

Manchester Airports Group

2024/2025 Emissions Report



Introduction

Manchester Airports Group (MAG) owns and operates Manchester, London Stansted and East Midlands airports and CAVU, a global travel services and marketplace business. We recognise the vital role we play in the aviation sector to tackle climate change by cutting our own emissions and contributing to the wider decarbonisation of the sector.

Climate change continues to be a priority for our business and stakeholders. It remains central to our business, with 2024-25 the final year of our Corporate Social Responsibility Strategy, *Working Together for a Brighter Future*, and 2025 seeing the launch of our new Sustainability Strategy, *Creating a Sustainable Future for All*.

Combined, our corporate strategy and Sustainability Strategy set a clear focus on Decarbonising Aviation.

Decarbonising aviation

We recognise the urgent need to decarbonise airport operations and the wider economy, and we are playing a pivotal role in helping the aviation industry achieve its net zero ambitions. We have a responsibility to drive change and support the transition to a more sustainable sector. Our commitment includes reaching net zero operations (market-based Scope 1 and 2) by 2038, while working collaboratively with our partners and across our value chain to reduce indirect (Scope 3) emissions.

To achieve this, we have committed to setting a near-term science-based target through the Science Based Targets initiative (SBTi). This target involves reducing MAG's operational emissions (market-based Scope 1 and 2) by 48% by 2030, compared with our 2019 baseline. Our strategy focuses on enhancing energy efficiency across our facilities, investing in renewable energy, and working with airlines, industry groups, governments and innovators to scale up the use of Sustainable Aviation Fuel (SAF) and other decarbonisation technologies.

NET ZERO

2038

transition from carbon neutral airport operations to net zero (scope 1 and 2 market-based emissions) no later than 2038.

EMISSIONS

48%

reduction in MAG scope 1 and 2 market-based emissions between 2019 and 2030.

AIRCRAFT EMISSIONS

27%

reduction in emission intensity per revenue tonne kilometre for aircraft departing MAG airports between 2019 and 2035.

RENEWABLE ELECTRICITY

30%

of our electricity will be supplied from renewable sources directly connected to our airports by 2035.

CARBON REMOVALS

50%

we will purchase carbon removals so that, by 2030, they address 50% of our residual scope 1 and 2 market-based emissions.



See more information on our decarbonisation plans in our Sustainability Strategy here:

<https://magairports.com/work-with-us/our-sustainability-plans/>

Scope of our reporting

This detailed report explains how we measure and manage our energy use and our greenhouse gas (GHG) emissions, including indirect emissions and carbon offsetting. This report includes our most recent GHG emissions data from 2024-25 (April 2024 to March 2025), including:

- ✓ **Total Scope 1 and 2** location and market-based emissions (tCO₂e)
- ✓ **Total Scope 3** GHG location and market-based emissions (tCO₂e)

We report in accordance with the following guidance and reporting standards:

- ✓ UK Streamlined Energy & Carbon Reporting Standard (UK SECR)
- ✓ The GHG Protocol Corporate Accounting and Reporting Standard (GHGP)
- ✓ Airport Carbon Accreditation (ACA) Level 3+

Our GHG reporting covers activities from MAG, which owns and operates East Midlands, Manchester, and London Stansted airports, as well as its travel business, CAVU. Currently, only scope 1 and 2 UK operations and scope 3 business travel emissions for CAVU are included in our emissions report, with plans to expand coverage to its international footprint in the future. Emissions are reported using the operational control approach, in line with the Greenhouse Gas Protocol (GHGP).



Our carbon emissions



Scope 1, 2 & 3 emissions

In accordance with the GHGP and ACA Standards, we report emissions under the following scopes:

Scope 1:

These are released from sources in our direct control, including: stationary combustion, mobile combustion and fugitive emissions, along with specific airport-related emissions from de-icer.

Scope 2:

These are indirect emissions from purchased energy that we consume, arising from electricity supplied through the grid.

Scope 3:

These cover all other indirect emissions in our value chain that we do not directly control, including waste and water, employee commuting, business travel, and the use of sold products. This category includes our most material emissions sources from aircraft and passenger surface access. We also report out our onward supply to downstream leased assets. Any on-site activities by third-party partners are outside our operational control and are accounted for within our Scope 3 footprint.

Fuel-and energy related activities (not in Scope 1 or 2)



Assurance

The methodologies used to monitor our energy and fuel use, and to calculate our carbon footprint, have been developed and refined over a number of years. We remain committed to continually improving our calculations and ensuring we work towards best practice across all scopes.

Our internal management processes, certified to ISO 14001 and ISO 50001 – the international standards for environmental and energy management – provide assurance that we have robust approaches to measuring and monitoring energy use.

Data is independently checked by our specialist GHG accounting consultants, who we appoint to prepare our carbon footprint. In addition, we commission TÜV Nord to provide independent assurance, in accordance with the ISO 14064-1 and GHG Protocol Standard, of our GHG emission inventory. Their verification statements are included as Appendix 1: Verification Statements.



More details on the specific emission source for each scope can be found in the **methodology** section of this report, starting on **page 30**



Our carbon emissions



Restatements

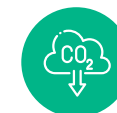
In line with the GHGP and best practices, we are committed to recalculating our emissions baseline if any factor results in a change of more than 5 percent to our total footprint (market-based scope 1, 2 and 3 combined). We also restate emissions where primary data becomes available to replace estimates, for example due to late invoicing. This includes structural changes in our organisation such as acquisitions, divestments or mergers that have a significant singular or cumulative impact; changes in calculation methodology or improvements in the accuracy of emission factors or activity data that result in a significant impact; and the discovery of material errors, or errors that together are significant.



Biomethane

MAG proactively purchases biomethane backed by Renewable Gas Guarantees of Origin (RGGO). We have chosen this approach to support the market for renewable gas and accelerate the transition away from fossil-based natural gas. To provide transparency, we dual report our location- and market-based GHG emissions, which clearly shows the carbon saving impact of this procurement decision.

In June 2025, we retired 24,297 MWh of RGGOs. These units were purchased in 2024/25 and retired in relation to our energy used in this period. This initiative reduced our market-based scope 1 emissions by 4,309 tCO₂e.



Carbon Offsets

We offset our scope 1 and 2 residual market-based emissions, as well as emissions from staff business travel, in alignment with ACA Level 3+ requirements. More information about Airport Carbon Accreditation is available [online](#).

Although we have made significant investments to reduce our energy use and purchase renewable energy, MAG continues to have a residual CO₂e footprint. To compensate for these residual emissions, MAG purchases verified carbon offsets. For 2024/25, our carbon offsets were generated by three projects: Improved Cookstoves for Social Impact in Rwandan Communities – an initiative that provides more efficient cookstoves to communities in Rwanda, a project to provide geothermal energy in Indonesia and a small scale hydro power project in India. We selected these projects because, in addition to reducing emissions and improving the local environment, they also generate employment opportunities and improve air quality.

Our carbon offset certificates and registry links can be found on [page 40](#) of this report.

Other relevant sustainability reporting



MAG Annual Financial Report and Accounts

Our Annual Report and Accounts includes an overview of MAG's energy use and emissions, in line with the SECR requirements set out by the Companies Directors' Report and Limited Liability Partnerships Energy and Carbon Report Regulations 2018.

We have also continued to implement the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and UK Climate-related Financial Disclosures (UK CFD), providing further detail on the physical and transition risks climate change poses to our business.

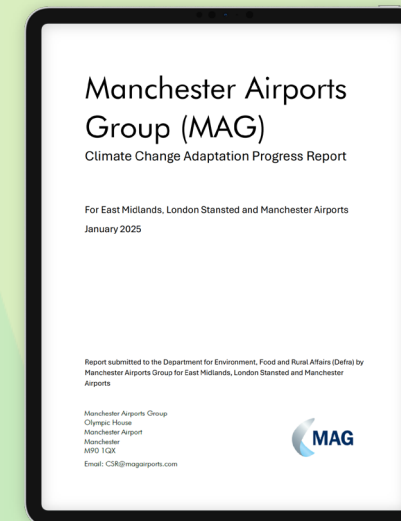


Sustainability Report 2024/25

Our Sustainability Report for 2024/25 reflects the final year of our strategy *Working Together for a Bright Future*. Over the past five years, this strategy has provided the framework for our work on decarbonisation, environmental stewardship, and supporting our colleagues and local communities.

This report sets out the progress made during 2024/25 and celebrates the key achievements delivered across the full five-year period of the strategy.

The report is prepared in accordance with the Global Reporting Initiative (GRI) Universal Standards 2021, and our GRI Content Index and disclosures are published alongside it on our website.



Climate Change Adaptation Progress Report

Submitted to Government in January 2025, this report outlines our assessment of the potential impacts of climate change on our airport operations and the steps we are taking to manage and minimise those impacts.



We are committed to open and transparent reporting that reflects the priorities of our stakeholders. We welcome feedback on this report and on how we can continue to improve our disclosures. **If you would like to share your views or have any questions, please contact us at: sustainability@magairports.com**

GHG emissions data

SECR Report ^[4]

The SECR report, published in our Annual Report and Accounts, is presented below. This report provides a high-level overview of our energy use, emissions and carbon intensity as required by the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018. Please note that the figures have been restated to incorporate the latest and most accurate data sets; for further details, refer to the restatement section on [page 6](#).

	2024/25	2023/24
Energy consumption used to calculate emissions (kWh)	202,031,852	192,963,827
Emissions from combustion of gas ^[2] (Scope 1, location-based, tCO ₂ e)	10,521	9,877
Emissions from combustion of gas ^[2] (Scope 1, market-based, tCO ₂ e)	6,213	7,528
Emissions from combustion of fuel for transport purposes [2] (Scope 1, location-based, tCO ₂ e)	4,307	3,703
Emissions from business travel in rental cars or employee-owned vehicles where MAG is responsible for purchasing the fuel (Scope 3, location-based, tCO ₂ e)	155	142
Emissions from purchased electricity ^[1] (Scope 2, location-based, tCO ₂ e)	26,327	25,329
Emissions from purchased electricity ^[1] (Scope 2, market-based, tCO ₂ e)	78	29
Total gross emissions based on the above ^[1] (Location-based, tCO ₂ e)	41,310	39,051
Total gross emissions based on the above ^[1] (Market-based, tCO ₂ e)	10,754	13,751
Intensity measure ^[2] (Traffic units)	72,898	68,636
Intensity ratio (Location-based emissions, tCO ₂ e /traffic unit)	0.57	0.56
Intensity ratio ^[4] (Market-based emissions, tCO ₂ e /traffic unit)	0.15	0.16
Carbon offsets (Purchase and retirement of carbon offsets, tCO ₂ e)	10,754	11,402

[1] Location-based emissions are based on the average emission intensity of UK energy networks. MAG proactively chooses to purchase renewable electricity and biomethane which are backed by Renewable Energy Guarantees of Origin and RGGO. To demonstrate the carbon saving of our procurement decision we dual report our location and market-based GHG emissions in accordance with the UK Government's Environmental Reporting Guidelines.

