



2022 SASB REPORT

---

# Sustainability in Action™



## 2022 Republic Services SASB Report

---

This report was prepared following the SASB Waste Management Sustainability Accounting Standard, Version 2018-10, using the reporting entity described in the Annual Report on Form 10-K for the year ended December 31, 2022 (2022 10-K) of Republic Services, Inc (Republic). All data is as of December 31, 2022, for calendar year 2022. Learn more about our sustainability and ESG reporting<sup>1</sup> at [RepublicServices.com/Sustainability](https://RepublicServices.com/Sustainability). We invite you to share your thoughts with us at [Sustainability@RepublicServices.com](mailto:Sustainability@RepublicServices.com).

### Disclosure Regarding Forward-Looking Statements

This report contains certain forward-looking information about us that is intended to be covered by the safe harbor for “forward-looking statements” provided by the Private Securities Litigation Reform Act of 1995. Forward-looking statements are statements that are not historical facts. Words such as “guidance,” “expect,” “will,” “may,” “anticipate,” “plan,” “estimate,” “project,” “intend,” “should,” “can,” “likely,” “could,” “outlook” and similar expressions are intended to identify forward-looking statements. These statements include information about our sustainability targets, goals and programs in addition to our plans, strategies, expectations of future financial performance and prospects. Forward-looking statements are not guarantees of performance. You should not place undue reliance on any forward-looking statement. These statements are based upon the current beliefs and expectations of our management and are subject to significant risk and uncertainties that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot assure you that the expectations will prove to be correct. The inclusion of information in this report should not be construed as a characterization regarding the materiality or financial impact of that information. More information on factors that could cause actual results or events to differ materially from those anticipated is included from time to time in our reports filed with the Securities and Exchange Commission, including our 2022 10-K, particularly under Part I, Item 1A – Risk Factors, and in our Quarterly Reports on Form 10-Q. Additionally, new risk factors emerge from time to time, and it is not possible for us to predict all such risk factors, or to assess the impact such risk factors might have on our business or sustainability programs and goals. We undertake no obligation to update publicly any forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.

<sup>1</sup>We produce sustainability and environmental, social and governance (ESG) reports aligned with numerous standards, including the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB) and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), all of which are available on our [sustainability reporting page](#).

## 2022 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2020	2021	2022
Greenhouse Gas (GHG) Emissions					
IF-WM-110a.1	(1) Gross global Scope 1 emissions	Metric tons CO <sub>2</sub> e	14,161,583	13,724,643	13,688,161
	(2) Percentage covered under emissions-limiting regulation	Percent	84%	83%	83%
	(3) Percentage covered under emissions-reporting regulations	Percent	67%	67%	67%
<p>(1)-(3) Scope 1 emissions include emissions from landfills where Republic has operational control, fleet and buildings. In the absence of viable measurement methods, landfill emissions are based on projection models. We use the Solid Waste Industry for Climate Solutions (SWICS) methodology, which allows us to represent the emissions reductions from investments such as landfill cover and gas collection systems in grades. As an identifiable and verifiable standard, SWICS meets the methodology requirements of the Greenhouse Gas Protocol. We have restated previous years' emissions back to our GHG reduction goal's 2017 baseline to reflect acquisitions and divestitures during the reporting period. For further restatement information and information on gases covered and calculation methodology, see our <a href="#">2022 GRI Report</a>: 2-4 and 305-1. For information on our Science Based Target greenhouse gas reduction goal, see our <a href="#">2022 Sustainability Report</a>.</p> <p>(2) This figure reflects the percentage of total Scope 1 emissions reported in the stated year, which may differ from the rebaselined values shown in this report, that are covered by U.S. EPA's Standards of Performance for Municipal Solid Waste Landfills (US 40 CFR Part 60, Subparts WWW and XXX) and Emissions Guidelines and Compliance Times for Municipal Solid Waste Landfills (U.S. 40 CFR Part 60, Subparts Cc and Cf), as well as the State of California's Landfill Methane Control Measure (17 CCR §§ 95460 – 95476). (3) This figure reflects the percentage of total Scope 1 emissions covered under emissions reporting regulations of the U.S. EPA Greenhouse Gas Reporting Program, which only applies to certain landfill types and those that emit &gt;25,000 MTCO<sub>2</sub>e/year.</p>					
IF-WM-110a.2	(1) Total landfill gas recovered	MMBTU	83,701,380	83,135,235	78,411,864
	(2) Percentage flared	Percent	58%	56%	55%
	(3) Percentage used for energy	Percent	42%	44%	45%
<p>(1)-(3) For more information about our Renewable Energy goal, our progress and related initiatives, see our <a href="#">2022 Sustainability Report</a>. (1) Reporting represents landfill gas collected in both open and closed landfills, via gas collection systems, and is typically described as "landfill gas recovered." Landfill gas generated (requested in SASB guidelines) is a calculated amount, using U.S. 40 CFR Part 98 Subpart HH and is imprecise; therefore, we report landfill gas recovered. (2) Flaring landfill gas effectively destroys certain regulated air pollutants while also thermally oxidizing the methane content of the gas. Thermal oxidation results in flue gases that have a 96% lower global warming potential than methane.</p>					

