



2020 SASB Report



2020 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, 2020 (2020 10-K) of Republic Services, Inc (Republic). All data is as of December 31, 2020, for calendar year 2020. Learn more about our sustainability and ESG reporting 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 2020 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).

2020 Republic Sustainability Accounting Metrics

SASB Code	Sustainability Accounting Metric	Units	2017 Results	2018 Results	2019 Results	2020 Results
Greenhouse Gas (GHG) Emissions						
IF-WM-110a.1	(1) Gross global Scope 1 emissions	Metric tons CO ₂ e	13,487,089	13,199,886	13,931,728	13,214,960
	(2) Percentage covered under emissions-limiting regulations	Percent	83 %	83 %	84 %	85 %
	(3) Percentage covered under emissions-reporting regulations	Percent	85 %	85 %	86 %	87 %
	<i>Discussion/clarifications/assumptions/etc. (including measurement/estimation methods):</i>					
	(1) Scope 1 emissions include emissions from landfills and fleet that are owned, leased or operated by Republic. For information on gases covered and calculation methodology, see our 2020 GRI Report, disclosure 305-1 and our 2020 Sustainability Report, available at RepublicServices.com/Sustainability .					
	In the absence of commercially viable technology for real-time monitoring of landfill emissions, EPA reporting is based on a projection model. Today, we rely on this projection model, and we recognize that this representation of our landfill emissions may not closely reflect our performance and reductions – a challenge faced throughout our industry. As indicated by our Science Based Targets initiative (SBTi)-approved emissions reduction target, we are actively working toward accurate and continuous measurement of fugitive landfill emissions. In the absence of accurate and continuous measurement, we continue to explore alternative means of measuring and projecting our landfill emissions.					
	Fleet emissions are based on fuel-specific emissions factors. In this year's report we now account for the operation of our corporate jet for 2017-2020, calculated using the EPA GHG Emissions Factor Hub for Jet Fuel. See Section IF-WM-110b for more details on fuel types.					
IF-WM-110a.2	(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).					
	(3) Only certain landfill types and those that emit >25k MTCO ₂ e/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.					
	CO ₂ e = carbon dioxide equivalents (standard unit for carbon footprint measurement)					
	(1) Total landfill gas recovered	MMBTU	78,942,711	80,148,584	82,651,373	83,870,646
(2) Percentage flared	Percent	55 %	58 %	57 %	58 %	
(3) Percentage used for energy	Percent	45 %	42 %	43 %	42 %	

SASB Code 2020 Results

Greenhouse Gas (GHG) Emissions

<p>IF-WM-110a.2 Continued</p>	<p><i>Discussion/clarifications/assumptions/etc. (including measurement/estimation methods):</i></p> <p>(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 is used.</p> <p>Our Renewable Energy goal is to increase biogas sent to beneficial reuse by 50% by 2030 (from a 2017 baseline), as we endeavor to make our landfills regenerative. For more information about our beneficial biogas reuse goal, our progress and related initiatives, please refer to our 2020 Sustainability Report, available at RepublicServices.com/Sustainability.</p> <p>(2) Flaring landfill gas effectively destroys certain regulated air pollutants while also thermally oxidizing the methane content of the gas. Thermal oxidation of methane reduces the global warming potential of the resultant flue gas by 96%.</p> <p>MMBTUs = million British Thermal Units (a measure of the energy content in fuel)</p>
<p>IF-WM-110a.3</p>	<p><i>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:</i></p> <p>Our 2030 sustainability goals address the risks and opportunities surrounding critical, global, sustainability-related macrotrends most relevant to our business, including climate change. Given our position, regulatory and market developments related to climate change present us with the potential for strategic business opportunities. Offsetting operational GHG emissions is not enough. We’re taking 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 SBTi. Our goal is to reduce absolute Scope 1 and 2 GHG 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’ll accomplish this goal through:</p> <ol style="list-style-type: none"> 1. Landfill innovation (e.g. monitoring and measurement, gas collection and control systems, landfill gas-to-energy) 2. Fleet emissions reductions (e.g. electrification, route optimization, changes in driver behavior) 3. 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 2020 Sustainability Report and our 2020 GRI Report, Standard 305. Please also refer to our inaugural TCFD Report, released earlier this year. These reports are available at RepublicServices.com/Sustainability.</p>

