

Environmental Monitoring Report

3rd Quarter: June - September 2024

Agenda

- Actions from last meeting
- General Sustainability Update
- Environmental Update
- Progress Update: Net zero and ACT
- AOB

Actions from last meeting

Hannah Pollard

Q3 General Sustainability Update

Hannah Pollard

Sustainability Update – Q3 2024

- Onsite sortation facility is live. Currently tracking at 60% recycling rate.
- Concept and design work has begun for the energy centre, which will remove gas from the terminal.
- Over 66,000 staff journeys made by public transport over the summer season, up 26% compared to Summer 2023.
- By end of 2024, over 50% of airside buses will be electric.
- Full £200,000 awarded for Noise Mitigation Scheme.
- Action plan for Bristol Airport's Energy Savings Opportunities Scheme is underway.

Sustainability Update

Net zero operations by 2030

- Design work on Energy Centre to be commissioned, which will facilitate the removal of boilers that currently heat the terminal and will remove gas onsite by 2026.
- 19% on site renewable energy generation with plans in place to get to 22-23%.
- By end of 2024, 50% of airside buses will be electric. First landside bus was delivered last month, 2nd due although there are delays in delivery.
- CO2 emissions from airport operations have reduced by 15% lower compared with this time last year, ahead of 10% reduction target.

Reducing indirect emissions

- EV Charging Hub to be developed opposite Lulsgate House.
- 173,645 staff journeys by public transport. Up by 30% compared to 2023

Noise management

- Full £200k awarded from Noise Mitigation Scheme in 2024.

Waste management

- On site sortation facility now live which will significantly increase on-site recycling rates.



Environmental Update

Whitney Love

Aircraft Operational Environmental Compliance



Track Keeping- within Departure Noise Preferential Routes Continuous Descent Approach- higher for longer with smooth decent

Team have started to monitor CDA, maximum noise and track keeping performance daily to provide a deeper dive into aircraft operation environmental compliance, rather than monthly.

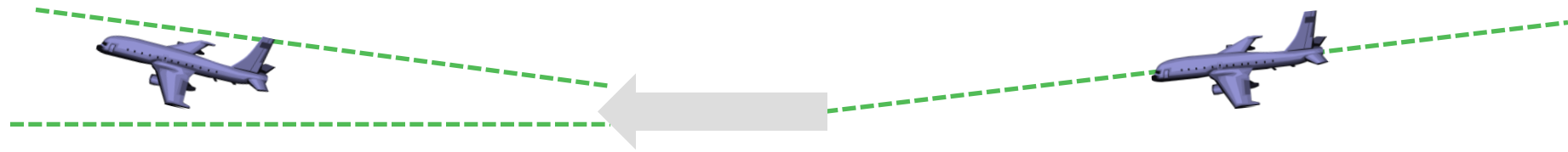
All aircraft over 5700kg maximum take off weight, which is the weight limit to be defined as a 'light aircraft' by the European Union Aviation Safety Agency and the UK gov, are tracked for compliance.

Results:

- More accurate data – easier to spot trends and dictate root cause
- Oversight of maximum noise levels to fine aircraft if exceed (levels are being reviewed next year)
- Improved breakdown of conformance between all and main airlines
- Follow up on days with below expected conformance with the relevant stakeholders. Eg) NATs and Airlines

