LLA Carbon Reduction Strategy & GHG Management Report

The following constitutes London Luton Airport Operations Limited's ("LLA") annual report for 2024 in respect of LLA's Carbon Reduction Strategy in accordance with planning permission 21/00031/VARCON and the related s106 agreement dated 9 December 2022

London Luton Airport

Carbon & GHG Management

2024 Performance Update

London Luton Airport
Champions of Sustainable Aviation

airport carbon accredited
TRANSFORMATION

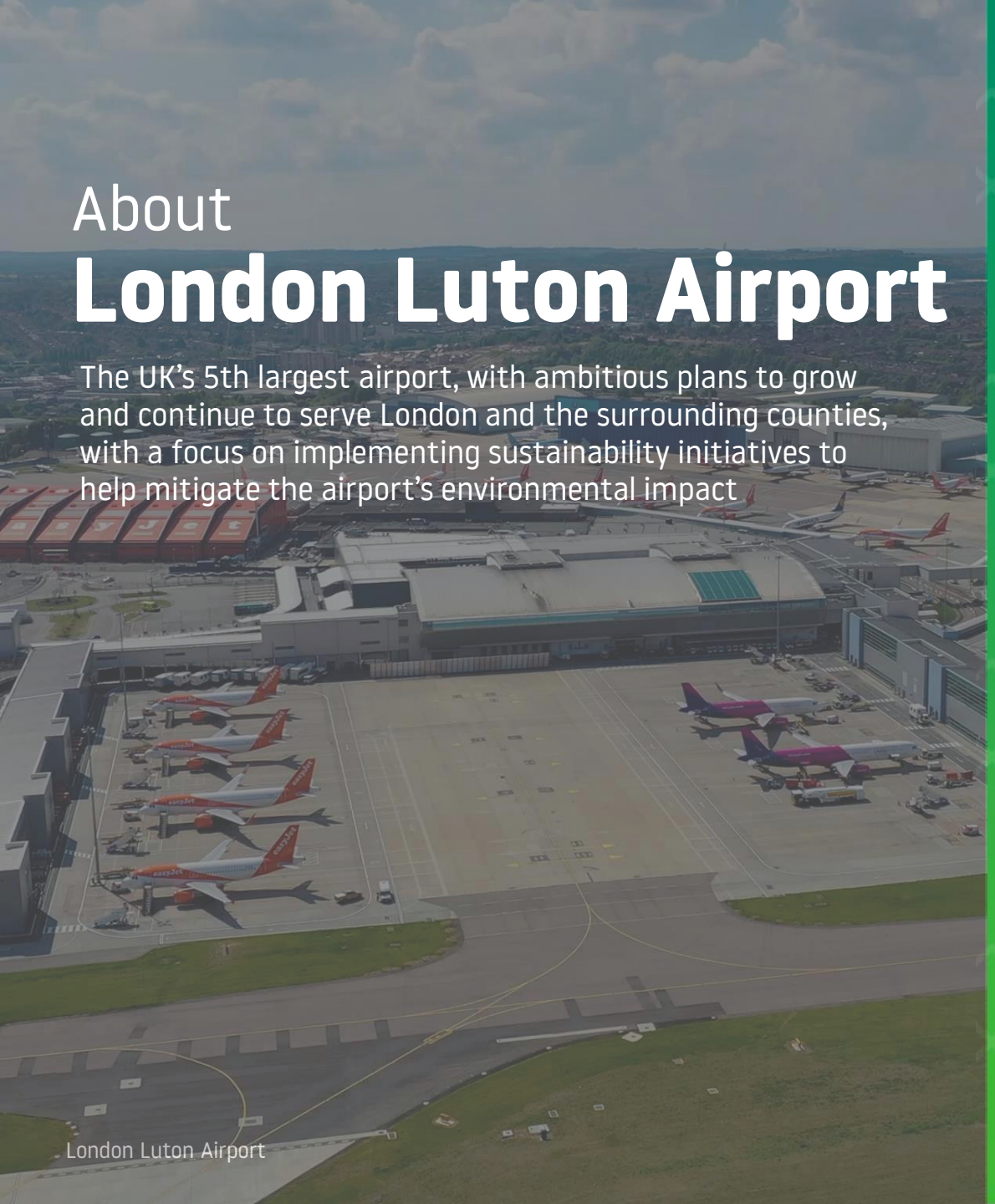
ENVIRONMENTAL · NET ZERO BY 2040 ·

GOVERNANCE · WORKING WITH PARTNERS ·

About

London Luton Airport

The UK's 5th largest airport, with ambitious plans to grow and continue to serve London and the surrounding counties, with a focus on implementing sustainability initiatives to help mitigate the airport's environmental impact



London Luton Airport

2024 Performance

16.7m
Passengers

131k
Air Traffic Movements

30k
Cargo (t)

£1.3bn
Regional economic impact

Unique approach to sustainable growth with LLAOL's ownership structure.

aena INFRABRIDGE
a division of DIGITALBRIDGE

Operating at London Luton Airport Operations Limited (LLAOL)

Key Accreditations

airport carbon accredited
TRANSFORMATION

2024 BEST EUROPEAN AIRPORT AWARD

GRESB INFRASTRUCTURE
sector leader 2024

Our Carbon Reporting Approach

LLAOL's 2024 GHG statement on scope 1 & 2 emissions has been verified as satisfactory in line with ISO 15064-3: 2019.

Purpose

The purpose of this report is to present the carbon footprint of London Luton Airport (LLA) for the 2024 period covering 1st January 2024 to 31st December 2024. During this time, LLA served 16,735,984 passengers with a total of 131,972 air traffic movements (ATMs).

The calculation of GHG emissions and publication of LLA's annual carbon management performance update helps LLA's stakeholders to understand the different emission sources which contribute to the overall carbon footprint and monitor performance on an annual basis.

LLA has committed to achieving Net Zero in scopes 1 & 2 (Airport Operations) by 2040, which is delivered using the carbon footprint process. The process helps to identify and track emission hotspots and improvement opportunities which will enable the decarbonisation of LLA's carbon footprint.

This report is managed and published by LLA's Sustainability team.

Process and Approach

The calculation and publication of LLA's carbon footprint is supported by LLA's Greenhouse Gas (GHG) inventory methodology document, which outlines the GHG inventory, methodology, processes for boundary definition and data collection and calculation for London Luton Airport Operations Limited (LLAOL).

The document also details LLAOL's alignment with the GHG protocol, Airport Carbon Accreditation (ACA) Level 4 and ISO 14064 carbon accounting standards.

