Sustainable Aviation Fuel (SAF) Incentive in Heathrow Aeronautical Charges Guidance for Airlines

Version 3: 15 December 2023

1. HOW IS SAF DEFINED?

For the purpose of the SAF Incentive, Heathrow will accept SAF which is captured under the UK Department for Transport's ("**DfT**") Renewable Transport Fuel Obligation ("**RTFO**") definition of SAF¹ (as amended, updated or replaced).

Qualifying SAF must meet the DfT's minimum requirements:

- Reduce CO₂e by at least 60% relative to fossil kerosene on a lifecycle basis;
- Biofuels may not be made from raw material obtained from land with high biodiversity value;
- Biofuels may not be made from raw material obtained from land with high carbon stock, such as forests or land that was undrained peatland in January 2008.

Consistent with the EU Renewable Energy Directive ("**RED II**"), it is expected that biofuel crops will be progressively excluded in future. The RTFO has been expanded to reward recycled carbon fuels ("**RCFs**"). RCFs are fuels produced from fossil and biogenic wastes that cannot be avoided, reused or recycled; and to be more flexible in rewarding renewable fuels of non-biological origin ("**RFNBO**").

Heathrow's clear preference is for RCFs – such as fuels produced from municipal solid waste, cellulosic waste (such as forestry and agricultural residues) and used cooking oil, and RFNBO including 'power-to-liquid' fuels using renewable electricity in their production. Use of RCFs and RFNBO, however, is not a requirement for this SAF Incentive.

At present, Heathrow does not differentiate between the minimum requirement and the leading-edge SAF because we believe that the priority is currently to support the SAF market to gain momentum. As this SAF Incentive progresses over the coming months and years, we intend to keep sustainability standards under constant review and we will likely consult on more stringent sustainability standards for future scheme years.

2. WHAT CONSTITUTES THE USE OF SAF AT HEATHROW?

Provided that it offers an auditable and verifiable path, measurement, reporting and verification of SAF use should align to the UK Emissions Trading Scheme ("**UK ETS**"). We welcome feedback as part of annual airline engagement regarding how to continue to make this SAF Incentive scheme easy to use as well as effective.

2.1. Documentation required to prove sustainability

In line with the UK ETS, the EU Emissions Trading Scheme ("**EU ETS**") and the ICAO Carbon Offsetting and Reduction Scheme in International Aviation ("**CORSIA**"), to ensure that the fuel is sustainably produced, Heathrow requires a copy of the Product Transfer Document received by the airline when it places its order for SAF with its fuel supplier as well as a verified emissions reduction report.

The manufacturing facility of the SAF must be certified to:

- The Roundtable on Sustainable Biomaterials ("RSB");
- The International Sustainability and Carbon Certification ("ISCC");

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/947710/rtfoguidance-part-2-carbon-and-sustainability-2021.pdf

2.2 Documentation required to prove uplift at Heathrow

SAF is considered to have been delivered to Heathrow on provision of evidence of receipt at London Heathrow Airport or delivery into a pipeline connected to London Heathrow Airport, on a mass balance basis.

Evidence can include a suitable batch delivery or 'movement ticket', or another accepted proof of delivery to a Heathrow Airport fuel supply location.

A copy of the Product Transfer Document(s) and the associated movement ticket for the batch should be sent by email to: airline.relations@heathrow.com. Any commercially sensitive financial information on these documents can be redacted as necessary, so long as Heathrow is able to determine the information required for the purpose of the SAF Incentive, for example, the type of SAF claimed for and the volume delivered to the Airport.

For 2024 claims, evidence of SAF delivery to the Airport must be provided by 31 January 2025 and will be required for verification prior to allocation of any applicable SAF Credit.

3. HOW DOES THE SAF INCENTIVE WORK?

As set out in our 2024 airport charges decision document, the SAF Incentive will collect the incentive pot through the NOx charge (which in turn is within the movement charge) and re-distribute the pot back to airlines who delivered SAF to Heathrow in 2024. The SAF Incentive is calculated by reference to reducing the premium price gap between fossil kerosene and SAF fuel by approximately 50%. For the purpose of the SAF Incentive in 2024, Heathrow has assumed the premium to be £920 GBP per tonne net of Renewable Transport Fuels Certificate (RTFC) value, so will incentivise SAF delivery to Heathrow Airport on the basis of £460 per tonne.