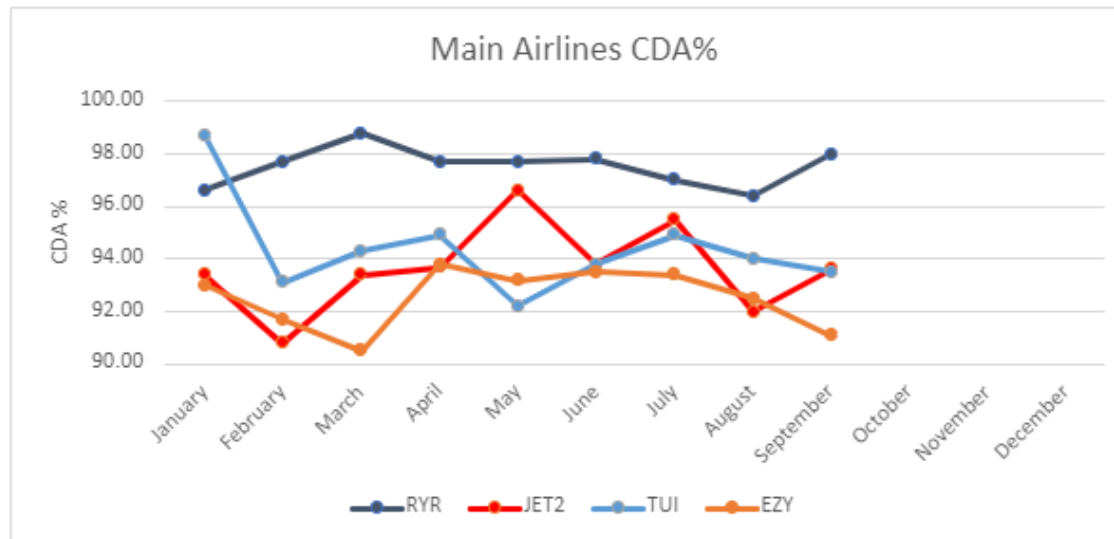
Day	Off Track Departures Runway 27 (IFR)	Off Track Departures Runway 09 (IFR)	Total Main Airlines	Non-CCO All	Non-CCO Main Airlines	Non CDOs to Runway 27 ANOMS (IFR)	Non CDOs to Runway 09 (IFR)	Total Main Airlines	Total Main Airline Arrivals	Main Airline Departures	Max Noise (LH))	Callsign	Aircraft Type	Max Noise (C))	Callsign	Aircraft T
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Airspace Activity- Approach and Departure



Track Keeping- within Departure Noise Preferential Routes Continuous Descent Approach- higher for longer with smooth decent

	January	February	March	April	May	June	July	August	September
2024 Total Arrivals	2113	2310	2712	3059	3633	3757	3847	3874	3793.00
2024 CDA% (All Airlines)	In Review								89.76
YTD	In Review								
2024 CDA% (Main Airlines)	95.43	93.33	94.25	95.03	94.93	94.73	95.20	93.73	94.05
2024 YTD (Main Airlines)	95.43	94.38	94.33	94.51	94.59	94.61	94.70	94.58	94.52



Engagement with airlines: flight path and glide slope for low drag approach

EZY- landing gear deployed ~2250ft in normal ops – declaration, 6nm

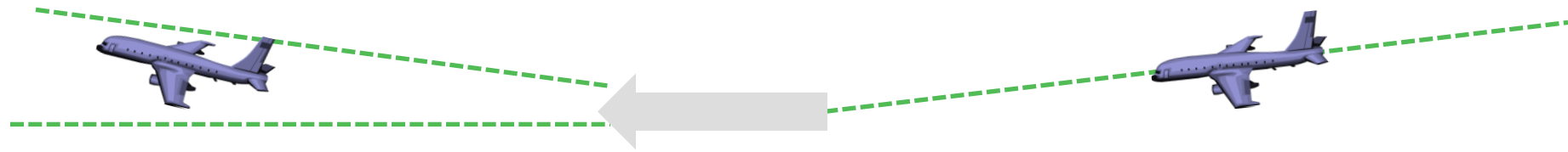
Jet2 - ~1300ft

RYR - ~500ft



- Performing stronger YTD than in 2023, by 0.7%
- Factors affecting CDAs include weather and the experience of pilots operating flights that month that month
- EZY YTD performance remains up over 1.5% from 2023 in April 24. Main based airline at BRS. TUI and JET2 performance also up compared to YTD by Sept 23/24.
- All airlines – reviewing using daily compliance checks hereon, and retrospectively for rest of 24. Will review in full Q1 25.
- Six days of storm weather impacted CDA performance in Sept 24, resulting in 17 non-compliant main Airline CDAs over 3 days, equating to 81% compliance (vs daily average of 7 non-complaint main airline CDAs).

