



CleanHarbors®



# 2023 SUSTAINABILITY SUPPLEMENT

**TABLE OF CONTENTS**

About This Supplement ..... 2

Letter to Our Stakeholders ..... 3

2022 In Review ..... 4

2030 Sustainability Goals and Benchmarks ..... 6

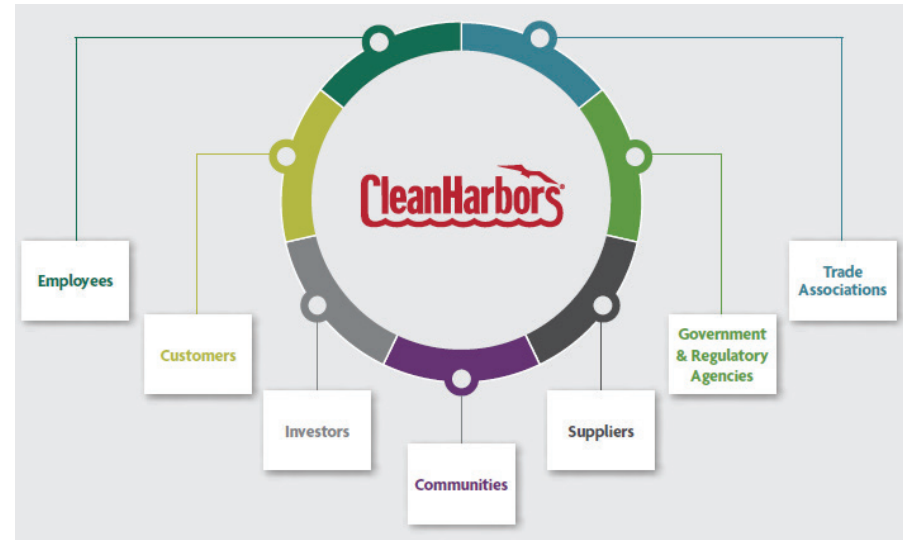
Progress Toward 2030 Goals and Benchmarks ..... 7

Sustainability Disclosures - 2022

    SASB Disclosures ..... 9

    GRI Disclosures ..... 12

    Other Disclosures ..... 20



# About This Supplement

We are committed to keeping our stakeholders fully informed about the impacts of our business activities and how we are addressing vital sustainability issues and trends. Clean Harbors believes that through proper dialogue and engagement with our stakeholders, we can contribute to the long-term health of the environment, society and the economy. The foundations of our sustainability programs assess Health and Safety, Sustainable Customer Solutions, Environmental Commitment, Our People, Community Engagement and Supply Chain. This supplemental report marks our third public sustainability disclosure since our inaugural report in 2021 and is intended as a companion to [our latest sustainability report released in 2022](#).

To identify those disclosures and subjects most material to the Clean Harbors business and operations, we continue to align with materiality mapping and guidance developed by the Sustainability Account Standards Board (SASB), now part of the International Financial Reporting Standards (IFRS). In this supplemental report, for the first time, we have reported with reference to Global Reporting Initiative (GRI) Standards (2021),

incorporating GRI 2 – General Disclosures, and look forward to considering additional GRI disclosures in future reports. In addition to the SASB and GRI disclosures, we have also reported on select voluntary disclosures which we believe are material to our business but may not be formally exhibited in other frameworks.

Clean Harbors' commitment to sustainable corporate governance is reflected across the entire organization, starting with our Board of Directors. Our Board and senior leadership are a critical oversight element of our sustainability programs and initiatives. The Governance Committee of the Board working with executive leadership is responsible for the oversight and engagement of sustainability at Clean Harbors, including the review and consideration of this supplemental report.

For additional information on our sustainability programs and policies, and to access past disclosures and reports, please visit [www.cleanharbors.com/about-us/sustainability](http://www.cleanharbors.com/about-us/sustainability).

# Dear Stakeholders:

2022 was a milestone year for Clean Harbors. We delivered record profitability, while exceeding \$5 billion in total revenue. We also set a new standard in the company's safety performance by achieving a Total Recordable Incident Rate (TRIR) under 1.0 for the first time in our history. We are proud of these accomplishments and believe they demonstrate the sustainability of our business model and the importance of our company to our customers. Our mission "to create a safer, cleaner environment through the treatment, recycling and disposal of hazardous materials" is more critically important than ever before.

Building on our achievements, we continue to make key investments in critical focus areas for our long-term success. We believe that sustained financial growth requires continued investment in the safety of our employees, commitment to service for our customers and communities, and stewardship of the environment.

Our commitment is to seek continuous improvement in evolving and advancing environmental, social and governance (ESG) aspects across our business. This commitment requires comprehensive data collection and analysis to gain a greater field of vision around our sustainability efforts and impacts. In this supplement, we

introduce the Global Reporting Initiative (GRI) framework and additional voluntary disclosures to complement disclosures aligned to the Sustainability Accounting Standards Board (SASB). We listen to and partner with our customers to understand and pursue their unique sustainability goals through increased data transparency.

In 2022, we advanced our sustainability efforts across the organization from the environmentally friendly products and services we provide to increasing our operational efficiency. We have made strong progress toward our 2030 goals, including satisfying our health and safety target, exceeding investment in employee training and development, and progressing the diversity of our Board of Directors.

We continued to expand our re-refined base oil product line during 2022. We launched our KLEEN+ brand, which features a lower carbon footprint when compared to products derived from conventional crude oil. Our KLEEN+ brand was recognized as a top sustainable product by the independent Sustainability, Environmental Achievement and Leadership (SEAL) Awards. We will continue to grow and innovate this sector of our business as North America's premier collector and re-refiner of used oil. In

addition, Safety-Kleen's advanced re-refining technologies and processes have earned the latest ISO 9001:2015 certification.

Across our facilities we implemented multiple cost-saving and recycling initiatives to enhance the circulatory and efficiency of our waste-handling systems. For example, our El Dorado, Arkansas, facility now has the capability both to recover scrap metal from incinerated steel drums and recycle and reconstitute polycarbonate containers resulting in a net reduction in the site's environmental footprint. More than 200,000 plastic containers and 3 million pounds of scrap metal have been recovered so far this year at the site. In total, our facilities recycled more than 1.6 million tons of materials in 2022.

Our company continues to lead efforts to strengthen the resiliency of our communities, which face the realities of a dynamic climate and evolving global ecology. When chemicals and hazardous materials are accidentally released, customers call on Clean Harbors to protect the environment. In 2022, Clean Harbors managed more than 6,000 environmental response and disaster recovery operations on land and water throughout North America.

