



HEATHROW AIRPORT SUSTAINABILITY-LINKED BOND FRAMEWORK ASSESSMENT

Heathrow

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This assessment is valid as long as the evidence provided to DNV remains materially unchanged and remains applicable in the context of the financing framework being assessed.

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Disclaimer

Our assessment relies on the premise that the data and information provided by the client to us as part of our review procedures have been provided in good faith. Because of the selected nature (sampling) and other inherent limitations of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities, possibly significant, may not have been detected. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organisation were applied as per the scope of work. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this assessment.

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DNV applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2011 - Conformity Assessment Requirements for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We have complied with the DNV Code of Conduct¹ during the assessment and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. DNV was not involved in the preparation of statements or data reviewed as part of this assessment. DNV maintains complete impartiality toward stakeholders interviewed during the assessment process.

¹ DNV Code of Conduct is available from the DNV website (www.dnv.com).

HEATHROW AIRPORT SUSTAINABILITY-LINKED BOND FRAMEWORK

DNV INDEPENDENT ASSESSMENT

Scope and Objectives

Heathrow Airport Holdings Limited (hereafter referred to as “Heathrow” or the “Company”) indirectly owns Heathrow Airport Limited, which owns and operates Heathrow airport. Heathrow is the largest airport in the UK, one of the busiest airports in Europe, and among the top ten airports worldwide in terms of passenger numbers². The Company is also one of three international airports that operates over seventy-five direct long-haul routes. In 2022, there were one-hundred-and-four long-haul and one-hundred-and-fourteen short-haul routes, serving eighty-four passenger airlines. The Company is also the UK's largest port by value for non-EU markets, with over one-point-four million tonnes of cargo at a value of more than £203 billion having passed through it in 2022³.

As part of its strategic plan, Heathrow has pledged its commitment to sustainable growth, placing sustainability as one of its four business priorities since 2016. To deliver on its commitments, the Company has recently refreshed its sustainability strategy to better reflect the updated landscape and changed priorities following COVID-19, which has seen the aviation industry confront the biggest crisis in its history. The refreshed strategy is called “Heathrow 2.0: Connecting People and Planet”⁴, which has been structured around two pillars:

1. “Net Zero Aviation”: This includes Heathrow’s plan to transition to a decarbonised aviation model by 2050, as outlined in “Heathrow’s Net Zero Plan”⁵, with solutions being rolled out this decade. Their objectives under this pillar are centred around two 2030 goals to cut absolute carbon emissions. The goals set 2019 as the baseline and the year of “peak carbon” emissions going forwards, with target reductions as follows:
 - a) up to a 15% cut in carbon from flying (or carbon ‘in the air’), and
 - b) at least a 45% cut in carbon from surface access, supply chain, vehicles, buildings and infrastructure (or carbon ‘on the ground’).
2. “Great Place to Live and Work”: This focuses on improving the quality of life of Heathrow’s colleagues and neighbours and by making a positive impact in its community.

These two pillars are supported by Heathrow’s responsible business foundations, which show how Heathrow addresses a range of key and material issues to the business including safety, security and governance, through its strategies and policies.

Heathrow is proposing to incorporate sustainability into its financing strategy through the development of a Sustainability-Linked Bond Framework (hereafter referred to as the “Framework”), setting targets that incentivise the transition to a decarbonised aviation model and to achieve the two 2030 strategic goals to cut absolute carbon emissions.

DNV Business Assurance Services UK Limited (“DNV”) has been commissioned by Heathrow to provide an eligibility assessment of the Framework. Our objective has been to provide an assessment of whether the

² Heathrow | Sustainability-Linked Bond Framework.

³ Heathrow | Base Prospectus – June 2023.

⁴ Heathrow | Heathrow 2.0: Connecting People and Planet ([online](#)).

⁵ Heathrow | Heathrow’s Net Zero Plan ([online](#)).

Framework meets the criteria established within the International Capital Market Association (“ICMA”) Sustainability-Linked Bond Principles (“SLBPs”) 2023. Our methodology to achieve this is described under ‘Work Undertaken’.

No assurance is provided regarding the financial performance of the Framework the value of any investments, or the long-term environmental benefits of the associated transactions. Our objective has been to provide an assessment that the Framework has met the criteria established on the basis set out below.

Responsibilities of the Management of Heathrow and DNV

The management of Heathrow has provided the information and data used by DNV during the delivery of this review. Our assessment represents an independent opinion, and is intended to inform Heathrow’s management and other interested stakeholders of the Framework, as to whether the established criteria have been met based on the information provided to us. In our work we have relied on the information and the facts presented to us by Heathrow. DNV is not responsible for any aspect of the nominated assets referred to in this opinion and cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Thus, DNV shall not be held liable if any of the information or data provided by Heathrow’s management and used as a basis for this assessment were not correct or complete.

Basis of DNV’s Opinion

We have adapted our eligibility assessment protocol, which incorporates the requirements of the SLBPs, to create a Heathrow-specific Sustainability-Linked Bond Eligibility Assessment Protocol (henceforth referred to as “Protocol”). Our Protocol includes a set of suitable criteria that can be used to underpin DNV’s opinion. The overarching principle behind the criteria, is that Sustainability-Linked Bonds are to *“provide an investment opportunity with transparent sustainability credentials”* and *“incentivise the issuer’s achievement of material, quantitative, pre-determined, ambitious, regularly monitored and externally verified sustainability (ESG) objectives”*.⁶

As per our Protocol, the criteria against which the Framework has been reviewed are grouped under the five Principles as detailed below:

- **Principle One: Selection of Key Performance Indicators (KPIs).** The issuer of a Sustainability-Linked Bond (“SLB” or “Bond”) should clearly communicate its overall sustainability objectives, as set out in its sustainability strategy, and how these relate to its proposed Sustainability Performance Targets (“SPTs”). The KPI should be relevant, core and material to the issuer’s core sustainability and business strategy, measurable or quantifiable on a consistent methodological basis, externally verifiable, and able to be benchmarked externally.
- **Principle Two: Calibration of SPTs.** The SPTs should be ambitious, meaningful, and realistic. The target setting should be done in good faith and based on a sustainability improvement in relation to a predetermined performance target benchmark.
- **Principle Three: Bond Characteristics.** The Bond will need to include a financial and/or structural impact depending on whether the selected KPIs reach (or not) the predefined SPTs. The Bond documentation needs to require the definitions of the KPI(s) and SPT(s) and the potential

⁶ ICMA | Sustainability-Linked Bond Principles – June 2023 ([online](#)).

variation of the SLB's financial and/or structural characteristics. Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner, should be explained.

- **Principle Four: Reporting.** The issuer should publish and keep readily available and easily accessible up-to-date information on the performance of the selected KPI(s), as well as a verification assurance report outlining the performance against the SPT(s), and the related impact and timing of such impact on the Bond's financial and/or structural characteristics with such information to be provided to investors participating in the Bond at least once per annum.
- **Principle Five: Verification (Post Issuance).** The issuer should have its performance against its SPTs independently verified by a qualified external reviewer with relevant expertise, such as an auditor, environmental consultant and/or independent ratings agency, at least once a year. The verification of the performance against the SPT(s) must be shared with the investors in a timely manner and, where appropriate, be made publicly available.

Work Undertaken

Our work constituted a high-level review of the available information, based on the understanding that this information was provided to us by Heathrow in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us.

The work undertaken to form our opinion included:

- Creation of a Heathrow-specific Protocol, adapted to the purpose of the Framework, as described above and in Schedule 2 to this Assessment;
- Assessment of documentary evidence provided by Heathrow on the Framework and supplemented by a high-level desktop research. These checks refer to current assessment best practices and standards methodology;
- Discussions with Heathrow management, as well as review of relevant documentation and evidence related to the criteria of the Protocol; and
- Documentation of findings against each element of the criteria.

Our opinion as detailed below is a consolidation of these findings.

Executive summary

Principle One: Selection of Key Performance Indicators (KPIs).

DNV can confirm that KPI 1 – Reduction of ‘in the air’ carbon emissions and KPI 2 – Reduction of ‘on the ground’ carbon emissions as outlined in the Framework are material to Heathrow’s overarching business and sustainability strategy. The KPIs address 100% of Heathrow’s Scope 1, 2 and 3 carbon emissions, and are considered core and material within the ICMA’s Illustrative KPIs Registry⁸ and Heathrow’s own materiality assessment. DNV further notes that, at the time of writing, Heathrow is the only major hub airport in Europe having had its near-term 2030 goals validated by the Science Based Targets initiative (SBTi) in line with a 1.5 degree pathway. The rationale and process for the KPI selection, as well as its definition, measurability, and verifiability are clearly defined and deemed to be robust, reliable, and they are set in accordance with the SLBPs.

Principle Two: Calibration of Sustainability Performance Targets (SPTs).