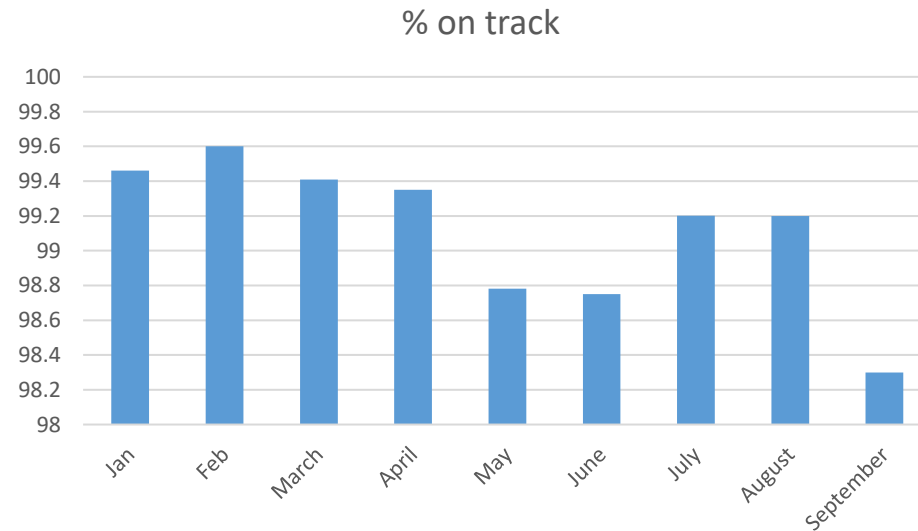
Airspace Activity- Approach and Departure – All Airlines



Track Keeping- within Noise Preferential Routes

Continuous Descent Approach- higher for longer with smooth decent

2024	Departures	Violations	% on track
Jan	2,036	11	99.46
Feb	2,264	9	99.6
March	2,685	16	99.41
April	3,101	20	99.35
May	3,529	43	98.78
June	3,605	45	98.75
July	3,752	30	99.20
August	3737	30	99.2
September	3,814	64	98.3
October			
November			
December			
Average			99.12



September:

- 6 thundery, storm days - 4 of which, ATC diverted Aircraft out of NPRs to avoid electrical storms
- 34 non-conformities to tracks from main Airlines – 24 of these occurred during ATC diversion days due to storms
- 2 days, AM storms – primarily affecting departures

Data only inclusive of movements of Aircraft over 5700kg in 2024

Previous data provided inclusive of helicopter movements and aircraft below 5700kg which are exempt from track keeping as aviation standard.

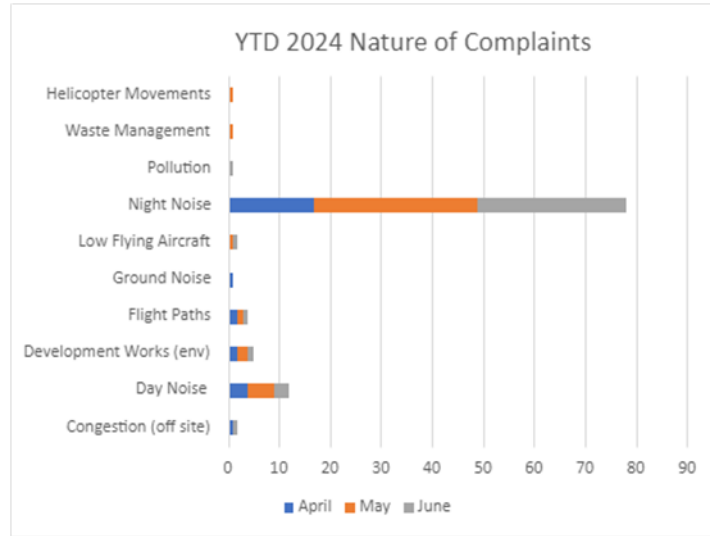
Track keeping – up to 4,000ft

2024 Noise Mitigation Scheme (NMS) - Closed

	No. of Households Granted Funds	Sum (from quotes - allocated)	Remaining Funds Distributed	
Backwell	2	£10,000.00	/	
Cleeve	5	£19,959.92	£3,579 (1 property)	
Felton	15	£87,881.60	/	
Winford	16	£59,262.40	£14,316 (4 properties)	
Wrington	1	£5,000.00	/	
Totals	39	£182,103.92	£17,896.08	£200,000.00