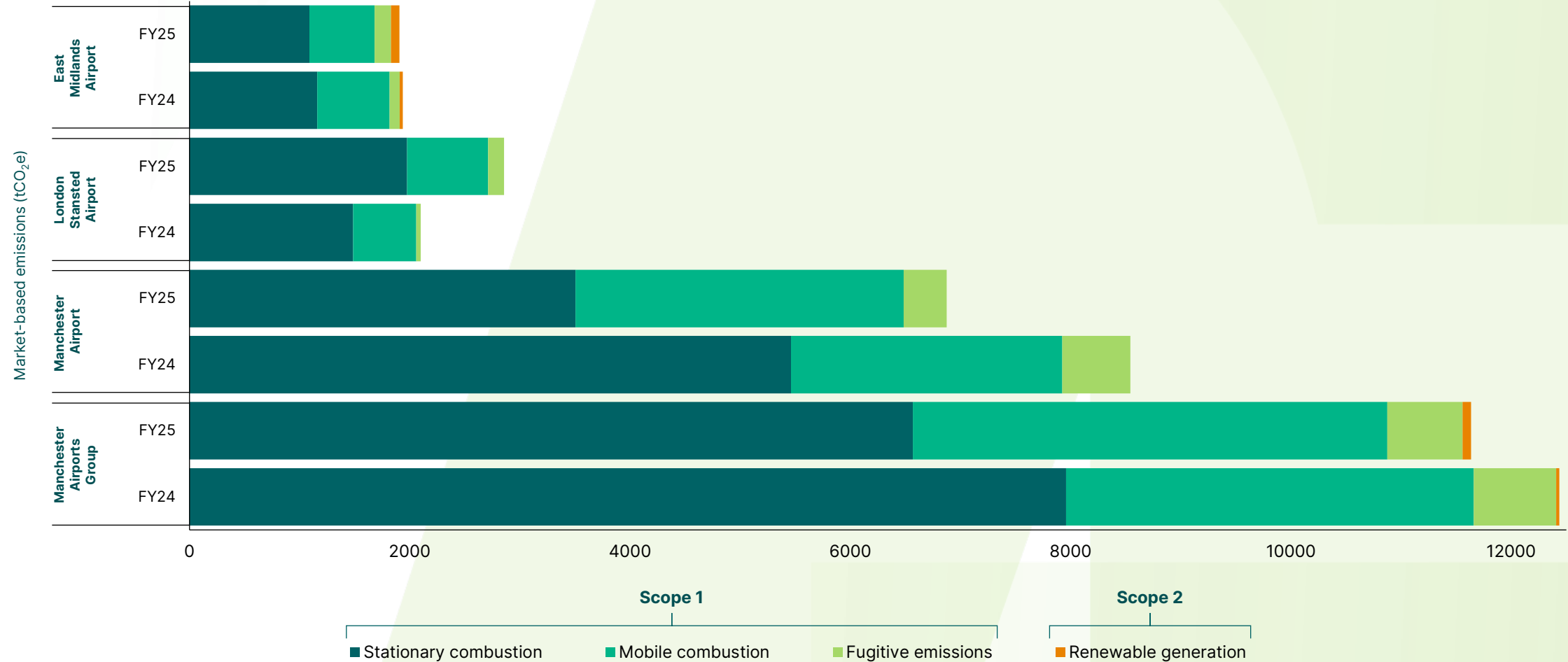
[2] We measure carbon intensity against traffic units, which are defined by the International Civil Aviation Organization (ICAO) as equivalent to 1,000 passengers or 100 tonnes of freight.

[3] Our carbon offsets are in alignment with ACA, more information can be found on [page 6](#)

[4] Our energy and emission performance have been restated for 2023/24 to make use of the most recent and complete dataset. This approach follows best practice outlined in the World Resources Institute GHGP and guidance issued by the UK Government.

All airports market – based emissions (scope 1 & 2)

The data in these graphs relates East Midlands, Manchester and London Stansted Airport and MAG which totals the airport's emissions and Group activities. These are reporting in line with the ACA framework and the GHGP. For further details on our calculation methodologies, please refer to page [insert page number of the start of the scope 1 & 2 methodology section] of this report.



GHG emission inventories

GHG emission inventories for each of our airports and MAG's combined UK operations are provided as tables below. These inventories provide greater detail about our direct energy use, and our scope 1, 2 and 3 GHG emissions.

Manchester Airports Group - GHG Inventory

Scope	Activity	Fuel/emission source	Energy consumption (kWh)		Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24	2024/25	2023/24
1	Stationary combustion	Gas (incl. market-based RGGOs)	57,426,177	55,444,262	10,521	9,877	6,213	7,528
		Liquefied petroleum gas	257,750	343,988	59	79	59	79
		Heating oil	207,537	220,572	57	60	57	60
		Biomass	94,445	11,366	1	–	1	–
		Petrol	188	735	0.04	2	0.04	2
		Power back-up (diesel)	934,406	1,048,400	237	286	237	286
		Kerosene	4,195	6,244	1	2	1	2
	Mobile combustion	Diesel	16,648,606	14,178,789	4,229	3,602	4,229	3,602
		Petrol	336,018	429,323	78	100	78	100
	Fugitive emissions	Airfield de-icer	–	–	471	253	471	253
		Refrigerants	–	–	211	496	211	496
Total gross Scope 1			75,909,324	71,683,649	15,866	14,756	11,558	12,407
2	Generation of renewable electricity on site	Wind generated electricity	188,000	138,001	78	29	78	29
	Consumption of purchased electricity, heat, steam & cooling	Consumption of purchased electricity (incl. market-based REGOs)	126,784,067	122,178,391	26,249	25,300	–	–
	Total gross Scope 2		126,972,067	122,316,392	26,327	25,329	78	29
Total gross Scope 1 & 2			202,881,391	196,244,714	42,193	40,084	11,636	12,435
1&2	Carbon offsets	Purchase & retirement of carbon offsets to maintain Scope 1 & 2 carbon neutrality (in accordance with ACA Level 3+)	–	–	11,636	12,435	11,636	12,435

Manchester Airports Group - GHG Inventory

Scope	Activity	Fuel/emission source	Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24
3	Category 1: Purchased goods & services	Water	186	219	186	219
		Fuels procured (well-to-tank)	7,424	8,377	7,424	8,377
	Category 3: Fuel and energy-related activities (not in scope 1 or 2)	Electricity (transportation and distribution losses)	2,225	2,126	2,225	2,126
		Electricity and heat (well-to-tank)	493	482	493	482
	Category 5: Waste generated in operations	Waste	61	1,181	61	1,181
		Wastewater	425	516	425	516
	Category 6: Business travel ^[1]	Business travel – public transport	1,792	1,409	1,792	1,409
		Business travel – staff vehicles	155	142	155	142
	Category 7: Employee commuting	Home working	2,271	1,755	2,271	1,755
		MAG staff commuting	3,598	2,752	3,598	2,752
		Other airport staff commuting	19,352	14,811	19,352	14,811
		Passenger surface access	568,048	535,911	568,048	535,911
		LTO cycle (departures)	329,102	302,530	329,102	302,530
		LTO cycle (arrivals)	152,511	140,157	152,511	140,157
		En-route (departures excl. MAG airport LTO cycle)	5,103,446	4,741,595	5,103,446	4,741,595
	Category 11: Use of sold products	On stand power (FEGP & APU)	20,402	21,558	20,402	21,558
		Aircraft engine testing	280	136	280	136
		Airside vehicles	5,514	5,325	5,514	5,325
		Aircraft de-icer	4,378	2,472	4,378	2,472
		Onward supply diesel	11,510	6,055	11,510	6,055
		Onward supply water	33	38	33	38
		Onward supply sewage	13	–	13	–
	Category 13: Downstream leased assets	Gas	5,005	5,203	5,005	5,203
		Heating oil	1,419	1,531	1,419	1,531
		Electricity	17,469	17,390	–	–
Total Gross Scope 3			6,257,113	5,813,671	6,239,643	5,796,281
Total Gross Scope 1, 2 & 3			6,299,306	5,853,755	6,251,279	5,808,716
	Carbon offsets	Purchase & retirement of carbon offsets to cover business travel emissions to maintain carbon neutrality (in accordance with ACA Level 3+)	1,947	1,551	1,947	1,551

[1] In line with the requirements of ACA Level 3+, we offset our scope 3 business travel emissions.

Manchester Airports Group – GHG Emissions Intensity

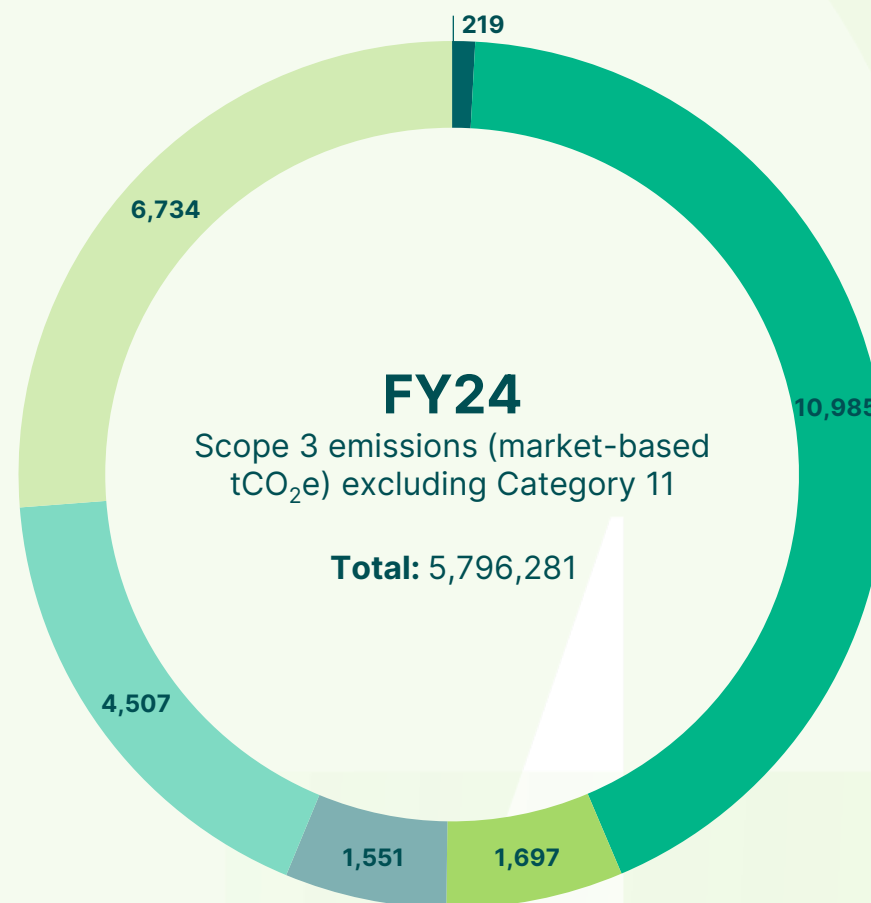
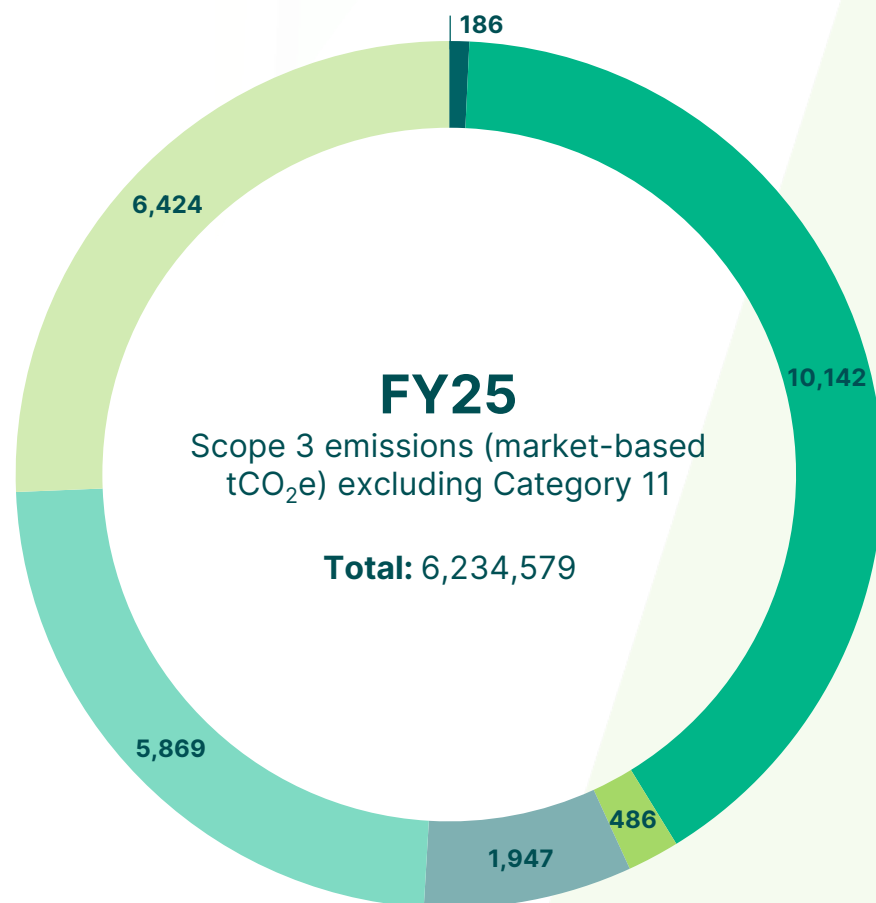
Scope	Activity	Fuel/emission source	Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24
1	Intensity benchmark	Total traffic units (TU)	72,898	68,636	72,898	68,636
1 & 2	Intensity benchmark	Scopes 1 & 2 Gross Emissions/TU	0.58	0.58	0.16	0.18
1, 2 & 3	Intensity benchmark	Scopes 1, 2 & 3 Gross Emissions/TU	86.2	85.1	85.5	84.5