At Clean Harbors, we accept the challenge of innovating to deliver sustainable solutions to address environmental problems. With a focus on emerging contaminants and pollutants, we published a comprehensive third-party study demonstrating that



**Michael L. Battles**   **Eric W. Gerstenberg**

the company's commercial permitted incinerators can safely and thoroughly destroy per- and poly-fluorinated alkyl substances (PFAS) in multiple forms.

We are excited to provide this supplemental report, which reflects the sustainability and ESG elements most material to our company. We would like to thank our investors for their continued confidence and trust in Clean Harbors, as well as our Board of Directors and the entire Clean Harbors team for their dedication toward creating a more sustainable future.

**Michael L. Battles**   **Eric W. Gerstenberg**

Co-Chief Executive Officers

Clean Harbors, Inc.













September, 2023

## ABOUT CLEAN HARBORS

Clean Harbors (NYSE: CLH) is North America's leading provider of environmental and industrial services. The company serves a diverse customer base, including a majority of Fortune 500 companies. Its customer base spans a number of industries, including chemical, energy and manufacturing, as well as numerous government agencies. These customers rely on Clean Harbors to deliver a broad range of services such as end-to-end hazardous waste management, emergency spill response, industrial cleaning and maintenance, and recycling services. Through its Safety-Kleen subsidiary, Clean Harbors is also North America's largest re-refiner and recycler of used oil and a leading provider of parts washers and environmental services to commercial, industrial and automotive customers. Founded in 1980 and based in Massachusetts, Clean Harbors operates in the United States, Canada, Mexico, Puerto Rico and India. For more information, visit [www.cleanharbors.com](http://www.cleanharbors.com).



# 2022 In Review

 <p><b>LESS THAN 1.0</b> TRIR</p>	 <p><b>MORE THAN \$5B</b> REVENUE</p>	 <p><b>MORE THAN \$1B</b> ADJUSTED EBITDA</p>	 <p><b>MORE THAN 20K</b> EMPLOYEES</p>
<p><b>232M</b> gallons used oil collected</p>	<p><b>196M</b> gallons used oil re-refined to product</p>	<p><b>16M</b> gallons used solvent recovered</p>	<p><b>&gt;3M</b> pounds ozone-depleting substances destroyed</p>
 <p><b>ALL U.S. INDUSTRIAL SERVICES UNITED UNDER ONE BRAND</b></p>	 <p><b>NEW BASE OIL BRAND LAUNCH</b></p>	 <p><b>GROUND-BREAKING STUDY</b></p>	 <p><b>2022 TOP COMPANY FOR WOMEN TO WORK FOR IN TRANSPORTATION</b> <small>WOMEN IN TRUCKING ASSOCIATION</small></p>
  <p><b>SUSTAINABLE PRODUCT AWARD</b></p>	 <p><b>2022 TOP VETERAN EMPLOYER</b> <small>Military.com VETERAN EMPLOYMENT PROJECT</small></p>	 <p><b>National Waste &amp; Recycling Association</b> <small>Collect. Recycle. Innovate.</small></p> <p><b>SUSTAINABILITY PARTNERSHIP GAME CHANGER AWARD</b></p>	

### 2022 SEAL SUSTAINABLE PRODUCT AWARD

A 2022 recipient of the Sustainability, Environmental Achievement and Leadership (SEAL) Sustainable Product Award, Safety-Kleen's KLEEN+ base oil continues to demonstrate our promise to provide innovative products purpose-built for environmental responsibility and a sustainable future. KLEEN+ base oil is manufactured by collecting used oil, re-refining it and returning it to market in a closed-loop process, reducing greenhouse gas emissions by as much as 78% as compared to base oil made through traditional refining.

### 2022 TOP COMPANY FOR WOMEN TO WORK FOR IN TRANSPORTATION

For a third consecutive year, Clean Harbors has been recognized as a top company for women in transportation by the Women in Trucking Association.

### 2023 SUSTAINABILITY PARTNERSHIP GAME CHANGER AWARD

In 2023, Clean Harbors was recognized by the National Waste and Recycling Association (NWRA) as a recipient of the prestigious Sustainability Partnership Game Changer Award. The award is given to companies that have made substantial contributions to U.S. recycling through partnerships, public education and innovation in recycling facilities that advance sustainability in their community.

### 2022 TOP VETERAN EMPLOYER

Clean Harbors earned a spot on the annual "Top 25 Veteran Employer" list from Military.com, a leading news and resource website for military members, veterans and their families. This is the first time Clean Harbors has been given the distinction and, for recruiters, validation of the progress Clean Harbors has made in hiring veterans and creating a culture conducive to those who served.

# 2022 In Review (cont'd)

## Net Climate Benefit Factor

We calculate our Net Climate Benefit Factor by adding the emission benefits of our used oil recycling, solvent and key materials recycling, and the destruction of ozone-depleting substances (ODS) activities, and then dividing this number by the sum of our Scope 1 and 2 emissions. In calculating our 2022 Net Climate Benefit, we have introduced greenhouse gas avoidance from the recycling of key materials (scrap metal, electronic waste, mixed plastics), both at our facilities and for our customers, by incorporating EPA's Waste Reduction Model (WARM). This estimate is combined with the savings from our solvent recycling. Emissions avoided from recycling were determined in comparison to conventional disposal technologies.

<b>GHG Scope 1:</b> <b>1,569,286 mt CO2e</b>	Greenhouse gas emissions from sources that are owned or controlled by the company
<b>GHG Scope 2:</b> <b>125,686 mt CO2e</b> (location-based)	Greenhouse gas emissions from consumption of electricity, heat or steam purchased by the company