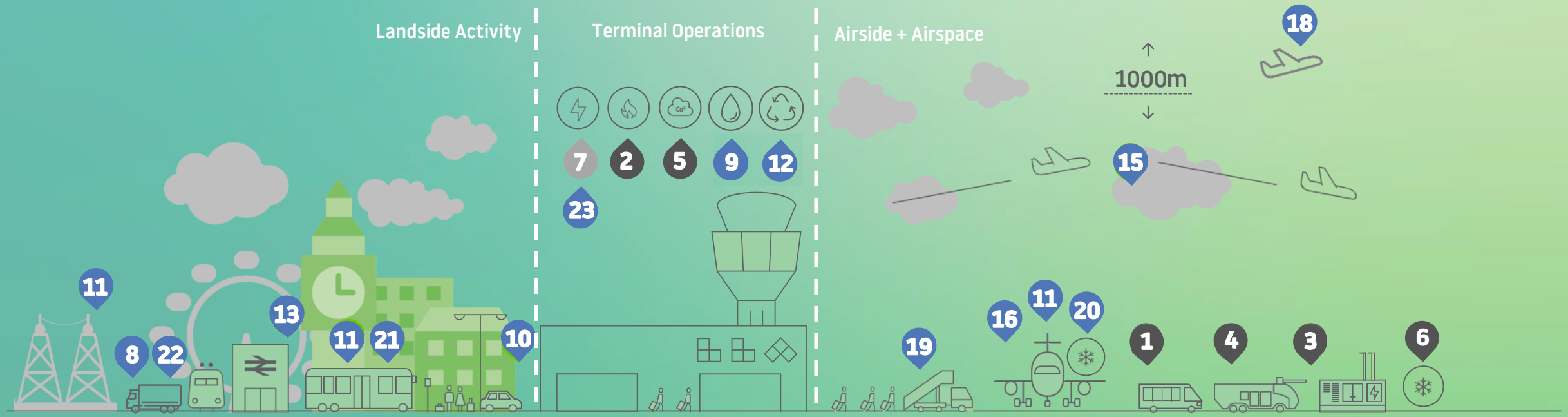
By calculating the emissions of LLAOL in line with these standards and methodology, LLAOL can demonstrate to its stakeholders including customers, shareholders, partners and local community that it is committed to transparently reporting and deliver reductions on GHG emissions.

All emissions are reported under a location-based methodology in line with LLA's Net Zero roadmap, unless otherwise stated (e.g. to show use of REGO electricity).

All emissions are also reported back to LLA's baseline of 2019, which is the highest operational output point for the airport.

LLA's Carbon Emission Boundaries

London Luton Airports carbon emissions boundaries demonstrates the relevant sources for each emission scope and category based upon the latest Airport Carbon Accreditation Level 4 requirements, GHG protocol Corporate Reporting standard and ISO 14064-1. Emissions are reported under Scopes 1, 2 (Our Airport Emissions) and 3 (Our Partners Emissions).



Our Airport Emissions

Scope 1 – Direct Emissions

Mobile Sources

1 LLAOL Operational Vehicles

Stationary Sources

2 Natural Gas – Heating + Boilers
3 Fuel – Heating + Power (Generators)
4 Firefighting Activities + Training

Process Emissions

5 Refrigerant Losses
6 Ground De-Icing

Scope 2 – Indirect Emissions

Purchased Electricity

7 LLAOL Electricity Usage

Our Partners Emissions

Scope 3 – Indirect Emissions

GHG Category 1

8 Supply Chain (inc. **Category 2** Capital Goods)
9 Water Consumption
10 Non-Road Construction Vehicles

GHG Category 3

11 WTT&T&D of Scope 1 and 2

GHG Category 5

12 Waste & Wastewater

GHG Category 6

13 LLAOL Business Travel

GHG Category 7

14 Employee Commuting

GHG Category 8

15 Aircraft LTO Cycle
16 Aircraft APU
17 Aircraft Engine Testing
18 Aircraft CCD
19 Third Party Operational Vehicles (GSE)
20 Aircraft De-Icing
21 Passenger & Tennant Staff Surface Access
22 Landside Cargo Transport

GHG Category 13

23 Third-Party Grid Electricity

London Luton Airport

Carbon Management Highlights 2024

NET ZERO 2040

Our **Airport** Emissions (Scope 1&2)

28%

Reduction in Scope 1 & 2 emissions from our Net Zero baseline (2019)

↓ **0.34** kgco2e/PAX

LLA's lowest output

Driven by LLA's Net Zero roadmap interventions:

100%

Of LLAOL Car Parks

LED Operated

88%

Of LLAOL Fleet now

Low-Carbon

100%

Of LLAOL transfer buses

Low-Carbon

All electricity to LLA is **100%**

Renewably Sourced

Through REGO certification saving

3,844 tCo2e

under a market-based approach

With plans to generate 25% of airport electricity from

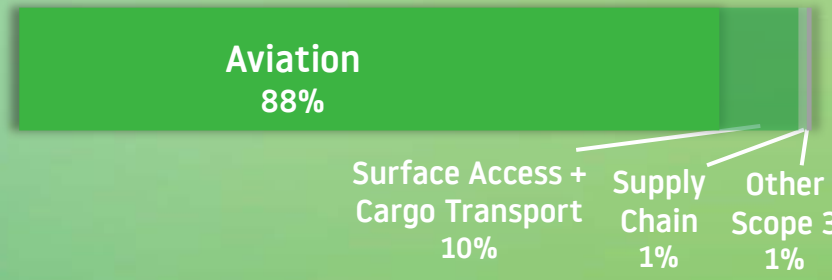
On-Site Solar

by the end of 2026

NET ZERO 2050

Our **Partners** Emissions (Scope 3)

Scope 3 breakdown



36% ↓CO_2

of all flights operated in 2024 were

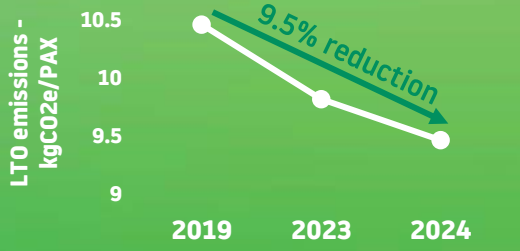
Next-Generation Aircraft

5% in 2019 & 27% in 2023

16,000+ tCo2e saved

Reducing our aircraft

Emissions per passenger



Passenger Surface Access

29% ↑ 6% vs 22

Staff Commute

27% ↑ 6% vs 22

Via sustainable mode
(rail, bus & coach)

With sustainable modes reducing carbon emissions by up to 87%

Minimising terminal operational carbon emissions

With managed recycling rate of

82%

In 2024, LLA's highest performance

up from 60% in 2019

2024 Carbon Footprint Summary

All emissions have been calculated in line with the GHG protocol, to ACA Level 4 standards and ISO 14064-1. Outside of scope emissions have not been shown below, but account for 0.3% of emissions, reported for all fuels that contain a biofuel component. LLA reports in line with scope 1 & 2 reporting and the 15 categories of scope 3 as outlined in the GHG protocol standard. LLA reports to all applicable categories of scope 3, and continues to improve the scope of the footprint annually in line with standard and industry best practice.