We measure carbon intensity against traffic units, which are defined by the International Civil Aviation Organization (ICAO) as equivalent to 1,000 passengers or 100 tonnes of freight.



MAG market – based emissions (Scope 3)

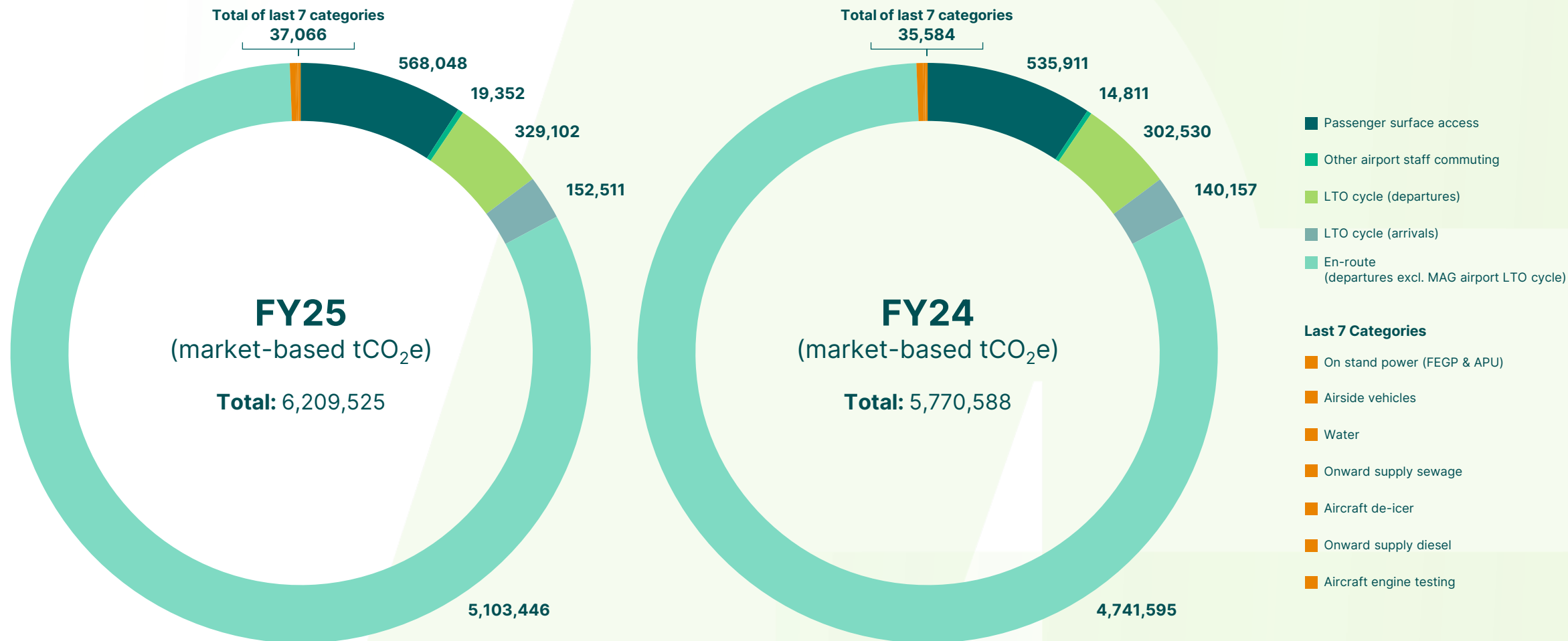
The data in these graphs relates to MAG's scope 3 emissions (excluding category 11), reported in line with the ACA framework and the GHGP. For further details on our calculation methodologies, please refer to page [insert page number of start of scope 3 methodology section] of this report. Category 11 includes emissions from aircraft movements (including in-flight emissions) and passenger surface access. The full list of activities within this category is provided in the methodology section of this report. These emissions represent over 99% of our Scope 3 footprint. To ensure transparency, they are presented on the next page.



- Category 1: Purchased goods & services
- Category 3: Fuel and energy-related activities (not in scope 1 or 2)
- Category 5: Waste generated in operations
- Category 6: Business travel
- Category 7: Employee commuting
- Category 13: Downstream leased assets

MAG Category 11 market – based emissions (tCO₂e)

The following charts present category 11 emissions, which include those from aircraft movements (including in-flight emissions) and passenger surface access. These activities represent over 99% of our scope 3 footprint and are therefore shown separately to provide a clear view of their contribution and trends.



East Midlands Airport – GHG Inventory

Scope	Activity	Fuel/emission source	Energy consumption (kWh)		Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)		
			2024/25	2023/24	2024/25	2023/24	2024/25	2023/24	
1	Stationary combustion	Gas (incl. market-based RGGOs)	6,010,744	5,392,521	1,099	986	923	986	
		Liquefied petroleum gas	23,799	24,881	5	6	5	6	
		Heating oil	207,537	220,572	57	60	57	60	
		Biomass	94,445	11,336	1	0.12	1	0.12	
		Petrol	188	735	0.04	0.17	0.04	0.17	
		Power back-up (diesel)	399,200	388,102	101	106	101	106	
		Kerosene	4,195	6,244	1	2	1	2	
	Mobile combustion	Diesel	2,325,903	2,513,700	591	639	591	639	
		Petrol	10,144	71,399	2	17	2	17	
	Fugitive emissions	Airfield de-icer	–	–	129	73	129	73	
		Refrigerants	–	–	18	18	18	18	
Total Gross Scope 1			9,076,156	8,629,490	2,005	1,907	1,829	1,907	
2	Generation of renewable electricity on site	Wind generated electricity	188,000	138,001	78	29	78	29	
	Consumption of purchased electricity, heat, steam & cooling	Consumption of purchased electricity (incl. market-based REGOs)	8,832,280	9,903,349	1,829	2,051	–	–	
	Total Gross Scope 2			9,020,280	10,041,350	1,907	2,080	78	29
1 & 2	Total Gross Scopes 1 & 2			18,096,436	18,670,840	3,911	3,987	1,906	1,936
	Carbon offsets	Purchase & retirement of carbon offsets to maintain Scope 1 & 2 carbon neutrality (in accordance with ACA Level 3+)	–	–	1,906	1,936	1,906	1,936	

East Midlands Airport – GHG Inventory

Scope	Activity	Fuel/emission source	Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24
3	Category 1: Purchased goods & services	Water	13	15	13	15
	Category 3: Fuel and energy-related activities (not scope 1 or 2)	Fuels procured (well-to-tank)	608	1,151	608	1,151
		Electricity (transportation and distribution losses)	162	177	162	177
		Electricity and heat (well-to-tank)	46	50	46	50
	Category 5: Waste generated in operations	Waste	2	12	2	12
		Wastewater	14	19	14	19
	Category 6: Business Travel	Business travel – public transport	100	94	100	94
		Business travel – staff vehicles	1	2	1	2
	Category 7: Employee commuting	MAG staff commuting	341	309	341	309
		Home working	215	197	215	197
	Category 11: Use of sold products	Other airport staff commuting	3,673	3,266	3,673	3,266
		Passenger surface access	28,972	27,218	28,972	27,218
		LTO cycle (departures)	40,509	39,918	40,509	39,918
		LTO cycle (arrivals)	17,003	18,077	17,003	18,077
		En-route (departures excl. MAG airport LTO cycle)	607,060	557,041	607,060	557,041
		On stand power (FEGP & APU)	3,216	3,698	3,216	3,698
		Airside vehicles	1,768	1,606	1,768	1,606
		Onward supply water	2	4	2	4
		Aircraft de-icer	447	284	447	284
		Aircraft engine testing	211	52	211	52
	Category 13: Downstream leased assets	Gas	–	–	–	–
		Heating oil	1,419	1,531	1,419	1,531
		Electricity	1,483	1,385	–	–
Total Gross Scope 3			707,265	656,106	705,782	654,721
Total Gross Scope 1,2 & 3			711,176	660,093	707,688	656,657
Carbon offsets	Purchase & retirement of carbon offsets to cover business travel emissions to maintain carbon neutrality (in accordance with ACA Level 3+)		101	96	101	96

