



Sustainability in Action

2021 SASB Report



2021 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, 2021 (2021 10-K) of Republic Services, Inc (Republic). All data is as of December 31, 2021, for calendar year 2021. Learn more about our sustainability and ESG reporting¹ at RepublicServices.com/Sustainability. We invite you to share your thoughts with us at 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 2021 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.

¹ 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).

2021 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2019 Results	2020 Results	2021 Results
Greenhouse Gas (GHG) Emissions					
IF-WM-110a.1	(1) Gross global Scope 1 emissions	Metric tons CO ₂ e	14,818,003	14,071,744	13,643,797
	(2) Percentage covered under emissions-limiting regulations	Percent	82%	84%	83%
	(3) Percentage covered under emissions-reporting regulations	Percent	65%	67%	67%
	<p><i>(1) - (3) Scope 1 emissions include emissions from landfills and fleet in which Republic has operational control. In the absence of viable technology for measurement of landfill emissions, landfill emissions are based on projection models. In 2021, we changed the methodology within our model to use the Solid Waste Industry for Climate Solutions (SWICS) methodology. This methodology allows for more input parameters, such as landfill cover systems, and is a better representation of our landfill emissions. 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 for SWICS and other factors such as acquisitions and divestitures during the reporting period.</i></p> <p><i>For further restatement information and information on gases covered and calculation methodology, see our 2021 GRI Report: 2-4 and 305-1. For information on our Science Based Target greenhouse gas reduction goal and SWICS, see our 2021 Sustainability Report. Reports are available at RepublicServices.com/Sustainability.</i></p> <p><i>(2) This percentage reflects the emissions 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).</i></p> <p><i>(3) Only certain landfill types and those that emit >25,000 MTCO₂e/year are covered under emissions reporting regulations, according to the U.S. EPA Greenhouse Gas Reporting Program. Percentage also does not include fleet emissions, as they are not regulated under emissions-reporting regulations.</i></p>				
IF-WM-110a.2	(1) Total landfill gas recovered	MMBTU	82,275,736	83,701,380	83,135,235
	(2) Percentage flared	Percent	57%	58%	56%
	(3) Percentage used for energy	Percent	43%	42%	44%
	<p><i>(1) - (3) We have restated previous years' landfill gas values back to our Renewable Energy goal's 2017 baseline to account for acquisitions and divestitures during the reporting period. For more information about our Renewable Energy goal, our progress and related initiatives, please refer to our 2021 Sustainability Report, available at RepublicServices.com/Sustainability.</i></p> <p><i>(1) This total represents the amount of 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 recovered landfill gas recovered is used.</i></p> <p><i>(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.</i></p>				

Key:

N/A – Not applicable

NR – Not reported

2021 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2019 Results	2020 Results	2021 Results
Greenhouse Gas (GHG) Emissions					
IF-WM-110a.3	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>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 Target 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'll accomplish our reductions through:</p> <ol style="list-style-type: none"> 1. Landfill innovation (e.g., improving monitoring and measurement, gas collection and control systems, landfill gas-to-energy) 2. Diversion from landfill (e.g., organics processing / composting, recycling) 3. Fleet emissions reductions (e.g., electrification, route optimization, changes in driver behavior) 4. Emissions reductions when we build (e.g., site selection, building materials and insulation, energy efficiency measures) <p>For more information about our GHG emissions goal, our progress and related initiatives, please refer to the Climate Leadership section of our 2021 Sustainability Report and our 2021 GRI Report, Standard 305. Please also refer to our 2021 TCFD Report and our CDP climate change response. These reports are available at RepublicServices.com/Sustainability.</p>				
Fleet Fuel Management					
IF-WM-110b.1	(1) Fleet fuel consumed	GJ	22,868,781	21,145,433	21,886,126
	(2) Percentage natural gas	Percent	21%	19%	20%
	(3) Percentage renewable	Percent	14%	19%	20%
	<i>(1) - (3) Historical values have been restated using a fleet fuel usage methodology more closely linked to our activities. Please refer to our 2021 GRI Report: 2-4, available at RepublicServices.com/Sustainability. (1) Value includes fuel consumed by collection and service vehicles. (2) Number 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.</i>				
IF-WM-110b.2	Percentage of alternative fuel vehicles in fleet	Percent	20%	21%	21%
	<p><i>Value represents compressed natural gas (CNG) vehicles as a percentage of collection vehicles.</i></p> <p><i>For more information about our energy and fuel management, our progress and related initiatives, please refer to our 2021 Sustainability Report and 2021 GRI Report, Standard 302, available at RepublicServices.com/Sustainability.</i></p>				