1,221,916 tCO_2e/year

Location Based Emissions Figures (excl. outside of scope)

0.1%

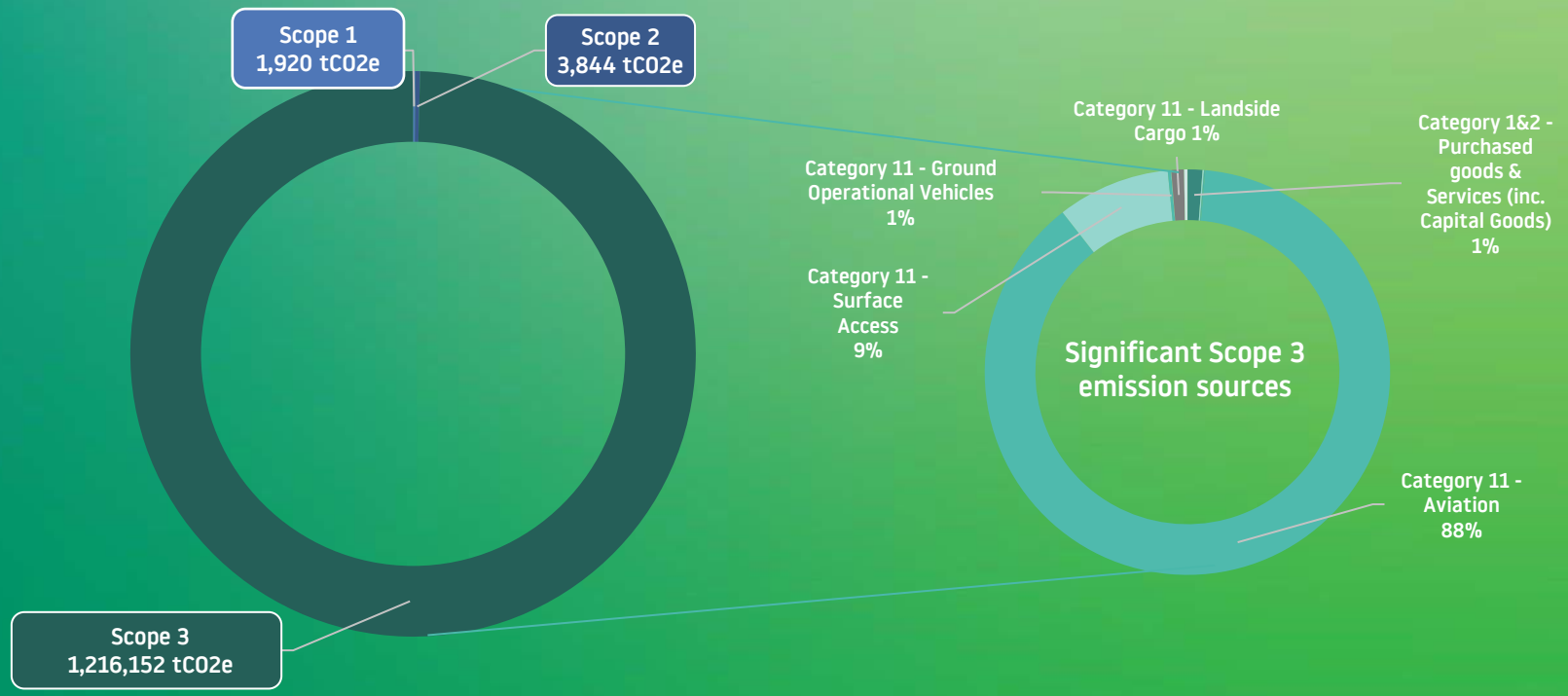
Scope 1

0.3%

Scope 2

99.6% (74% CCD, 13% LTO)

Scope 3



In 2024, LLA's largest emission sources remained within scope 3 of the carbon footprint, with the significant majority sourced from aviation related activities (including Cruise, Climb Decent (CCD), Landing-Take off (LTO) and APU usage).

LLA is working towards decarbonising all sources of carbon emissions including its scope 3 emissions, working closely with airport partners and the wider industry. LLA is a member of the Sustainable Aviation group, UK Jet Zero council and ACI's Net Zero 2050 pledge.

Expanded Reporting

Since 2019, LLA has continued to expand its scope of carbon footprint in line with updates to the ACA methodology and industry best practice. The footprint includes 5 additional emission sources including Aircraft CCD (74%), Supply Chain (1.2%), Well-To-Tank (0.1%), Landside Cargo Transport (1%) and tenant Staff commute (0.6%).

