

RAG System Test Questions: 2024 UPS GRI Report

This document contains 40 questions across four sections, designed to test a RAG system's ability to retrieve, synthesize, and analyze information from the "2024 UPS GRI Report."

1. Basic Questions (Factual Retrieval)

These questions test the direct retrieval of explicit facts and figures from a single point in the document.

Q No.	Question	Answer
B1	What was the total consolidated revenue for UPS in 2024 (excluding Coyote)?	The total consolidated revenue was \$89,502 million (or \$89.502 billion).
B2	Which independent third-party firm provided a reasonable assurance level on the Statement of Greenhouse Gas Emissions for 2024?	Deloitte & Touche LLP provided reasonable assurance.
B3	What is the reported CO ₂ e intensity (tonnes per \$M Revenue) for Total Scope 1, 2, and 3 emissions in the base year (2020)?	The total intensity in the 2020 base year was 0.356 ('000 tonnes/ \$M Revenue).
B4	What was the total reported number of packages delivered by UPS in 2024?	The total number of packages delivered in 2024 was 5.7 billion.
B5	What is the stated goal for the percentage of alternative fuel usage in ground operations by the year 2025?	The goal for alternative fuel usage in ground operations by 2025 is 40%.
B6	What percentage of total electricity consumed at owned and leased facilities was generated from renewable sources in 2024?	15.2% of total electricity was generated from renewable sources in 2024.
B7	As of December 31, 2024, what was the total number of global employees, including both full-time and part-time staff?	The total number of global employees was 500,810.
B8	Which of UPS's operational segments covers packages delivered across Europe, Asia Pacific, and Latin America?	The International Package segment covers these regions.
B9	What percentage of total ground fuel usage did alternative fuel represent in 2024?	Alternative fuel represented 30.6% of total ground fuel usage in 2024.
B10	What is UPS's long-term environmental target for achieving carbon neutrality across global operations?	UPS aims to achieve carbon neutrality by 2050.



2. Intermediate Questions (Synthesizing and Logical Retrieval)

These questions require correlating data points from different sections or performing simple comparisons/subtractions.

Q	Question	Answer
N		
O.		
I1	The reported Total Scope 1 and 2 CO ₂ e intensity was 0.168 in 2024 and 0.172 in 2023. Did the company's efficiency, relative to revenue, improve or decline year-over-year?	The company's efficiency improved. The intensity decreased from 0.172 to 0.168, meaning less CO ₂ e was emitted per million dollars of revenue.
I2	How many more part-time employees were there in the U.S. Domestic Package segment than full-time employees in the same segment in 2024?	The U.S. Domestic Package segment had 263,400 part-time employees and 106,640 full-time employees. The difference is 156,760 more part-time employees.
I3	The renewable electricity percentage increased by 5% year-over-year to reach 15.2% in 2024. What was the percentage of renewable electricity powering facilities in 2023?	The 5% increase is a percentage point increase. If 2024 is 15.2%, then 2023 was 10.2% (15.2% - 5%).
I4	What was the total reported Scope 1 CO ₂ e emissions in '000 tonnes for 2024, given the revenue of \$89,502 million and an intensity of 0.161?	Total Scope 1 emissions = Revenue (\$M) × Intensity (tonnes/M) = 89,502 × 0.161 ≈ 14,409.822 thousand tonnes CO ₂ e.
I5	What were the two reporting segments that collectively represented the global small package operations and what was their combined share of the total number of packages delivered?	The segments are U.S. Domestic Package and International Package. Their combined share is 100% of the 5.7 billion total packages. 
I6	What was the year-over-year (2024 vs. 2023) decrease in total combined Scope 1, 2, and 3 CO ₂ e intensity?	The intensity decreased from 0.288 in 2023 to 0.278 in 2024. The decrease was 0.010 ('000 tonnes/ \$M Revenue).
I7	The report mentions a "significant workforce reduction" is expected through 2027. What is the <i>primary cause</i> of this expected operational change cited in the report?	The primary cause is the agreement with the largest customer to significantly reduce the volume UPS delivers for them.
I8	What was the total energy consumption (in '000 GJs) from all ground fleet fuel sources (gasoline, diesel, jet fuel, alternative, etc.) in 2024?	The total energy consumption from all ground fleet fuel sources in 2024 was 136,878 ('000 GJs).
I9	How many more part-time employees were reported in the Supply Chain Solutions segment	Supply Chain Solutions had 3,060 part-time employees. International Package had 2,290 part-time

than in the International Package segment in 2024?

- I1 If UPS's goal is to achieve 40% alternative fuel usage in ground operations by 2025 (up from 30.6% in 2024), what percentage point increase is required over the single year?

employees. The difference is 770 more part-time employees.

The required increase is $\$40.0\% - 30.6\% = \$ 9.4$ percentage points.

3. Advanced Questions (Analytical and Inferential)

These questions require complex analysis, multi-step calculation, or inference of trends and implications.