DNV can confirm that the SPTs set for KPI 1 – Reduction of ‘in the air’ carbon emissions and KPI 2 – Reduction of ‘on the ground’ carbon emissions are:

- Ambitious, realistic, and meaningful to Heathrow’s business, and they are consistent with the Company’s overall sustainability strategy as highlighted in Heathrow 2.0: Connecting People and Planet and Heathrow’s Net Zero Plan; and
- Represent a material improvement of the respective absolute emissions trajectories beyond a “Business as Usual” scenario, considered leading compared to a peer group benchmark, and are referenced to science-based pathways as part of Heathrow’s near-term absolute emission reduction commitments for KPI 2 and its customer engagement targets for KPI 1.

DNV confirms that the calibration of the SPTs is in line with the requirements of the SLBPs.

Principle Three: Bond Characteristics.

DNV can confirm that for any instrument issued under this Framework, Heathrow has committed to include a sustainability-linked mechanism by which the financial characteristics of the instrument may be impacted in case of the non-achievement of the predefined SPTs at the relevant target observation date. We can confirm that Heathrow’s commitment to specifying the Bond Characteristics is in line with the requirements of the SLBPs.

Principle Four: Reporting.

Heathrow has committed to reporting on the performance of the two KPIs annually in its Sustainability Report, and/or its Annual Report and Accounts and/or a standalone document. Such reporting will be available on Heathrow’s corporate website and will be subject to external verification. DNV can confirm Heathrow’s commitment to reporting is in line with the requirements of the SLBPs.

Principle Five: Verification.

DNV can confirm Heathrow’s commitment to verification as outlined in the Framework, and that this is in line with the requirements of the SLBPs. Heathrow has committed to reporting on the KPIs’ performance against the SPTs and engaging an external verifier to provide at least limited assurance regarding the performance of the KPIs on an annual basis, and for the duration of the SPTs at least. Heathrow has also conducted a pre-issuance external review by way of this assessment with DNV.

Findings and DNV’s Opinion

DNV’s findings are listed below with further detail provided in Schedule 2:

1. Principle One: Selection of Key Performance Indicators (KPIs).

In the Framework, Heathrow has identified two KPIs focused on absolute carbon emissions (see Table 1) that are core and material to its business and its sustainability strategy and has committed to driving future sustainability improvements on these KPIs within a predefined timeline of FY 2023 to FY 2030. We can confirm that these topics are material to Heathrow’s core sustainability and business strategy, as outlined in Heathrow’s own Materiality Assessment⁷ and other external materiality maps, including the ICMA Illustrative KPIs Registry⁸ and the SASB Materiality Map⁹. Heathrow has also mapped out which of the stated United Nations (UN) Sustainable Development Goals (SDGs) KPI 1 and KPI 2 will contribute to, specifically: Goal #7 (Affordable and Clean Energy) and Goal #13 (Climate Action). We can further confirm that the KPIs address relevant environmental challenges of the industry.

DNV also notes that, at the time of writing, Heathrow is the only major hub airport in Europe having had its near-term emissions reduction trajectory validated by the Science Based Target initiative (SBTi) under their 1.5°C pathway.

The selected KPIs are summarised below:

Table 1: Overview of the Key Performance Indicators (KPIs)

KPI Name	KPI Description	Units
KPI 1: Reduction of ‘in the air’ carbon emissions	Absolute ‘in the air’ carbon emissions (Scope 3) expressed in tonnes of CO2 equivalent. This indicator covers Heathrow’s Scope 3 emissions from Category 11 – Use of sold products as per the GHG Protocol (GHGP).	tCO2e
KPI 2: Reduction of ‘on the ground’ carbon emissions	Absolute ‘on the ground’ carbon emissions (Scope 1, 2 and 3) expressed in tonnes of CO2 equivalent. In terms of the GHGP Scope 3 categories, this indicator covers Heathrow’s emissions from: <ul style="list-style-type: none"> • Category 2 – Capital goods; • Category 4 – Upstream transportation and distribution; • Category 7 – Employee commuting; • Category 9 – Downstream transportation and distribution; and • Category 13 – Downstream leased assets. 	tCO2e

KPI 1: Reduction of ‘in the air’ carbon emissions:

Heathrow’s KPI 1 includes absolute emissions expressed in tonnes of CO2 equivalent arising from all aircraft operating activities at Heathrow Airport, during:

- i. Landing cycle (3,000 ft);
- ii. Take-off cycle (3,000 ft); and
- iii. Cruise phase (for departing flights only).

⁷ Heathrow | Heathrow Sustainability Report 2022 ([online](#)).

⁸ ICMA | Sustainability Linked Bonds Working Group KPI Register ([online](#)).

⁹ MSCI | ESG Industry Materiality Map ([online](#)).

This KPI accounts for approximately 95% of Heathrow's overall Scope 1, 2 and 3 emissions which totalled 21 MtCO₂e in its 2019 baseline year¹⁰. Based on the evidence provided, we can confirm that KPI 1 is externally benchmarkable, when reviewing the KPI set against a group of comparable European peers. The target for absolute reduction of 'in the air' carbon emissions by 15% by 2030 from the 2019 baseline is in line with Heathrow's 2.0 Sustainability Strategy and Heathrow's Net Zero Plan. Heathrow's Net Zero Plan is supported by the Company's SBTi approved "customer engagement" target, stating that 67% of Heathrow's customers by emissions covering use of sold products and services, will set science-based targets by 2027. DNV notes that Heathrow's customer engagement target covers Scope 3 carbon emissions related to the landing and take-off cycle. We can confirm that KPI 1 is quantifiable on a consistent methodological basis, and that the data will be independently verified and disclosed in Heathrow's annual sustainability report and/or annual report and accounts and/or an independent report or document, each of which will be made available on its website.

KPI 2: Reduction of 'on the ground' carbon emissions

Heathrow's KPI 2 is the absolute 'on the ground' carbon emissions expressed in tonnes of CO₂ equivalent resulting from Heathrow's business and operations. Included in this are:

- i. Scope 1, 2 and 3 emissions relating to buildings and infrastructure (GHGP category 13 - Downstream leased assets);
- ii. Scope 1 and 3 emissions relating to airport vehicles (GHGP category 13 - Downstream leased assets);
- iii. Scope 3 emissions relating to supply chain (GHGP category 2 - capital goods); and
- iv. Scope 3 emissions relating to surface access to the airport (including passengers and colleagues) (GHGP categories 9 - Downstream transportation and distribution and 7 - employee commuting).

This KPI accounts for the remaining portion of Heathrow's emissions not captured in KPI 1. In its 2019 baseline year, the Company's 'on the ground' emissions made up approximately 5% of total emissions reported. Heathrow has opted to distinguish between 'on the ground' and 'in the air' emissions to better manage emissions reduction. Since the Company has greater control over "on the ground" emissions, by separating them from 'in the air' emissions it allows for a more targeted approach. Furthermore, combining the two types of emissions would make small improvements to the 'in the air' emissions and overshadow significant reductions in 'on the ground' emissions. By keeping them separate, Heathrow is committed to reducing all sources of emissions independently, ensuring accountability and a targeted emissions mitigation plan is in place. Based on the evidence provided, we can confirm that KPI 2 is benchmarkable externally against the same European peers reviewed. Similarly, Heathrow's carbon reduction targets for Scope 1, 2 and 3 emissions covering the categories mentioned above, excluding that from the supply chain, are in line with a 1.5°C pathway as accredited by the SBTi, which verifies a reduction of absolute 'on the ground' emissions of 46.2% by 2030 from the 2019 base year. Reduction of supply chain emissions has been validated using a supplier engagement target, stating that 67% of Heathrow's suppliers by emissions covering purchased goods and services and capital goods, will set science-based targets by 2027. We can also confirm that KPI 2 is quantifiable on a consistent methodological basis and that the data will be independently verified and disclosed in Heathrow's annual sustainability report and/or annual report and accounts and/or an independent report or document.

Based on the work undertaken, DNV can confirm that KPI 1 and KPI 2 as outlined in the Framework, are material to Heathrow's overarching business and sustainability strategy. We note that these KPIs address 100% of Heathrow's Scope 1, 2 and 3 carbon emissions, and are considered core and material within the

¹⁰ Heathrow | Heathrow's Net Zero Plan ([online](#)).

ICMA Illustrative KPIs Registry¹¹ and Heathrow’s own materiality assessment¹². The rationale and process for the KPI selection, as well as its definition, measurability and verifiability are also clearly defined, and are deemed to be robust, reliable, and in accordance with the SLBPs.

2. Principle Two: Calibration of Sustainability Performance Targets (SPTs).

In line with the KPIs outlined under Principle One above, the Company has provided SPTs for FY 2026 and FY 2030 for KPI 1 and KPI 2. These are supplemented by historical actual figures for FY 2019 to FY 2022. The forward-looking SPTs and historical figures are summarised in the table below:

Table 2: Overview of the SPTs

Metrics	Historic (MtCO2e)				SPTs (%)	
	FY 2019	FY 2020	FY 2021	FY 2022	FY 2026 (by 31/12/2026)	FY 2030 (by 31/12/2030)
KPI 1: Absolute 'in the air' emissions	20.0	8.6	7.9	14.3	A 10% cut in carbon emissions 'in the air' compared to a 2019 baseline	A 15% cut in carbon emissions 'in the air' compared to a 2019 baseline
KPI 2: Absolute 'on the ground' emissions	1.05	0.46	0.35	0.68	A 26% cut in carbon emissions 'on the ground' compared to a 2019 baseline	A 46.2% cut in carbon emissions 'on the ground' compared to a 2019 baseline (SBTi-validated target).