East Midlands Airport – GHG Emission intensity

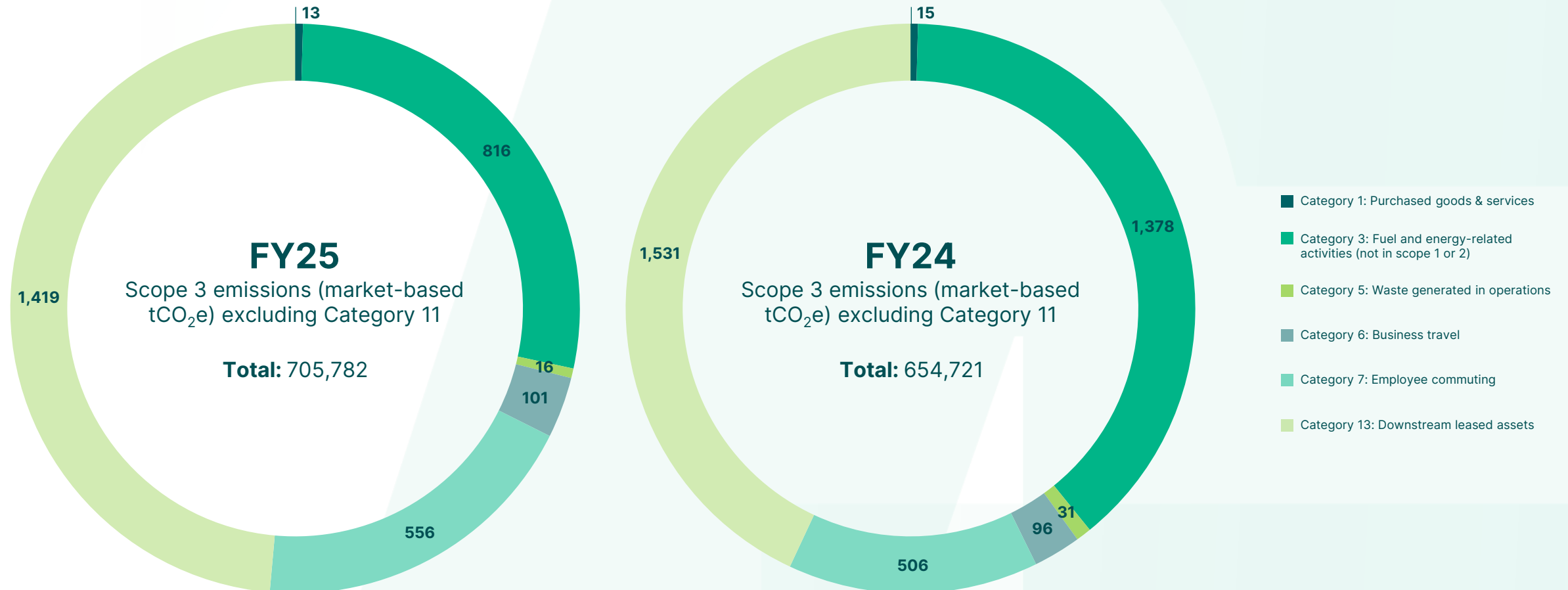
Scope	Activity	Fuel/emission source	Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24
1	Intensity benchmark	Total traffic units (TU)	7,792	7,764	7,792	7,187
1 & 2	Intensity benchmark	Scopes 1 & 2 Gross Emissions/TU	0.502	0.513	0.245	0.269
1, 2 & 3	Intensity benchmark	Scopes 1, 2 & 3 Gross Emissions/TU	91.136	84.8	90.7	91.2

We measure carbon intensity against traffic units, which are defined by the International Civil Aviation Organization (ICAO) as equivalent to 1,000 passengers or 100 tonnes of freight.



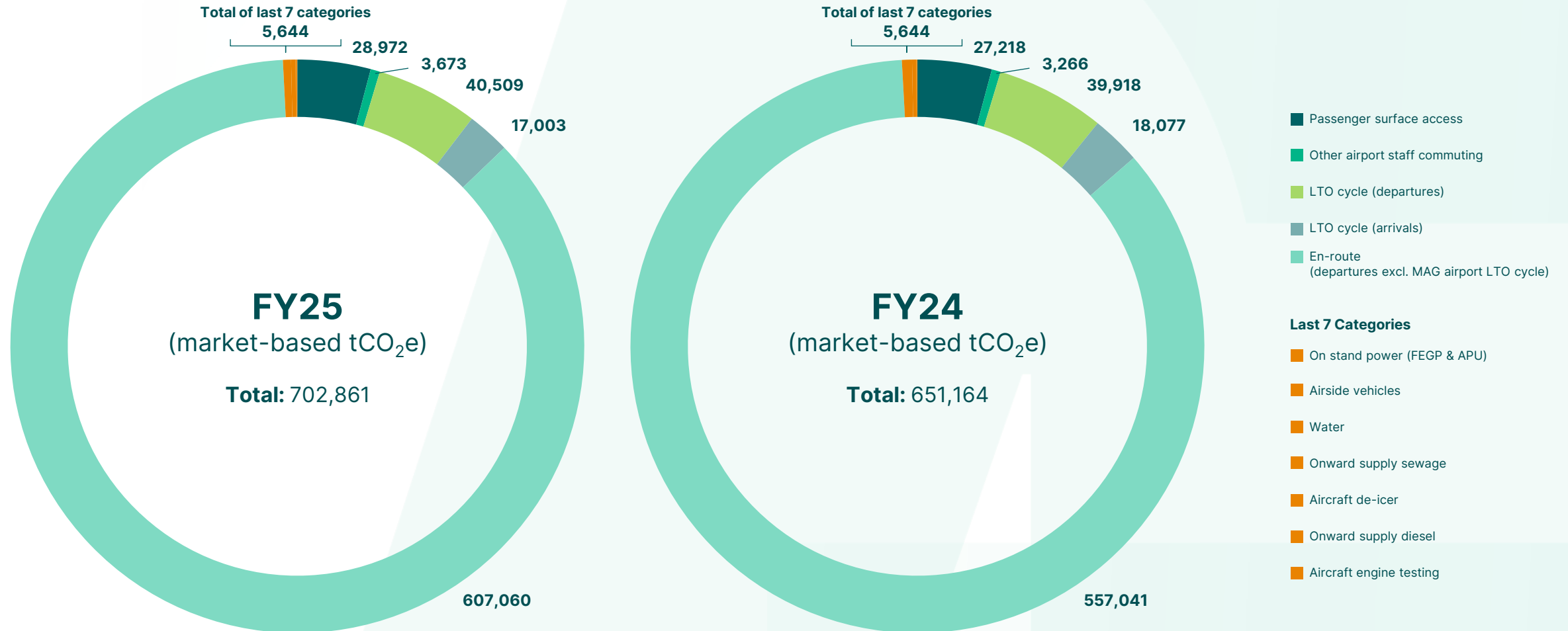
EMA market – based emissions (scope 3)

The data in these graphs relates to East Midlands Airport's scope 3 emissions (excluding category 11), reported in line with the ACA framework and the GHGP. For further details on our calculation methodologies, please refer to page [insert page number of start of scope 3 methodology section] of this report. Category 11 includes emissions from aircraft movements (including in-flight emissions) and passenger surface access. The full list of activities within this category is provided in the methodology section of this report. These emissions represent over 99% of our Scope 3 footprint. To ensure transparency, they are presented on the next page.



EMA Category 11 market – based emissions (tCO₂e)

The following charts present category 11 emissions, which include those from aircraft movements (including in-flight emissions) and passenger surface access. These activities represent over 99% of our scope 3 footprint and are therefore shown separately to provide a clear view of their contribution and trends.



London Stansted Airport – GHG Inventory

Scope	Activity	Fuel/emission source	Energy consumption (kWh)		Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24	2024/25	2023/24
1	Stationary combustion	Gas (incl. market-based RGGOs)	10,531,302	11,532,091	1,944	1,844	1,944	1,430
		Liquefied petroleum gas	11,649	103,539	3	24	3	24
		Heating oil	–	–	–	–	–	–
		Biomass	–	–	–	–	–	–
		Petrol	–	–	–	–	–	–
		Power back-up (diesel)	109,408	109,715	28	30	28	30
		Kerosene	–	–	–	–	–	–
	Mobile combustion	Diesel	2,600,402	1,957,541	661	497	661	497
		Petrol	325,874	332,117	76	78	76	78
		Company cars	–	–	–	–	–	–
	Fugitive emissions	Airfield de-icer	–	–	64	26	64	26
		Refrigerants	–	–	80	15	80	15
	Total Gross Scope 1		13,578,635	14,035,003	2,856	2,513	2,856	2,099
2	Generation of renewable electricity on site	Wind generated electricity	–	–	–	–	–	–
	Consumption of purchased electricity, heat, steam & cooling	Consumption of purchased electricity (incl. market-based REGOs)	46,296,481	42,286,867	9,584	8,757	–	–
	Total Gross Scope 2		46,296,481	42,286,867	9,584	8,757	–	–
1 & 2	Total Gross Scopes 1 & 2		59,875,116	56,321,870	12,440	11,270	2,856	2,099
	Carbon offsets	Purchase & retirement of carbon offsets to cover business travel emissions to maintain carbon neutrality (in accordance with ACA Level 3+)	–	–	2,856	2,099	2,856	2,099

London Stansted Airport – GHG Inventory

Scope	Activity	Fuel/emission source	Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24
3	Category 1: Purchased goods & services	Water	95	103	95	103
	Category 3: Fuel and energy-related activities (not scope 1 or 2)	Fuels procured (well-to-tank)	2,459	2,373	2,459	2,373
		Electricity (transportation and distribution losses)	847	758	847	758
		Electricity and heat (well-to-tank)	184	168	184	168
	Category 5: Waste generated in operations	Waste	32	102	32	102
		Wastewater	109	113	109	113
	Category 6: Business Travel	Business travel – public transport	283	189	283	189
		Business travel – staff vehicles	6	–	6	–
	Category 7: Employee commuting	MAG staff commuting	1,033	891	1,033	891
		Home working	652	568	652	568
		Other airport staff commuting	6,545	5,241	6545	5,241
		Passenger surface access	285,873	271,818	285,873	271,818
		LTO cycle (departures)	136,806	128,359	136,806	128,359
		LTO cycle (arrivals)	61,932	58,537	61,932	58,537
		En-route (departures excl. MAG airport LTO cycle)	1,891,169	1,772,438	1,891,169	1,772,438
	Category 11: Use of sold products	On stand power (FEGP & APU)	4,458	1,458	4,458	1,458
		Airside vehicles	1,990	1,452	1,990	1,452
		Onward supply water	20	22	20	22
		Aircraft de-icer	1,442	876	1,442	876
		Onward supply diesel	5,064	4,974	5,064	4,974
		Aircraft engine testing	43	49	43	49
	Category 13: Downstream leased assets	Gas	5,082	4,993	5,082	4,993
		Heating oil	–	–	–	–
		Electricity	5,445	5,998	–	–
	Total Gross Scope 3		2,411,569	2,261,480	2,406,124	2,255,482
	Total Gross Scope 1, 2 & 3		2,411,569	2,261,480	2,406,124	2,255,482
	Carbon offsets	Purchase & retirement of carbon offsets to cover business travel emissions to maintain carbon neutrality (in accordance with ACA Level 3+)	289	189	289	189