SASB Code	Sustainability Accounting Metric	Units	2017 Results	2018 Results	2019 Results	2020 Results
Fleet Fuel Management						
IF-WM-110b.1	(1) Fleet fuel consumed	GJ	19,544,955	19,292,633	18,746,185	18,295,379
	(2) Percentage natural gas	Percent	19 %	20 %	21 %	24 %
	(3) Percentage renewable	Percent	7 %	15 %	15 %	21 %
	<i>Discussion/clarifications/assumptions/etc. (including measurement/estimation methods):</i>					
	(1) Number 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), we include renewable natural gas and biodiesel GJ = gigajoule (a measure of energy that enables comparisons amongst different types of fuel)					
IF-WM-110b.2	Percentage of alternative fuel vehicles in fleet	Percent	19 %	20 %	20 %	21 %
	<i>Discussion/clarifications/assumptions/etc. (including measurement/estimation methods):</i>					
	Number represents compressed natural gas (CNG) vehicles as a percentage of collection vehicles. See page 6 of our 2020 10-K . For more information about our energy and fuel management, our progress and related initiatives, please refer to our 2020 Sustainability Report and 2020 GRI Report, Standard 302, available at RepublicServices.com/Sustainability .					
Air Quality						
IF-WM-120a.1	Air emissions of the following pollutants:	Air Emissions (metric tons)				
	(1) NOx (excluding N ₂ O)	Metric tons	1,304	1,400	1,438	1,486
	(2) SOx	Metric tons	314	339	347	359
	(3) Volatile organic compounds (VOCs)	Metric tons	31	33	34	36
	(4) Hazardous Air Pollutants (HAPs)	Metric tons	49	53	54	56
IF-WM-120a.2	Number of facilities in or near areas of dense population	Open landfills	N/A	89	89	85
		Closed landfills	N/A	49	49	52
IF-WM-120a.3	Number of incidents of non-compliance associated with air emissions	Number	NR	NR	NR	NR
RSG-AQ-01	SEC disclosable environmental enforcement proceedings relating to air and odor	Number	0	2	1	0

SASB Code	Sustainability Accounting Metric	Units	2017 Results	2018 Results	2019 Results	2020 Results
Air Quality						
<i>Discussion/clarifications/assumptions/etc. (including measurement/estimation methods):</i>						
<p>IF-WM-120a.1 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 2020 GRI Report, disclosure 305-7, available at RepublicServices.com/Sustainability.</p> <p>IF-WM-120a.2 Total landfill count within 5 km of urban populations greater than 50,000 people, based on 2010 US Census Bureau data, is reported. Site locations are based on landfill mailing address.</p> <p>IF-WM-120a.3 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.</p> <p>RSG-AQ-01 Please refer to Item 103 of SEC Regulation S-K, and Part I, Item 3 (Legal Proceedings) in our 2020 10-K. Item 103 of the SEC's Regulation S-K, as amended effective November 9, 2020, 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 disclosure threshold of \$100,000, previously required by Item 103 of SEC Regulation S-K. We have had no new proceedings to report under Item 103.</p> <p>For more information about our air quality management, our progress and related initiatives, please refer to our 2020 Sustainability Report and 2020 GRI Report, Standards 305 and 307, available at RepublicServices.com/Sustainability.</p>						
Management of Leachate and Hazardous Waste						
IF-WM-150a.1	(1) Total Toxic Release Inventory (TRI) releases	Number	N/A	N/A	N/A	N/A
	(2) Percentage released to water	Percent	N/A	N/A	N/A	N/A
IF-WM-150a.2	Number of corrective actions implemented for landfill releases	Number	NR	NR	NR	NR
IF-WM-150a.3	Number of incidents of non-compliance associated with environmental impacts	Number	NR	NR	NR	NR
RSG-ML-01	SEC disclosable environmental enforcement proceedings relating to management of leachate, water and hazardous waste	Number	0	1	1	0
RSG-ML-02	Total leachate collected and treated	Billion gallons	1.745	1.817	2.043	2.051