mt CO2e = metric tons carbon dioxide equivalent

ODS = ozone depleting substances

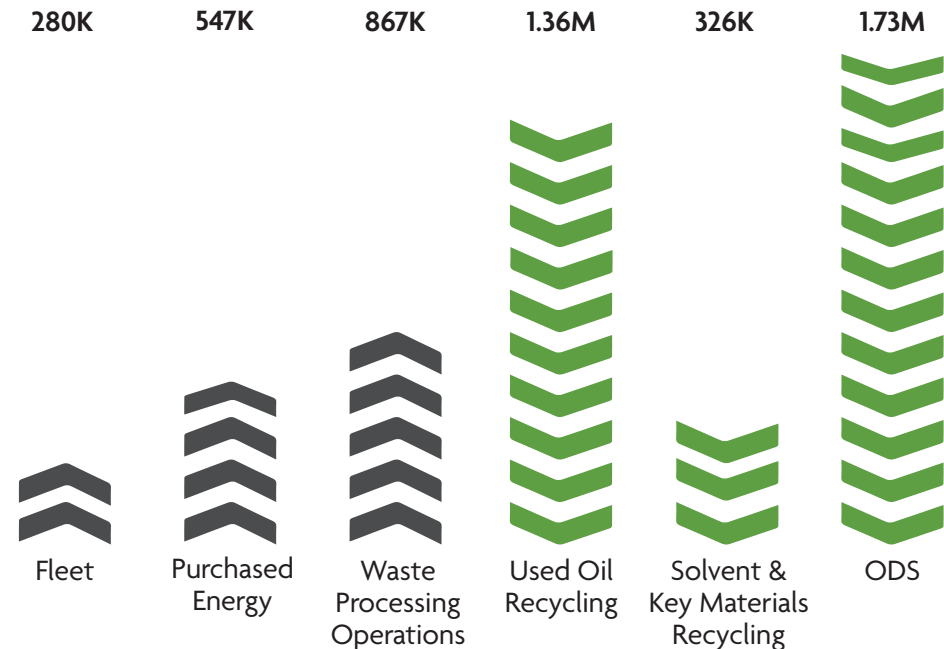
Applicable U.S. Scope 1 and Scope 2 emissions calculated using U.S. EPA Simplified GHG Emissions Calculator (SGEC) Version 7, May 2023

Scope 2 U.S. emissions calculated using most conservative eGRID subregion emissions rate for subregions in which operations exist in the United States

Scope 2 Canadian emissions incorporated Canada Energy Regulator - Provincial and Territorial Energy Profiles

GHG emissions disclosures conducted in conformance with Sustainability Accounting Standards Board (SASB), Greenhouse Gas Protocol, Intergovernmental Panel on Climate Change's (IPCC) Fifth Assessment Report, and other relevant guidance.

## Calculating Our 2022 Net Climate Benefit (metric tons CO2e)



**Total: 1,694,972 mt CO2e**

**Total: 3,421,768 mt CO2e**

### Emissions Avoidance

**Emissions Avoided**

**3,421,768 mt CO2e**

**Emissions**

**1,694,972 mt CO2e**



**NET CLIMATE BENEFIT FACTOR > 2X**

# 2030 Sustainability Goals and Benchmarks

## Important Updates to Our 2022 Sustainability Report

In our inaugural sustainability report, published in 2021, we had established nine forward-looking ESG goals with the intention of advancing our environmental responsibility, our support and development of our employees, and our sustainable governance. We present this 2023 update to report on our progress toward each 2030 goal. With the rapid pace of change in ESG metrics and reporting, we will continue to review our goals and related progress in 2024 and beyond. This review will include a benchmarking process to ensure that the goals we originally set remain relevant and representative of our company.

### ENVIRONMENTAL

#### Alternative Energy Vehicles

**Grow the percentage of alternative vehicles in our light-duty fleet to comprise over 10% by 2030**

We continue to look for opportunities to integrate more renewable energy sources and decrease fuel consumption in our 15,000+ company vehicle fleet, supported by our asset refurbishment program and route optimization.

#### Increase Recycling

**Increase recovery of key materials by 25% on a combined basis by 2030**

In 2022, we recycled more than 1.6 million metric tons of materials, including collection of more than 232 million gallons of used oil and recovery of 16 million gallons of solvent.

#### Renewable Energy

**Increase the use of renewable energy at our facilities to greater than 3,000 MWh annually by 2030**

In 2022, more than 2,097 MWh were generated by solar arrays on our property. We are continuously looking for ways to add sustainable and renewable energy sources to power our facilities and operations.

### SOCIAL

#### Health and Safety

**Reduce our Total Recordable Incident Rate (TRIR) of accidents and injuries to less than 1.0 by 2030**

We reduced our TRIR from 1.12 in 2021 to 0.73 in 2022, achieving a TRIR of less than 1.0 for the first time in our company's history. We will do our best to maintain this record and provide all employees with the safest possible work environment.

#### Community Involvement

**Double our charitable donations, in-kind services and community sponsorships by 2030**

We care about the communities in which we live and work. We continue to look for opportunities to support the people and infrastructure of our communities through a variety of methods, including charitable donations.

#### Training and Development

**Increase our annual investment in training to enhance engagement and reduce turnover**

Our 2021 goal was to increase annual investment in training to \$5M by 2030. We surpassed this goal in 2022 with a capital commitment of \$5M+ through diversified online and remote training.

### GOVERNANCE

#### Board Diversity

**Increase gender diversity from 20% to 40% and ethnic diversity from 10% to 20% by 2030**

We have expanded our Board to 11 members with the additions of Ms. Alison Quirk, Mr. Shelly Stewart and, most recently in 2023, Ms. Karyn Polito.

#### Incentive Plans

**Grow ESG-focused management incentive goals from 20% to 30% of possible payout by 2030**

Safety-performance metrics such as TRIR continue to remain critical indicators linked to incentives for our managers. We continue to evaluate additional opportunities to incorporate new ESG incentives and KPIs into incentive plans across our company.

### Additional Reading

[2022 Sustainability Report - Full Version](#) includes more details on our goals and benchmarks.

[SEC Filings and Proxy Reports](#) includes more details on Board diversity and incentive plans.

# Progress Toward 2030 Goals and Benchmarks

**2030 Goal**

Denotes original goal achieved and replacement or evolution of goal now in consideration.

## ENVIRONMENTAL

### Alternative Energy Vehicles

Grow the percentage of alternative energy vehicles in our light-duty fleet to comprise over 10% by 2030.

<b>2022</b>	<b>2030</b>
<1%	>10%

### Increase Recycling

Increase recovery of key materials by 25% on a combined basis by 2030.

<b>2022</b>	<b>2030</b>
>1.6M <sub>MT</sub>	1.7M <sub>MT</sub>

### Renewable Energy

Increase the use of renewable energy at our facilities including landfill gas, solar and other sources generated at company facilities.

<b>2022</b>	<b>2030</b>
2,097	3,000
MWh/ANNUALLY	MWh/ANNUALLY

## SOCIAL

### Health and Safety

Improve our safety performance and reduce our Total Recordable Incident Rate (TRIR), a measure of accidents and injuries relative to hours worked.