- Total of 34 eligible applicants across both periods - £182,103.92 total granted.
- **£80,284 has been paid to cover work at 17 properties to date.**
- £17,896.08 remained in fund minus eligible applicants.
- Community Fund reviewed 7 applications that were positioned slightly outside the contours and agreed to split the remaining balance across 5 households closest to contours. equaling circa. £3,579 per household. **£200k allocated to assist 39 properties.**

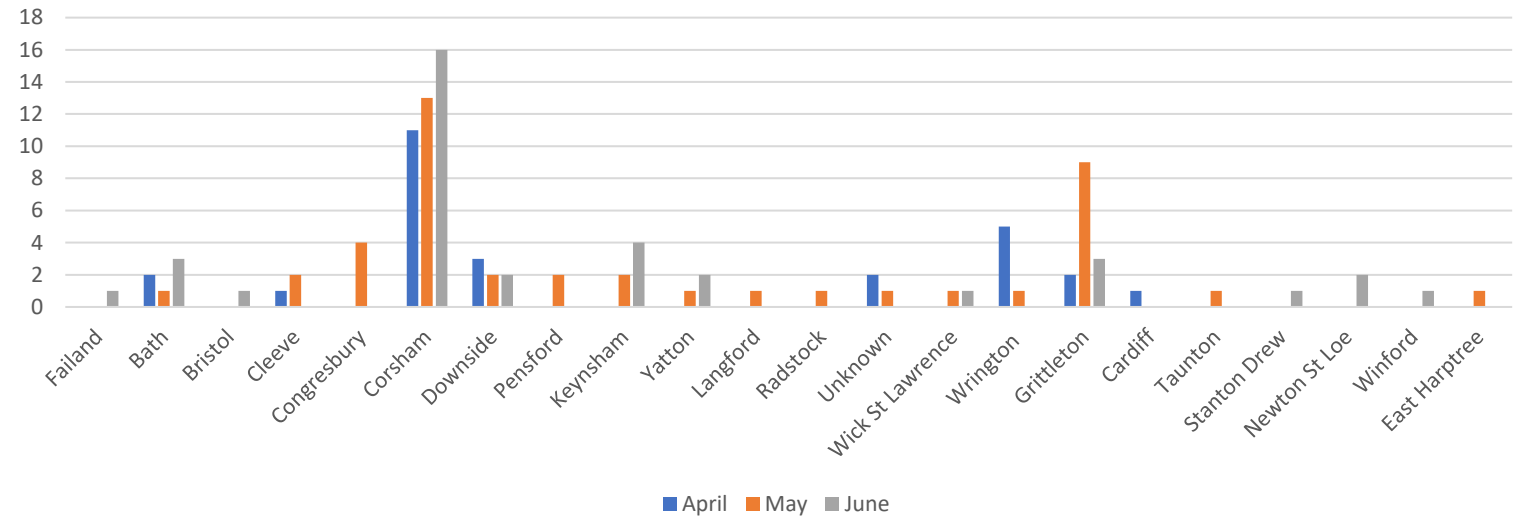
Environmental Complaints – Q2



	April	May	June
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Complaints Total	27	43	37
Noise (CRM)	21	37	32
Other CRM	5	4	4
Other Sources	1	2	1
Complainants this month	11	21	20
Complainants (YTD)	65		