In the absence of regulatory required targets, the ambition of KPI 1 and KPI 2 SPTs was assessed on their alignment with Heathrow’s overall sustainability strategy and having a material improvement beyond the “business as usual” (BAU) trajectory. The SPTs are also benchmarked against a group of comparable peers and are consistent with an SBTi-approved 1.5°C pathway.

For KPI 1 and KPI 2, Heathrow has confirmed that the SPTs have been aligned with the Company’s decarbonisation goals to 2030 and its net zero pathway to 2050, as defined in Heathrow’s Net Zero Plan¹³. Heathrow has further confirmed that its net zero pathway assumes a third runway to be built in the future.

With regards to SBTi validation in relation to KPI 1, Heathrow has also committed to a ‘customer engagement’ target related to Scope 3 ‘in the air’ emissions, whereby Heathrow commits that at least 67% of its airline “customers by emissions” operating at Heathrow covering the landing and take-off cycle (LTO) will have science-based targets by 2027. This is consistent with a 1.5°C pathway, which we can confirm has been independently validated by the SBTi. This airline “customer engagement target” is one of the supporting factors to achieving a reduction of absolute ‘in the air’ emissions of 15% by 2030 from the 2019 baseline.

For the scope defined under KPI 2, Heathrow has committed to reducing its absolute Scope 1, 2 and 3 emissions ‘on the ground’, excluding that from the supply chain, by 46.2% by 2030 from a 2019 base year, which has been validated by the SBTi in line with a 1.5°C pathway. Supply chain emissions have been validated using a “supplier engagement target”, stating that 67% of Heathrow’s “suppliers by emissions” covering purchased goods and services and capital goods, will set science-based targets by 2027. These

¹¹ ICMA | Sustainability Linked Bonds Working Group KPI Register ([online](#)).

¹² Heathrow | Heathrow Sustainability Report 2022 ([online](#)).

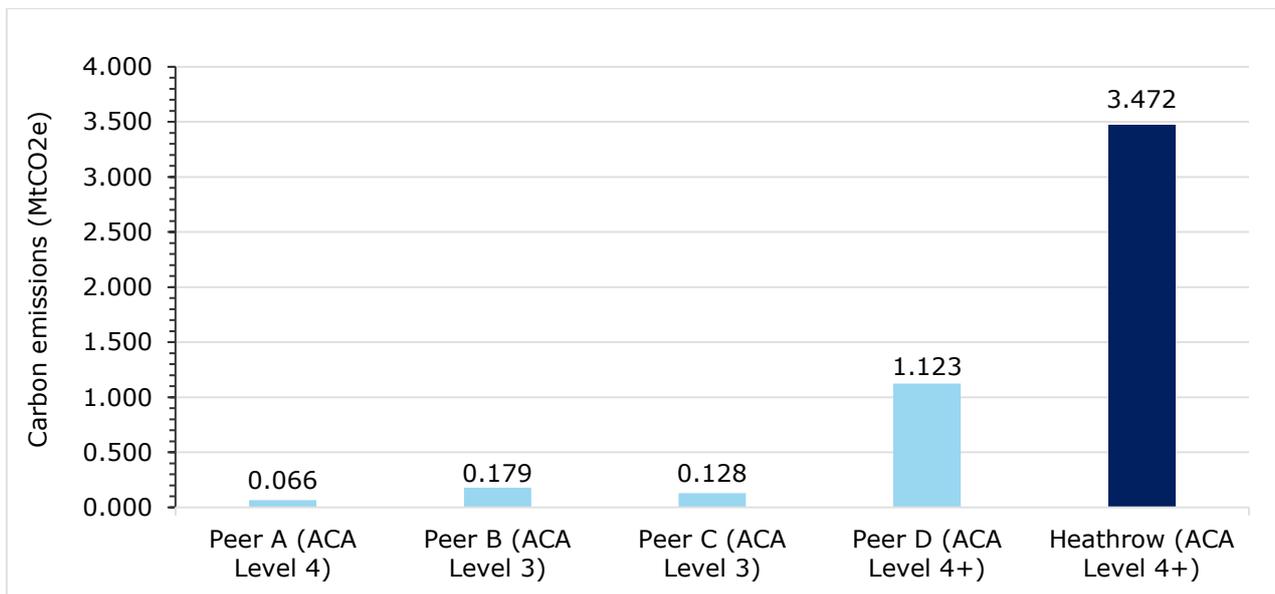
¹³ Heathrow | Heathrow’s Net Zero Plan ([online](#)).

commitments, as reflected in KPI 2, are aligned with a 1.5°C pathway and have been independently validated by the SBTi¹⁴.

Based on the evidence reviewed, we can confirm that KPI 1 and KPI 2 are consistent with a science-based 1.5°C pathway for absolute emissions reduction.

To further assess the ambition of Heathrow’s SPTs, DNV has conducted a review which compares the public commitments made by Heathrow and its peers regarding annual absolute emissions reduction to 2030 versus a 2019 baseline. The peer review considered a review of four European hub airports accredited to ACA Level 3 and above, that are of a similar size (in terms of passenger numbers) and that have a similar airline profile (split between long haul vs. short haul and proportion of low-cost vs. full-service carriers) to Heathrow. The insights from the peer review have been summarised in Figure 1, Table 3 and Table 4 below, and indicate that Heathrow’s public absolute emissions reduction commitments to 2030 are currently leading among the peers considered – with an annual reduction in emissions at 3x the amount of the nearest peer by 2030, covering Scope 1, Scope 2 and Scope 3 emissions as applicable (Figure 1). DNV notes that, out of the airports considered, Heathrow is one of two airports to be including cruise phase emissions from departing flights, a material component of an airport’s Scope 3 emissions, within its public decarbonisation commitments in addition to landing and take-off emissions. Of these two airports, DNV further notes that Heathrow’s target reduction for ‘in the air’ emissions of 15% by 2030 against a 2019 baseline is more stretching than its peer’s target reduction of at least 9%.

Figure 1: Absolute public emissions reduction commitments by 2030 (non-cumulative) vs 2019 for Heathrow and its peers covering Scope 1, 2 and 3 emissions where applicable (MtCO2e).



¹⁴ Heathrow SBTi Target submission form.

Table 3: Annual absolute public emissions reduction commitments to 2030 vs 2019 by Heathrow and its peers covering 'In the air' Scope 3 emissions.

	ACA Accreditation	'In the air' Scope 3 emissions			SBTi Commitment / Validation
		Landing & take-off	Cruise phase emissions from departing flights	2030 reduction target vs 2019	
Heathrow	Level 4+ Transition	✓	✓	15% reduction	1.5°C Validated
Peer A	Level 4 Transformation	✓	✓	No firm 2030 target	1.5°C Committed
Peer B	Level 3 Optimisation	✓	✗	No firm 2030 target	No current commitment
Peer C	Level 3 Optimisation	✓	✗	No firm 2030 target	1.5°C Committed
Peer D	Level 4+ Transition	✓	✓	At least 9% reduction	1.5°C Committed

DNV notes, when comparing the absolute 'in the air' emissions of Heathrow to its peers (see Table 3), Heathrow is one of three airports including cruise phase emissions from departing flights in their annual reporting. This represents the most material component of an airport's Scope 3 emissions, and accounts for 94% of Heathrow's 'in the air' Scope 3 emissions. Of these three airports, only two have set public emissions reduction commitments to mitigate emissions from their 'in the air' operations. DNV notes that Heathrow's target reduction for 'in the air' emissions of 15% by 2030 against a 2019 baseline is more stretching than Peer D's target reduction for 'in the air' emissions of at least 9%. Furthermore, at the time of writing, we note that Heathrow is the only airport among the relevant peers that has received accreditation from the SBTi validating its carbon reduction trajectory and the first airport to have achieved this status against the SBTi's updated 1.5°C standard.

Table 4: Annual absolute public emissions reduction commitments by 2030 (non-cumulative) vs 2019 for Heathrow and its peers covering 'On the ground' Scope 1, 2 and 3 emissions.