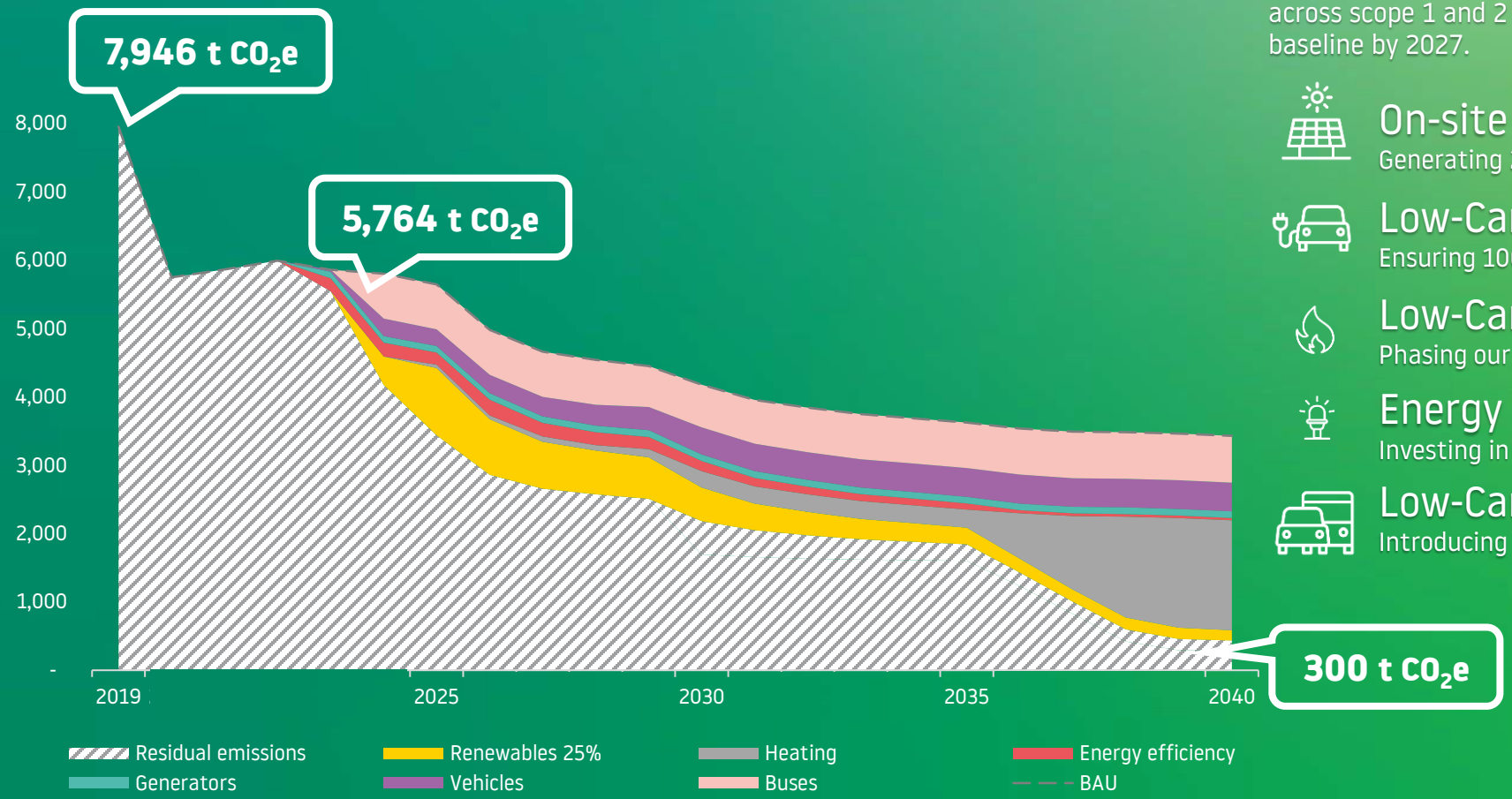
Many of these sources were calculated in 2023, but in 2024, these are now included in the full footprint of the airport.

Net Zero Roadmap

NET ZERO 2040

In 2022, London Luton Airport Operations Limited (LLAOL) introduced its Net Zero Roadmap to achieve net zero by 2040 at the latest for scope 1 and 2 airport operation emissions at London Luton Airport (LLA). Targeting a reduction of more than 90% in the airport's scope 1 & 2 emissions and resolving the residual emissions using carbon removals.

The Net Zero Roadmap uses a baseline from 2019, as the latest fully operational year at LLA with 18 million passengers, ensuring the airport highlights its true maximum output.



Using the following measures, LLA is reducing its emissions significantly across scope 1 and 2 sources, with the aim of having halved the original baseline by 2027.

On-site Solar

Generating 25% of LLAOL electricity requirement by the end of 2026

Low-Carbon Vehicles

Ensuring 100% of LLAOL fleet are low carbon by 2030

Low-Carbon Heating

Phasing our gas use across the airport by 2039

Energy Efficiency Upgrades

Investing in upgrades across lighting, systems and HVAC

Low-Carbon Buses

Introducing low carbon car park buses and exploring electric options

Lowest Intensity Output

With successful implementation of LLA's Net Zero roadmap measures, in 2024 the airport saw the lowest scope 1 per passenger output at 0.11kgCO2e per passenger. Driven by key interventions such as energy efficiency upgrades on gas heating appliances, low-carbon vehicle transition and trialling HVO in airport generators.

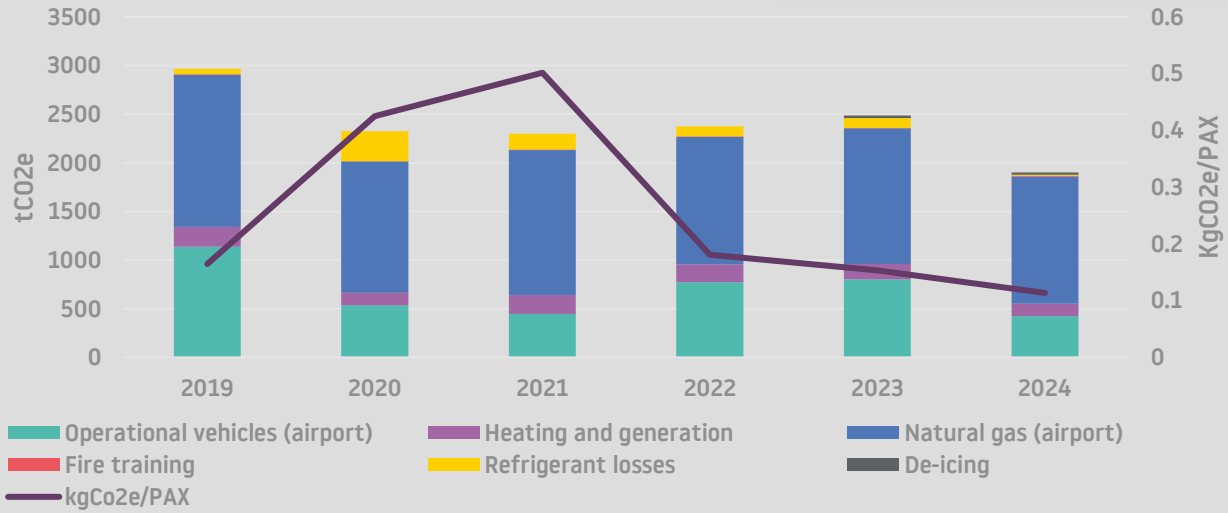
A 31% reduction in passenger intensity from 2019, with passenger numbers also remaining 7% lower than LLA's operational baseline year – a clear demonstration of decarbonisation measures in practice.

Low-Carbon Vehicles

2024 saw the acceleration of LLA's low-carbon vehicle transition on all LLAOL operated vehicles and car park transfer buses, reducing emissions by 62% against the 2019 baseline.

Using a fleet transition mix of HVO and the introduction of electric vehicles across the fleet, LLA at the end of 2024 operated with 88% of the fleet being low-carbon. This significant decarbonisation measure is reducing scope 1 emissions, whilst transitioning to a fully electric fleet where feasible.

Scope 1 emission sources



Our Airport Emissions

Scope 1

Reducing our direct control emissions sourced from LLAOL controlled mobile and stationary sources as well as process emissions from airport operational activities.