London Stansted – GHG Intensity

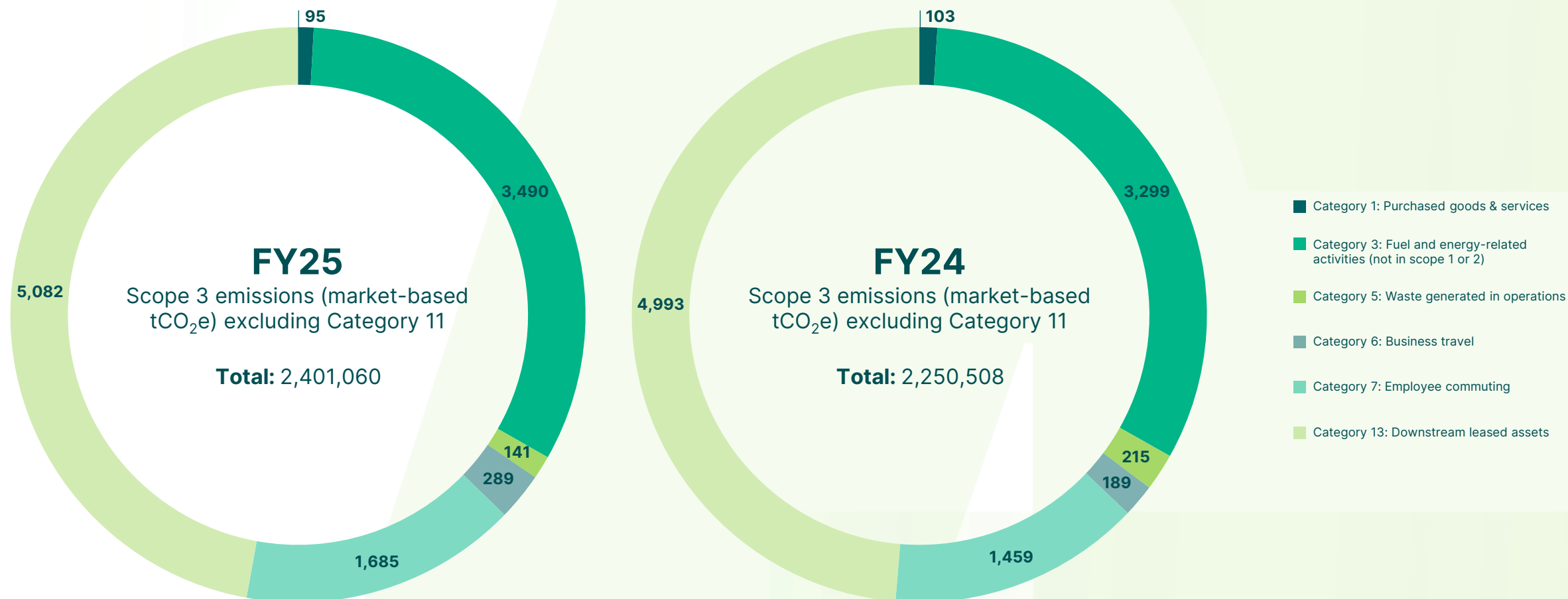
Scope	Activity	Fuel/emission source	Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24
1	Intensity benchmark	Total traffic units (TU)	33,062	31,395	33,062	31,395
1 & 2	Intensity benchmark	Scopes 1 & 2 Gross Emissions/TU	0.38	0.36	0.09	0.08
1, 2 & 3	Intensity benchmark	Scopes 1, 2 & 3 Gross Emissions/TU	73.1	72.1	72.6	71.6

We measure carbon intensity against traffic units, which are defined by the International Civil Aviation Organization (ICAO) as equivalent to 1,000 passengers or 100 tonnes of freight.



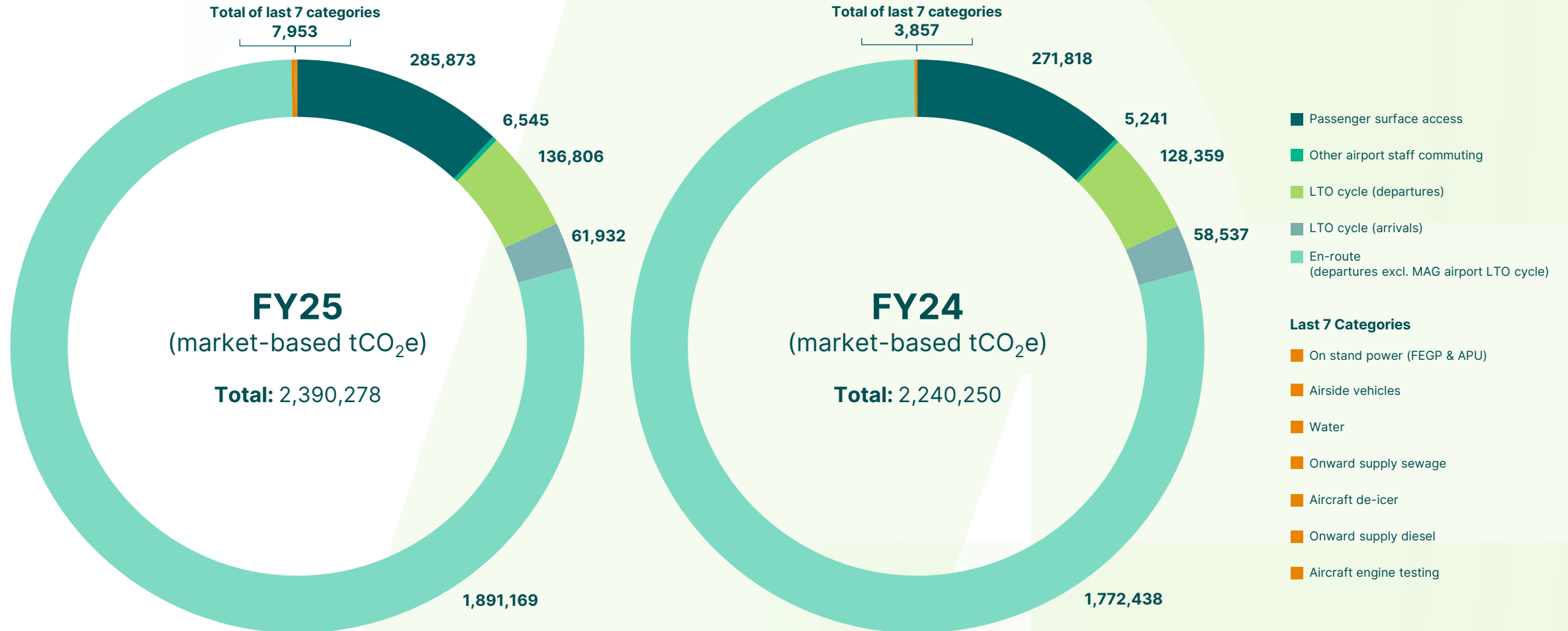
STN market – based emissions (scope 3)

The data in these graphs relates to London Stansted's scope 3 emissions (excluding category 11), reported in line with the ACA framework and the GHGP. For further details on our calculation methodologies, please refer to page [insert page number of start of scope 3 methodology section] of this report. Category 11 includes emissions from aircraft movements (including in-flight emissions) and passenger surface access. The full list of activities within this category is provided in the methodology section of this report. These emissions represent over 99% of our Scope 3 footprint. To ensure transparency, they are presented on the next page.



STN Category 11 market – based emissions (tCO₂e)

The following charts present category 11 emissions, which include those from aircraft movements (including in-flight emissions) and passenger surface access. These activities represent over 99% of our scope 3 footprint and are therefore shown separately to provide a clear view of their contribution and trends.



Manchester Airport – GHG Inventory

Scope	Activity	Fuel/emission source	Energy consumption (kWh)		Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24	2024/25	2023/24
1	Stationary combustion	Gas (incl. market-based RGGOs)	40,884,131	38,519,649	7,478	7,046	3,346	5,111
		Liquefied petroleum gas	222,302	215,569	51	50	51	50
		Biomass	–	–	–	–	–	–
		Petrol	–	–	–	–	–	–
		Power back-up (diesel)	425,798	550,583	108	150	108	150
		Kerosene	–	–	–	–	–	–
	Mobile combustion	Diesel	11,722,301	9,695,231	2,978	2,463	2,978	2,463
		Petrol	–	–	–	–	–	–
	Fugitive emissions	Airfield de-icer	–	–	278	154	278	154
		Refrigerants	–	–	113	463	113	463
	Total Gross Scope 1		53,254,533	48,981,033	11,006	10,327	6,874	8,392
2	Generation of renewable electricity on site	Wind generated electricity	–	–	–	–	–	–
	Consumption of purchased electricity, heat, steam & cooling	Consumption of purchased electricity (incl. market-based REGOs)	71,639,639	69,978,546	14,833	14,491	–	–
	Total Gross Scope 2		71,639,639	69,978,546	14,833	14,491	–	–
1 & 2	Total Gross Scopes 1 & 2		124,894,172	118,959,578	25,839	24,818	6,874	8,392
	Carbon offsets	Purchase & retirement of carbon offsets to cover business travel emissions to maintain carbon neutrality (in accordance with ACA Level 3+)	–	–	6,874	8,392	6,874	8,392

Manchester Airport – GHG Inventory

Scope	Activity	Fuel/emission source	Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)		
			2024/25	2023/24	2024/25	2023/24	
3	Category 1: Purchased goods & services	Water	79	101	79	101	
	Category 3: Fuel and energy-related activities (not scope 1 or 2)	Fuels procured (well-to-tank)	4,356	4,853	4,356	4,853	
		Electricity (transportation and distribution losses)	1,215	1,192	1,215	1,192	
		Electricity and heat (well-to-tank)	264	264	264	264	
		Category 5: Waste generated in operations	Wastewater	302	385	302	385
	Waste		27	1,067	27	1,067	
	Category 6: Business Travel	Business travel – public transport	511	458	511	458	
		Business travel – staff vehicles	1	–	1	–	
	Category 7: Employee commuting	Home working	1,403	990	1,403	990	
		MAG staff commuting	2,224	1,552	2,224	1,552	
		Passenger surface access	253,203	236,875	253,203	236,875	
		Other airport staff commuting	9,135	6,304	9,135	6,304	
		LTO cycle (departures)	151,788	134,254	151,788	134,254	
		LTO cycle (arrivals)	73,577	63,543	73,577	63,543	
		En-route (departures excl. MAG airport LTO cycle)	2,605,217	2,412,116	2,605,217	2,412,116	
		Category 11: Use of sold products	On stand power (FEGP & APU)	12,729	16,402	12,729	16,402
			Airside vehicles	1,756	2,267	1,756	2,267
			Water	11	13	11	13
	Onward supply sewage		13	–	13	–	
		Aircraft de-icer	2,489	1,313	2,489	1,313	
		Onward supply diesel	1,382	1,081	1,382	1,081	
		Aircraft engine testing	25	35	25	35	
		Category 13: Downstream leased assets	Gas	4,987	5,184	4,987	5,184
	Heating oil		–	–	–	–	
	Electricity		10,541	10,006	–	–	
Total Gross Scope 3			3,137,235	2,900,255	3,126,694	2,890,249	
Total Gross Scope 1, 2 & 3			3,163,074	2,925,073	3,133,568	2,898,641	
Carbon offsets		Purchase & retirement of carbon offsets to cover business travel emissions to maintain carbon neutrality (in accordance with ACA Level 3+)	512	458	512	458	