Q	Question	Answer
N		
O.		
A	Analytical: Calculate the total number of tonnes of Scope 3 CO ₂ e emissions in 2024. Use the 2024 revenue of \$89,502 million and the Scope 3 intensity of 0.110. Express the result in million tonnes.	Total Scope 3 emissions = $89,502 \times 0.110 = 9,845.22$ thousand tonnes. Since 1 million tonnes = 1,000 thousand tonnes, the result is 9.845 million tonnes CO ₂ e.
A	Inferential: The report notes a "major customer volume shift" and a "network reconfiguration." What impact is this expected to have on the long-term fixed cost base for the U.S. Domestic Package segment, and why?	The impact is an expected reduction in the long-term fixed cost base . This is inferred from the planned closure of up to 10% of facilities and a significant workforce reduction through 2027, which are actions taken to optimize and lower fixed infrastructure and labor costs in response to reduced volume.
A	Analytical: Given the total global employee count of 500,810 and the total number of full-time employees (213,870), what is the ratio of full-time to part-time employees, rounded to two decimal places?	Part-time employees = $500,810 - 213,870 = 286,940$. The ratio (FT:PT) is $213,870/286,940 \approx 0.74:1$.
A	Inferential: The report highlights a 34% decrease in Scope 3 emissions due to the combined effect of new emission factors and the removal of Coyote's impact. What does this suggest about the historical Scope 3 footprint attributed to Coyote's operations prior to its removal from the reporting scope?	This suggests that the Coyote operation previously accounted for a very significant portion (likely a majority) of the total Scope 3 emissions being reported, or that the newly adopted emission factors substantially lowered the calculated emissions across all categories. The large 34% drop points to a material change in scope or calculation method heavily influenced by the excluded entity.



A	Analytical: Based on the Global CO ₂ e Emissions data, calculate the Scope 1 emissions in '000 tonnes for 2023. Use the 2023 revenue of \$88,415 million and the Scope 1 intensity of 0.164.	Total Scope 1 emissions (2023) = $88,415 \times 0.164 \approx 14,490.06$ thousand tonnes CO ₂ e.
A	Inferential: Why would the company explicitly state that revenue does not include Coyote due to restatement when calculating the GRI 305-4 GHG intensity metrics?	This is done to ensure comparability and accuracy of the intensity ratios across all years (2024, 2023, and Base Year 2020). By excluding Coyote from the revenue denominator, the resulting intensity metric accurately reflects the core package business's efficiency without being diluted by a business unit that has been divested or structurally changed.
A	Analytical: UPS achieved 30.6% alternative fuel usage in ground operations in 2024. If the goal is 40% by 2025, what percentage of the remaining gap to the 2025 goal did UPS achieve in 2024, assuming the 2023 usage was the same as the starting point of the 2024 gap calculation?	This is not answerable without the 2023 figure, but using the 2020 base year: Remaining gap (2020 to 2025) is 40% – [2020usage]. The correct calculation using 2024 data is: Not possible to calculate the percentage of the remaining gap without knowing the 2023 (or prior year) achievement towards the 2025 target.
A	Logical: The report indicates that the "Emissions reduced per package" decreased by 1.1% in 2024 versus 2023, while the Total Scope 1, 2, and 3 CO ₂ e intensity (per \$M Revenue) decreased by 3.5% (0.288 to 0.278). What is the primary logical reason for the difference in these two year-over-year improvement metrics?	The primary reason is that the volume (package count) and revenue metrics did not change at the same rate . The decrease in emissions relative to revenue (3.5%) was greater than the decrease relative to package count (1.1%), implying that UPS's average revenue per package likely increased in 2024, making the intensity look better when measured against revenue.
A	Analytical: The Scope 2 intensity (0.007) is significantly lower than the Scope 1 intensity (0.161) in 2024. What does this suggest about the relative proportion of energy consumed and/or emissions produced from owned assets (Scope 1) versus purchased electricity (Scope 2)?	This strongly suggests that the vast majority of UPS's direct operational emissions (fuel use in its fleet) outweigh the emissions associated with its purchased electricity. The Scope 1 operational footprint is exponentially larger and more material than the Scope 2 footprint, likely due to the massive fuel consumption required for its air and ground fleets.



A	Inferential: The report notes that all U.S. data centers procured 100% renewable electricity in 2024. If the company is aiming for 100% renewable electricity for all owned and leased facilities globally by 2035, what is the logical next step for the company to prioritize after the data centers?	The logical next step would be to prioritize the global package facilities (hubs, sorting centers, and distribution centers) outside the U.S. and those U.S. facilities not classified as data centers, as these are likely the next largest consumers of purchased electricity impacting the overall 15.2% global renewable figure.
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4. Table Questions (Pure Data Retrieval and Comparison from GRI 305-4)

These questions focus solely on the data presented in the GHG Emissions Intensity table (GRI 305-4), requiring direct retrieval and comparison between years and scopes.

Q	Question	Answer
N		
T1	What was the Scope 3 CO ₂ e intensity ('000 tonnes/ \$M Revenue) reported for the 2023 fiscal year?	The Scope 3 CO ₂ e intensity for 2023 was 0.116.
T2	By how many million dollars did the reported Revenue increase from the Base Year (2020) to 2024?	The increase was \$89,502 - \$78,408 = \$11,094 million.
T3	Which of the three reporting years (2024, 2023, or 2020) had the lowest Total Scope 1, 2, and 3 CO ₂ e intensity?	2024 had the lowest intensity at 0.278.
T4	What is the exact difference in Scope 1 Intensity between the Base Year (2020) and the 2024 reporting year?	The difference is \$0.192 - 0.161 = 0.031.
T5	How much higher was the Scope 1 intensity than the Scope 2 intensity in the 2024 reporting year?	The difference was \$0.161 - 0.007 = 0.154.
T6	What was the total Scope 1 and 2 CO ₂ e intensity in the Base Year (2020)?	The Total Scope 1 and 2 CO ₂ e intensity in 2020 was 0.202.
T7	Which scope (Scope 1, Scope 2, or Scope 3) saw the smallest absolute reduction in intensity ('000 tonnes/ \$M Revenue) between 2023 and 2024?	Scope 2 saw the smallest reduction: \$0.008 - 0.007 = 0.001. (Scope 1: 0.003; Scope 3: 0.006).
T8	The Total Scope 1, 2, and 3 intensity decreased from 0.356 in 2020 to 0.278 in 2024. What was the percentage reduction in this total intensity	The percentage reduction is $(0.356 - 0.278)/0.356 \times 100\% \approx 21.9\%$.