	2019	2020	2021	2022	2023	2024	Vs 2019 Baseline
Operational Vehicles (inc. CP Buses)	1,137	536	447	773	801	423	-62
Heating (Natural Gas)	1,562	1,349	1,492	1,307	1,393	1,306	-16%
Generators	203	129	192	184	158	149	-26%
Fire Training	8	2	6	6	5	10	+25%
Refrigerant Losses	55	309	162	102	103	8	-85%
De-Icing	-	-	-	-	25	13	-
Total	**2,966**	**2,326**	**2,299**	**2,373**	**2,486**	**1,920**	**-35%**

Material emissions

Our Airport Emissions
Scope 2

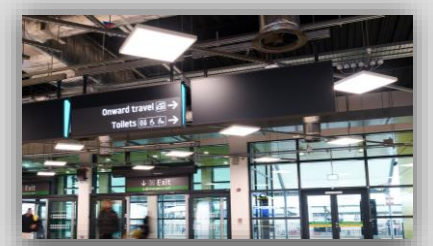
Reducing our indirect control emissions sourced from the use of grid electricity to power LLAOL operated buildings, equipment and systems across the airport, including airfield and external lighting.

	2019	2020	2021	2022	2023	2024	Vs 2019 Baseline
Location Based (tco2e)	4,981	3,418	3,538	4,045	4,091	3,844	-22%
Market Based (tco2e)	6,772	5,059	1,332	0	0	0	-100%
Total (Location Based)	**4,981**	**3,418**	**3,538**	**4,045**	**4,091**	**3,844**	**-22%**

Sourcing Renewable Energy

At LLA, electricity has been sourced from renewable energy sources since April 2021 through the REGO (Renewable Energy Guarantees of Origin) certification scheme. This ensures all electricity used directly by the airport and recharged to concessions is zero carbon under a market-based methodology.

This is a transitionary measure whilst we work towards installing our on-site solar farm, which is planned to generate c.25% of the airports direct electricity demands by 2026.

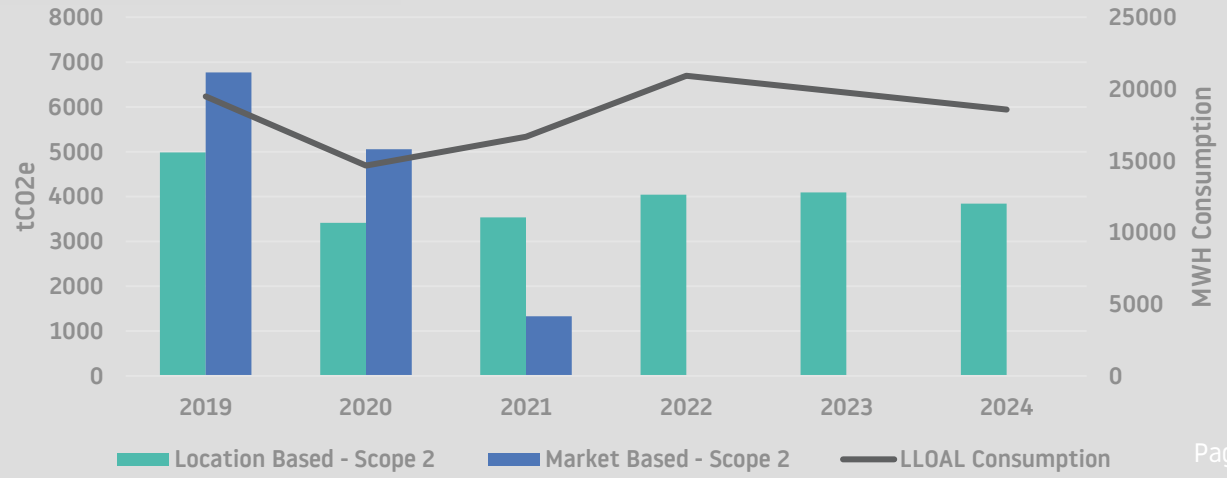


Energy Efficiency Investment

As part of LLA's commitment to Net Zero by 2040, energy efficiency measures across the airport site are being implemented.

In 2024, c.250 MWH was saved from the implementation of lighting upgrades across airport car parks and operated budlings, equating to around 50 tCO2e.

Further works are planned with lighting upgrades across the airfield and runway, and site-wide metering improvements to identify further opportunities.



GHG Protocol Categories

In line with the Corporate Value Chain (scope 3) Standard and supporting calculation guidance as well as ACA Level 4 guidance, LLA calculates its full scope 3 emissions against the 15 scope 3 categories.

Of the 15 categories, 9 emissions sources are in scope of LLA operations, with no activities undertaken in the remaining 6 categories including upstream transportation, processing of sold goods, franchise, investments, and upstream leased assets. This is in line with the guidance.

Goods & Services inc. Capital Goods

This category covers all LLAOL's spend based emissions. With 16% of these emissions coming from construction activities across site and a further 11% of these emissions originating from the investment in Next-Gen Security.

Capital emissions fell from a peak in 2023.

Surface Access

Passenger surface access emissions made up 8% of total emissions in 2024, with a further 1.1% from staff & tenant commuting (surface access).

The Luton DART saw 2.9m passengers in 2024 (Jan-Dec), with emissions per passenger around 80% lower than a car journey to central London.

Tenant staff commute covers airport pass holders who work on site at LLA. This was calculated for the first time in 2024.

Use of sold products

This category covers all aviation emissions (page 10), and the emissions from partner ground support equipment, surface access, aircraft de-icing and landside cargo transport (introduced in 2024).

This is our most significant emission category, and therefore working closely with all partners to reduce the emissions from these sources.

Business Travel

In 2024, we developed our internal business travel policy to provide guidance and influence to colleagues on business travel. Since the pandemic, these emissions have risen, but we are now looking to reduce and minimise these emissions.

Waste

In 2024, the methodology for waste emission reporting had been updated to reflect best practice. With the reporting of virgin material production emissions reported in category 1, the residual waste emissions from LLA waste only are then captured in category 5, where products have not been recycled.

Our Partner Emissions

Scope 3

Reducing our indirect emissions sourced from our partners activities across landside surface access, concession activities in the terminal and operations on the airfield and London Luton airspace. This also includes LLA's downstream activity emissions and supply chain.