Manchester Airport – Emissions Intensity

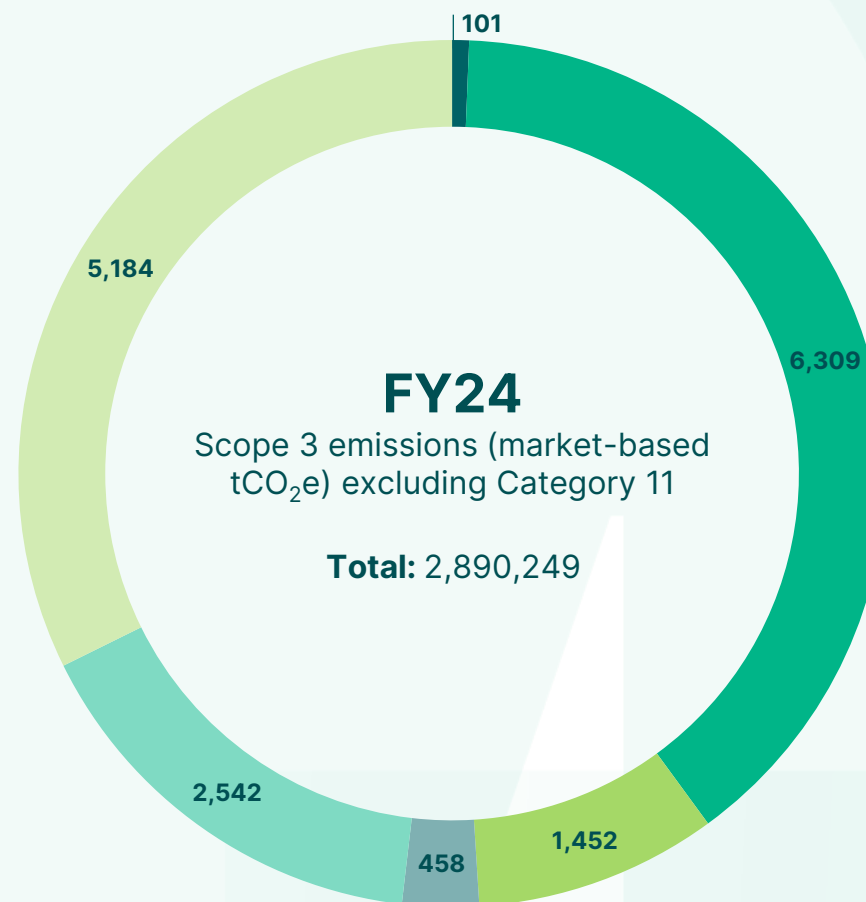
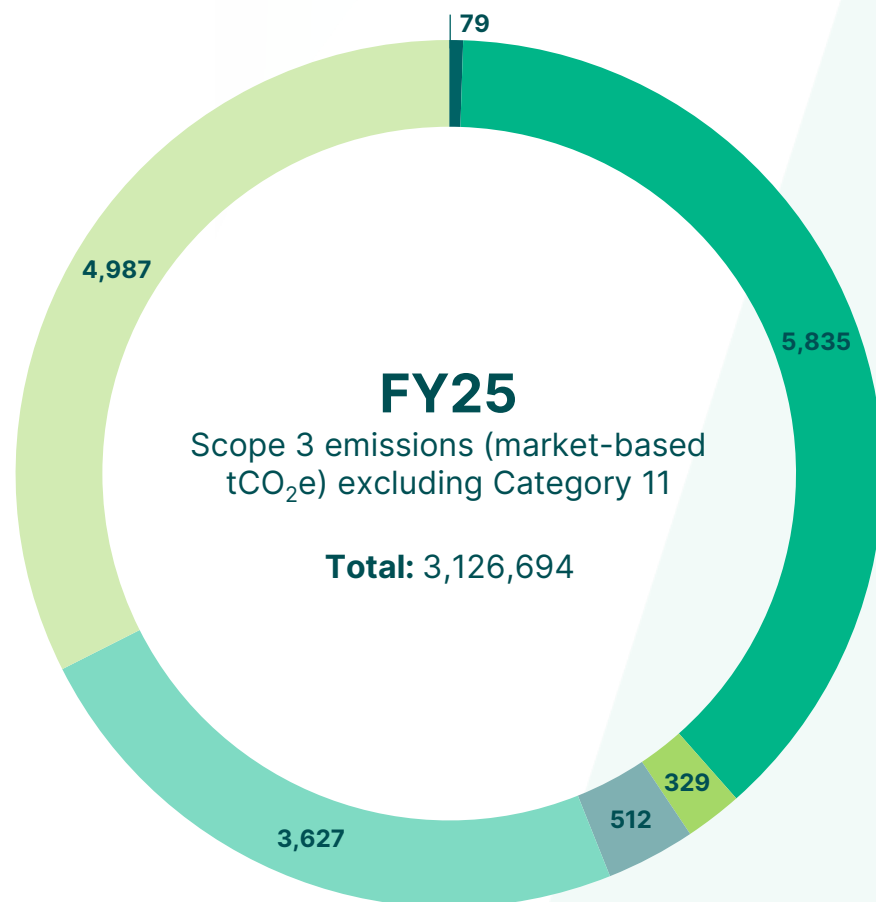
Scope	Activity	Fuel/emission source	Location – based emissions (tCO ₂ e)		Market – based emissions (tCO ₂ e)	
			2024/25	2023/24	2024/25	2023/24
1	Intensity benchmark	Total traffic units (TU)	32,044	29,476	32,044	29,476
1 & 2	Intensity benchmark	Scopes 1 & 2 Gross Emissions/TU	0.806	0.842	0.215	0.285
1, 2 & 3	Intensity benchmark	Scopes 1, 2 & 3 Gross Emissions/TU	98.5	99.0	97.6	98.1

We measure carbon intensity against traffic units, which are defined by the International Civil Aviation Organization (ICAO) as equivalent to 1,000 passengers or 100 tonnes of freight.



MAN market – based emissions (scope 3)

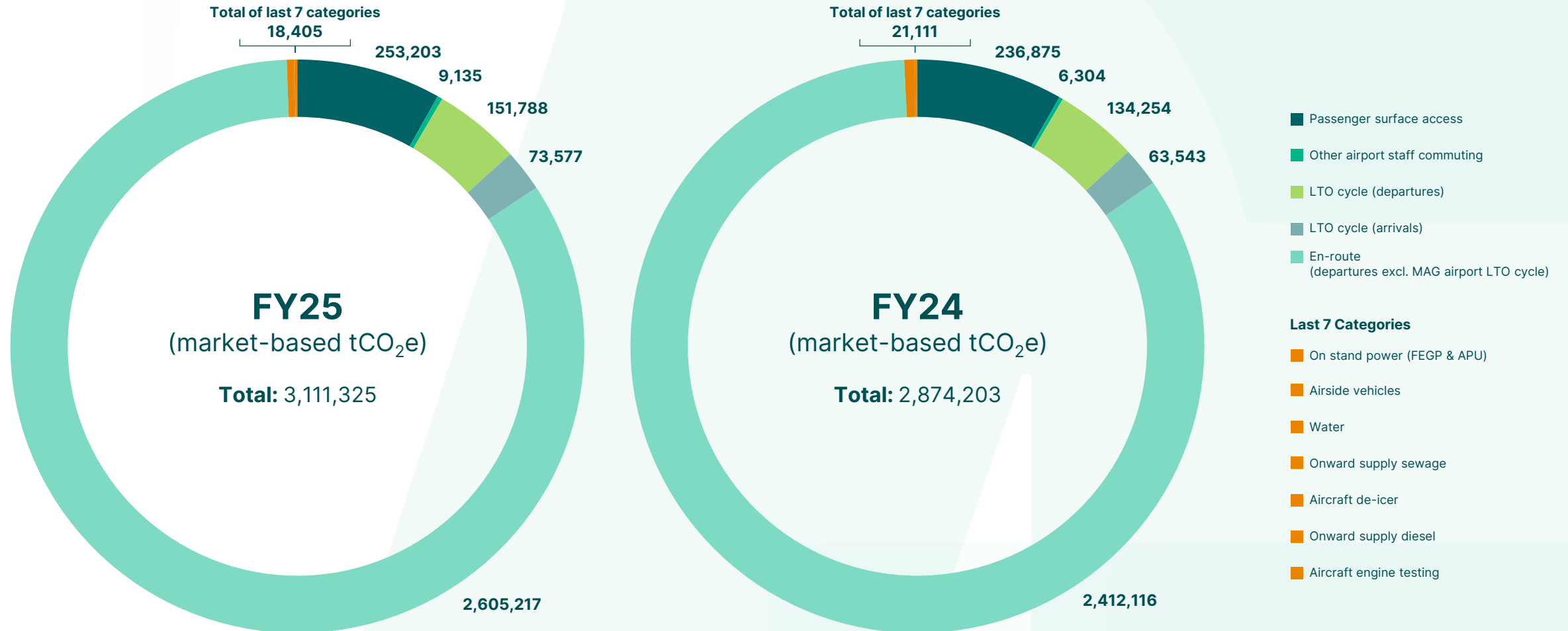
The data in these graphs relates to Manchester Airport's scope 3 emissions (excluding category 11), reported in line with the ACA framework and the GHGP. For further details on our calculation methodologies, please refer to page [insert page number of start of scope 3 methodology section] of this report. Category 11 includes emissions from aircraft movements (including in-flight emissions) and passenger surface access. The full list of activities within this category is provided in the methodology section of this report. These emissions represent over 99% of our Scope 3 footprint. To ensure transparency, they are presented on the next page.



- Category 1: Purchased goods & services
- Category 3: Fuel and energy-related activities (not in scope 1 or 2)
- Category 5: Waste generated in operations
- Category 6: Business travel
- Category 7: Employee commuting
- Category 13: Downstream leased assets

MAN Category 11 market – based emissions (tCO₂e)

The following charts present category 11 emissions, which include those from aircraft movements (including in-flight emissions) and passenger surface access. These activities represent over 99% of our scope 3 footprint and are therefore shown separately to provide a clear view of their contribution and trends.



Reporting standards

Our emissions have been calculated in accordance with the Greenhouse Gas Protocol: Corporate Accounting and Reporting Standard, applying the operational control principle. Calculations are based on a combination of directly measured data, supplier information and appropriate estimation techniques where primary data is unavailable. The following methodologies and data sources are applied consistently across all emission sources:



UK Government Conversion Factors for GHG Reporting

Published annually by the Department for Energy Security and Net Zero (DESNZ), these factors are used to calculate emissions associated with fuel use, energy consumption, business travel, waste, water, and other relevant activities.



The ACERT tool developed by Airports Council International

Used to estimate emissions associated with the use of aircraft de-icers and engine testing, based on aircraft activity data and standardised emission factors.



Market-based reporting

Renewable Energy Guarantees of Origin (REGO) certificates demonstrate that purchased electricity is from renewable sources and therefore has zero associated GHG emissions under the market-based approach. In addition, the Government's Environmental Reporting Guidelines recommend the use of market-based emissions reporting for biomethane, supported by Renewable Gas Guarantees of Origin (RGGOs). Both location-based and market-based emissions are reported.

Where data gaps exist, we have made estimates using historical consumption patterns, averages, or survey-derived assumptions to ensure complete coverage. All assumptions and estimation methods are applied conservatively and reviewed annually to maintain consistency and accuracy in reporting.



Scope 1

Category	Source	Description	Methodology	Significant estimations and assumptions
Stationary combustion	Gas	Natural gas used in fixed equipment including boilers and combined heat and power (CHP) units to produce heat, hot water and energy for our buildings.	Location-based: Gas consumption is measured in kilowatt-hours (kWh) from meter readings, including deduction submeters which measure energy supplied by MAG to tenants and concessionaires. The emissions associated with this use are included in our Scope 3 footprint below. The resulting activity data is multiplied by the DESNZ location-based natural gas emission factor. Market-based: Gas consumption is measured in kWh from meter readings, including deduction submeters which measure energy supplied by MAG to tenants and concessionaires. The emissions associated with this use are included in our Scope 3 footprint below. Any data gaps are filled using estimates based on historic consumption. The resulting activity data is applied to a supplier-specific emission factor that reflects the purchase of renewable gas (RGGOs). More information can be found in the Biomethane section on page 6.	Any data gaps are filled using estimates based on historic consumption
	LPG	Liquified petroleum gas (LPG) used in fixed equipment including boilers and fire service training facilities to produce heat, hot water and for fire service training.	Supplier invoices for regular deliveries in litres multiplied by the DESNZ LPG emission factor.	Use is calculated upon delivery of the fuel from the supplier.
	Heating oil	Heating oil used in fixed equipment including boilers and fire service training facilities, to produce heat, hot water and for fire training exercises.	Supplier invoices for regular deliveries in litres multiplied by the DESNZ diesel emission factor.	Use is calculated upon delivery of the fuel from the supplier.
	Biomass	Wood and straw used in fire service training facilities for fire training exercises.	Measurement of wood delivered for training activity, multiplied by actual number of training events supplied by the Airport Fire and the DESNZ biomass emission factor for the relevant fuel type.	None
	Petrol	Petrol used in fire service training exercises.	Supplier invoices for regular deliveries in litres multiplied by the DESNZ petrol emission factor.	Use is calculated upon delivery of the fuel from the supplier.
	Kerosene	Kerosene used in fire service training exercises.	Supplier invoices for regular deliveries in litres multiplied by the DESNZ turbine fuel emission factor.	Use is calculated upon delivery of the fuel from the supplier.