YTD 2024 Location of Complaints

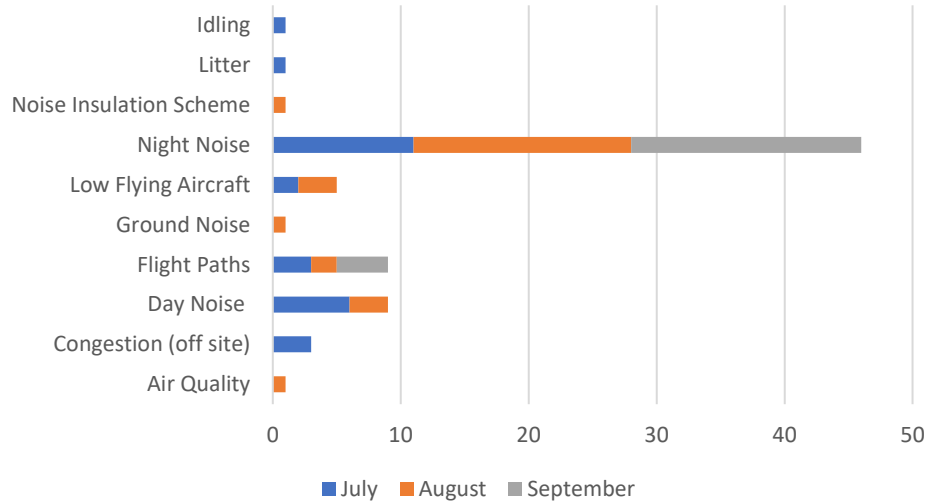


* - Corsham – One complainer. From Q3, identified as a serial complainer and each month is identified as one complaint, so that the statistics are not skewed.

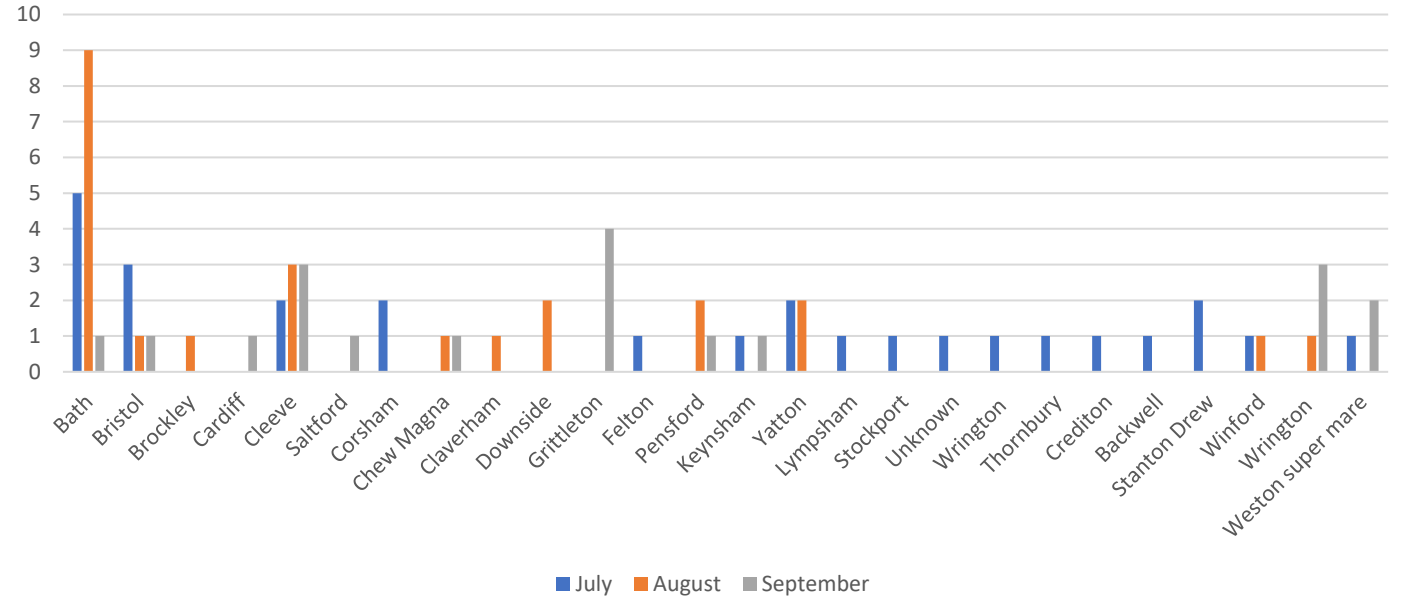
	January	February	March	April	May	June	July	August	September	October	November
2023	4	2	18	15	25	58	41	42	40	19	23
2024	10	12	27	27	43	37					