	ACA Accreditation	'On the ground' emissions				SBTi Commitment / Validation
		Scope 1	Scope 2	'On the ground' Scope 3	2030 reduction target expressed as a percentage & [MtCO ₂ e] vs 2019	
Heathrow	Level 4+ Transition	✓	✓	Emissions from buildings & infrastructure, airport vehicles, supply chain and surface access	46.2% [0.48 MtCO ₂ e]	1.5°C Validated
Peer A	Level 4 Transformation	✓	✓	✗	100% [0.067 MtCO ₂ e]	1.5°C Committed
Peer B	Level 3 Optimisation	✓	✓	✗	78% [0.17 MtCO ₂ e]	No current commitment
Peer C	Level 3 Optimisation	✓	✓	✗	94% [0.13 MtCO ₂ e]	1.5°C Committed
Peer D	Level 4+ Transition	✓	✓	Emissions from ground support equipment, commuter traffic and business travel of own employees	100% [0.052 MtCO ₂ e]	1.5°C Committed

In our analysis of the absolute 'on the ground' emissions of Heathrow and its peers (see Table 4), DNV notes that Heathrow is one of two airports that includes Scope 3 emissions in their annual reporting. Heathrow's baseline 'on the ground' Scope 3 emissions account for at least 97% of total 'on the ground' Scope 1, 2 and 3 emissions, with the share of emissions from passenger surface access and supply chain representing 82% of this total. In further comparing Heathrow and Peer D, we found that Heathrow's absolute public emissions reduction commitments to 2030 vs 2019 includes emissions from passenger surface access and supply chain, while Peer D's target excludes these emission sources. As a result, Heathrow's absolute 'on the ground' emissions reduction target measured in MtCO₂e, is 9x greater than Peer D. Similarly, Heathrow's inclusion of wider Scope 3 emissions sources highlights its commitment to mitigate emissions from 'on the ground' operations and supply chain.

Based on the evidence reviewed, in addition to the alignment of Heathrow's SPTs with their 2030 decarbonisation goals and 2050 Net Zero Plan, DNV can confirm that the SPTs set by Heathrow for KPI 1 and KPI 2 are ambitious and leading among its airport peers.

In addition, on the basis of evidence provided by Heathrow, we can also confirm that the SPTs set for KPI 1 and KPI 2 represent a material improvement beyond the business-as-usual (BAU) absolute emissions 'in the air' trajectory and the BAU absolute emissions 'on the ground' trajectories. The material improvements of KPI 1 and KPI 2 trajectories beyond the BAU scenario are depicted by Figure 2 and Figure 3 respectively.

Figure 2: Assessment of Heathrow's Net Zero Pathway: Absolute 'in the air' emissions trajectory to BAU: Absolute 'in the air' emissions trajectory.

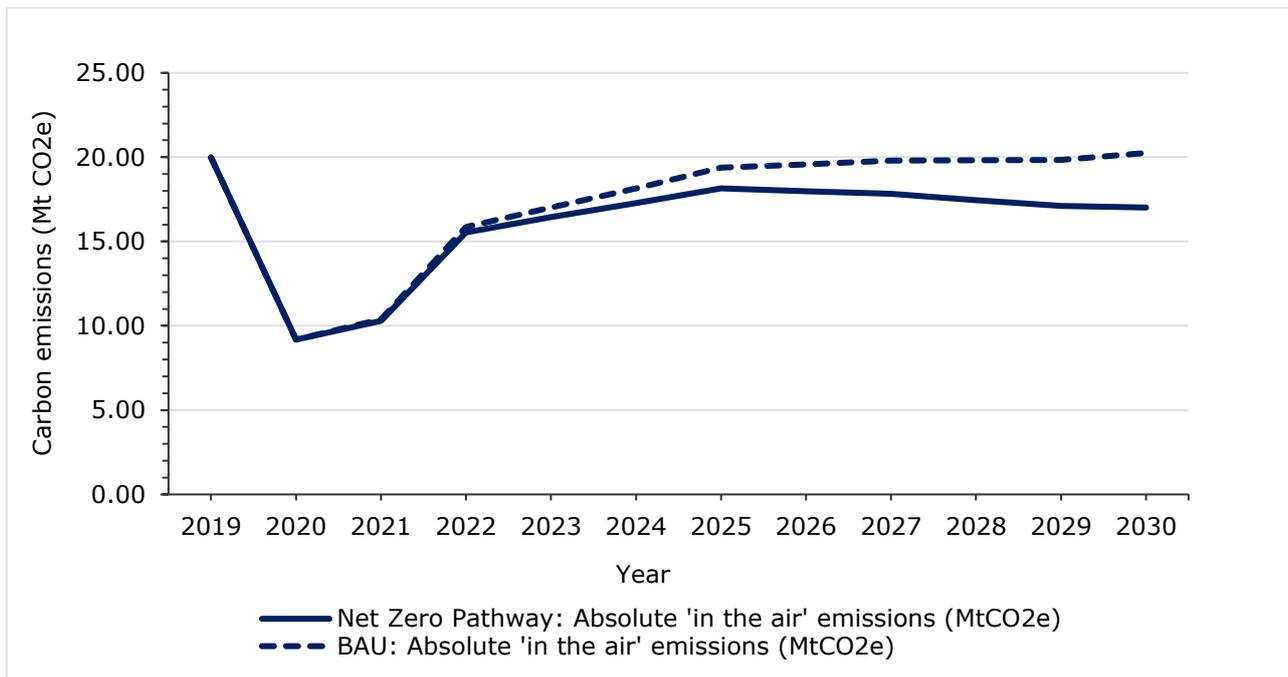
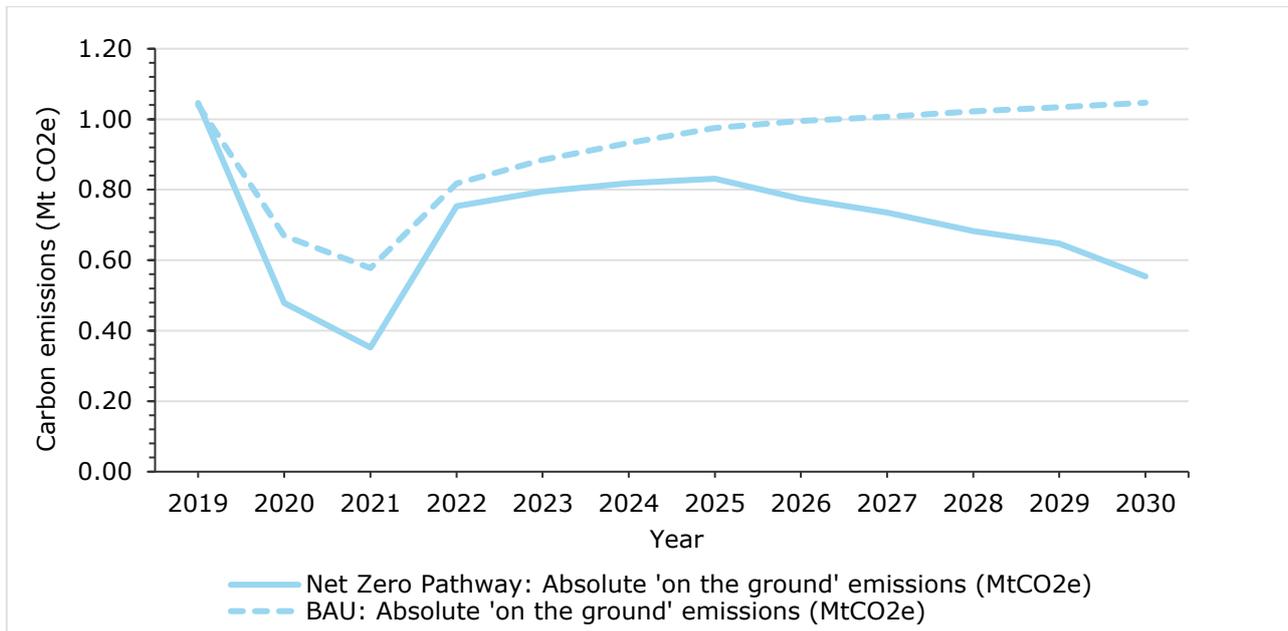


Figure 3: Assessment of Heathrow’s Net Zero Pathway: Absolute ‘on the ground’ emissions trajectory to BAU: Absolute ‘on the ground’ emissions trajectory.



DNV has also reviewed the strategies provided by Heathrow to achieve the SPTs set for KPI 1 and KPI 2. As outlined in Table 5, these strategies include improving airspace and operational efficiency, incentivising the use of fuel-efficient conventional aircraft and sustainable aviation fuel, and implementing energy efficiency and low-carbon technologies within buildings and infrastructure, among others. In addition, DNV has noted that Heathrow intends to meet the targets without the use of carbon offsets. We can conclude that based on the evidence sent to DNV, Heathrow has a clear roadmap in place for achieving its absolute carbon emissions reduction, and the SPTs set, for the respective KPIs for ‘in the air’ and ‘on the ground’.

Table 5: Heathrow’s carbon emissions reduction strategies.

Metric	Heathrow’s carbon emissions reduction strategies			
KPI 1: Reduction of ‘in the air’ carbon emissions	Airspace and operational efficiency initiatives	Incentivising the use of fuel-efficient conventional aircraft	Incentivising the use of Sustainable Aviation Fuel (SAF)	Research & development into airport infrastructure for zero carbon flights
KPI 2: Reduction of ‘on the ground’ carbon emissions	Surface access: Switching to electric vehicles and new public transport links	Working with suppliers to set net zero targets	Switching to zero emission airport vehicles or to airport vehicles using biofuels	Implementing energy efficiency and carbon cutting technologies within buildings and infrastructure

Alongside, the carbon reduction measures, Heathrow has also outlined the potential risks to achieving the targets set which are outside of the Company’s direct control, as detailed in Table 6 below. We can conclude that based on the evidence provided to DNV, Heathrow is aware of the potential risks posed to the company when it comes to achieving its absolute carbon emissions reduction for ‘in the air’ and the ‘on the ground’ SPTs.