In 2024, to recognise that this increase in the NOx emissions charge will drive additional revenue outside the MAY due to cargo ATM charges there will be two SAF incentive pots. One pot for Passenger ATMs and a separate pot for Cargo ATMs which will be funded by the additional revenue created by NOx emissions charge on cargo ATMs. The Passenger ATM incentive pot will be allocated based on an airlines' Revenue Passenger Kilometres (RPK) to incentivise fuller aircraft. Similarly, the Cargo ATM pot will be allocated based on Freight Tonne Kilometres (FTK)

4. Obtaining SAF at Heathrow

Airlines should work directly with fuel suppliers who will arrange delivery of SAF to the airport. Heathrow Airport Ltd is not directly involved in the aviation fuel supply chain – the fuel farm and hydrant infrastructure system at the airport is managed, maintained and operated by the Heathrow Hydrant Operating Company Ltd (HHOpCo). However, airlines should contact fuel companies not HHOpCo to obtain SAF for delivery at Heathrow.

5. Timeline

5.2 In December 2023, Heathrow will calculate the relevant LHR Revenue Passenger Kilometres ("RPK") and Freight Tonne Kilometres ("FTK") (as set out further below) for all airlines operating from Heathrow Airport. The calculation will be based on the 12 month period from Dec 2022 – Nov 2023.

- 5.3 By 5pm (UK time) on 31 January 2024, all Airlines wishing to participate in the SAF Incentive for 2024 must have contacted Heathrow to state their intention to do so by sending an email to airline.relations@heathrow.com outlining:
 - (i) the number of tonnes of SAF they propose to deliver to Heathrow Airport in 2024; and
 - (ii) their nominated contact person for the SAF Incentive.
 - The subject line of the email should read: [Airline Name] SAF Incentive 2024.
- 5.4 By 5pm (UK time) on 16 February 2024, Heathrow will review airlines submissions, calculate, and publish the final allocation. An example of the calculation methodology is set out in paragraph 6, below.
- 5.5 Airlines will have until 31 December 2024 to deliver the allocated SAF to Heathrow Airport.
- 5.6 By 31 January 2025 Airlines must provide Heathrow with evidence of the delivery and the necessary certificates (as set out above).
- 5.7 Subject to compliance with the terms of the SAF Incentive, as set out in the COU, Heathrow will allocate the relevant credit to the Airline's Heathrow airport charges account. The terms applicable to this are set out in the COU.

6. How the size of the incentive pot is calculated

The pot size is calculated as demonstrated below:

Calculation Element	Example
Forecasted movements at Heathrow in 2024	467k movements
Fuel requirement	≈6.2m tonnes
Desired SAF mix outcome	2.5%
50% of SAF Premium	f920 x 50% = f460
Incentive pot	≈ 6.2m t x 2.5% ≈ 155k t x £460 ≈ £71m

7. How the incentive pot is allocated to airlines

The table below is an illustrative calculation for how SAF incentive allocation per airline will be calculated using Revenue Passenger Kilometre (RPK) for passenger ATMs. The same process will be applied for the Cargo ATM incentive pot.

POT (T)	POT (£)		oublish SAF Incentive airline based on ASK	2. Airlines to submit proposal to HAL	HAL to calculate SAF allowances per airline based on received proposals			4. HAL to publish final SAF allocations by airline		
155609	£71,580,000	By end of I	December 2023	By end of January 2024	Final allocation calculation period			By 16th of February 2024		
									Final	
Name	RSK share	Allowance £	Allowance T	Airline Proposal T	Step 1	Step 2	Step 3	Final Allocation T	Allocation £	
Α	В	С	D	Е	F	G	Н	1	J	
Airline 1	40%	28,632,000	62244	85500	62244	17516	2849	82609	£38,000,000	
Airline 2	25%	17,895,000	38902	26000	26000	0	0	26000	£11,960,000	
Airline 3	20%	14,316,000	31122	38500	31122	7378	0	38500	£17,710,000	
Airline 4	10%	7,158,000	15561	0	0	0	0	0	£0	
Airline 5	5%	3,579,000 7780		8500	7780	720	0	8500	£3,910,000	
				158500	127146	25614	2849	155609	£71,580,000	

- **Step 1:** Proposals within allowances (D) are assigned, any airline proposal (E) higher than allowance (D) goes to step 2.
- **Step 2:** As Airlines 2 and 4 did not utilise their full allowance (D), we will redistribute unallocated tonnage to airlines who want to purchase over their initial allowance (D) Remaining tonnage is allocated using RPK share of Airlines 1,3 and 5. Calculation will allocate up until airlines proposal number (E) is hit. This is visible in Airlines 3 and 5 which have been allocated the full proposal amount (E) at this stage. Any remaining tonnage after this step will move to step 3
- **Step 3:** So far Airlines 2,3,4 and 5 have been allocated full proposal amount (E). Since the difference between Airline 1 proposal (E) and what has been allocated so far (F) and (G) is more than 2849, the whole remaining tonnage will be allocated to Airline 1. Should there be more airlines with unused allocation at this stage we would repeat allocation logic from step 2 until we allocate full tonnage allowance of 155609.