	2019*	2020	2021	2022	2023*	2024
Category 1: Purchased goods and services	46	18	7	78	518	415
Category 1: Purchased goods and services, and Category 2: Capital goods	-	-	-	13549	23578	16659
Category 3: Fuel- and energy-related activities	790	527	2139	2102	1831	1720
Category 5: Waste generated in operations	140	980	786	2007	2658	39
Category 6: Business travel	103	39	4	101	68	178
Category 7: Employee commuting and home office	1,010	436	680	931	1,648	1,251
Category 11: Use of sold products	1,254,538	110,506	519,802	1,052,304	1,165,961	1,192,076
Category 12: End-of-life treatment of sold products	-	-	-	-	-	193
Category 13: Downstream leased assets	4,325	2,706	2,211	1,918	3,404	3,621
Total (Location Based)	1,260,952	115,212	525,629	1,072,990	1,199,666	1,216,152

**2019 & 2023 Carbon footprints have been adjusted in 2024 to account for new LTO + CCD methodology to reflect true taxi-in and taxi-out times in the LTO cycle, delivering a more robust and accurate carbon footprint output.*

Aviation Emissions

Aviation accounts for over 85% of the total airport emissions output in 2024. LLA continues to work with Airline partners and the wider industry to influence the decarbonisation of this indirect emission source through engagement, innovation and research and operational procedures to ensure all carbon reduction opportunities are explored where feasible.

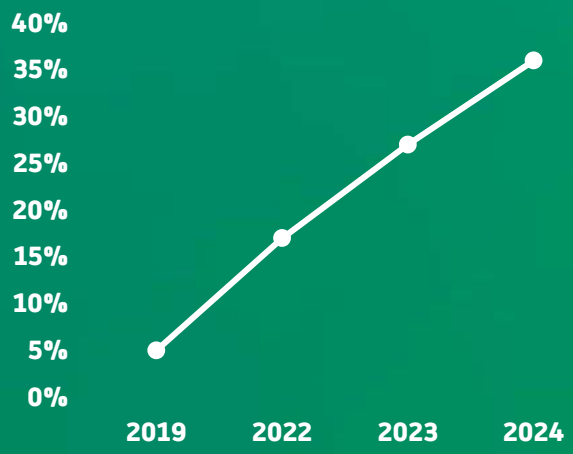
NEXT-GENERATION Aircraft

AIRBUS A320neo BOEING 737 MAX

We are working with airlines to increase the use of Next-Generation Aircraft on passenger movements.

These modernised aircraft deliver carbon savings of up to 20% compared to the original models (CEO) and are currently one of the most significant decarbonisation measures being utilised in the industry through improved engine efficiencies and aero-dynamic enhancements to the fuselage.

Next-Gen Aircraft Proportion



36% of all flights in 2024 were operated using a next-gen aircraft

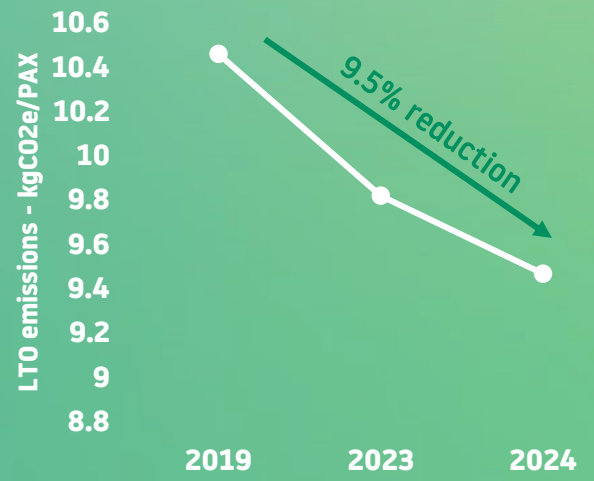
Saving **16,913tco2e** in 2024

Operational Improvements

As outlined in the Sustainable Aviation roadmap, there are carbon reduction opportunities from operational efficiency improvements which LLA is working with airlines and ground handler agents to implement.

These improvements can deliver up to a 5% reduction in carbon and include reduction in APU run time, taxi-practices and efficient climb and decent practices which we are continuing to enhance and monitor to maximise the opportunity.

Reducing Passenger intensities



In line with our 2024 RBS, we are working to reduce aircraft carbon emissions per passenger by at least 5% by 2026.

Through a combination of measures and engagement points, we are reducing LTO emissions per passenger covering the aircraft operations on the ground and in Luton airspace (1000ft).

In 2024, passenger LTO emissions were 9.47 kgCO2e per passenger, a 9.5% reduction from 2019.

Carbon Footprint 2024 (Location Based)

Summary Category	ACA Category	tCo2e	tCo2	tCH4	tN2O
Scope 1 – Total		**1,920**	**1,871.28**	**2.09**	**7.99**
Mobile sources	Operational vehicles (airport)	423.25	411.18	0.05	5.46
Stationary sources	Heating and generation	148.93	146.88	0.04	1.89
	Natural gas (airport)	1,306.38	1,303.74	2	0.64
	Fire training	9.51	9.48	0.01	0.01
Process emissions	Refrigerant losses	8.47	0	0	0
	De-icing	23.04	0	0	0
Scope 2 – Total		**3,844**	**3,804.38**	**16.71**	**22.65**
Purchased electricity	Purchased electricity (airport)	3,843.74	3,804.38	16.71	22.65
Scope 3 – Total		**1,216,152**	**1,155,442.52**	**856.77**	**9,613.49**
Category 1: Purchased goods and services	Water consumption	21	0.00	0.00	0.00
	Non-road construction vehicles	394	312.67	0.04	4.15
Category 1: Purchased goods and services, and Category 2: Capital goods	Supply chain	16,659	0.00	0.00	0.00
Category 3: Fuel- and energy-related activities	WTT/T&D of scope 1 and 2	1,720	336.20	1.49	2.04
Category 5: Waste generated in operations	Waste	15	0.00	0.00	0.00
	Wastewater	24	0.00	0.00	0.00
Category 6: Business travel	Business travel	178	152.81	0.11	0.86
Category 7: Employee commuting and home office	Staff commute	1,251	976.29	2.27	2.42
Category 11: Use of sold products	Aircraft LTO and APU	158,448	157,017.36	109.47	1,321.08
	Aircraft CCD	883,875	875,894.68	610.50	7,369.41
	Aircraft engine testing	2,282	1,871.67	1.30	15.75
	Operational vehicles (third party)	3,625	2,877.63	0.38	37.92
	Aircraft de-icing	372	0.00	0.00	0.00
	Passenger surface access	120,046	94,487.04	101.08	633.60
	Tenant staff commute (new for 2024)	8,985	7,011.37	15.43	17.54
	Landside cargo transport (new for 2024)	14,443	11,430.06	1.79	189.38
Category 12: End-of-life treatment of sold products	MSCP decommissioning	193	139.92	0.02	1.86
Category 13: Downstream leased assets	Purchased electricity (tenant)	3,621	2,934.82	12.90	17.50
All Scopes Total (inc. outside of scopes)		**1,221,916**	**1,165,474**	**876**	**9,644**

**2019 & 2023 Carbon footprints have been adjusted in 2024 to account for new LTO + CCD methodology to reflect true taxi-in and taxi-out times in the LTO cycle, delivering a more robust and accurate carbon footprint output.*

