion:

- the carbon inventory data is or may be associated with misstatements (omissions, misrepresentations, or errors), non-conformities; or
- the verification team/verifier has not received all the information and explanations that it requires to conduct its examination; or
- improvements can be made to the group's performance in monitoring and reporting carbon inventory data.

Independence statement

We confirm that NORMEC VERIFAVIA and the verification team are independent of Malaysia Aviation Group and have not assisted in any way with the development of the carbon inventory or in the preparation of any text or data provided in the Carbon Footprint and the diversity report, except for this Assurance Statement.

Work performed & basis of the opinion

We conducted our examination having regard to the verification criteria documents listed above. This involved a virtual site visit on the 12th and 24th of June 2025, to interview the staff responsible to gain reasonable assurances that the amounts and disclosures relating to the data have been properly prepared in accordance with the requirements of the Greenhouse Gas Protocol in terms of relevance, completeness, consistency, transparency, and accuracy. This also involved assessing where necessary estimates and judgements made by Malaysia Aviation Group in preparing the data and considering the overall adequacy of the presentation of the data in the Carbon Footprint report and the Diversity report.

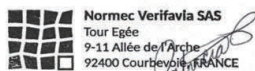
Materiality threshold

For the purpose of this audit, a materiality threshold of 5% was determined, as GHG quantification has inherent uncertainties due to measurement instrumentation capabilities, testing methodologies, and incomplete scientific knowledge used in determining emissions factors and global warming potentials.

Opinion

NORMEC VERIFAVIA conducted the verification of the carbon inventory data reported by Malaysia Aviation Group in its Carbon Footprint report and presented above. Based on the verification work undertaken and a virtual-site visit (dated 12.06.2025 & 24.06.2025), interviews and walkthrough of the data, and assessment of technical assumptions and judgments to gain reasonable assurance for Scope 1 & 2 and limited assurance for Scope 3 (categories 1, 2, 3, 4, 5, 6, 7, 8, and 15), carbon intensity, diversity data, employee data of new hire, turnover as well as parental leave that the data is fairly stated and contains no material misstatements or material non-conformities.

Courbevoie, 9th July 2025



Patricia PINILLA
Sustainability Initiatives Director
NORMEC VERIFAVIA



Amit MEHTA
Lead Auditor
NORMEC VERIFAVIA



Vivek KUSHWAHA
Auditor
NORMEC VERIFAVIA



Sasi KUMAR
Independent Technical Reviewer
NORMEC VERIFAVIA

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ABBREVIATIONS AND ACRONYMS

ADS	AeroDarat Services
CAAM	Civil Aviation Authority of Malaysia
CO ₂	Carbon dioxide
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
CSR	Corporate social responsibility
DEI	Diversity, equity, and inclusion
DMA	Double materiality assessment
EAP	Employee assistance programme
ERM	Enterprise risk management
ESG	Environmental, social, and governance
FY	Firefly
GHG	Greenhouse gases
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IOSA	IATA Operational Safety Audit
KPI	Key performance indicator
KTJ	<i>Komuniti Tukang Jahit</i>
LTAG	Long-Term Aspirational Goal
LTBP	Long-Term Business Plan
LTIFR	Lost time injury frequency rate
MAB	Malaysia Airlines Berhad
MABA	Malaysia Airlines Berhad Academy

MABES	MAB Engineering
MACC	Malaysian Anti-Corruption Commission
MAG	Malaysia Aviation Group
MAHB	Malaysia Airports Holdings Berhad
MAVCOM	Malaysian Aviation Commission
MCAT	MAG Catering Operations
MH	Malaysian Hospitality
MK	MASkargo
MRO	Maintenance, repair, and overhaul
MW	MASwings
MoU	Memorandum of Understanding
NGO	Non-governmental organisation
NRES	Ministry of Natural Resources and Environmental Sustainability
PDRM	<i>Polis Diraja Malaysia</i>
SAF	Sustainable aviation fuel
SDG	Sustainable Development Goals
SHUT	Stop Human and Underage Trafficking
TRAFFIC	Trade Records Analysis of Flora and Fauna in Commerce
UNHCR	United Nations High Commissioner for Refugees

SUBSIDIARIES WITH US



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