8. SAF Incentive initial allocation per airline for 2024 based on RPK*

Airline	%	Tonnes	Airline	%	Tonnes	Airline	%	Tonnes
British Airways	35.57%	55,169	Air Mauritius	0.38%	593	Uzbekistan Airways	0.05%	82
Virgin Atlantic Airways	9.52%	14,769	All Nippon Airways	0.36%	566	Azerbaijan Airlines	0.04%	70
American Airlines	7.22%	11,195	Iberia	0.36%	565	Air Serbia	0.04%	64
United Airlines	4.96%	7,693	Vietnam Airlines	0.36%	551	Air Algerie	0.04%	62
Singapore Airlines	3.06%	4,750	China Eastern Airlines	0.35%	546	Tarom Romanian Air Transport	0.04%	61
Air Canada	2.99%	4,634	Jetblue Airways	0.33%	515	Brussels Airlines	0.03%	43
Emirates	2.98%	4,625	Egyptair	0.33%	511	Bulgaria Air	0.02%	38
Delta Air Lines	2.59%	4,016	China Airlines	0.32%	489	Klm Cityhopper	0.02%	28
Qatar Airways	2.49%	3,866	Finnair	0.29%	446	Sky Express	0.02%	27
Cathay Pacific Airways	2.45%	3,802	El Al Israel Airlines	0.28%	441	Jazeera Airways	0.02%	24
Qantas Airways	2.34%	3,637	Transportes Aereos Portugueses	0.28%	434	Croatia Airlines	0.02%	24
Air India	1.74%	2,697	Oman Air	0.27%	425	Tunisair	0.01%	20
Etihad Airways	1.39%	2,150	Aegean Airlines	0.27%	418	Wideroe	0.00%	4
Thai International Airways	1.13%	1,757	Aer Lingus	0.27%	416	Aeroitalia	0.00%	1
Malaysia Airlines	1.12%	1,743	Biman Bangladesh Airlines	0.25%	389			
Saudi Arabian Airlines	0.86%	1,331	Swiss International Air Lines	0.23%	359			
Tam Linhas Aereas	0.78%	1,212	Royal Brunei Airlines	0.22%	339			
Japan Airlines	0.71%	1,097	Middle East Airlines	0.19%	293			
Turkish Airlines	0.69%	1,064	Royal Jordanian Airline	0.18%	280			
Eva Airways	0.68%	1,054	Beijing Capital Airlines	0.17%	262			
Gulf Air	0.57%	887	Eurowings	0.15%	231			
China Southern Airlines	0.57%	886	Rwandair	0.15%	228			
Sri Lankan Airlines	0.56%	863	Austrian Airlines	0.15%	227			
Tata Sia Airlines	0.55%	858	Air Malta	0.14%	221			
Air China	0.51%	792	Icelandair	0.12%	193			
Kenya Airways	0.48%	749	Lot Polish Airlines	0.12%	183			
Korean Air	0.46%	715	Tianjin Airlines	0.11%	168			
Kuwait Airways	0.46%	714	Italia Trasporto Aereo	0.09%	147			
Scandinavian Airlines System	0.46%	708	Royal Air Maroc	0.08%	126			
Westjet	0.45%	701	Loganair	0.08%	118			
Asiana Airlines	0.45%	695	Air France	0.08%	117			
Aerovias de Mexico	0.42%	656	Hainan Airlines	0.07%	110			
Avianca	0.41%	638	Iran Air	0.06%	99			
Lufthansa	0.40%	615	Air Astana	0.06%	96			
Ethiopian Airlines	0.40%	615	Klm Royal Dutch Airlines	0.06%	90			

^{*}Allowances are subject to change in accordance with 8.12, Schedule 4 of the COU 2024 relating to penalties for not meeting SAF deliveries confirmed for 2024.

9. Cargo ATM Incentive initial allocation per airline for 2024 based on FTK

Airline	%	Tonnes	Airline	%	Tonnes
Emirates	13.61%	132	Silk Way West Airlines	0.43%	4
Qatar Airways	12.39%	120	Egyptair	0.33%	3
Korean Air	11.63%	113	Uzbekistan Airways	0.17%	2
Cathay Pacific Airways	10.41%	101	Mng Havayollari Ve Tasimacilik	0.16%	2
Singapore Airlines	9.96%	96	Jetex	0.14%	1
European Air Transport	6.25%	60	Royal Jordanian Airline	0.11%	1
China Eastern Airlines	5.77%	56	European Cargo	0.05%	1
One Air	4.20%	41			
Ethiopian Airlines	4.02%	39			
Turkish Airlines	3.22%	31			
Aerotranscargo	2.58%	25			
Ana Airline Management	2.48%	24			
DHL	2.09%	20			
Etihad Airways	1.80%	17			
Air China	1.65%	16			
Flightworx Aviation	1.64%	16			
Magma Aviation	1.35%	13			
National Air Cargo Group	1.31%	13			
Romcargo Airlines	1.24%	12			
British Airways	0.80%	8			