<b>2022</b>	<b>2030</b>
0.73	<1.0

### Community Involvement

Increase our corporate community giving, including charitable donations, in-kind services and sponsorships.

<b>2022</b>	<b>2030</b>
>\$1M <sup>1</sup>	>\$2M

### Investment in Training

Increase our annual investment in training and employee development to enhance employee engagement and reduce turnover.

<b>2022</b>	<b>2030</b>
>\$5M <sup>2</sup>	>\$5M

## GOVERNANCE

### Board Diversity (Gender)

Increase Board gender diversity from 20% to 40% to better align governance to our workforce.

<b>2022</b>	<b>2030</b>
45% <sup>3</sup>	40%

### Board Diversity (Ethnic)

Increase Board ethnic diversity from 10% to 20% to better align governance to our workforce.

<b>2022</b>	<b>2030</b>
18% <sup>3</sup>	20%

### Incentive Plans (ESG Goals)

Grow the percentage of management incentive plan goals that are tied to ESG from 20% to 30% of possible payout.

<b>2022</b>	<b>2030</b>
20%	30%

<sup>1</sup>This amount represents only corporate giving. In addition, much of our community spending is conducted at a local branch level.

<sup>2</sup>This amount represents only training-department costs and does not capture the wages paid to employees during training.

<sup>3</sup>Board of Directors diversity reflects Board composition as of the 2023 Annual Meeting of Shareholders conducted May 24, 2023.



# Sustainability Disclosures

2022 – SASB, GRI, OTHER VOLUNTARY DISCLOSURES



## SASB Disclosures – 2022 Accounting and Activity Metrics

### SASB - IF WM Waste Management - Accounting Metrics

**Statement of Use:** Clean Harbors, Inc. has reported the information cited in this SASB Standard for the period of January 1, 2022 to December 31, 2022

**Industry Standard Version:** Sustainable Industry Classification System (SICS) IF-WM Version 2023-06

Code	Accounting Metrics	Category	Unit of Measure	Data, Omission & Explanation (2022)
<b>Greenhouse Gas Emissions</b>				
IF-WM-110a.1	(1) Gross global Scope 1 emissions, (2) percentage covered under emissions-limiting regulation, and (3) percentage covered under emissions-reporting regulation	Quantitative	Metric tons (mt) CO2e Percentage (%)	(1) 1,569,286 mt (2) 82% (3) 82%  Scope 1 emissions include emissions from our facilities, landfills and fleet that are owned, leased or operated by Clean Harbors. We include operational processes in our Scope 1 calculation, some of which are estimates based on (a) waste composition and volume at our incinerators, (b) fuel and vapor extracted from used oil refining and used for heat and, (c) landfill gas generation estimates calculated using U.S. 40 CFR Part 98 Subpart HH and Subpart TT methodology. Except for fleet emissions we believe that all of our Scope 1 emissions are subject to emissions-limiting and emissions-reporting regulations.
IF-WM-110a.2	Total landfill gas generated, percentage flared, percentage used for energy	Quantitative	Million British Thermal Units (MMBtu), Percentage (%)	The SASB guidelines request disclosure of the total landfill gas generated in millions of British Thermal Units (MMBtu) using the calculation methodology in U.S. 40 CFR 98.340-348 Subpart HH. This methodology is applicable to municipal solid waste landfills (the type of landfills regulated under Subpart HH). These calculations are known to have a margin of error of +/-200%. As of December 31, 2022, the company had nine active landfill sites. Of these landfills, only one landfill (Altair, TX) is a subpart HH landfill. Altair's estimated landfill gas emissions were <b>71,793 MMBtu</b> in 2022, calculated following the methodology required by the SASB guidance. Only two landfills regulated under Subpart TT were required to estimate emissions based on total waste volumes (Buttonwill Landfill and Sawyer Landfill). Those two landfills estimated emissions using the methodology for Subpart TT and reported <b>100,832 MMBtu</b> in 2022. The other landfills we operate are hazardous waste landfills that are not required to estimate greenhouse gas (GHG) emissions, as their design and waste composition indicate that they are below the reporting threshold requirements. <b>0% flared, 0% used for energy.</b>
IF-WM-110a.3	Long-term and short-term strategy or plan to manage Scope 1 emissions, emissions-reduction targets, and an analysis of performance against those targets	Discussion & Analysis	N/A	Over the next 15 years, we intend for our used oil collection and recycling, solvent recycling, key materials recovery, and our other sustainable services to result in a GHG emissions avoidance three times greater than emissions generated by operations. In 2022, that ratio was nearly two times greater.  <b>Targets and Progress</b> In this report, we have disclosed our emissions for 2022. We continue to aggregate our emissions data as we establish our true operational baseline. Once established, we will set specific targets related to emissions. We plan to publish those targets in an upcoming report.  <b>Emissions Management and Strategy</b> <ul style="list-style-type: none"> <li>• Upon validating baseline GHG emissions, consider science-based or intensity-based emissions reduction targets</li> <li>• Invest in processes and technology to increase material recovery from waste processing</li> <li>• Increase the contribution of purchased and produced renewable energy through investment in commercially viable technologies</li> <li>• Improve fuel economy in our fleet vehicles and further asset refurbishment</li> <li>• Enhance energy-and water-consumption efficiency at our facilities</li> <li>• Evaluate the potential for landfill gas capture and other waste-to-energy opportunities</li> <li>• Recycle greater volumes of materials for the greatest environmental benefits</li> <li>• Expand our used motor oil collection, re-refining services and sustainable base oil products</li> <li>• Broaden our solvent recovery and ozone-depleting substance destruction services</li> <li>• Extend our industry leadership in spill response, disaster response and remediation services</li> <li>• Expand our leading market position in providing industrial wastewater treatment services</li> </ul>

