



LRQA Independent Assurance Statement

Relating to Republic Service's Report for the 2023 Fiscal and Calendar Year

This Assurance Statement has been prepared for Republic Services, Inc. in accordance with our contract.

Terms of Engagement

LRQA was commissioned by Republic Services, Inc. (Republic) to provide independent assurance on its greenhouse gas (GHG) emissions inventory for the fiscal and calendar year 2023 (January 1 through December 31) and environmental, safety, and employee engagement performance indicators for the fiscal and calendar year 2023 ("the Report") against the assurance criteria below to a limited level of assurance and materiality of the professional judgement of the verifier using LRQA's verification procedure and ISO 14064 - Part 3 for greenhouse gas emissions. LRQA's verification procedure is based on current best practice and is in accordance with ISAE 3000 and ISAE 3410.

Our assurance engagement covered Republic's operations and activities specifically the following requirements:

- Verifying conformance with:
 - Republic's reporting methodologies for the selected environmental, safety, employee engagement, and charitable giving datasets; and
 - World Resources Institute / World Business Council for Sustainable Development Greenhouse Gas Protocol: A corporate accounting and reporting standard, revised edition (otherwise referred to as the WRI/WBCSD GHG Protocol) for the GHG emissions data.¹
- Evaluating the accuracy and reliability of data and information under the operational control consolidation methodology for only the selected indicators listed below:
 - Direct (Scope 1), Energy Indirect (Scope 2) and Other Indirect (Scope 3) GHG emissions;
 - Scope 3 GHG emissions verified by LRQA include Purchased Goods and Services; Capital Goods, Fuel and energy-related emissions, Upstream Transportation and Distribution, Waste Generated in Operations, Business Travel, Employee Commuting, and Upstream Leased Assets.
 - Quantity of total non-renewable and renewable energy consumption;
 - Quantity of biogas sent to beneficial reuse;
 - Municipal water use;
 - Waste recycled and disposed from internal generation;
 - Safety performance metrics including Number of employee fatalities, Number of contractor fatalities, Total Recordable Incident Rate (TRIR), and Lost Time Injury Frequency Rate (LTIFR) for employees; and
 - Employee engagement score.

The following sources were excluded from the GHG Emissions Inventory on the basis of their de minimis contribution to the total Scope 1 and Scope 2 GHG emissions and sense-checked during the engagement:

- GHG emissions from Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur hexafluoride (SF6) and Nitrogen trifluoride (NF3).

LRQA's responsibility is only to Republic. LRQA disclaims any liability or responsibility to others as explained in the end footnote. Republic's responsibility is for collecting, aggregating, analyzing and presenting all the data and information within the Report and for maintaining effective internal controls over the systems from which the Report is derived. Ultimately, the Report has been approved by, and remains the responsibility of Republic.

LRQA's Opinion

Based on LRQA's approach, except for the effect of the matters described in the Basis for Qualified Opinion, nothing has come to our attention that would cause us to believe that Republic has not, in all material respects:

- Met the requirements of the criteria listed above; and
- Disclosed accurate and reliable performance data and information as summarized in Tables 1 through 4 below.

The opinion expressed is formed on the basis of a limited level of assurance and at the materiality of the professional judgement of the verifier.

¹ <http://www.ghgprotocol.org/>



Basis for Qualified Opinion

- In a limited number of instances, the latest emission factors available from Defra were not applied. The difference is non-material.
- The set of global warming potentials applied on one specific source of emission factors was not consistent with the rest of the inventory. The difference is non-material.

Table 1. Summary of Republic’s GHG Emissions Inventory for FY 2023

Scope of GHG emissions		Quantity	Units
Scope 1	Direct GHG Emissions	13,003,979	Metric Tons CO ₂ e
Scope 2	Energy indirect GHG emissions, Electricity (Location-based)	169,256	Metric Tons CO ₂ e
	Energy indirect GHG emissions, Electricity (Market-based)	172,968	
Scope 3	Category 1 Purchased goods and services	1,202,761	Metric Tons CO ₂ e
	Category 2 Capital goods	290,725	Metric Tons CO ₂ e
	Category 3 Fuel and Energy Related Activities (Location-based)	434,764	Metric Tons CO ₂ e
	Category 3 Fuel and Energy Related Activities (Market-based)	435,217	
	Category 4 Upstream Transportation and Distribution	182,480	Metric Tons CO ₂ e
	Category 5 Waste Generated in Operations	90,047	Metric Tons CO ₂ e
	Category 6 Business travel	11,848	Metric Tons CO ₂ e
	Category 7 Employee commuting	149,663	Metric Tons CO ₂ e
	Category 8 Upstream Leased assets (Location-based)	804	Metric Tons CO ₂ e
	Category 8 Upstream Leased assets (Market-based)	340	
Biogenic	Direct Biogenic emissions	6,761,209	Metric Tons CO ₂ e

1. Scope 2, Location-based and Scope 2, Market-based are defined in the WRI/WBCSD GHG Protocol Scope 2 Guidance, 2015

Table 2. Summary of Republic’s Energy Data for FY 2023

Description	Quantity	Unit
Total non-renewable energy consumption in MWh	7,057,179	MWh
Total renewable energy consumption in MWh	1,205,056	MWh
Biogas Sent to Beneficial Reuse ¹	71,726,154,479	SCF _N

1. Biogas is reported in terms of normalized standard cubic feet (SCF_N), as the biogas flow is normalized to 50% CH₄.

Table 3. Summary of Republic’s Other Environmental and Sustainability Data for FY 2023

Parameter	Quantity	Units
Municipal Water Consumed	1.958	Million cubic meters
Waste Generated Internally and Recycled	6,399	Metric Tons
Waste Generated Internally and Disposed ¹	22,924	Metric Tons
Employee Engagement ²	86	Average score

1. This waste metric considers material generated by Republic employees and disposed in a landfill. It does not include recycled materials.
2. Employee engagement value is based on results of a 5-question employee survey managed and analyzed by a third party. The value is the resulting average score on a 100-point scale.



Table 4. Summary of Republic’s Safety Data for FY 2023

Parameter	Quantity
Number of employee fatalities (Safety Amplified goal)	3
Number of contractor fatalities (Safety Amplified goal)	0
Total Recordable Incident Rate (TRIR) ¹ for employees and contract labor (Incident Reduction goal)	2.81
Lost Time Injury Frequency Rate (LTIFR) ² for employees and contractors	5.18

1. Total recordable incident rate is derived as follows: TRIR = Recordable Cases x 200,000/Labor Hours. Rate includes employees and temporary contract labor.
2. Lost Time Incident Frequency Rate is derived as follows: LTIFR = (Days Away from Work * 1,000,000) / Total Hours. Rate includes employees and temporary contract labor

LRQA’s Approach

LRQA’s assurance engagements are carried out in accordance with our verification procedure. The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- interviewing relevant employees of the organization responsible for managing GHG emissions, environmental, safety, and employee engagement performance data and records;
- recalculating sampled sources to demonstrate compliance with the reporting standards;
- assessing Republic’s data management systems to confirm they are designed to prevent significant errors, omissions or mis-statements in the Report; and
- verifying historical GHG emissions, environmental, safety, and employee engagement performance data and records at an aggregated level for the fiscal and calendar year 2023.

LRQA’s Standards and Competence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition* and ISO/IEC 17021 *Conformity assessment – Requirements for bodies providing audit and certification of management systems* that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

Signed

Dated: May 22, 2024

Natali Ganfer
 LRQA Lead Verifier
 On behalf of LRQA, Inc.
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 LRQA reference: UQA00002100

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