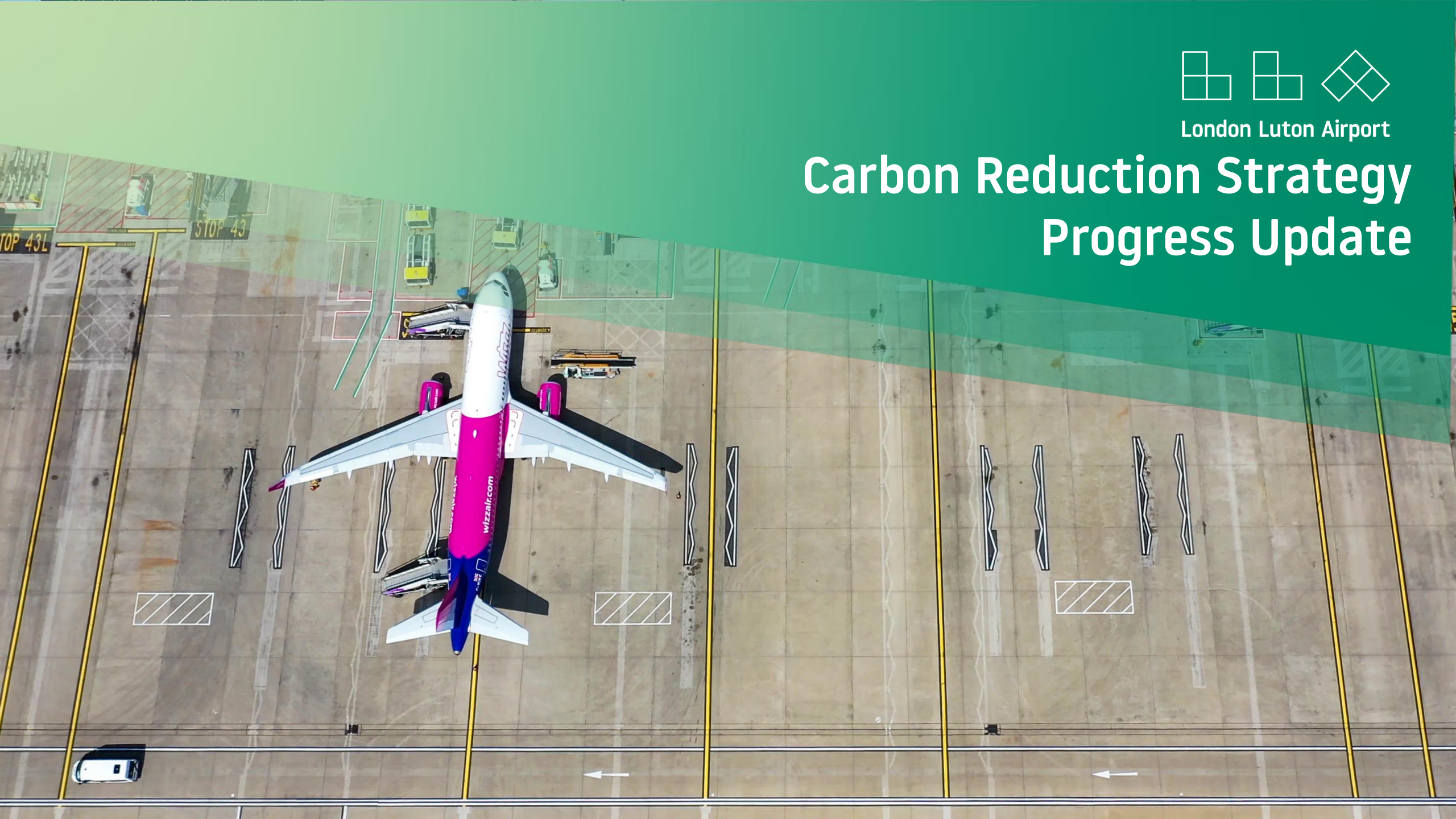
Carbon Footprint – Historic Performance

Summary Category	ACA Category	2019*	2020	2021	2022	2023*	2024	% of Scope	% of Total Emissions
Scope 1 – Total		**2,966**	**2,326**	**2,299**	**2,373**	**2,486**	**1,920**		
Mobile sources	Operational vehicles (airport)	1,137	536	447	773	801	423	22%	0.03%
Stationary sources	Heating and generation	203	129	192	184	158	149	8%	0.01%
	Natural gas (airport)	1,562	1,349	1,492	1,307	1,393	1,306	68%	0.1%
	Fire training	8	2	6	6	5	10	0.5%	0.001%
Process emissions	Refrigerant losses	55	309	162	102	103	8	0.4%	0.001%
	De-icing	-	-	-	-	25	25	1%	0.001%
Scope 2 – Total		**4,981**	**3,418**	**3,538**	**4,045**	**4,091**	**3,844**		
Purchased electricity	Purchased electricity (airport)	4,981	3,418	3,538	4,045	4,091	3,844	100%	0.3%
Scope 3 – Total		**1,260,951**	**115,214**	**525,631**	**1,072,991**	**1,199,668**	**1,216,151**		
Category 1: Purchased goods and services	Water consumption	46	18	7	16	21	21	0%	0.001%
	Non-road construction vehicles	-	-	-	62	497	394	0%	0.03%
Category 1: Purchased goods and services, and Category 2: Capital goods	Supply chain	-	-	-	13,549	23,578	16,659	1%	1.2%
Category 3: Fuel- and energy-related activities	WTT/T&D of scope 1 and 2	790	527	2,139	2,102	1,831	1,720	0%	0.1%
Category 5: Waste generated in operations	Waste	50	945	774	1,979	2,635	15	0.0%	0.001%
	Wastewater	90	35	12	28	23	24	0%	0.002%
Category 6: Business travel	Business travel	103	39	4	101	68	178	0%	0.01%
Category 7: Employee commuting and home office	Staff commute	1,010	436	680	931	1,648	1,251	0%	0.09%
Category 11: Use of sold products	Aircraft LTO and APU	188,267	66,789	59,372	115,162	159,030	158,448	13%	13.3%
	Aircraft CCD	930,561	-	428,882	838,325	873,200	883,875	75%	74.0%
	Aircraft engine testing	608	266	85	1,832	2,157	2,282	0.2%	0.2%
	Operational vehicles (third party)	3,179	1,592	1,505	2,621	3,661	3,625	0%	0.3%
	Aircraft de-icing	-	-	101	188	502	372	0%	0.03%
	Passenger surface access	131,923	41,859	29,857	94,176	127,411	120,046	8%	8.3%
	Tenant staff commute (new for 2024)	-	-	-	-	-	8,985	1%	0.6%
	Landside cargo transport (new for 2024)	-	-	-	-	-	14,443	1%	1.0%
Category 12: End-of-life treatment of sold products	MSCP decommissioning	-	-	-	-	-	193	0.0%	0.01%
Category 13: Downstream leased assets	Purchased electricity (tenant)	4,325	2,706	2,211	1,918	3,404	3,621	0%	0.3%
All Scopes Total (excl. outside of scope)		**1,268,898**	**120,958**	**531,469**	**1,079,409**	**1,206,243**	**1,221,916**		

**2019 & 2023 Carbon footprints have been adjusted in 2024 to account for new LTO + CCD methodology to reflect true taxi-in and taxi-out times in the LTO cycle, delivering a more robust and accurate carbon footprint output.*

London Luton Airport

Carbon Reduction Strategy Progress Update



Carbon Reduction Strategy

Theme	2024 Progress Update
Decarbonising our Operations	• Working towards this theme, LLA have planned on-site solar set to generate at least 25% of LLA electricity demand by the end of 2026 with planning permission not required following assessment of site requirements. In 2024, after six months of negotiation with our network partner, we reached an agreement in principle to proceed with the design development of our planned solar farm. Since April 2021, LLA has procured all electricity from renewable sources through the Renewable Guarantees of Origin (REGO) scheme. • As of 2024, 88% of LLA vehicles and buses are now low-carbon, operating on HVO or electric alternatives, reducing scope 1 emissions. Additionally, all landside leased car park transfer buses were replaced with new HVO fuelled buses, with airside "Cobuses" also transitioned onto HVO fuel. This is a transition measure as the airport moves to a fully-electric fleet where operationally feasible. • In 2024 we began trials of using HVO fuel in generators, reducing diesel consumption with results to be reviewed in 2025 to assess further LLA continues to upgrade its electrical and energy assets across the site in line with the site-wide energy audit conducted in 2022, whilst working with industry experts and operational teams to identify and implement further measures without impacting the requirement of the operation. In 2024, work was done to include a requirement for new suppliers to work proactively on energy efficiency and not just maintain the BMS (to be included in 2025 tenders). A feasibility study was also completed in 2022 on low carbon heating options, and a new boiler management system was installed in 2023 to ensure we only run the necessary number of boilers required for the operation. We are developing an internal refrigerant policy outlining the checks and best practice to be followed in line with relevant regulations to be implemented in 2025. New technologies explored in line with residual emissions review and continuous maintenance improvement. • LLA also began conducting a feasibility study in 2024 on potable and non-potable water usage across the site, with assessment of opportunties to substitute potable water sources, with a Water Use Plan to continue to be developed in 2025. • In 2024, LLA developed its internal business travel guidance and policy encouraging staff to consider virtual meetings where possible and use sustainable modes of transport for in personal meetings and events where feasible. • Recycling and landfill diversion have been at the core of LLA Waste management contracts since 2022, with record high recycling rates achieved and 100% diversion from landfill in 2024 from terminal and LLA managed waste. Work also continues to reduce per passenger waste output from LLA, alongside successful delivery of increased recycling rates with an average of 82% across 2024 on managed waste. • Looking forward to 2025, LLA is developing Construction Environmental Minimum Requirements to be incorporated into contractors SLA's to support the delivery of Responsible Business Strategy objectives.
Decarbonising the Ramp	• Working towards this theme, LLA engages with airlines on material shared goals such as SAF and objectives of the Jet Zero strategy, with references noted in the CCU and collaboration with local academia in 2024. LLA also collaborates with Government through forums such as Sustainable Aviation, Zero Emissions Flight Infrastructure Group and Sustainable Skies. In 2024, LLA signed a Memorandum of Understanding with Cranfield university which includes exploring research and operational feasibility studies on future flight supporting the goals of the Jet Zero strategy and Sustainable Aviation. • LLA also continues to work with airline partners through various mechanisms to increase the use of Next-Generation aircraft based and operating at LLA, with 60% of aircraft based at LLA in 2024 Next-Generation. • Introduced in 2017, GSE pooling has saved significant emissions from across the airfield from inefficient operations with enhanced use of telematics across the pooled fleet. In 2024, LLA continued to engage with airside operators and asset managers TCR to explore low-carbon fuel use and the trial of E-GSE equipment. • Additionally, LLA's main de-icing contractor uses forced air/blend to temperature techniques to reduce the amount of glycol required per Airframe, with the GlyVac units being used to collect residual fluid from de-icing locations across the airfield.

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Reducing Noise Impact	• As set out in the Noise Action Plan, engagement with operators on ACOP and DCOP procedures took place throughout 2024, increasing the number of points of engagement with operators each year. Engagement with operators in regard to the use of delayed landing gear techniques also took place in 2024, with the introduction of monitoring systems where feasible. A full review of practices will be undertaken in 2025 and updated as part of the Noise Action Plan schedule. • LLA applies strict restrictions on engine testing, with time-based charging on engine testing and no engine testing taking place in 2024 during the restricted night period. • LLA also enforces an APU Use policy through the Operational Safety instructions to be followed by all airside users, which restricts usage to 30 minutes before departure and 5 minutes after arrival. LLA held ongoing engagement with operators throughout 2024 and are continuing to explore further mechanisms to reduce usage. • In regards to airspace modernisation, the Airspace Change Programme is currently delayed. The existing CAA/DfT methodology for airspace redesign has been deemed inadequate for the programme of this scale. The DfT through the CAA are expected to introduce a new UK Airspace Design Service aligned with the updated regulatory frameworks. This approach aims to enable faster and more effective airspace changes, with implementation expected from 2031 onwards.
Sustainable Surface Access	• In 2024, LLA published its new Airport Surface Access Strategy and associated travel plan, a full update of which can be found in the ASAS 2024 update on employee and passenger surface access. • Working towards the theme of sustainable surface access, LLA has developed an electric vehicle transition roadmap and charging strategy in collaboration with industry experts as we continue with the transition to electric operational vehicles. • Additionally, in 2024 LLA introduced the electric vehicle salary sacrifice scheme in partnership with Octopus energy, with over 40 employees signed up to the scheme. • We also continue to review current car parking and drop of charges and operations in line with in line with 2024 ASAS passenger requirements. • As of 2024, 126 taxis now hold a licence with Luton Council to use the taxi forecourt at LLA, with 43 of those being electric and eligible for discounted licensing rates for taxis with Euro 6 standard. • New contracts have also been implemented with Arriva Green Line and National Express to ensure a consistent use of Euro 6 coaches. LLA is currently exploring with coach operators a potential trial of electric coaches. • Clear signage has been installed across the terminal forecourt to enforce our "no idling" policy and support strict compliance with the potential of additional charges applied by the car parking management agency.

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