Code	Accounting Metrics	Category	Unit of Measure	Data, Omission & Explanation (2022)
<b>Fleet Fuel Management</b>				
SASB IF-WM-110b.1	(1) Fleet fuel consumed, (2) percentage natural gas, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	(1) 3,812,631 GJ (2) 0.02 % (3) 0.26 %
SASB IF-WM-110b.2	Percentage of alternative energy vehicles in fleet	Quantitative	Percentage (%)	>11,120 vehicles, 13 are alternative energy vehicles – less than 1% of fleet
<b>Air Quality</b>				
SASB IF-WM-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, non-methane (3) volatile organic compounds (NMVOCs), and (4) hazardous air pollutants (HAPs)	Quantitative	Metric tons (mt)	(1) NOx - 1,084 mt, (2) SOx - 7,637 mt, (3) Total VOC - 3,044 mt, (4) HAP - 29,589 mt
SASB IF-WM-120a.2	Number of facilities in or near areas of dense population	Quantitative	Number	197 of 540 locations
SASB IF-WM-120a.3	Number of incidents of noncompliance associated with air emissions	Quantitative	Number	8
<b>Management of Leachate &amp; Hazardous Waste</b>				
SASB IF-WM-150a.1	(1) Total Toxic Release Inventory (TRI) releases, (2) percentage released to water	Quantitative	Metric tons (mt), Percentage (%)	(1) Total Releases - 20,643 mt, (2) 0.0% released to water
SASB IF-WM-150a.2	Number of corrective actions implemented for landfill releases	Quantitative	Number	0
SASB IF-WM-150a.3	Number of incidents of noncompliance associated with environmental impacts	Quantitative	Number	30
<b>Labor Practices</b>				
SASB IF-WM-310a.1	Percentage of active workforce covered under collective bargaining agreements	Quantitative	Percentage (%)	11%
SASB IF-WM-310a.2	(1) Number of work stoppages and (2) total days idle	Quantitative	Number, Days idle	(1) 0 (2) 0
<b>Workforce Health &amp; Safety</b>				
SASB IF-WM-320a.1	(1) Total Recordable Injury Rate (TRIR), (2) fatality rate, and (3) near-miss frequency rate (NMFR) for (a) direct employees and (b) contract employees	Quantitative	Rate	(1) TRIR - 0.73% (2) Fatality rate - 0.00% (3) NMFR - 31.65%* (all employees) *only available and disclosed for (a) direct employees
SASB 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	Quantitative	Percentile (%)	The Federal Motor Carrier Safety Administration (FMCSA) calculates BASIC percentiles for the 12+ Department of Transportation numbers under which Clean Harbors operates. These scores are available to the public at <a href="https://ai.fmcsa.dot.gov/SMS">https://ai.fmcsa.dot.gov/SMS</a> .
SASB IF-WM-320a.3	Number of road accidents and incidents	Quantitative	Number	64
<b>Recycling &amp; Resource Recovery</b>				
SASB IF-WM-420a.1	Amount of waste incinerated, percentage hazardous, percentage used for energy recovery	Quantitative	Metric tons (mt), Percentage (%)	Amount of waste incinerated: 439,431 mt Percentage hazardous: 74% Percentage used for energy recovery: 0% at this time
SASB IF-WM-420a.2	Percentage of customers receiving (1) recycling and (2) composting services, by customer type – municipal, commercial, industrial, residential, other	Quantitative	Percentage (%)	(1) municipal - 59%; commercial - 65%; industrial - 53%; residential - 41%; other customers - 55% (2) 0% - no composting
SASB IF-WM-420a.3	Amount of material (1) recycled, (2) composted, and (3) processed as waste-to-energy	Quantitative	Metric tons (mt)	(1) 1,630,102 mt, (2) 0 mt - composted, (3) 0 mt - on-site waste-to-energy
SASB IF-WM-420a.4	Amount of electronic waste collected and percentage recovered through recycling	Quantitative	Metric tons (mt), Percentage (%)	1,978 mt collected; 100% recovered through recycling

### SASB - IF WM Waste Management - Activity Metrics

**Statement of Use:** Clean Harbors, Inc. has reported the information cited in this SASB Standard for the period of January 1, 2022 to December 31, 2022

**Industry Standard Version:** Sustainable Industry Classification System (SICS) IF-WM Version 2023-06

Code	Accounting Metrics	Category	Unit of Measure	Data, Omission & Explanation (2022)
<b>Activity Metrics</b>				
<b>IF-WM-000.A</b>	Number of customers by category: (1) municipal, (2) commercial, (3) industrial, (4) residential, and (5) other	Quantitative	Number	(1) municipal - 47,333, (2) commercial - 361,588, (3) industrial - 69,808, (4) residential - 145, (5) other customers - 4,498
<b>IF-WM-000.B</b>	Vehicle fleet size	Quantitative	Number	>11,120 vehicles
<b>IF-WM-000.C</b>	Number of (1) landfills, (2) transfer stations, (3) recycling centers, (4) composting centers, (5) incinerators and (6) all other facilities	Quantitative	Number	Active sites - (1) 9 landfills; (2) 33 treatment, storage and disposal facilities, 2 autoclave facilities; (3) 10 recycle centers, 8 facilities specializing in solvent recovery, 8 oil re-refineries; (4) 0 composting centers; (5) 5 incinerator facilities with 9 incinerators; (6) 516 other facilities including 9 oil accumulation centers, 78 oil terminals, 5 packaging and blending facilities, 10 wastewater treatment facilities, and various service branch and office locations. Our properties are more fully described in "Item 2. Properties" in the company's 2022 Form 10-K filing.
<b>IF-WM-000.D</b>	Total amount of materials managed, by customer category: (1) municipal, (2) commercial, (3) industrial, (4) residential and (5) other	Quantitative	Metric tons (mt)	(1) municipal - 1,016,159 mt, (2) commercial - 2,549,488 mt, (3) industrial - 1,934,788 mt, (4) residential - 2,497 mt, (5) other - 10,395 mt

## GRI Content Index – Report Year 2022

### GRI Content Index

**Statement of Use:** Clean Harbors, Inc. has reported the information cited in this GRI content index for the period of January 1, 2022 to December 31, 2022 with reference to the GRI Standards