SASB Code	Sustainability Accounting Metric	Units	2017 Results	2018 Results	2019 Results	2020 Results
Management of Leachate and Hazardous Waste						
<i>Discussion/clarifications/assumptions/etc. (including measurement/estimation methods):</i>						
IF-WM-150a.1 We have replaced the SASB advised metric of Total Toxic Release Inventory (TRI) releases with Total leachate collected and treated (RSG-ML-02) because TRI releases are de minimis for our business.						
IF-WM-150a.2 SASB reporting guidelines are unclear for this metric.						
IF-WM-150a.3 SASB reporting guidelines are unclear for this metric.						
RSG-ML-01 Please refer to Item 103 of SEC Regulation S-K, and Part I, Item 3 (Legal Proceedings) in our 2020 10-K. Item 103 of the SEC's Regulation S-K, as amended effective November 9, 2020, 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 disclosure threshold of \$100,000, previously required by Item 103 of SEC Regulation S-K. We have had no new proceedings to report under Item 103.						
RSG-ML-02 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 2020 Sustainability Report and 2020 GRI Report, Standard 306, available at RepublicServices.com/Sustainability .						
Labor Practices						
IF-WM-310a.1	Percentage of active workforce covered under collective bargaining agreements	Percent	24 %	24 %	24 %	24 %
IF-WM-310a.2	(1) Number of work stoppages	Number	0	0	0	0
	(2) Total days idle	Days	0	0	0	0
<i>Discussion/clarifications/assumptions/etc. (including measurement/estimation methods), including reason for the work stoppage, impact on operations and any corrective actions taken:</i>						
IF-WM-310a.1 As of December 31, 2020, approximately 24% of our workforce was represented by various labor unions. See page 22 of our 2020 10-K .						
IF-WM-310a.2 Republic did not have any labor events that qualify as material work stoppages under the SASB reporting guidelines.						
For more information about our employee engagement goal, our progress and related initiatives, please refer to our 2020 Sustainability Report and 2020 GRI Report, Standard 401, available at RepublicServices.com/Sustainability .						

SASB Code	Sustainability Accounting Metric	Units	2017 Results	2018 Results	2019 Results	2020 Results
Workforce Health & Safety						
IF-WM-320a.1	(1) Total Recordable Incident Rate (TRIR)	Rate	3.646	3.873	3.707	3.748
	(2) Fatality Rate	Rate	4.988	0	4.872	2.599
	(3a) Near Miss Frequency Rate (NMFR) for direct employees	Rate	NR	NR	NR	NR
	(3b) Near Miss Frequency Rate (NMFR) for contract employees	Rate	NR	NR	NR	NR
IF-WM-320a.2	Safety Measurement System BASIC percentiles:					
	(1) Unsafe Driving	Percent	See below	See below	See below	See below
	(2) Hours-of-Service Compliance	Percent	See below	See below	See below	See below
	(3) Driver Fitness	Percent	See below	See below	See below	See below
	(4) Controlled Substances/Alcohol	Percent	See below	See below	See below	See below
	(5) Vehicle Maintenance	Percent	See below	See below	See below	See below
IF-WM-320a.3	(6) Hazardous Materials Compliance	Percent	See below	See below	See below	See below
	Number of road accidents and incidents	Number	162	124	NR	NR

Discussion/clarifications/assumptions/etc. (including measurement/estimation methods):

IF-WM-320a.1:

(1) TRIR is a company-wide rate, including residential, commercial and industrial collection, calculated using OSHA reporting guidelines (per 100 employees). All incidents, regardless of whether treated in-house or externally, are recorded.

(2) The fatality rate is calculated per 100,000 full-time equivalent employees, consistent with OSHA and Bureau of Labor Statistics (BLS) reporting guidance.

IF-WM-320a.1 (3a)/(3b) Republic does not track near miss data.

IF-WM-320a.2 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](https://www.fmcsa.dot.gov/SMS).

IF-WM-320a.3 Not reporting: Due to a quality issue with data provided by a third party, Republic was unable to report on this item for 2019 or 2020. We are in the process of upgrading our data collection systems to align with reporting requirements.

Republic is taking an ambitious leap forward in safety with a program we call Safety Amplified. Our goals are designed to enhance safety for our employees and the communities we serve. We have two safety goals:

1. Zero work-related employee fatalities
2. OSHA Total Recordable Incident Rate (TRIR) of 2.0 or less by 2030

For more information about our safety goals, our progress and related initiatives, please refer to our 2020 Sustainability Report and 2020 GRI Report, Standard 403, available at RepublicServices.com/Sustainability.