Table 6: Risks and challenges to Heathrow’s carbon emissions reduction strategies.

Metric	Heathrow’s carbon emissions reduction risks and challenges
<p>KPI 1: Reduction of ‘in the air’ carbon emissions</p>	<ul style="list-style-type: none"> • Delayed or unambitious UK SAF policy: SAF policy which fails to incorporate effective incentives and support mechanisms to encourage sufficient production, widespread distribution and widespread adoption of SAF by airlines, and which has the potential to result in the prolonged use of conventional jet fuel. • Financial constraints: funding constraints on vital decarbonisation capital projects, such as airspace modernisation, pose significant challenges to decarbonisation progress. The sufficiency of funding for capital projects hinges upon the regulatory approval process overseen by the Economic Regulator, the Civil Aviation Authority (CAA) and agreement with airlines on capital prioritisation. • Stakeholder engagement: challenges arising from limited stakeholder engagement for instance due to inadequate coordination and communication can hinder the successful implementation of joint initiatives. The adoption of SAF requires collaborative efforts from all stakeholders involved. Insufficient coordination and communication among these stakeholders may present barriers to the effective integration and utilisation of SAF. • Macroeconomic volatility: fluctuations in energy prices and economic downturns can have an adverse effect on the feasibility of planned sustainable investments, thus disrupting the attainment of this target. • Complexity of delivering interdependent net zero solutions and behaviours in a capacity constrained airport with legacy infrastructure. • Data quality and availability: lack of robust, automated data could lead to sub-optimal decision-making and less ability to course correct. Carbon reduction outcomes cannot be accurately quantified without robust data.
<p>KPI 2: Reduction of ‘on the ground’ carbon emissions</p>	<ul style="list-style-type: none"> • Changes in Government policy that diverge from the net zero plan might come with new requirements that can disrupt the achievement of this target. • Financial constraints: sufficient financial resources are essential for investing in infrastructure aimed at decarbonising ground airport emissions. The sufficiency of funding for capital projects hinges upon the regulatory approval process overseen by the Economic Regulator, the Civil Aviation Authority (CAA) and agreement with airlines on capital prioritisation. • Surface Access: insufficient national progress in transitioning to zero-emission vehicles due to affordability, supportive policy, charging infrastructure and associated grid capacity, vehicle availability and other factors outside Heathrow’s control. • Supply chain challenges: for instance, insufficient decarbonisation progress among sectors that contribute most to Heathrow’s supply chain emissions (construction and maintenance, logistics and information technology). • Complexity of delivering interdependent net zero solutions and behaviours in a capacity constrained airport with legacy infrastructure. • Data quality and availability: lack of robust, automated data could lead to sub-optimal decision-making and ability to course correct. Carbon reduction outcomes cannot be accurately quantified without robust data.

Based on the work undertaken, DNV can confirm that the SPTs set for KPI 1 and KPI 2 as outlined in the Framework, are ambitious, realistic, and meaningful to Heathrow's business, and that they are consistent with its overall strategic sustainability strategy and in line with the requirements of the SLBPs.

3. Principle Three: Bond Characteristics.

Heathrow has committed to including a sustainability-linked mechanism by which the financial characteristics of an instrument may be impacted, depending on the achievement or non-achievement of the predefined SPTs at the relevant target observation date(s), as specified in the documentation for any sustainability-linked bond issued under the Framework.

These financial implications may include, but are not limited to:

- A coupon adjustment such as a step-up; or
- A premium payment at maturity depending on the nature of the instrument as specified in the relevant final terms.

Heathrow has confirmed that these implications would be commensurate and meaningful as aligned with market practices. These financial implications will occur if:

- The selected KPIs performance failed to satisfy the applicable SPTs at any target observation date;
- The verification of the SPTs has not been provided and made public in a timely manner as set out in the legal documentation of the relevant bond instrument; or
- If, for any reason, one of the KPIs cannot be calculated, observed or reported in a timely and satisfactory manner (as defined in the relevant instrument's documentation).

Heathrow has also committed to notify the investors of the achievement (or not) of the applicable SPTs within 180 days after the end of the relevant financial year. If Heathrow has achieved its SPTs, as identified in the relevant documentation of instrument, and reporting and verification for the SPTs have been provided and made public in accordance with the reporting and verification sections and the terms of the relevant instrument's documentation, the financial characteristics of the instrument will remain unchanged.

4. Principle Four: Reporting.

Under the Framework, Heathrow has committed to reporting on the performance of the two KPIs annually in its Sustainability Report and/or its Annual Report and Accounts and/or a standalone document (such as a "Heathrow 2.0 Progress Update"). Such reporting will be available on Heathrow's corporate website. The reporting may also include:

- Up-to-date information on the performance of the selected KPI(s), including the baseline where relevant;
- A verification assurance report relative to the SPT(s) outlining the performance against the SPT and the related impact, and timing of such impact on the sustainability-linked instrument(s); and
- Any relevant information enabling investors to monitor the progress of the SPT(s).

The information reported may also include the following, when feasible and possible:

- A qualitative or quantitative explanation of the contribution of the main factors behind the evolution of the performance/KPI on an annual basis;
- Illustration of the positive sustainability impacts of the performance improvement;

- If relevant, any re-assessments of KPI(s) and/or restatements of SPT(s) and/or pro forma adjustments of baselines or KPI(s) scope.

Heathrow has also committed to follow, on a best effort basis, the disclosure guidelines found in the Climate Transition Finance Handbook¹⁵, and has confirmed that it will be transparent with regards to:

- Its climate transition strategy and governance;
- Its business model environmental materiality;
- Its 'science-based' climate transition strategy, including targets and pathways;
- Implementation transparency.

Heathrow has further committed to conducting a second-party opinion on the Framework by way of this assessment and to external verification of the KPIs to be reported on (as per Principle Five below). DNV can confirm Heathrow's commitment to reporting is in line with the requirements of the SLBPs.

5. Principle Five: Verification.

Heathrow has committed to reporting on the KPIs performance against the SPTs, and engaging an external verifier (an auditor or any other qualified provider of third-party assurance or attestation services), to provide at least a limited assurance regarding the performance of the KPIs on an annual basis, and for the duration of the SPTs at least, as part of its Sustainability Report and/or its Annual Report and Accounts and/or a standalone document.

Heathrow has also conducted a pre-issuance external review by way of this assessment with DNV Business Assurance Services UK Limited ("DNV") to confirm its alignment with the ICMA SLBPs. The SPO will be made publicly available on Heathrow's corporate website.

Based on the evidence reviewed and the discussions with Heathrow, DNV can confirm Heathrow's commitment to verification as outlined in the Framework is in line with the requirements of the SLBPs.

¹⁵ ICMA | ICMA Climate Transition Finance Handbook ([online](#)).

On the basis of the information provided by Heathrow and the work undertaken, it is DNV's opinion that the Framework meets the criteria established in the Protocol and that it is aligned with the stated definition of sustainability-linked bonds within the Sustainability-Linked Bond Principles – June 2023, which is to “incentivise the issuer’s achievement of material, quantitative, pre-determined, ambitious, regularly monitored and externally verified sustainability (ESG) objectives through KPIs and SPTs”, thereby providing “an investment opportunity with transparent sustainability credentials”.¹⁶

for DNV Business Assurance Services UK Limited, London

29 June 2023



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¹⁶ ICMA | Sustainability-Linked Bond Principles – June 2023 ([online](#)).