**GRI 1 Used:** GRI 1: Foundation 2021

**GRI Standard Presented:** GRI 2: General Disclosures 2021

GRI Standard	GRI Disclosure	Disclosure Description	Unit of Measure	Disclosure/Location	Omission & Explanation
<b>GRI 2:1 The organization and its reporting practices</b>					
GRI 2-1	Organizational details	Name of organization	Qualitative	Clean Harbors, Inc.	–
		Ownership and legal form	Qualitative	<a href="#">Form 10-K, pp. 1–2</a>	–
		Location of headquarters	Qualitative	Norwell, Massachusetts	–
		Location of operations	Qualitative	<a href="#">Service Locations, Annual Report, pp. 25–26</a>	–
GRI 2-2	Entities included in the organization's sustainability reporting	Entities included in sustainability reporting	Qualitative	<a href="#">Form 10-K, pp. 1–17</a>	–
		Entities included in financial reporting also included in sustainability report	Qualitative	Yes	–
		Minority ownership interest	Qualitative	None, not applicable	–
GRI 2-3	Reporting period, frequency and contact point	Sustainability reporting period	Reporting Period Reporting Frequency	January 1, 2022 to December 31, 2022 Annual reporting frequency	–
		Financial reporting period and alignment with sustainability reporting	Reporting Period Reporting Frequency	January 1, 2022 to December 31, 2022 Annual reporting frequency is aligned with sustainability reporting period and frequency	–
		Sustainability and financial report(s) publication dates	Qualitative	<a href="#">Annual Report and Form 10-K - March 1, 2023</a> <a href="#">Proxy Statement - April 13, 2023</a> <a href="#">Sustainability Report - December 21, 2022</a>	–
		Sustainability and financial report(s) point of contact	Qualitative	Katie Craig - Vice President of Finance Daniel Liwicki - Corporate Sustainability Manager	–
GRI 2-4	Restatements of information	Restatements of information	Qualitative	None, not applicable	–
		Reasons for restatements of information	Qualitative	None, not applicable	–
		Effects of restatements of information	Qualitative	None, not applicable	–

GRI Standard	GRI Disclosure	Disclosure Description	Unit of Measure	Disclosure/Location	Omission & Explanation
<b>GRI 2:1 The organization and its reporting practices</b>					
GRI 2-5	External assurance	Policy and practice of external assurance	Qualitative	<a href="#">Form 10-K, pp. 90–91</a>	–
		Sustainability reporting external assurance	Qualitative	Not externally assured	–
<b>GRI 2:2 Activities and workers</b>					
GRI 2-6	Activities, value chain and other business relationships	Market sectors	Qualitative	<a href="#">Form 10-K, pp. 1–17</a>	–
		Value chain	Qualitative	<a href="#">Form 10-K, pp. 11 and 30, Sustainability Report, p.47</a>	–
		Other relevant business relationships	Qualitative	None, not applicable	–
		Changes in activities, value chain and business relationships compared to previous reporting period	Qualitative	None, not applicable	–
GRI 2-7	Employees	Total number of employees by gender and region	Number of Employees	20,260 active status employees as of 12.31.2022 Female Employees: Canada - 363, India - 324, USA - 2,473 Male Employees: Canada - 2,167, India - 788, USA - 14,876	Employee breakdown by region and gender includes employees not on active status (leave)
		Total number of permanent employees by gender and region	Number of Employees	Female Permanent Employees: Canada - 324, India - 323, USA - 2,417; Male Permanent Employees: Canada - 2,156, India - 1,109, USA - 17,018	Employee breakdown by region and gender includes employees not on active status (leave)
		Total number of temporary employees by gender and region	Number of Employees	Female Temporary Employees: Canada - 39, India - 1, USA - 56; Male Temporary Employees: Canada - 335, India - 2, USA - 275	Employee breakdown by region and gender includes employees not on active status (leave)
		Non-guaranteed-hours employees by gender and region	–	Not available	Not available, human resources data tracking does not differentiate this employee class by gender and region
		Full-time employees by gender and region	Number of Employees	Female Full-Time Employees: Canada - 361, India - 322, USA - 2,436; Male Full-Time Employees: Canada - 2,154, India - 786, USA - 14,754	Employee breakdown by region and gender includes employees not on active status (leave)
		Total number of employees by gender and region	Number of Employees	Female Part-Time Employees: Canada - 2, India - 2, USA - 37; Male Part-Time Employees: Canada - 13, India - 2, USA - 122	Employee breakdown by region and gender includes employees not on active status (leave)
		Headcount or full-time equivalent (FTE) methodology	Qualitative	Headcount	–
		Rationale for fluctuation in employee population	Qualitative	For 2022, growth was primarily organic as no large acquisitions (i.e., greater than 100 heads) occurred	–

GRI Standard	GRI Disclosure	Disclosure Description	Unit of Measure	Disclosure/Location	Omission & Explanation
<b>GRI 2:2 Activities and workers</b>					
GRI 2-8	Workers who are not employees	Full-time employees by gender and region	–	Not available	Not applicable, human resources data tracking does not differentiate or monitor non-employee class
		Headcount or full-time equivalent (FTE) methodology	–	Not available	Not applicable, human resources data tracking does not differentiate or monitor non-employee class
		Rationale for fluctuation in employee population	–	Not available	Not applicable, human resources data tracking does not differentiate or monitor non-employee class
<b>GRI 2:3 Governance</b>					
GRI 2-9	Governance structure and composition	Governance structure and body	Qualitative	<a href="#">Form 10-K, p.4, Sustainability Report pp. 42–44, Corporate Governance, Proxy Statement, pp. 2–3</a>	–
		Committees of the highest responsible governance body	Qualitative	<a href="#">Form 10-K, p.4, Sustainability Report pp. 42–44, Corporate Governance, Proxy Statement, pp. 2–3</a>	–
		Composition of the highest governance body and its committees	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Corporate Governance</a>	–
GRI 2-10	Nomination and selection of the highest governance body	Nomination and selection processes for the highest governance body	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Corporate Governance</a>	–
		Nomination and selection criteria for the highest governance body	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Corporate Governance</a>	–
GRI 2-11	Chair of the highest governance body	Status of Chair as senior executive	Qualitative	Executive Chairman of the Board is a senior executive	–
		Description of Chair as senior executive	Qualitative	Mr. Alan McKim is the company's founder and largest individual shareholder and therefore his interests are significantly aligned with those of the other shareholders.	–
GRI 2-12	Role of the highest governance body in overseeing the management of impacts	Role of the highest governance body and senior executives in sustainable development	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Sustainability Report, pp. 41–48, Annual Report, Corporate Governance</a>	–
		Role of the highest governance body and senior executives in overseeing and managing impacts	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Sustainability Report, pp. 41–48, Annual Report, Corporate Governance</a>	–
		Role of the highest governance body and senior executives in reviewing the effectiveness of the organization's processes	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Sustainability Report, pp. 41–48, Annual Report, Corporate Governance</a>	–