2021 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2019 Results	2020 Results	2021 Results
Air Quality					
IF-WM-120a.1	Air emissions of the following pollutants:				
	(1) NOx (excluding N ₂ O)	Metric tons	1,408	1,466	1,413
	(2) SOx	Metric tons	340	354	341
	(3) Volatile organic compounds (VOCs)	Metric tons	33	35	34
	(4) Hazardous air pollutants (HAPs)	Metric tons	53	55	53
	<i>Reporting follows SASB reporting guidelines and is based exclusively on landfill emissions. While there may be multiple methods for calculating landfill air emissions, Republic believes the most representative method is to use measured landfill gas flow to flares, engineering calculations and mass balance calculations. For additional details on scope and method of calculations, please see our 2021 GRI Report, disclosure 305-7, available at RepublicServices.com/Sustainability.</i>				
IF-WM-120a.2	Number of facilities in or near areas of dense population	Open landfills	89	85	94
		Closed landfills	49	52	80
	<i>From 2020 to 2021, Republic Services acquired 8 open landfills and 1 closed landfill located in or near areas of dense population. The remaining change in the numbers reported year over year is a reflection of an update to our methodology and enhanced data available to us from the U.S. Census Bureau.</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	1	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.</i>				
	<i>For more information about our air quality management, our progress and related initiatives, please refer to our 2021 Sustainability Report and 2021 GRI Report: 305 and 2-27, available at RepublicServices.com/Sustainability.</i>				

2021 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2019 Results	2020 Results	2021 Results
Management of Leachate and Hazardous Waste					
IF-WM-150a.1	(1) Total Toxic Release Inventory (TRI) releases, (2) Percentage released to water	Number	N/A	N/A	N/A
	<i>We have replaced the SASB advised metric of Total Toxic Release Inventory (TRI) releases with RSG-ML-02 Total Leachate Collected and Treated because TRI releases are de minimis for our business.</i>				
IF-WM-150a.2	Number of corrective actions implemented for landfill releases	Number	NR	NR	NR
	<i>SASB reporting guidelines are unclear for this metric.</i>				
IF-WM-150a.3	Number of incidents of non-compliance associated with environmental impacts	Number	NR	NR	NR
	<i>SASB reporting guidelines are unclear for this metric.</i>				
RSG-ML-01	SEC disclosable environmental enforcement proceedings relating to management of leachate, water and hazardous waste	Number	1	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.</i>				
RSG-ML-02	Total leachate collected and treated	Billion gallons	2.043	2.051	1.904
	<i>Total reflects leachate that is treated by either Republic or a third party and then returned to the water cycle. For more information about our leachate management, our progress and related initiatives, please refer to our 2021 Sustainability Report and 2021 GRI Report, Standard 306, available at RepublicServices.com/Sustainability.</i>				
Labor Practices					
IF-WM-310a.1	Percentage of active workforce covered under collective bargaining agreements	Percent	24%	24%	24%
IF-WM-310a.2	(1) Number of work stoppages	Number	0	0	0
	(2) Total days idle	Days	0	0	0
	<i>While we occasionally experience work stoppages, Republic did not have any work stoppages or days idle as defined by the 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, please refer to our 2021 Sustainability Report and 2021 GRI Report, Standard 401, available at RepublicServices.com/Sustainability.</i>				

2021 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2019 Results	2020 Results	2021 Results
Workforce Health & Safety					
IF-WM-320a.1	(1) Total Recordable Incident Rate (TRIR)	Rate	3.707	3.748	3.640
	(2) Fatality Rate	Rate	4.872	2.599	4.966
	(3a) Near Miss Frequency Rate (NMFR) for direct employees, (3b) Near Miss Frequency Rate (NMFR) for contract employees	Rate	NR	NR	NR
	<p>(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.</p> <p>(2) The fatality rate is calculated per 100,000 full-time equivalent employees, consistent with OSHA and Bureau of Labor Statistics (BLS) reporting guidance.</p> <p>(3a)/(3b) Republic does not track near miss data.</p>				
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
<p>The Federal Motor Carrier Safety Administration (FMCSA) calculates BASIC percentiles for the 60+ Department of Transportation numbers under which Republic operates. These scores are available to the public at Ai.fmcsa.dot.gov/SMS.</p>					
IF-WM-320a.3	Number of road accidents and incidents	Number	NR	NR	NR
	<p>Due to a quality issue with data provided by a third party, Republic is unable to report on this item for 2021. We are in the process of upgrading our data collection systems to align with reporting requirements.</p> <p>For more information about our safety goals, our progress and related initiatives, please refer to our 2021 Sustainability Report and 2021 GRI Report, Standard 403, available at RepublicServices.com/Sustainability.</p>				

2021 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2019 Results	2020 Results	2021 Results
Recycling and Resource Recovery					
IF-WM-420a.1	(1) Amount of waste incinerated in owned facilities	Metric tons	0	0	0
	(2) Percent of waste incinerated that is hazardous	Percent	0%	0%	0%
	(3) Percent 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%	74%	75%
	Small container	Percent	26%	25%	26%
	Large container	Percent	25%	26%	26%
	(2) Percentage of customers receiving organics services by customer type:				
	Residential (municipal + open market)	Percent	25%	24%	25%
	Small container	Percent	2%	2%	2%
Large container	Percent	2%	2%	2%	
<i>The customer categories shown above are consistent with Republic's financial reporting for collection services.</i>					
IF-WM-420a.3	(1) Amount of material recycled	Million metric tons	4.9	5.1	4.8
	(2) Amount of organics diverted	Thousand metric tons	704	718	924
	(3) Amount of material processed as waste to energy	Million metric tons	44.5	43.0	40.8
	<i>(1) Amount provided is metric tons of material processed at a Republic-owned or -operated recycling facility. It does not include recycling collected by Republic and taken to a third-party facility for processing.</i>				
	<i>(2) 2021 amount provided includes metric tons composted and food waste pre-processed at a Republic-owned or -operated facility. It does not include organics collected by Republic and taken to a third-party facility for processing.</i>				
	<i>(3) Amount provided is tons of waste received at a Republic-owned or -operated landfill with a gas-to-energy recovery system.</i>				
	<i>For more information about our Circular Economy goal, our progress and related initiatives, please refer to our 2021 Sustainability Report, available at RepublicServices.com/Sustainability.</i>				
IF-WM-420a.4	(1) Amount of electronic waste collected	Metric tons	548	292	336
	(2) Percent of electronic waste recovered through recycling	Percent	≥ 99%	≥ 99%	≥ 99%

2021 Republic Activity Metrics

SASB Code	Activity Metric	Units	2019 Results	2020 Results	2021 Results
IF-WM-000.A	Number of customers by category: (1) municipal, (2) commercial, (3) industrial, (4) residential, and (5) other	Number	NR	NR	NR
	<i>Republic does not classify customer counts by these categories.</i>				
IF-WM-000.B	Vehicle fleet size	Includes collection fleet, service vehicles and equipment	25,529	25,659	26,173
		Collection fleet	16,000	16,300	16,400
IF-WM-000.C	Landfills	Active landfills	189	186	198
		Closed landfills	130	128	124
		Active hazardous landfills	0	0	0
	Transfer stations	Number	212	220	239
	Recycling facilities	Number	79	76	71
	Organics facilities	Number	10	12	19
	Incinerators	Number	0	0	0
	All Other facilities	Landfill gas to energy	69	69	69
		Other renewable energy	6	6	8
		CNG fueling stations	39	38	40
		TRD facilities	7	6	3
SWD wells		15	9	6	
	Deep injection wells	4	7	7	
<i>Recycling facilities: Reduction in count is a result of consolidation of less efficient recycling facilities into more efficient, technologically advanced facilities and the expiration of operating agreements.</i>					
<i>Organics facilities: 2021 data has been updated to include all Organics Centers. Total includes 12 composting, 3 food waste preprocessing, and 4 green waste processing facilities. Previous year's data included only composting facilities.</i>					
IF-WM-000.D	Amount of material managed by our business:				
	Total tons managed	Million metric tons	103.4	96.2	101.6
<i>We use the amount of material we manage when calculating and evaluating intensity comparisons. Data includes MSW, recycling, and E&P waste tons managed. Historical values have been converted to metric tons for alignment with SASB guidelines.</i>					
N/A	Revenue	Billion USD	\$10.299	\$10.154	\$11.295