SCHEDULE 1: DESCRIPTION OF HEATHROW'S KEY PERFORMANCE INDICATORS (KPIs) AND SUSTAINABILITY PERFORMANCE TARGETS (SPTs)

KEY PERFORMANCE INDICATORS	SUSTAINABILITY PERFORMANCE TARGETS			SDG ALIGNMENT												
<p>KPI 1 Reduction of 'in the air' carbon emissions: Absolute 'in the air' carbon emissions expressed in tonnes of CO2 equivalent*.</p> <p><i>* Includes Scope 3 emissions of all aircraft operating at Heathrow Airport during i) cruise phase (for departing flights only), ii) landing, and iii) take off.</i></p>	<table border="1"> <thead> <tr> <th>Financial Year</th> <th>Absolute 'in the air' carbon emissions (millions tCO2e)</th> <th>Reduction of absolute 'in the air' carbon emissions (%)¹⁷</th> </tr> </thead> <tbody> <tr> <td>2019 (Baseline)</td> <td>20.0</td> <td>0%</td> </tr> <tr> <td>2026</td> <td>18.0</td> <td>10% reduction from 2019</td> </tr> <tr> <td>2030</td> <td>17.0</td> <td>15% reduction from 2019</td> </tr> </tbody> </table>			Financial Year	Absolute 'in the air' carbon emissions (millions tCO2e)	Reduction of absolute 'in the air' carbon emissions (%) ¹⁷	2019 (Baseline)	20.0	0%	2026	18.0	10% reduction from 2019	2030	17.0	15% reduction from 2019	
Financial Year	Absolute 'in the air' carbon emissions (millions tCO2e)	Reduction of absolute 'in the air' carbon emissions (%) ¹⁷														
2019 (Baseline)	20.0	0%														
2026	18.0	10% reduction from 2019														
2030	17.0	15% reduction from 2019														
<p>KPI 2 Reduction of 'on the ground' carbon emissions: Absolute 'on the ground' carbon emissions expressed in tonnes of CO2 equivalent**.</p> <p><i>** Includes i) Scope 1, 2 & 3 emissions relating to buildings and infrastructure, ii) Scope 1 & 3 emissions relating to airport vehicles, iii) Scope 3 emissions relating to supply chain, and iv) Scope 3 emissions relating to surface access to the airport (incl. passengers and colleagues).</i></p>	<table border="1"> <thead> <tr> <th>Financial Year</th> <th>Absolute 'on the ground' carbon emissions (thousands tCO2e)</th> <th>Reduction of absolute 'on the ground' carbon emissions (%)¹⁷</th> </tr> </thead> <tbody> <tr> <td>2019 (Baseline)</td> <td>1,048</td> <td>0%</td> </tr> <tr> <td>2026</td> <td>774</td> <td>26% reduction from 2019</td> </tr> <tr> <td>2030</td> <td>564</td> <td>46.2% reduction from 2019</td> </tr> </tbody> </table>			Financial Year	Absolute 'on the ground' carbon emissions (thousands tCO2e)	Reduction of absolute 'on the ground' carbon emissions (%) ¹⁷	2019 (Baseline)	1,048	0%	2026	774	26% reduction from 2019	2030	564	46.2% reduction from 2019	
Financial Year	Absolute 'on the ground' carbon emissions (thousands tCO2e)	Reduction of absolute 'on the ground' carbon emissions (%) ¹⁷														
2019 (Baseline)	1,048	0%														
2026	774	26% reduction from 2019														
2030	564	46.2% reduction from 2019														

¹⁷ Percentage reductions are shown on a rounded basis.

SCHEDULE 2: HEATHROW-SPECIFIC SUSTAINABILITY-LINKED BOND FRAMEWORK ELIGIBILITY ASSESSMENT PROTOCOL

1. Selection of Key Performance Indicators (KPIs)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	KPI – Material to core sustainability and business strategy	<p>The issuer’s sustainability performance is measured using sustainability KPIs that can be external or internal.</p> <p>The KPIs must be material to the issuer’s core sustainability and business strategy and address relevant environmental, social and/or governance challenges of the industry sector and be under management’s control. The KPI should be of high strategic significance to the issuer’s current and/or future operations.</p> <p>It is recommended that issuers communicate clearly to investors the rationale and process according to which the KPI(s) have been selected and how the KPI(s) fit into their sustainability strategy.</p>	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> • Heathrow Net Zero Plan [online]. • Heathrow Sustainability Linked Bond Framework. • Heathrow Sustainability Report 2022 [online]. • Heathrow’s SBTi Target Submission Form and Guidance. • Heathrow 2.0: Connecting People and Planet [online]. 	<p>DNV can confirm that KPI 1 and KPI 2 have been identified as material within Heathrow’s own Materiality Assessment¹⁸. DNV further notes that these KPIs are also identified as core for the airport sector across several external bodies. This includes, but it is not limited to, the ICMA Illustrative KPIs Registry¹⁹ and the SASB Materiality Map²⁰. Furthermore, Heathrow has committed to future sustainability improvements for each these KPIs within a predefined timeline of FY 2023 to FY 2030. The materiality of the KPIs to Heathrow’s core sustainability and business strategy is outlined below:</p> <p>KPI 1 “Reduction of ‘in the air’ carbon emissions”:</p> <p>Heathrow’s KPI 1 accounts for approximately 95% of Heathrow’s total Scope 1, 2 and 3 emissions of 21 MtCO₂e in its 2019 baseline year. Cruise phase emissions alone are the most material contributor to Heathrow’s emissions, making up almost 89% of its total 2019 emissions. The target for absolute reduction of ‘in the air’ carbon emissions by 15% by 2030 from the 2019 baseline is in line with Heathrow’s 2.0 Sustainability Strategy and Heathrow’s Net Zero Plan. Given the nature of Heathrow’s airport operations and emissions profile, KPI 1 is core and material to Heathrow’s business, and of high strategic significance to its current and future operations.</p>

¹⁸ Heathrow | Heathrow Sustainability Report 2022 ([online](#)).

¹⁹ ICMA | Sustainability Linked Bonds Working Group KPI Register ([online](#)).

²⁰ MSCI | ESG Industry Materiality Map ([online](#)).

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>KPI 2 "Reduction of 'on the ground' carbon emissions":</p> <p>Heathrow's KPI 2 accounts for the remaining portion of Heathrow's emissions not captured in KPI 1. In its 2019 baseline year, Heathrow's "on the ground" emissions make up approximately 5% of total emissions reported and as such, when combined, KPIs 1 and 2 covers 100% of Heathrow's total emissions. Heathrow has opted to distinguish between 'on the ground' and 'in the air' emissions to better manage emissions reduction. Since the Company has greater control over 'on the ground' emissions, by separating them from 'in the air' emissions, it allows for a more targeted approach. Furthermore, combining the two types of emissions would make small improvements to the 'in the air' emissions and overshadow significant reductions in 'on the ground' emissions. By keeping them separate, Heathrow is committed to reducing all sources of emissions independently, ensuring accountability and a targeted emissions mitigation plan is in place. On the basis of the evidence reviewed to DNV, we can conclude that KPI 2 is core and material to Heathrow's business, and it is of high strategic significance to its current and future airport operations.</p> <p>We can confirm that KPI 1 and KPI 2 have been identified as material to Heathrow's core sustainability and business strategy, addresses relevant environmental challenges of the industry, and they are in line with the SLBPs.</p>
1b	KPI - Measurability	KPIs must be measurable or quantifiable on a consistent methodological basis; externally verifiable; and able to be benchmarked, i.e., as much as possible using an external reference or definitions to	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> • Heathrow Carbon Footprint Methodology 2022 [online]. 	<p>Heathrow publicly discloses its emissions as part of its Annual Accounts and Sustainability Report. DNV can confirm Heathrow has demonstrated at least 4 years of performance data for the KPIs, including historical actual figures for FY 2019 to FY 2022. DNV notes that Heathrow's air and ground</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		<p>facilitate the assessment of the SPTs level of ambition.</p> <p>Issuers are encouraged, when possible, to select KPI(s) that they have already included in their previous annual reports, sustainability reports or other non-financial reporting disclosures to allow investors to evaluate historical performance of the KPIs selected.</p> <p>In situations where the KPIs have not been previously disclosed, issuers should, to the extent possible, provide historical externally verified KPI values covering at least the previous 3 years.</p>	<ul style="list-style-type: none"> • Heathrow Net Zero Plan [online]. • Heathrow Sustainability-Linked Bond Framework. • Heathrow Sustainability Report 2022 [online]. • Heathrow’s SBTi Target Submission Form and Guidance. • Heathrow 2.0: Connecting People and Planet [online]. 	<p>emissions data are currently independently verified as part of its external disclosure process.</p> <p>The specific benchmarking process for each of the KPIs is outlined below:</p> <p>KPI 1 “Reduction of ‘in the air’ carbon emissions”:</p> <p>For KPI 1, we note that Heathrow is benchmarkable against a group of European peers. These peers were selected from a pool of European hub Airports, where passenger numbers and the maturity of carbon reduction strategies (airports accredited to Airport Carbon Accredited (ACA) Levels 3 and above), were considered comparable to that of Heathrow. We note that out of these peers, Heathrow is one of two airports which includes cruise phase emissions for departing flights within its public Scope 3 reporting. Additionally, we note Heathrow’s KPI 1 is supported by the Company’s SBTi approved “customer engagement” target, stating that 67% of Heathrow’s customers by emissions covering use of sold products and services, will set science-based targets by 2027. This SBTi commitment covers Scope 3 carbon emissions related to the landing and take-off cycle.</p> <p>KPI 2 “Reduction of ‘on the ground’ carbon emissions”:</p> <p>Based on the evidence provided, we can confirm that KPI 2 is benchmarkable externally against the same European peers reviewed. Similarly, Heathrow’s carbon reduction targets for Scope 1, 2 and 3 emissions covering the categories mentioned above, excluding that from the supply chain, are in line with a 1.5°C pathway as accredited by the SBTi, which verifies a reduction of absolute ‘on the ground’ emissions of 46.2% by 2030 from the 2019 base year. Reduction of supply chain emissions has been validated using a supplier engagement target, stating that 67% of Heathrow’s suppliers by emissions</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>covering purchased goods and services and capital goods, will set science-based targets by 2027.</p> <p>DNV can confirm that Heathrow’s KPIs are measurable, quantifiable, are externally verifiable, and they are in line with the SLBPs.</p>
1c	KPI – Clear definition	A clear definition of the KPI(s) should be provided and include the applicable scope or perimeter, as well as the calculation methodology	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> • Heathrow Annual Report and Financial Statements 2021 [online]. • Heathrow Carbon Footprint Methodology 2022 [online]. • Heathrow Net Zero Plan [online]. • Heathrow Sustainability-Linked Bond Framework. • Heathrow Sustainability Report 2022 [online]. • Heathrow 2.0: Connecting People and Planet [online]. 	<p>DNV can confirm that Heathrow has provided a clear definition of both KPIs, has defined the scope and parameters set, and has provided a clear calculation methodology, in line with the SLBPs. The definition, scope and calculation methodology for each KPI is outlined below:</p> <p>KPI 1 “Reduction of ‘in the air’ carbon emissions”:</p> <p>Heathrow’s KPI 1 includes absolute carbon emissions (Scope 3) expressed in tonnes of CO2 equivalent arising from aircraft operating at Heathrow Airport during:</p> <ol style="list-style-type: none"> i. Landing cycle (3,000 ft); ii. Take-off cycle (3,000 ft); and iii. Cruise phase (for departing flights only). <p>We can confirm that KPI 1 is quantifiable on a consistent methodological basis, and that the carbon reporting methodology is informed by the Greenhouse Gas Protocol (GHGP), and the Airport Carbon Accreditation (ACA) standards.</p> <p>KPI 2 “Reduction of ‘on the ground’ carbon emissions”:</p> <p>Heathrow’s KPI 2 captures absolute carbon emissions (Scope 1, 2 and 3) expressed in tonnes of CO2 equivalent from on the ground sources and includes:</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<ul style="list-style-type: none"> i. Scope 1, 2 & 3 emissions relating to buildings and infrastructure; ii. Scope 1 & 3 emissions relating to airport vehicles; iii. Scope 3 emissions relating to supply chain; and iv. Scope 3 emissions relating to surface access to the airport (including passengers and colleagues). <p>We can confirm that KPI 2 is quantifiable on a consistent methodological basis, and that the carbon reporting methodology is informed by the Greenhouse Gas Protocol (GHGP) and the Airport Carbon Accreditation (ACA) standards.</p>

