

RAG System Evaluation Report

Generated on October 28, 2025 at 10:19 PM

Overall Performance

Metric	Value
Total Questions	10
Successful Answers	10
Failed Answers	0
Success Rate	100.0%

Quality Metrics

Metric	Value
Average Confidence Score	0.795 (79.5%)
Average Retrieval Score	0.532

Detailed Question Results

#	Question	Confidence	Retrieval Score
1	What is climate change?	0.799	0.537
2	What are renewable energy sources?	0.817	0.564
3	What is the greenhouse effect?	0.772	0.495
4	What is biodiversity?	0.750	0.461
5	What causes deforestation?	0.846	0.609
6	What is sustainable development?	0.779	0.507
7	What are fossil fuels?	0.784	0.514
8	What is ocean acidification?	0.779	0.507
9	What is carbon footprint?	0.863	0.636
10	What is conservation?	0.766	0.486

Sample Question-Answer Pairs

Q1: What is carbon footprint?

Answer: A carbon footprint is a measure of the total greenhouse gas emissions caused directly and indirectly by an individual, organization, event, or product throughout its lifecycle. It is expressed as carbon dioxide equivalent (CO₂e), which accounts for all greenhouse gases by converting them to the equivalent...

Confidence: 0.863 | Retrieved Docs: 6 | Citations: 6

Q2: What causes deforestation?

Answer: The primary causes of deforestation include agricultural expansion, logging for timber and paper products, infrastructure development, urbanization, and mining. Agricultural expansion, particularly for large-scale commodity agriculture like cattle ranching, soy production, and palm oil plantations, ...

Confidence: 0.846 | Retrieved Docs: 6 | Citations: 6

Q3: What are renewable energy sources?

Answer: Renewable energy comes from sources that are naturally replenished on a human timescale. These sources can provide power indefinitely with minimal environmental impact, unlike fossil fuels, which are finite.

Confidence: 0.817 | Retrieved Docs: 6 | Citations: 6

Report generated by RAG System Evaluation Tool