Scope 1

Category	Source	Description	Methodology	Significant estimations and assumptions
Stationary combustion	Power Backup Diesel	Emissions from the use of onsite diesel generators during periods of mains power failure and low visibility operations.	Supplier invoices for regular deliveries in litres multiplied by the DESNZ diesel emission factor.	
Mobile combustion	Diesel	Diesel consumption in the fleet of vehicles that are directly owned or leased by MAG. These vehicles are used for operational purposes across our airports, including airside ground support, maintenance activities, and landside operations.	Motor Transport fuelling records from MAG and third-party fuel card supplier fuelling systems in litres, multiplied by the DESNZ diesel emission factor.	None
	Petrol	Petrol consumption in the fleet of vehicles that are directly owned or leased by MAG. These vehicles are used for operational purposes across our airports, including airside ground support, maintenance activities, and landside operations.	Motor Transport fuelling records from MAG and third-party fuel card supplier fuelling systems in litres, multiplied by the DESNZ diesel emission factor.	None
	Company cars	Fuel consumption from company cars used by MAG employees typically between MAG sites.	Fuel card records from MAG detail the fuel type used and litres, multiplied by the DESNZ emission factor for the specific fuel type (petrol, diesel etc.)	None
Fugitive emissions	Airfield de-icer	De-icer is applied to aircraft manoeuvring areas, taxiways and runways to maintain safe operating conditions during winter weather.	Measured consumption of de-icing fluids in litres provided by our Airfield Operations team, multiplied by the ACERT 7.0 emission factor for de-icing chemicals	None
	Refrigerants	Refrigerant gases used for air conditioning or refrigeration in airport spaces.	Measured consumption from refrigerant charges detailing; refrigerants type, data, and addition of refrigerant in kg multiplied by the DESNZ emission factor for the relevant refrigerant.	Emissions accounted for at the time of recharge.

Scope 2

Category	Source	Description	Methodology	Significant estimations and assumptions
Indirect emissions from the consumption of purchased electricity	Electricity	Consumption of purchased electricity across MAG's sites, including terminals, offices, and supporting infrastructure. These emissions are calculated using both the location-based method, which applies the national grid average emission factor, and the market-based method, which reflects contractual arrangements and renewable energy sourcing where applicable.	Location-based: Electricity consumption is recorded in kWh from meter readings, with any third-party (Scope 3) usage deducted from the total supply. The resulting activity data is then multiplied by the DESNZ location-based average grid electricity emission factor. Market-based: Electricity consumption is recorded in kWh from meter readings, with any third-party (scope 3) usage deducted from the overall grid supply. The resulting activity data is then applied to a green electricity emissions factor of 0 kgCO ₂ e per unit.	Data gaps filled with estimate based on historic consumption.
Renewable generation	Wind generated electricity	Electricity generated by wind turbines, owned and operated by MAG and connected directly to East Midlands Airport's private electrical network.	Measured electricity production based on meter readings. Because MAG receives feed in tariff payments for its wind generated electricity, it does not own the renewable energy attribute and must therefore report emissions using the 'Electricity: UK' emission factor for both location and market-based emissions.	None

Scope 3

Our scope 3 emissions are calculated using primary data as a preference. However, the nature of indirect emissions, which are the direct responsibility of another company or individual, means that primary data is not always available to us. Where we do not have primary data, we have developed robust modelling and sampling methodologies to estimate our indirect emissions.

We currently report on the Scope 3 categories most material to our business and inline with the requirements of ACA Level 3+, all categories in which we report are listed below. For categories not yet included, we will assess their materiality and incorporate them into future disclosures if they become material to our operations and as reliable data becomes available.

Category	Source	Description	Methodology	Significant estimations and assumptions
Category 1: Purchased Goods & Services	Water consumption	Water supplied by utilities and consumed across MAG facilities, including terminals, offices, and operational buildings.	Data supplied as cubic meters of water used based on meter readings and supplier invoice records. Activity data is multiplied by the DESNZ water supply emission factor.	None
Category 3: Fuel-and energy-related activities (not in Scope 1 or 2)	Well-to-tank	WTT (well-to-tank) - upstream emissions from the extraction, refinement and distribution of fuels and electricity purchased and used by MAG.	Fuel volumes from invoices were collected and multiplied by the corresponding DESNZ WTT emissions factors for respective fuel types.	None
	Transmission & Distribution	T&D (transmission and distribution) - emissions accounting for the energy losses during transmission from source to end-user. WTT of T&D - upstream emissions from the fuels used to generate electricity that is lost in the T&D system.	Measured electricity consumption taken from supplier invoices and/or meter readings was collected and multiplied by the DESNZ 2024 T&D emissions factor. WTT of T&D emissions were calculated by applying an average loss rate to the electricity purchased and multiplying those losses by applying the WTT emissions factor.	None
Category 5: Waste generated in operations	Waste	Disposal and treatment of waste generated across MAG's operations. Emissions are produced indirectly through waste management processes such as recycling, composting, energy recovery, and landfill.	Data is provided by the waste operator on weight, waste type and treatment method. The DESNZ emission factors for the relevant waste type and treatment method are used.	None
	Wastewater	Wastewater generated at MAG facilities which is treated by third-party utilities.	Emissions from wastewater were calculated in line with the GHGP using the average data method. Volumetric data from invoices for both MAG water consumption and volume of wastewater treated were collected from invoices provided by utility supplier, and multiplied by the DESNZ emissions factors for water and wastewater.	None

Scope 3

Category	Source	Description	Methodology	Significant estimations and assumptions
Category 6: Business Travel	Business travel – public transport	Business travel undertaken by MAG staff using public transport (including air travel, rail, car and hotels) and private vehicles owned or leased by MAG staff.	Activity data is compiled from travel booking systems, supplemented by expense claims where appropriate, and includes details such as travel mode, travel class and distance travelled. Where available, hotel stays linked to business travel are also included. Emissions are calculated by DESNZ emission factors for each mode of transport (air, rail, car hire, taxis, etc.), with class-specific factors used for air travel.	None
	Business travel – staff vehicles	Emissions from employees using their own vehicles for business purposes, based on mileage claims submitted through our internal system.	The total mileage and vehicle type recorded in each employee's profile is used to determine the associated fuel type and the relevant DESNZ emissions factor is chosen.	Where the vehicle type is not known, the average DESNZ emissions factor for cars is applied
Category 7: Employee commuting	MAG staff commuting	Journeys made by MAG's directly employed staff travelling to and from work. Commuting is undertaken using a range of transport modes, including private vehicles, public transport, cycling, and walking.	Emissions are estimated using the results of the most recent MAG staff travel surveys, which provide data on the "typical" commuting patterns of employees, including average travel distances and modal splits. These representative profiles are then multiplied by the actual number of directly employed MAG staff at each airport to calculate total emissions. DESNZ emission factors for the relevant reporting year are applied for each mode of transport.	If the vehicle type is not stated, the UK Government's average emission factor is used.
	Home working	Emissions resulting from employees working from electricity and nature gas consumption. emissions resulting from employees working from home, covering energy use for heating, cooling, and powering electronic equipment.	The calculation is based on average energy consumption assumptions, supported by the EcoAct Home Working Emissions Whitepaper and employee working patterns.	Working hours are assumed to be 37.5 hours per week across 49 working weeks per year. Operational colleagues are assumed to work onsite, while office-based colleagues are assumed to work from home three days per week. This provides a conservative estimate of homeworking emissions.

Scope 3

Category	Source	Description	Methodology	Significant estimations and assumptions
Category 11: Use of sold products	Passenger surface access	Emissions from passengers travelling to and from MAG airports using private vehicles and public transport. Journeys are made across a wide range of distances and modes, including cars, taxis, buses, coaches, trams and rail, depending on the airport location and passenger origin.	Data from the Civil Aviation Authority (CAA) passenger surveys conducted during the 2024 calendar year is used. These surveys capture key information including mode of transport, destination, route taken from the airport, and group size. Reported journeys were converted into total trip distances, adjusted to a per-person basis where group travel was indicated. Each journey was assigned an emissions factor corresponding to its transport mode, using DESNZ emission factors. Since survey participation is voluntary and responses represent only a proportion of the total passenger population, the results were scaled up to align with full-year passenger volumes at each airport. This approach provides a representative estimate of emissions associated with all surface access journeys made by departing and arriving passengers.	If the vehicle type is not stated, the UK Government's average emission factor is used.
	Onward supply - Airside vehicles	Emissions from vehicles and ground support equipment operated on the airfield by companies other than MAG, including airlines, handling agents, and service providers. These vehicles support a range of activities such as aircraft turnaround, baggage handling, fuelling, and catering.	Emissions are estimated using fuel consumption data for a "typical" airside vehicle, based on fuelling records held in MAG's fuelling systems where MAG is the fuel supplier. This representative fuel use is then multiplied by the total number of airside vehicles operating at each airport, as recorded through the airside vehicle permit system.	None
	Other airport staff commuting	Commuting journeys of staff employed by other companies who work at MAG airports, including airline, retail, hospitality, and ground-handling employees. Travel is undertaken using a range of modes, primarily private vehicles and public transport.	Emissions are estimated using the results of the most recent airport-wide staff travel surveys, which provide data on the "typical" commuting patterns of non-MAG employees, including average travel distances and modal splits. These representative commuting profiles are multiplied by the actual number of airport-based staff employed by other organisations to calculate total emissions.	If the vehicle type is not stated, the DESNZ average emission factor is used.