GRI Standard	GRI Disclosure	Disclosure Description	Unit of Measure	Disclosure/Location	Omission & Explanation
<b>GRI 2:3 Governance</b>					
GRI 2-13	Delegation of responsibility for managing impacts	Delegation of the highest governance body and senior executives in managing the organization's impacts on the economy, environment, and people	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Sustainability Report, pp. 41–48, Annual Report, Corporate Governance</a>	–
		Process and frequency for senior executives or other employees to report back to the highest governance body on the management of the organization's impacts on the economy, environment, and people	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Sustainability Report, pp. 41–48, Annual Report, Corporate Governance</a>	–
GRI 2-14	Role of the highest governance body in sustainability reporting	Responsibility of the highest governance body in sustainable reporting	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Sustainability Report, pp. 41–48</a>	–
GRI 2-15	Conflicts of interest	Processes for the highest governance body to ensure that conflicts of interest are prevented and mitigated	Qualitative	<a href="#">Proxy Statement, pp. 2-17</a>	–
GRI 2-16	Communication of critical concerns	Whether and how critical concerns are communicated to the highest governance body, number, and nature of concerns	Qualitative	<a href="#">Proxy Statement, pp. 2-17</a>	–
GRI 2-17	Collective knowledge of the highest governance body	Measures taken to advance the collective knowledge, skills, and experience of the highest governance body on sustainable development.	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Sustainability Report, pp. 41–48</a>	–
GRI 2-18	Evaluation of the performance of the highest governance body	Processes for evaluating the performance of the highest governance body in overseeing the management of the organization's impacts on the economy, environment, and people	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Corporate Governance</a>	–
		Whether the evaluations are independent or not, and the frequency of the evaluations	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Corporate Governance</a>	–
		Actions taken in response to the evaluations, including changes to the composition of the highest governance body and organizational practices	Qualitative	<a href="#">Proxy Statement, pp. 2–17, Corporate Governance</a>	–
GRI 2-19	Remuneration policies	Remuneration policies for members of the highest governance body and senior executives	Qualitative	<a href="#">Proxy Statement, pp. 25–47, Corporate Governance</a>	–
		How the remuneration policies for members of the highest governance body and senior executives relate to their objectives and performance in relation to the management of the organization's impacts on the economy, environment and people	Qualitative	<a href="#">Proxy Statement, pp. 25–47, Corporate Governance</a>	–
GRI 2-20	Process to determine remuneration	Process for designing remuneration policies and for determining remuneration	Qualitative	<a href="#">Proxy Statement, pp. 25–47, Corporate Governance</a>	–
		Results of votes of stakeholders (including shareholders) on remuneration policies and proposals, if applicable	Qualitative	<a href="#">Proxy Statement, pp. 25–47, Corporate Governance</a>	–

GRI Standard	GRI Disclosure	Disclosure Description	Unit of Measure	Disclosure/Location	Omission & Explanation
<b>GRI 2:3 Governance</b>					
GRI 2-21	Annual total compensation ratio	Ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees (excluding the highest-paid individual)	Pay Ratio	90:1, <a href="#">Proxy Statement, p. 41</a>	–
		Ratio of the percentage increase in annual total compensation for the organization's highest-paid individual to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual)	–	Not available, only the ratio of annual CEO compensation to median employee compensation is disclosed as part of our company's <a href="#">Proxy Statement, see p. 41</a>	–
		Contextual information necessary to understand the data and how the data has been compiled	Qualitative	<a href="#">Proxy Statement, p. 41</a>	–
<b>GRI 2:4 Strategy, policies and practices</b>					
GRI 2-22	Statement on sustainable development strategy	Statement from the highest governance body or most senior executive of the organization about the relevance of sustainable development to the organization and its strategy for contributing to sustainable development	Qualitative	<a href="#">Sustainability Report, p. 3</a> , <a href="#">Annual Report, p. 1</a>	–
GRI 2-23	Policy commitments	Policy commitments for responsible business conduct	Qualitative	<a href="#">Code of Ethics, Human Rights Policy, Vendor Code of Conduct, Sustainability Report, p. 34</a>	–
		Specific policy commitment to respect human rights	Qualitative	<a href="#">Code of Ethics, Human Rights Policy, Vendor Code of Conduct, Sustainability Report, p. 34</a>	–
		Links to the policy commitments if publicly available, or if the policy commitments are not publicly available, explain the reason for this	Qualitative	<a href="#">Code of Ethics, Human Rights Policy, Vendor Code of Conduct, Sustainability Report, p. 34, Corporate Governance</a>	–
		Level at which each of the policy commitments was approved within the organization, including whether this is the most senior level	Qualitative	Apply company-wide across senior executive leadership and board of directors, all employees, vendors and subcontractors (where applicable per <a href="#">Vendor Code of Conduct</a> )	–
		Extent to which the policy commitments apply to the organization's activities and to its business relationships	Qualitative	<a href="#">Code of Ethics, Human Rights Policy, Vendor Code of Conduct, Sustainability Report, p. 34, Corporate Governance</a>	–
		How the policy commitments are communicated to workers, business partners, and other relevant parties	Qualitative	<a href="#">Code of Ethics, Human Rights Policy, Vendor Code of Conduct, Sustainability Report, p. 34, Corporate Governance</a>	–
GRI 2-24	Embedding policy commitments	Describe how it embeds each of its policy commitments for responsible business conduct throughout its activities and business relationships	Qualitative	<a href="#">Code of Ethics, Human Rights Policy, Vendor Code of Conduct, Sustainability Report, p. 34</a>	–