## 2022 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2020	2021	2022
Greenhouse Gas (GHG) Emissions					
IF-WM-110a.3	<p>Description of long-term and short-term strategy or plan to manage Scope 1 and life-cycle emissions, emission-reduction targets and an analysis of performance against those targets:</p> <p>We've taken a bold position to leverage innovation and lead the industry in combating climate change. Landfill methane emissions, vehicle and equipment emissions, and our buildings' electricity consumption all contribute to climate change. That's why we've adopted an aggressive target for reducing our operational GHG emissions, approved by the Science Based Targets initiative (SBTi). Our goal is to reduce absolute Scope 1 and 2 GHG emissions 35% by 2030, from a 2017 baseline year. This goal supports the United Nations "Climate Action" Sustainable Development Goal, 13.2 – reduce GHG emissions. We've also set an interim target to reduce absolute Scope 1 and 2 emissions 10% by 2025. We're accomplishing our reductions through:</p> <ol style="list-style-type: none"> <li>1. Landfill innovation (e.g. monitoring and measurement, gas collection and control systems, landfill gas-to-energy)</li> <li>2. Diversion from landfill (e.g., composting and other organics processing, recycling)</li> <li>3. Fleet emissions reductions (e.g. electrification, route optimization, changes in driver behavior)</li> <li>4. Emissions reductions when we build (e.g. site selection, building materials and insulation, energy efficiency measures)</li> </ol> <p>For more information about progress toward our GHG reduction goal and related initiatives, refer to the Climate Leadership section of our <a href="#">2022 Sustainability Report</a>, <a href="#">2022 GRI Report: 305</a>, <a href="#">2022 TCFD Addendum</a> and <a href="#">FY2022 CDP Climate Change</a> response.</p>				
Fleet Fuel Management					
IF-WM-110b.1	(1) Fleet fuel consumed	GJ	25,574,173	26,244,511	26,145,367
	(2) Percentage natural gas	Percent	18%	19%	19%
	(3) Percentage renewable	Percent	18%	19%	19%
<p>(1)-(3) See our <a href="#">2022 GRI Report: 2-4</a>. (1) Reporting represents fuel consumed by collection and service vehicles. (2) Reporting includes renewable natural gas. (3) Consistent with the U.S. Renewable Fuel Standard (U.S. 40 CFR § 80.1401), value includes renewable natural gas and biodiesel.</p>					
IF-WM-110b.2	Percentage of alternative fuel vehicles in fleet	Percent	21%	21%	20%
<p>Reporting represents compressed natural gas (CNG) and electric vehicles as a percentage of recycling and solid waste collection vehicles. For more information about our energy and fuel management, our progress and related initiatives, see our <a href="#">2022 Sustainability Report</a> and <a href="#">2022 GRI Report: 302</a>.</p>					
Air Quality					
IF-WM-120a.1	(1) NO <sub>x</sub> (excluding N <sub>2</sub> O)	Metric tons	1,466	1,413	1,368
	(2) SO <sub>x</sub>	Metric tons	354	341	330
	(3) Volatile organic compounds (VOCs)	Metric tons	35	34	33
	(4) Hazardous air pollutants (HAPs)	Metric tons	55	53	51
<p>For more information about reporting on these substances, see our <a href="#">2022 GRI Report</a>.</p>					

## 2022 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2020	2021	2022
<b>Air Quality</b>					
IF-WM-120a.2	Number of facilities in or near areas of dense population	Open Landfills	85	94	95
		Closed Landfills	52	80	82
<i>Value changes from 2021 to 2022 are attributable to a large acquisition. For information regarding changes in reporting from 2020 to 2021, see our <a href="#">2021 SASB Report</a>.</i>					
IF-WM-120a.3	Number of incidents of non-compliance associated with air emissions	Number	NR	NR	NR
<i>SASB reporting guidelines are unclear for this metric. We have opted to report on Item 103 of SEC Regulation S-K in our own metric, defined as RSG-AQ-01.</i>					
RSG-AQ-01	SEC disclosable environmental enforcement proceedings relating to air and odor	Number	0	0	0
<i>Effective November 19, 2020, Item 103 of the SEC's Regulation S-K requires disclosure of certain environmental matters when a governmental authority is a party to the proceedings and the proceedings involve potential monetary sanctions unless we reasonably believe the monetary sanctions will not equal or exceed a threshold which we determine is reasonably designed to result in disclosure of any such proceeding that is material to our business or financial condition. We have determined such disclosure threshold to be \$1,000,000, which is a change from the former threshold of \$100,000, previously required by SEC Regulation S-K. We have had no new proceedings to report under Item 103. For more information about our air quality management, our progress and related initiatives, see our <a href="#">2022 Sustainability Report</a> and <a href="#">2022 GRI Report</a>: 305 and 2-27.</i>					
<b>Management of Leachate and Hazardous Waste</b>					
IF-WM-150a.1	(1) Total Toxic Release Inventory (TRI) releases	Metric tons	11,125	26,650	See below
	(2) Percentage released to water	Percent	>0.06%	>0.01%	See below
<i>Due to TRI reporting timeline, this metric lags by one year, thus 2022 values will be reported in our 2023 reporting. For more information about our releases, see <a href="#">RSG-ML-02</a>. Nonetheless, we provide three years of data for reporting consistency and in 2019 our TRI releases totaled 9,931 metric tons, with less than 0.01% released to water.</i>					
IF-WM-150a.2	Number of corrective actions implemented for landfill releases	Number	NR	NR	NR
<i>IF-WM-150a.2 SASB reporting guidelines are unclear for this metric. For more information, see RSG-ML-01.</i>					
IF-WM-150a.3	Number of incidents of non-compliance associated with environmental impacts	Number	NR	NR	NR
<i>IF-WM-150a.3 SASB reporting guidelines are unclear for this metric. For more information, see RSG-ML-01.</i>					
RSG-ML-01	SEC disclosable enforcement proceedings relating to management of leachate, water and hazardous waste	Number	0	0	0
<i>See notes regarding Item 103 of SEC Regulation S-K under RSG-AG-01 in this report.</i>					

## 2022 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2020	2021	2022
<b>Management of Leachate and Hazardous Waste</b>					
RSG-ML-02	Total leachate collected and treated	Billion gallons	2.072	1.904	1.811
	<i>Reporting represents leachate treated either by Republic or by a third party and then returned to the water cycle. For more information about our leachate management, our progress and related initiatives, see our <a href="#">2022 Sustainability Report</a> and <a href="#">2022 GRI Report</a>: 303.</i>				
<b>Labor Practices</b>					
IF-WM-310a.1	Percentage of active workforce covered under collective bargaining agreements	Percent	24%	24%	23%
	<i>Value changes from 2021 to 2022 are attributable to a large acquisition. For more information on collective bargaining agreements, see page 23 of our <a href="#">2022 10-K</a>.</i>				
IF-WM-310a.2	(1) Number of work stoppages involving 1,000 or more workers lasting one full shift or longer	Number	0	0	0
	(2) Total days idle as a result of work stoppages	Days	0	0	0
	<i>Work stoppages reported in accordance with SASB guidelines, i.e., involving 1,000 or more workers lasting one full shift or longer. For more information about our employee engagement goal, our progress and related initiatives, see our <a href="#">2022 Sustainability Report</a> and <a href="#">2022 GRI Report</a>: 401.</i>				
<b>Workforce Health &amp; Safety</b>					
IF-WM-320a.1	(1) Total recordable incident rate (TRIR)	Rate	3.748	3.640	2.882
	(2) Fatality rate	Rate	2.599	4.966	2.237
	(3) Near Miss Frequency Rate (NMFR) for (a) direct employees and (b) contract employees	Rate	NR	NR	NR
	<i>(1) TRIR includes employee and temporary third-party labor and is calculated using OSHA reporting guidelines. All incidents, regardless of whether treated in-house or externally, are recorded. (2) Fatality rate is calculated per 100,000 full-time equivalent employees, consistent with OSHA and Bureau of Labor Statistics (BLS) reporting guidance. (3a &amp; 3b) Republic does not track near miss data.</i>				
IF-WM-320a.2	Safety Measurement System BASIC percentiles for: (1) Unsafe Driving, (2) Hours-of-Service Compliance, (3) Driver Fitness, (4) Controlled Substances/Alcohol, (5) Vehicle Maintenance and (6) Hazardous Materials Compliance	Percent	See below	See below	See below
	<i>The Federal Motor Carrier Safety Administration (FMCSA) calculates BASIC percentiles for the 60+ Department of Transportation numbers under which Republic operates. These scores are publicly available at <a href="https://www.fmcса.gov/SMS">Ai.fmcса.gov/SMS</a>.</i>				
IF-WM-320a.3	Number of road accidents and incidents	Number	NR	NR	NR
	<i>Due to a quality issue with data provided by a third party, Republic is unable to report on this item for 2022. We are in the process of upgrading our data collection systems to align with reporting requirements. For more information about our safety goals, our progress and related initiatives, see our <a href="#">2022 Sustainability Report</a> and <a href="#">2022 GRI Report</a>: 403.</i>				

