



LRQA Independent Assurance Statement

Relating to Republic Service's Report for the 2022 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 2022 (January 1 through December 31) and environmental, safety, employee engagement, and charitable giving performance indicators for the fiscal and calendar year 2022 ("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 for only the selected indicators listed below:
 - Direct (Scope 1), Energy Indirect (Scope 2) and Other Indirect (Scope 3) GHG emissions, using the operational control consolidation methodology;
 - 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 – financial control;
 - Quantity of biogas sent to beneficial reuse – financial control;
 - Water consumption – operational control;
 - Waste recycled and disposed from internal generation – operational control;
 - 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

These non-material discrepancies (all under 1% materiality by scope) have not been addressed by Republic:

- Minor inconsistencies between the supporting documentation provided for biomethane consumption and the final reported value, resulting in a non-material discrepancy for biomethane emissions and subsequently renewable energy consumption;
- Outstanding questions on energy usage activity data for a small number of reporting units; and
- Discrepancies identified with the business travel compliance rate that impact the air travel and rental car emission values.

Table 1. Summary of Republic’s GHG Emissions Inventory for FY 2022

| Scope of GHG emissions | | Quantity | Units |
|--|--|------------|-------------------------------|
| Scope 1 | Direct GHG Emissions | 13,688,116 | Metric Tons CO ₂ e |
| Scope 2 | Energy indirect GHG emissions, Electricity (Location-based) | 200,642 | Metric Tons CO ₂ e |
| | Energy indirect GHG emissions, Electricity (Market-based) | 204,356 | |
| | Energy indirect GHG emissions, Natural Gas | 100,141 | |
| Scope 3 | Category 1 Purchased goods and services | 656,385 | Metric Tons CO ₂ e |
| | Category 2 Capital goods | 203,995 | Metric Tons CO ₂ e |
| | Category 3 Fuel and Energy Related Activities (Location-based) | 553,144 | Metric Tons CO ₂ e |
| | Category 3 Fuel and Energy Related Activities (Market-based) | 554,664 | |
| | Category 4 Upstream Transportation and Distribution | 313,376 | Metric Tons CO ₂ e |
| | Category 5 Waste Generated in Operations | 17,989 | Metric Tons CO ₂ e |
| | Category 6 Business travel | 7,171 | Metric Tons CO ₂ e |
| | Category 7 Employee commuting | 155,334 | Metric Tons CO ₂ e |
| | Category 8 Upstream Leased assets (Location-based) | 679 | Metric Tons CO ₂ e |
| Category 8 Upstream Leased assets (Market-based) | 186 | | |

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 2022

| Description | Quantity | Unit |
|---|----------------|------------------|
| Total non-renewable energy consumption in MWh | 8,546,454 | MWh |
| Total renewable energy consumption in MWh | 1,221,915 | MWh |
| Biogas Sent to Beneficial Reuse ¹ | 72,300,065,684 | 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 2022

| Parameter | Quantity | Units |
|--|----------|----------------------|
| Water Consumed | 1.992 | Million cubic meters |
| Waste Generated Internally and Recycled | 7,149 | Metric Tons |
| Waste Generated Internally and Disposed ¹ | 23,727 | Metric Tons |
| Employee Engagement ² | 85 | 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 2022

| Parameter | Quantity |
|---|----------------|
| Number of employee fatalities (Safety Amplified goal) | 1 ¹ |
| Number of contractor fatalities (Safety Amplified goal) | 0 |
| Total Recordable Incident Rate (TRIR) ² for employees and contract labor (Incident Reduction goal) | 2.88 |
| Lost Time Injury Frequency Rate (LTIFR) ³ for employees and contractors | 5.78 |

1. One additional incident is pending investigation and thus was not OSHA reportable at the time of this report.
2. Total recordable incident rate is derived as follows: TRIR = Recordable Cases x 200,000/Labor Hours. Rate includes employees and temporary contract labor.
3. Lost Time Incident Frequency Rate is derived as follows: LTIFR = # of 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, employee engagement, and charitable giving 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, employee engagement, and charitable giving performance data and records at an aggregated level for the fiscal and calendar year 2022.

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: July 13, 2023

Allison Muehe
LRQA Lead Verifier
On behalf of LRQA, Inc.
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LRQA reference: UQA00002100

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