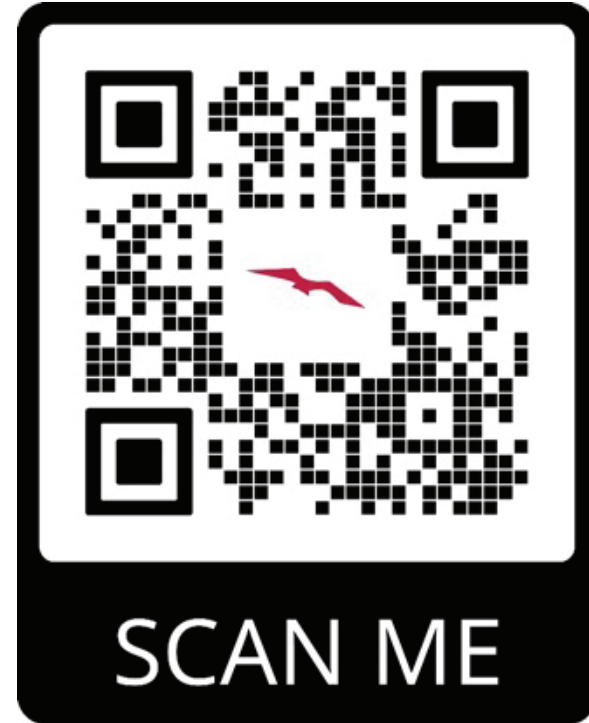
GRI Standard	GRI Disclosure	Disclosure Description	Unit of Measure	Disclosure/Location	Omission & Explanation
<b>GRI 2:4 Strategy, policies and practices</b>					
<b>GRI 2-25</b>	<b>Processes to remediate negative impacts</b>	Commitments to provide for or cooperate in the remediation of negative impacts that the organization identifies it has caused or contributed to	Qualitative	<a href="#">Code of Ethics, Vendor Code of Conduct, Corporate Governance</a>	-
		Approach to identify and address grievances, including the grievance mechanisms that the organization has established or participates in	Qualitative	<a href="#">Code of Ethics, Vendor Code of Conduct, Corporate Governance</a>	-
		Other processes by which the organization provides for or cooperates in the remediation of negative impacts that it identifies it has caused or contributed to	Qualitative	<a href="#">Code of Ethics, Vendor Code of Conduct, Corporate Governance</a>	-
		How the stakeholders who are the intended users of the grievance mechanisms are involved in the design, review, operation and improvement of these mechanisms	Qualitative	<a href="#">Code of Ethics, Vendor Code of Conduct, Corporate Governance</a>	-
		How the organization tracks the effectiveness of the grievance mechanisms and other remediation processes with examples of their effectiveness, including stakeholder feedback	Qualitative	<a href="#">Code of Ethics, Vendor Code of Conduct, Corporate Governance</a>	-
<b>GRI 2-26</b>	<b>Mechanisms for seeking advice and raising concerns</b>	Mechanisms for individuals to 1) seek advice on implementing the organization's policies and practices for responsible business conduct 2) raise concerns about the organization's business conduct	Qualitative	<a href="#">Code of Ethics, Vendor Code of Conduct, Corporate Governance</a>	-

GRI Standard	GRI Disclosure	Disclosure Description	Unit of Measure	Disclosure/Location	Omission & Explanation
<b>GRI 2:4 Strategy, policies and practices</b>					
<b>GRI 2-27</b>	<b>Compliance with laws and regulations</b>	Total number of significant instances of noncompliance with laws and regulations during the reporting period	–	Not available	<p>We regard compliance with applicable regulations as a critical component of our overall operations and we maintain a compliance organization that is independent of the operations of the business to monitor and provide oversight at the highest levels of our organization. We strive to maintain strict professional standards in our compliance activities. Our compliance staff is responsible for the facilities' permitting and regulatory compliance, compliance training, transportation compliance and related record keeping. To ensure the effectiveness of our regulatory compliance program, our facilities operations are monitored by our compliance staff. Our facilities are also frequently inspected and audited by regulatory agencies, as well as by customers. Although our facilities have been cited on occasion for regulatory violations, we believe that each of our facilities is currently in substantial compliance with applicable permit requirements. Because of the scale of Clean Harbors' business, we are subject to many local, state, federal, and international regulation. As such, aggregating incidences of noncompliance would not be representative of our compliance management across the company. We have disclosed selected elements of environmental noncompliance in our SASB disclosure. Please also see our Annual Report for a comprehensive discussion of compliance risks related to Clean Harbors' business and operations.</p>
		Total number and the monetary value of fines for instances of noncompliance	–	Not available	
		Significant instances of noncompliance	–	Not available	
		How it has determined significant instances of noncompliance	–	Not available	
<b>GRI 2-28</b>	<b>Membership associations</b>	Industry associations, other membership associations, and national or international advocacy organizations in which it participates in a significant role	Qualitative	<a href="#">Sustainability Report, p.9</a>	Clean Harbors participates in numerous trade and industry associations, including the Environmental Technology Council (ETC), and the National Oil Recyclers Association (NORA).

GRI Standard	GRI Disclosure	Disclosure Description	Unit of Measure	Disclosure/Location	Omission & Explanation
<b>GRI 2:5 Stakeholder engagement</b>					
GRI 2-29	Approach to stakeholder engagement	Describe its approach to engaging with stakeholders	Qualitative	<a href="#">Sustainability Report, p.9</a> , <a href="#">Annual Report, p.11</a> , <a href="#">Proxy Statement, p.49</a>	–
GRI 2-30	Collective bargaining agreements	Describe its approach to engaging with stakeholders	Percentage	11%	–
		For employees not covered by collective bargaining agreements, description of whether the organization determines their working conditions and terms of employment based on collective bargaining agreements that cover its other employees or based on collective bargaining agreements from other organizations	Qualitative	<a href="#">Sustainability Report, p.34, 47</a> , <a href="#">Human Rights Policy, p.2</a> , <a href="#">Vendor Code of Conduct, p. 5</a>	–

## Other Voluntary Disclosures – 2022

Code	Accounting Metrics	Category	Unit of Measure	Data, Omission & Explanation (2022)
<b>Environmental</b>				
E.1	Gross Scope 1 emissions, Gross Scope 2 (location-based) emissions	Quantitative	Metric tons carbon dioxide equivalent (mt CO2e)	Scope 1 = 1,569,286 mt CO2e; Scope 2 = 125,686 mt CO2e
E.2	Total emission intensity	Quantitative	Metric tons carbon dioxide equivalent (mt CO2e) per unit revenue \$ USD	0.0003
E.3	Total electricity consumption	Quantitative	Megawatt hours (MWh)	357,081 MWh
E.4	Estimate of total electricity consumption from renewables as percentage	Quantitative	% Renewable energy consumption	19%
E.5	Total water consumption	Quantitative	US gallons (USG)	420,176,108 USG
E.6	Total wastewater treated	Quantitative	US gallons (USG)	>65,559,259 USG
E.7	Asset refurbishment	Quantitative	Assets refurbished	150 total refurbished assets, 63 donor vehicles refurbished, 104 total vehicles
<b>Social</b>				
S.1	Average training hours per employee	Quantitative	Training hours per employee (hrs)	52 hrs
S.2	Total and voluntary employee turnover	Quantitative	% Total turnover, % Voluntary turnover	32% total turnover, 24% voluntary turnover
S.3	Percentage of workforce who receives training on preventing discrimination and human rights violations	Quantitative	% Employees	100%
S.4	Percentage of workforce across all locations who received training on environmental issues	Quantitative	% Employees	100%
S.5	Percentage of workforce across all locations who received training on business ethics issues	Quantitative	% Employees	100%
<b>Governance</b>				
G.1	Revenue	Quantitative	\$ USD	\$5,166,605,025.66
G.2	Board of Directors headcount	Quantitative	Total board members	11
G.3	Percentage of suppliers who are governed by supplier code of conduct	Quantitative	% