



REPUBLIC
SERVICES

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. | | | | | |
| | (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) | | | | | |
| IF-WM-110a.2 | (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 <i>Continued</i></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.fmcscsa.gov/SMS](https://www.fmcscsa.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 | Billion USD | \$10,042 | \$10,041 | \$10,299 | \$10,154 |

Key:

N/A – Not applicable

NR – Not reported