SASB Code	Sustainability Accounting Metric	Units	2017 Results	2018 Results	2019 Results	2020 Results
Recycling and Resource Recovery						
IF-WM-420a.1	(1) Amount of waste incinerated in owned facilities	Metric tons	0	0	0	0
	(2) Percent of waste incinerated that is hazardous	Percent	0 %	0 %	0 %	0 %
	(3) Percent of waste incinerated used for energy recovery	Percent	0 %	0 %	0 %	0 %
IF-WM-420a.2	(1) Percentage of customers receiving recycling services by service type:					
	Residential (municipal + open market)	Percent	72 %	71 %	74 %	74 %
	Small container	Percent	24 %	25 %	26 %	25 %
	Large container	Percent	12 %	12 %	25 %	26 %
	(2) Percent of customers receiving composting services by service type:					
	Residential (municipal + open market)	Percent	25 %	24 %	25 %	24 %
	Small container	Percent	1 %	1 %	2 %	2 %
IF-WM-420a.3	(1) Amount of material recycled	Million metric tons	4.9	4.9	4.9	5.1
	(2) Amount of material composted	Thousand metric tons	411	680	704	718
	(3) Amount of material processed as waste to energy	Million metric tons	43	45	44.5	43
IF-WM-420a.4	(1) Amount of electronic waste collected	Metric tons	473	479	548	292
	(2) Percent of electronic waste recovered through recycling	Percent	≥ 99 %	≥ 99 %	≥ 99 %	≥ 99 %

Discussion/clarifications/assumptions/etc. (including measurement/estimation methods):

IF-WM-420a.1 Republic does not own or operate waste incineration facilities.

IF-WM-420a.2 The customer categories shown above are consistent with Republic's financial reporting for collection services.

IF-WM-420a.3 (1) and (2) These totals include material that is processed at Republic-owned or -operated recycling and composting facilities from both Republic and third-party haulers. These figures do not include material collected by Republic and taken to third-party facilities for processing. Historical values have been converted to metric tons for alignment with SASB guidelines.

IF-WM-420a.3 (3) This is the amount of MSW that goes to Republic landfills that create renewable energy through gas to energy projects.

Our 2030 sustainability goals address critical global macro trends and our most relevant sustainability risks and opportunities, including recycling and the circular economy. We believe our innovative business practices and deep understanding of scalable circular economy solutions will help us accomplish our ambitious Circular Economy goal, to **increase recovery of key materials by 40% on a combined basis by 2030** (from a 2017 baseline). For more information about our circular economy goal, our progress and related initiatives, please refer to our 2020 Sustainability Report, available at RepublicServices.com/Sustainability.

2020 Republic Activity Metrics

SASB Code	Activity Metric	Units	2017 Results	2018 Results	2019 Results	2020 Results	
IF-WM-000.A	Municipal	Number	NR	NR	NR	NR	
	Commercial	Number	NR	NR	NR	NR	
	Industrial	Number	NR	NR	NR	NR	
	Residential	Number	NR	NR	NR	NR	
	IF-WM-000.A Republic does not archive historical customer counts by these categories.						
IF-WM-000.B	Vehicle fleet size	Includes collection fleet, service vehicles and equipment	24,837	25,094	25,529	25,659	
		Collection fleet	15,900	16,000	16,000	16,300	
IF-WM-000.C	Landfills	Active landfills	195	190	189	186	
		Closed landfills	124	129	130	128	
		Active hazardous landfills	0	0	0	0	
	Transfer Stations	Number	204	207	212	220	
	Recycling Centers	Number	90	91	79	76	
	Composting Centers	Number	9	10	10	12	
	Incinerators	Number	0	0	0	0	
	All other facilities	Renewable energy and landfill gas projects		68	75	75	75
		CNG fueling stations		37	37	39	38
		TRD facilities		7	7	7	6
SWD wells			11	11	15	9	
	Deep injection wells		NR	NR	4	7	
IF-WM-000.D	Amount of material managed by our business:						
	Total tons managed	Million metric tons	102.5	104.3	103.4	96.2	
	IF-WM-000.D 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.						
N/A	Revenue	Million USD	\$10,042	\$10,041	\$10,299	\$10,154	

Key:

N/A – Not applicable

NR – Not reported