Environmental Complaints – Q3

YTD 2024 Nature of Complaints



2024 Location of Complaints

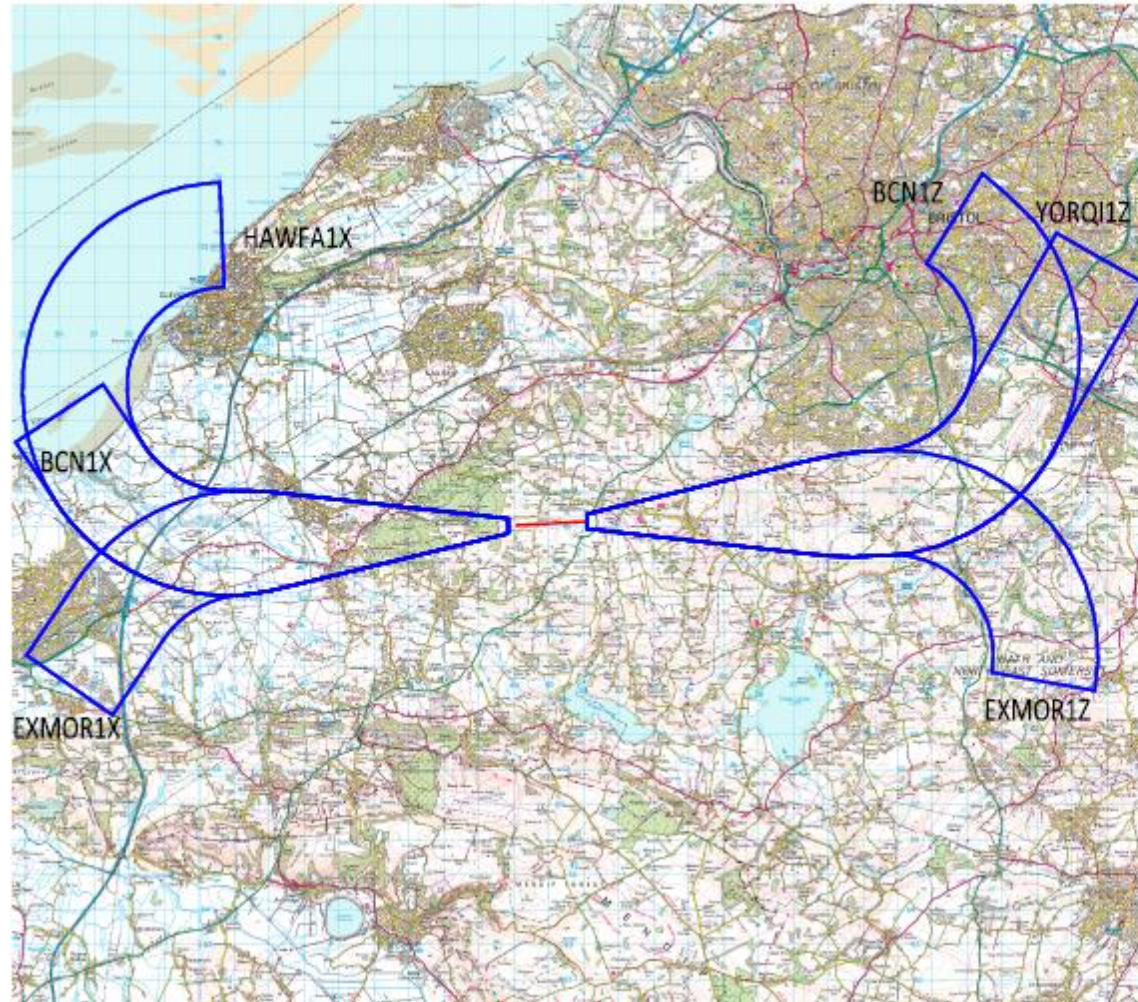


	July	August	September
Complaints Total	27	28	22
Noise (CRM)	22	27	18
Other CRM	5	1	4
Other Sources	0	0	0
Complainants this month	25	25	14
Complainants (YTD)	115		

* - Corsham – One complainer. From Q3, identified as a serial complainer and each month is identified as one complaint, so that the statistics are not skewed.

	January	February	March	April	May	June	July	August	September	Total YTD
2023	4	2	18	15	25	58	41	42	40	233
2024	10	12	27	27	43	37	27	28	22	233

Noise Preferential Routes



This drawing contains Ordnance Survey data © Crown Copyright and database right 2023.