2. Calibration of Sustainability Performance Targets (SPTs)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Target Setting - Meaningful	The SPTs should be ambitious, realistic, and meaningful to the issuer's business, and be consistent with the issuers' overall strategic sustainability/ESG strategy	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> • Heathrow Annual Report and Financial Statements 2021 [online]. • Heathrow Carbon Footprint Methodology 2022 [online]. • Heathrow Net Zero Plan [online]. • Heathrow Sustainability-Linked Bond Framework. • Heathrow Sustainability Report 2022 [online]. 	<p>Based on the evidence reviewed, DNV can confirm that the SPTs are ambitious, realistic and meaningful to Heathrow's business, as well as consistent with the Company's overall sustainability strategy.</p> <p>For KPI 1 and KPI 2, the SPTs have been aligned with Heathrow's decarbonisation commitments to 2030 and its Net Zero Plan to 2050 in absolute emissions terms. We also recognise that Heathrow's near-term commitments are validated by the SBTi and aligned with a 1.5°C pathway. This includes Heathrow's commitment to reduce Scope 1, 2 and 3 emissions from upstream transportation and distribution, waste generated in operations, business travel, employee commuting, and downstream leased assets by 46.2% by 2030 from a 2019 base year. Also validated by the SBTi are Heathrow's customer and supplier engagement targets,</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
			<ul style="list-style-type: none"> Heathrow 2.0: Connecting People and Planet [online]. 	<p>whereby 67% of customers and suppliers by emissions covering the use of sold products and services and the purchased goods and services and capital goods, will set science-based targets by 2027. For these commitments Heathrow has been recognised as a member of the 'Business Ambition for 1.5°C' campaign - an urgent call to action from a global coalition of UN agencies, business and industry leaders, in partnership with the Race to Zero.</p> <p>We have also reviewed the credibility of Heathrow's strategies to achieve the SPTs and conclude that based on the evidence provided, Heathrow has a clear and realistic roadmap in place for carbon reduction. For KPI 1 and KPI 2, achievement of the SPTs is reliant on improving airspace and operational efficiency, incentivising the use of fuel-efficient conventional aircraft and Sustainable Aviation Fuel (SAF), and implementing energy efficiency and low-carbon technologies within buildings and infrastructure, among others. In terms of SAF, Heathrow has committed to 11% SAF use by airlines by 2030, which is higher than the targets of most of its peers and above the UK government's ambitions in the Jet Zero Strategy (10% by 2030). The airport has also implemented measures to incentivise the use of SAF, including through landing charges, and is already one of the largest users of SAF globally. In addition, DNV has noted that Heathrow intends to meet the targets without the use of carbon offsets.</p> <p>Alongside the carbon reduction measures, Heathrow has also outlined the potential risks to the achievements of the targets. For KPI 1 the potential risks include: the UK's delayed and unambitious policy on SAF, the lack of effective incentives and support mechanisms, financial constraints, limited stakeholder engagement, macroeconomic volatility, resource challenges, complexity in delivering net zero solutions, and inadequate data quality and availability pose significant barriers to achieving sustainable aviation goals. For KPI 2 the potential risks include: changes in government policy, financial</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>constraints, surface access challenges, supply chain limitations, resource shortages, complexity in implementing interdependent solutions, and inadequate data quality and availability pose significant barriers to the successful transition to a net zero airport with decarbonised ground emissions.</p> <p>Based on the work undertaken, DNV can confirm that the SPTs for KPI 1 and KPI 2 are ambitious, realistic and meaningful to Heathrow’s business, and they are consistent with its overall strategic sustainability strategy.</p>
2b	Target Setting - Meaningful	SPTs should represent a material improvement in the respective KPIs and be beyond a “Business as Usual” trajectory; where possible be compared to a benchmark or an external reference and be determined on a predefined timeline, set before (or concurrently with) the issuance of the Bond.	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> • Heathrow Annual Report and Financial Statements 2021 [online]. • Heathrow Carbon Footprint Methodology 2022 [online]. • Heathrow Net Zero Plan [online]. • Heathrow Sustainability-Linked Bond Framework. • Heathrow Sustainability Report 2022 [online]. • Heathrow 2.0: Connecting People and Planet [online]. 	<p>DNV has reviewed the evidence provided and can confirm that Heathrow's SPTs for KPI 1 and KPI 2 represent a significant improvement and exceed the trajectory that would be expected under "Business as Usual" (BAU).</p> <p>For KPI 1 and KPI 2, DNV has assessed the net zero pathway which accounts for emissions reduction from the carbon reduction measures listed above, in relation to a BAU pathway, which does not include these measures. Based on this evidence, we can confirm that Heathrow’s net zero pathway from which the SPTs for KPI 1 and KPI 2 are based, represent a material improvement beyond the BAU scenario.</p> <p>We also conducted a review comparing the public commitments made by Heathrow and four European hub airports. The peer review considered European hub airports that are accredited to ACA Level 3 and above, that are of a similar size (in terms of passenger numbers), and that have a similar airline profile (split between long haul vs. short haul and proportion of low-cost vs. full-service carriers) regarding annual absolute emissions reduction to 2030 versus a 2019 baseline. The findings indicate that Heathrow's public absolute emissions reduction commitments to 2030 are currently leading among the peers considered, with an annual reduction in emissions at 3x the amount of the nearest peer if scope 3 emissions are considered.</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>Based on the work undertaken, DNV can confirm that the SPTs for KPI 1 and KPI 2 represent a material improvement in the respective KPIs; are beyond a “Business as Usual” trajectory; and are considered leading compared to a peer group benchmark.</p>
2c	Target Setting – Benchmarks	<p>The target setting exercise should be based on a combination of benchmarking approaches:</p> <ol style="list-style-type: none"> 1. The issuer’s own performance over time for which a minimum of 3 years, where feasible, of measurement track record on the selected KPI(s) is recommended and when possible forward-looking guidance on the KPI 2. The SPTs relative positioning versus the issuer’s peers where comparable or available, or versus industry or sector standards 3. Systematic reference to science-based scenarios, or absolute levels (e.g. carbon budgets) or official country/regional/international targets or to recognised Best-Available-Technologies or other proxies 	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> • Heathrow Carbon Footprint Methodology 2022 [online]. • Heathrow Net Zero Plan [online]. • Heathrow Sustainability-Linked Bond Framework. • Heathrow Sustainability Report 2022 [online]. • Heathrow 2.0: Connecting People and Planet [online]. 	<p>DNV can confirm Heathrow’s target setting exercise is based on several benchmarking approaches. Both KPI 1 and KPI 2 consider all three benchmarking approaches for the calibration of the SPTs.</p> <p>For both KPIs, Heathrow has demonstrated at least 4 years of performance data. This includes historical actual figures for FY 2019 to FY 2022. For KPI 1, the public commitments towards reducing scope 3 emissions due to ‘in the air’ sources from Heathrow and its peers have been compared. For KPI 2, the public commitments towards reducing scope 1, 2 and 3 emissions due to ‘on the ground’ sources from Heathrow and its peers have been compared.</p> <p>The results of the peer benchmarking analysis, which are outlined above, show that Heathrow is leading for these metrics amongst its peer group.</p> <p>DNV also notes KPI 1 and KPI 2 are consistent with a science-based pathways as part of Heathrow’s near-term absolute emissions reduction commitments. For KPI 1, the SPTs are supported by Heathrow’s commitment to have 67% of its customers by emissions covering the use of sold goods and services having set science-based targets by 2027. We can confirm that the customer targets have been independently validated by the SBTi²¹. For KPI 2, Heathrow has committed to reduce its absolute ‘on the ground’ Scope 1, 2 and 3 emissions, excluding that from the supply chain, by 46.2% by 2030 from a 2019 base year. Supply chain emissions have</p>