## 2022 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2020	2021	2022
Recycling and Resource Recovery					
IF-WM-420a.1	(1) Amount of waste incinerated in owned or operated facilities	Metric tons	0	0	0
	(2) Percentage of waste incinerated that is hazardous	Percent	0%	0%	0%
	(3) Percentage of waste incinerated used for energy recovery	Percent	0%	0%	0%
	<i>Republic does not own or operate waste incineration facilities.</i>				
IF-WM-420a.2	(1) Percentage of customers receiving recycling services by customer type:				
	Residential (municipal + open market)	Percent	74%	75%	74%
	Small container	Percent	25%	25%	26%
	Large container	Percent	26%	25%	26%
	(2) Percentage of customers receiving organics services by customer type:				
	Residential (municipal + open market)	Percent	24%	25%	27%
	Small container	Percent	2%	2%	4%
	Large container	Percent	2%	2%	2%
	<i>The customer categories shown above are consistent with Republic's financial reporting for collection services. We have revised past year reporting to separate organics from other recycling, in accordance with SASB guidelines. Republic Services offers both single-stream and multi-stream recycling services as well as organics recycling services.</i>				
	IF-WM-420a.3	(1) Amount of material recycled	Million metric tons	5.1	4.8
(2) Amount of organics diverted		Million metric tons	0.7	0.9	0.9
(3) Amount of materials processed as waste to energy		Million metric tons	43.5	42.4	42.2
<i>(1) Reporting represents metric tons of material processed at a Republic owned or operated recycling facility. (2) Reporting in 2021 and 2022 includes metric tons composted and food waste pre-processed at a Republic owned or operated facility. Reporting does not include organics collected by Republic and taken to a third-party facility for processing. (3) Reporting represents tons of waste received at a Republic owned or operated landfill with a gas-to-energy recovery system. Historic values have been updated to align with updated methodologies. For more information about our Circular Economy goal and related initiatives, see our <a href="#">2022 Sustainability Report</a>.</i>					
IF-WM-420a.4	(1) Amount of electronic waste collected	Metric tons	292	336	262
	(2) Percentage of materials recovered from electronic waste through recycling	Percent	>99%	>99%	>99%
	<i>Reporting represents volumes collected by Republic as electronic waste and processed by a third party.</i>				

## 2022 Republic Activity Metrics

SASB Code	Sustainability Accounting Metric	Units	2020	2021	2022
IF-WM-000.A	Number of customers by category: (1) municipal, (2) commercial, (3) industrial, (4) residential and (5) other <i>Republic does not classify customer counts by these categories.</i>	Number	NR	NR	NR
IF-WM-000.B	Vehicle fleet size	Number of collection vehicles, service vehicles and heavy equipment	25,659	26,173	29,240
		Collection fleet only	16,300	16,400	16,900
<i>Collection fleet comprises recycling and solid waste vehicles as reported in our <a href="#">2022 10-K</a>. Historical counts do not reflect subsequent acquisitions.</i>					
IF-WM-000.C	Landfills	Total Active Landfills	186	198	206
		Closed Landfills	128	124	128
	Transfer Stations	Number	220	239	233
	Recycling Centers	Number	76	71	71
	Organics Facilities	Number	12	19	19
	Incinerators	Number	0	0	0
	All Other Facilities	Number	480	492	507
<i>The increase in landfill count from 2021 to 2022 is a result of one large and numerous small acquisitions, including five active hazardous waste landfills. Closed Landfills represent those for which we had post-closure responsibility and do not distinguish hazardous landfills, which do not accept putrescible or organic wastes that generate landfill gases. For information regarding changes in recycling center and organics facility counts from 2020 to 2021, see our <a href="#">2021 SASB Report</a>. We report the breakdown of operations included under All Other Facilities in our <a href="#">2022 10-K</a>.</i>					
IF-WM-000.D	Amount of material managed by our business	Million metric tons	96.2	101.6	95.3
<i>We use the amount of material we manage when calculating and evaluating intensity comparisons. Data includes the categories MSW, Recycling, E&amp;P (extraction and production) and TSDF (treatment, storage and disposal facilities). We track volumes in short tons and convert to metric tons per SASB guidelines.</i>					
RSG-AM-01	Revenue	Million USD	10,154	11,295	13,511