LEGEND:

- Bristol Airport Runway
- Departure Route Corridor

Rev	Date	Description	Initials

REVISIONS

**Bickerdike
Allen
Partners**
Architecture
Acoustics
Technology

121 Salisbury Road, London, NW6 6RG
Email: mail@bickerdikeallen.com T: 0207 625 4433
www.bickomfkaallen.com F: 0207 625 0250

**Bristol Airport
Noise Action Plan**

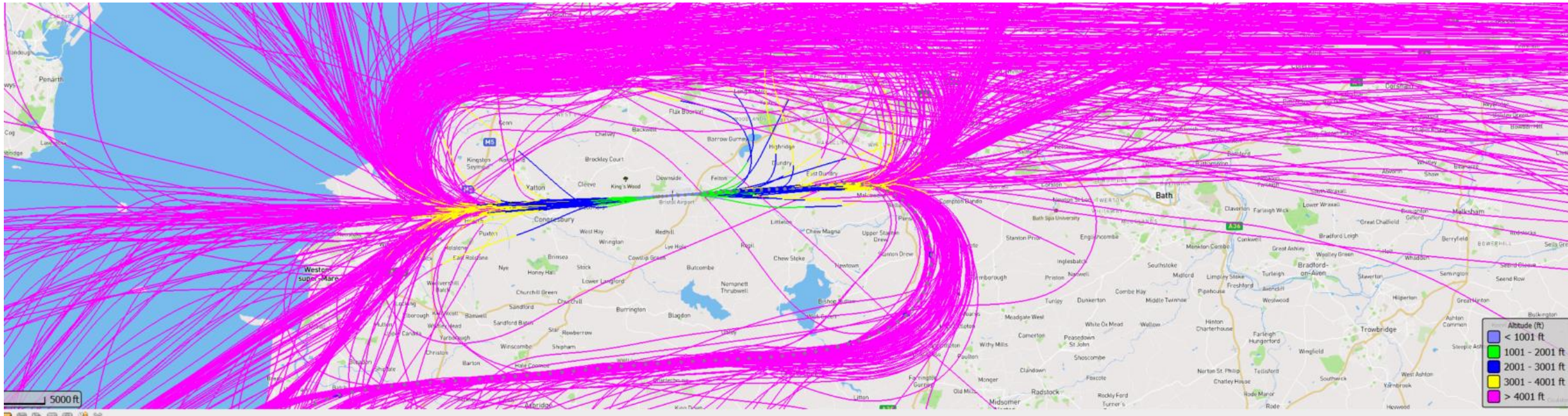
Departure Route Corridors

DRAWN: JC CHECKED: NW
DATE: June 2023 SCALE: 1:150,000@A4

Drawing No:

A11519 01 DR001 1.0

Departure Tracks by Altitude – WC 01/09 - Departures



Departure Tracks by Altitude – WC 01/09 – Arrivals

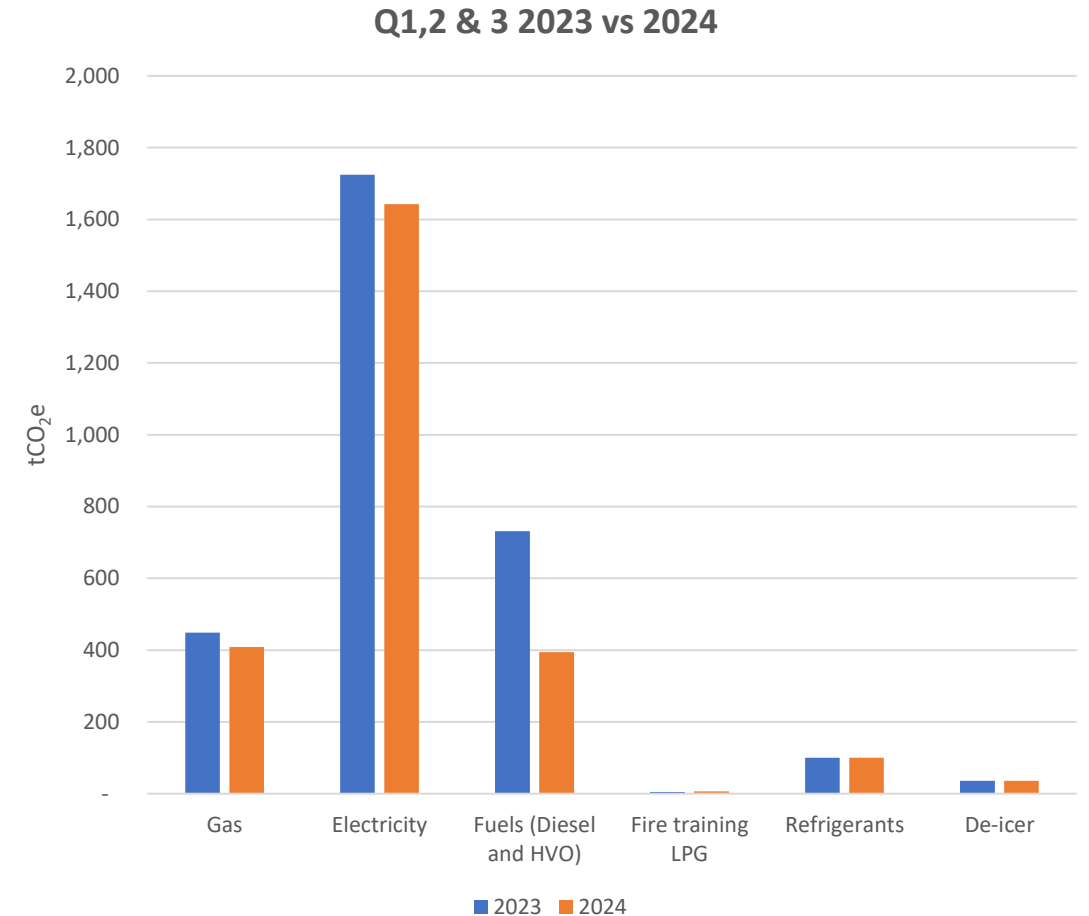


Net Zero: Carbon update

Dan Samson

2023 vs 2024 Operational Emissions

- Significant progress has been made towards our 2030 Net Zero operational emissions goal this year.
- We are on track to surpass our 10% annual emissions reduction target.
- So far this year the solar farm has produced over 1,200,000 kWh of electricity (enough to power one of our electric cars to travel 4,000,000 miles).
- All landside buses are now either electric or run on HVO (Hydrotreated Vegetable Oil) which has reduced emissions from Bristol airport owned vehicles by over 40%.



Aviation Carbon Transition Programme

ACT 2024

- ACT - Aviation Carbon Transition
- The fund is limited to £250,000 per annum
- Aims to kick start and fast track decarbonisation initiatives in the South West focusing on Scope 3 emissions
- This is an annual fund running from 2021 to 2031

Successful projects

Nature investment strategy, Wanderlands

- The project will outline short, medium and long term investment strategies into UK carbon offsetting projects on a local, regional and national basis within the UK.
- This will secure carbon offsets from high integrity and transparent projects as this becomes an area of increased scrutiny and questioning from local groups.
- Along with the defined carbon benefits this project can offer, there are secondary benefits through increasing the habitat quality of a given area and enhancing the local environment.



Wanderlands

Successful projects

Hydrogen feasibility study, Ultima Forma

- The project involves designing, analysing, and animating a mobile liquid hydrogen refuelling system for Bristol Airport.
- The project would be overseen by Steve Newbury (MD) at Ultima Forma who led the academic research programme for the ATI's (Aerospace Technology Institute) FlyZero programme.
- The project will provide design drawings and analysis of how a mobile hydrogen refuelling system would integrate into the airport.



Successful projects

Nuclear derived SAF and hydrogen, Equilibrion

This project will carry out research and development on nuclear-derived SAF and hydrogen production, as part of a feasibility study to investigate how these fuels can be produced within the Bristol City and North Somerset regions and be delivered to Bristol Airport for use in planes and land transport vehicles.

Supporting objectives are:

- Assess technology development requirements
- Provide an evidence base covering economic, social value and carbon reduction impacts
- Identify other opportunities for nuclear to support airport carbon transition (e.g. direct air capture)
- Provide a delivery roadmap to making the scheme a reality



AOB

All