²¹ SBTi | Companies Taking Action [\(online\)](#)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>been validated using a supplier engagement target, stating that 67% of Heathrow’s suppliers by emissions covering use of purchased goods and services and capital goods, will set science-based targets by 2027. These commitments, represented by KPI 2, are consistent with a 1.5°C pathway and have been independently validated by the SBTi²².</p> <p>At the time of writing, DNV further notes that Heathrow is the only major hub airport in Europe having had its near-term carbon reduction trajectory validated by the SBTi.</p>
2d	Target setting – disclosures	<p>Disclosures on target setting should make clear reference to:</p> <ol style="list-style-type: none"> 1. The timelines of target achievement, the trigger event(s), and the frequency of SPTs 2. Where relevant, the verified baseline or reference point selected for improvement of KPIs as well as the rationale for that baseline or reference point to be used 3. Where relevant, in what situations recalculations or pro-forma adjustments of baselines will take place 4. Where possible and taking into account competition and confidentiality considerations, how the issuers intend to reach such SPTs 5. Any other key factors beyond the issuer’s direct 	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> • Heathrow Carbon Footprint Methodology 2022 [online]. • Heathrow Net Zero Plan [online]. • Heathrow Sustainability-Linked Bond Framework. • Heathrow Sustainability Report 2022 [online]. • Heathrow 2.0: Connecting People and Planet [online]. 	<p>DNV can confirm that Heathrow has committed to relevant disclosures on target setting:</p> <ul style="list-style-type: none"> • The Company has provided SPTs for FY 2026 and FY 2030 for KPI 1 and KPI 2; • All KPIs are to be measured and reported against a relevant baseline year of 2019; • The Company has outlined the situations whereby recalculations or pro-forma adjustments of baselines will take place; and • Heathrow has also outlined key risks for each KPI which may affect the achievement of the SPTs; and are beyond the Company’s control. <p>DNV can confirm that the SPTs have a clear calculation methodology in place, that at least 3 years of performance have been outlined, and that the SPTs are set on a predefined timeline (baseline year of 2019, and targets year of FY2026 and FY2030 for KPIs 1 and 2.</p>

²² Ibid

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		control that may affect the achievement of the SPTs.		

3. Bond Characteristics

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Bond Characteristics – SPT Financial / Structural impact	The SLB will need to include a financial and/or structural impact involving trigger event(s) based on whether the KPI(s) reach the predefined SPT(s).	Discussions with Heathrow and review of the following documents: <ul style="list-style-type: none"> Heathrow Sustainability-Linked Bond Framework. 	<p>DNV can confirm that for any sustainability-linked bond transaction under this Framework, Heathrow will include a sustainability-linked mechanism by which the financial characteristics of the instrument may be impacted depending on the achievement or non-achievement of the predefined SPTs at the relevant target observation dates specified in the financing documentation of the relevant sustainability-linked bond. These financial implications could include, but are not limited to, for instance:</p> <ul style="list-style-type: none"> A coupon adjustment such as a step-up; or A premium payment at maturity depending on the nature of the instrument as specified in the relevant final terms. <p>In any case, these implications would be commensurate and meaningful as aligned with market practices.</p> <p>Such financial implications will occur if:</p> <ul style="list-style-type: none"> The selected KPIs performance failed to satisfy the applicable SPTs at any target observation date; The external verification of the SPTs has not been provided and made public in a timely manner, as set out in the legal documentation of the relevant bond instrument; or

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<ul style="list-style-type: none"> If, for any reason, one of the KPIs cannot be calculated, observed or reported in a timely and satisfactory manner (as defined in the relevant bond documentation). <p>Heathrow has committed to notify the investors of the achievement (or not) of the applicable SPTs as soon as possible, and in any event within 180 days after the end of the relevant financial year.</p>
3b	Bond Characteristics – Fallback mechanism	<p>Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner should be explained.</p> <p>Issuers may also consider including, where needed, language in the Bond documentation to take into consideration potential exceptional events.</p>	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> Heathrow Carbon Footprint Methodology 2022 [online]. Heathrow Net Zero Plan [online]. Heathrow Sustainability-Linked Bond Framework. Heathrow Sustainability Report 2022 [online]. Heathrow 2.0: Connecting People and Planet [online]. 	<p>DNV can confirm there appears to be little risk of Heathrow not being able to calculate its KPIs, due to the mature carbon reporting framework that is followed. However, Heathrow has committed in the Framework that if, for any reason, one of the KPIs cannot be calculated, observed, or reported on in a timely and satisfactory manner (as defined in the relevant instrument’s documentation) – the defined financial characteristic change will be triggered as if the target was not met.</p>

4. Reporting commitments

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a	Reporting	<p>Issuers of SLBs should publish, at least once per annum:</p> <ol style="list-style-type: none"> Up-to-date information on the performance of the selected KPI(s), including baselines where relevant A verification assurance report relative to the SPT outlining the performance against the SPTs and the related impact, and timing of such impact, on the bond's financial and/or structural characteristics Any information enabling investors to monitor the level of ambition of the SPTs <p>This reporting should be published regularly, at least annually, and in any case for any date/period relevant to assessing the SPT performance leading to a potential adjustment of the SLB's financial and/or structural characteristics.</p>	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> Heathrow Annual Report and Financial Statements 2021 [online]. Heathrow Sustainability-Linked Bond Framework. Heathrow Sustainability Report 2022 [online]. Heathrow 2.0: Connecting People and Planet [online]. 	<p>Heathrow has committed to reporting progress against the KPIs as part of its annual public disclosures, either in its Sustainability Report and/or its Annual Report and Accounts and/or a standalone document. The reporting may also include:</p> <ul style="list-style-type: none"> Up-to-date information on the performance of the selected KPIs, including the baseline where relevant; A verification assurance report relative to the SPTs outlining the performance against the SPT and the related impact, and timing of such impact, on the sustainability-linked instrument(s); and Any relevant information enabling investors to monitor the progress of the SPTs. <p>When feasible and possible, information may also include:</p> <ul style="list-style-type: none"> A qualitative or quantitative explanation of the contribution of the main factors, including potential expansion, behind the evolution of the performance/KPI on an annual basis; Illustration of the positive sustainability impacts of the performance improvement; If relevant, any re-assessments of KPIs and/or restatements of SPTs and/or pro forma adjustments of baselines or KPIs scope.
4b	Second Party Opinion	<p>Publication of any pre-issuance external review, such as a second party opinion, or if relevant a verification of baselines.</p>	<p>Discussions with Heathrow and review of the following documents:</p>	<p>Heathrow has conducted a pre-issuance external review by way of this assessment by DNV to confirm its alignment with the ICMA SLBPs 2023. The SPO will be made publicly available on Heathrow's corporate website.</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
			<ul style="list-style-type: none"> Heathrow Sustainability-Linked Bond Framework. 	

5. Verification

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
5a	External Verification	An issuer must have its performance against each SPT for each KPI independently verified by a qualified external reviewer with relevant expertise, at least once a year, and for each SPT trigger event.	<p>Discussions with Heathrow and review of the following documents:</p> <ul style="list-style-type: none"> Heathrow Annual Report and Financial Statements 2021 [online]. Heathrow Sustainability-Linked Bond Framework. Heathrow Sustainability Report 2022 [online]. 	<p>DNV notes that Heathrow’s ‘in the air’ and ‘on the ground’ emissions data, representing KPI 1 and KPI 2, is currently independently verified as part of its external disclosure process. In addition, the Company has committed to continue to have its data for these KPIs independently verified annually, for the duration of the SPTs at least.</p> <p>DNV notes that Heathrow will report the KPIs performance against the SPTs post issuance and annually. It will also engage an external verifier (an auditor or any other qualified provider of third-party assurance or attestation services) to provide at least a limited assurance regarding the performance of both KPIs.</p> <p>Based on the evidence reviewed and the discussions with Heathrow, DNV can confirm Heathrow’s commitment to verification as outlined in the Framework, and that is in line with the requirements of the SLBPs.</p>