Scope 3

Category	Source	Description	Methodology	Significant estimations and assumptions
Category 11: Use of sold products	Auxiliary Power Units & Fixed Electrical Ground Power	Systems used to provide power to aircraft while parked at MAG airports. It includes both fixed electric ground power (FEGP) supplied from airport infrastructure and auxiliary power units (APUs) operated on-board the aircraft.	FEGP: Calculated using metered electricity consumption. APU: Estimated using a “typical turn-around” APU run-time, derived from operational monitoring, multiplied by fuel flow rates for the relevant APU type for each aircraft. UK Government conversion factors for jet fuel are applied to calculate associated CO ₂ e emissions.	Where metering is unavailable, consumption is estimated and reported under Scope 2 using UK Government electricity conversion factors.
	Maintenance, repair and overhaul emissions (aircraft engine testing)	Aircraft engine testing conducted at MAG airports as part of maintenance, repair, and overhaul (MRO) activities. Following maintenance, aircraft engines require testing on the ground to ensure proper operation and safety before returning to service.	Estimated using airside engine testing permit data, which provides the number of tests, airline, and aircraft type. For each test, emissions are calculated by applying the ACERT 7.0 emission factor for the relevant aircraft type during taxiing, assuming sufficient thrust for movement and a standard engine run time of 15 minutes.	Where a specific emission factor is not available for a given aircraft type, a Boeing 737-800 is applied to ensure a conservative estimate.
	Aircraft de-icing	De-icing substances applied to aircraft by third-party ground handling companies at MAG airports. The substances used include Type I, Type II and Type IV.	Calculated using measured consumption of de-icing fluids (in litres) provided by the operators. Each volume of de-icer is multiplied by the relevant ACERT 7.0 emission factor for the specific type of de-icing substance applied.	None

Scope 3

Category	Source	Description	Methodology	Significant estimations and assumptions
Category 11: Use of sold products	Aircraft emissions	Emissions from aircraft operating at MAG airports, including both departing and arriving flights. Emissions are calculated for the full landing and take-off (LTO) cycle as defined by the International Civil Aviation Organisation (ICAO). The LTO cycle includes taxiing from the parking stand to the runway, take-off, and climb or descent to 3,000 feet above ground level. It therefore captures emissions from both departures and arrivals occurring within the airport's vicinity. In addition to LTO emissions, cruise emissions are estimated for the phase of flight above 3,000 feet from departure until descent below 3,000 feet at the destination airport. Full flight emissions are calculated by combining LTO and cruise emissions to provide an estimate of total emissions associated with each aircraft operating at MAG airports. This approach ensures that both local (LTO) and en-route (cruise) emissions are captured, providing a complete picture of aviation-related GHGs attributable to airport operations.	Source data for aircraft operations at MAG airports is provided by Cirium, which includes detailed flight schedules, aircraft types, and operational information. Cirium's methodology estimates fuel burn for each phase of flight, including taxiing, take-off, climb, cruise, descent, and landing. Using this fuel burn data, emissions are calculated by applying the DESNZ emissions factors, updated annually.	Emissions from general aviation flights are currently excluded due to data constraints. These are estimated to represent less than 5% of total airport-related aviation emissions, so their exclusion does not significantly affect the overall footprint. MAG continues to review options for including general aviation in future reporting.

Scope 3

Category	Source	Description	Methodology	Significant estimations and assumptions
Category 13: Downstream leased assets	Onward supply – Heating oil	Heating oil supplied by MAG to tenants and concessionaires for use in fixed equipment, such as boilers and other heating systems, within MAG-owned premises.	Fuelling records from MAG's fuelling systems, supplemented by supplier invoices for regular heating oil deliveries.	None
	Onward supply - Electricity	Electricity supplied by MAG to tenants and concessionaires for use in fixed equipment, such as lighting, HVAC systems, catering equipment.	Calculated using measured electricity consumption from meter readings for tenant and concessionaire facilities. As the electricity supplied is backed by REGOs, the market-based Scope 2 emissions are reported as zero. For location-based reporting, UK Government conversion factors for grid electricity are applied to the consumption data.	Where meter data is unavailable or incomplete, estimates are applied based on historic consumption patterns for the same location or comparable facilities.
	Onward supply - Gas	Natural gas distributed by MAG to tenants and concessionaires for use in fixed equipment such as boilers, catering facilities, and heating systems located within MAG-owned premises.	Emissions are based on measured natural gas consumption from meter readings for tenant and concessionaire facilities multiplied by the DESNZ natural gas emission.	Where meter data is unavailable or incomplete, estimates are applied using historic consumption patterns for the same location or comparable facilities.

Carbon offsets

To ensure transparency, all carbon offsets purchased by MAG are verified and recorded in recognised public registries. These certificates confirm that the offsets meet verified standards and have been retired.



Links to public registry

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=281229> (STN)
<https://registry.goldstandard.org/batch-retirements/details/222853> (STN)
<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=313837> (MAN)
<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=313838> (EMA)
<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=313839> (Group activities)

Carbon offsets

To ensure transparency, all carbon offsets purchased by MAG are verified and recorded in recognised public registries. These certificates confirm that the offsets meet verified standards and have been retired.



Renewable Gas Guarantees of Origins

To support our transition, we purchase RGGOs that certify the renewable source of the biomethane used. Each certificate represents verified renewable gas injected into the national grid.



CERTIFICATION SCHEME

RGGOs issued on:

13/10/2023 13:58:00

RGGOs retired on:

25/06/2024 13:18:28

Retirement statement downloaded on:

25/06/2024 13:18:35

RGGOs allocated to:

Manchester Airport Ltd

Renewable Gas Guarantees of Origin (RGGOs):

G0085AA00000001E0623 to G0085AA11025241E0623

Injection date:

17/03/2023 to 16/06/2023

Biomass information:

GGCS - Biomass (Unspecified) Classification (Waste)

RGGOs issued by:

GGCS - UK

Amount:

11025241 kWh

Production support received:

Yes

Sustainability criteria met:

International Sustainability and Carbon Certification (ISCC)

Certificate pin number:

f85b19

Green gas producer:

Sewern Trent Water Ltd (Stoke Bardolph STW G2G)
Stoke Bardolph Sewage Treatment Works, Stoke Lane, Burton Joyce, NG14 5HL, Green Gas (Biomethane), Process (Anaerobic Digestion), Delivery (Grid Injection), Metering Point (000025607), Commissioning Date (April '21), Capacity (12.0 MW), Investment Support (No)

Retirement statement generated by:

S0148 - MAG Airport Ltd
6th Floor Olympic House, Manchester Airport, Manchester, M90 1QX

The RGGOs listed on this Retirement Statement have been allocated to the party named and cannot be transferred or allocated to any other party.

These RGGOs have been issued according to a calculation of the number of kWh of green gas produced, net of any fossil gas consumed during the production process. For more information, visit [www.greengas.org.uk/certificates](#).

Sustainability Criteria – the “Non-Domestic Renewable Heat Incentive (NDRHI) - UK” criteria require that lifecycle emissions associated with the production of biomethane, up until its injection into the grid, is no more than 125.28 gCO₂ equivalent per kWh.

For more information about the NDRHI and other sustainability criteria that may be stated above, visit [www.greengas.org.uk/certificates/emissions-reporting](#).

Any GHG values related to the production of green gas are calculated against the lower calorific value, whereas the kWh represented by the RGGOs are the higher calorific value of the green gas.

To verify that this Retirement Statement is genuine, visit [www.greengas.org.uk/certificates/validate](#).

For information about additional claims, visit [www.greengas.org.uk/certificates/additionality](#).



CERTIFICATION SCHEME

RGGOs issued on:

13/10/2023 13:58:00

RGGOs retired on:

25/06/2024 13:25:48

Retirement statement downloaded on:

25/06/2024 13:25:54

RGGOs allocated to:

Stansted Airport Ltd

Renewable Gas Guarantees of Origin (RGGOs):

G0085AA11025242E0623 to G0085AA13384130E0623

Injection date:

17/03/2023 to 16/06/2023

Biomass information:

GGCS - Biomass (Unspecified) Classification (Waste)

RGGOs issued by:

GGCS - UK

Amount:

2358889 kWh

Production support received:

Yes

Sustainability criteria met:

International Sustainability and Carbon Certification (ISCC)

Certificate pin number:

cb9ed4

Green gas producer:

Sewern Trent Water Ltd (Stoke Bardolph STW G2G)
Stoke Bardolph Sewage Treatment Works, Stoke Lane, Burton Joyce, NG14 5HL, Green Gas (Biomethane), Process (Anaerobic Digestion), Delivery (Grid Injection), Metering Point (000025607), Commissioning Date (April '21), Capacity (12.0 MW), Investment Support (No)

Retirement statement generated by:

S0148 - MAG Airport Ltd
6th Floor Olympic House, Manchester Airport, Manchester, M90 1QX

The RGGOs listed on this Retirement Statement have been allocated to the party named and cannot be transferred or allocated to any other party.

These RGGOs have been issued according to a calculation of the number of kWh of green gas produced, net of any fossil gas consumed during the production process. For more information, visit [www.greengas.org.uk/certificates](#).

Sustainability Criteria – the “Non-Domestic Renewable Heat Incentive (NDRHI) - UK” criteria require that lifecycle emissions associated with the production of biomethane, up until its injection into the grid, is no more than 125.28 gCO₂ equivalent per kWh.

For more information about the NDRHI and other sustainability criteria that may be stated above, visit [www.greengas.org.uk/certificates/emissions-reporting](#).

Any GHG values related to the production of green gas are calculated against the lower calorific value, whereas the kWh represented by the RGGOs are the higher calorific value of the green gas.

To verify that this Retirement Statement is genuine, visit [www.greengas.org.uk/certificates/validate](#).

For information about additional claims, visit [www.greengas.org.uk/certificates/additionality](#).

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Assurance

The carbon footprint presented in this report has been independently verified by TÜV Nord. This assurance was conducted in accordance with ISO 14064-1 and the GHG Protocol Standards. The TÜV Nord assurance statement is provided on this page.

TÜVNORD

Summary and Test Statement

The Carbon Footprint was verified by TÜV NORD CERT GmbH in accordance with DIN EN ISO 14064-3:2020 regarding its correctness and completeness for Manchester Airports Group.

Acting as an independent Certification Body TÜV NORD CERT GmbH has verified the carbon footprint, Scope 1, Scope 2 (Location based) and Scope 3 of the organisation for the reporting period **01.04.2024 - 31.03.2025** (inclusive) to be **6,299,306 t CO₂e**.

Summary	t CO ₂ e
A – Greenhouse Gas Inventory	
Scope 1	15,866
Scope 2 (Location based)	26,327
Scope 1 and 2 (Location based)	42,193
Scope 1 and 2 (Market based)	11,636
Scope 3	6,257,113
Total Scope 1, 2 and 3 (Location based)	6,299,306

The level of assurance has been determined to be limited. The carbon footprint includes Scope 1, 2 and 3 (location-based approach). The calculation of the carbon footprint comprises of emissions arising from:

Scope 1: Stationary and Mobile Combustion, Fugitive Emissions.

Scope 2: Electricity purchased (Location based).

Scope 3: Onward supply, water, wastewater, WTT and T&D, business travel, employee commuting and working from home, cargo handling, landing and take offs (departures, cruise arrivals), auxiliary power units and fixed electrical ground power, engine testing, de-icer.

On the basis of the audit, there is no evidence to conclude that the greenhouse gas declaration is not substantially correct. In addition, there is no evidence that the greenhouse gas-related data and information are not presented objectively. Furthermore, there are no known facts that lead to the assumption that the greenhouse gas declaration was not prepared in accordance with the GHG Protocol.

Dr. Tahsin Choudhury
Lead Auditor
18th October 2025

Tahsin
Choudhury
Digitally signed
by Tahsin
Choudhury

TÜV NORD CERT GmbH
Am TÜV 1
45307 Essen
Germany

Carbon financial instruments	t CO ₂ e
Procured electricity from renewable energies with contractually regulated means in accordance with ISO 14064-1, Annex E (market-based emissions factors)	26,249
Procured natural gas from renewable energies with contractually regulated means in accordance with ISO 14064-1, Annex E (market-based emissions factors)	4,309

Contact Us

sustainability@magairports.com

We will continue to work collaboratively with those in our industry, local communities and beyond, so we welcome your views and suggestions.

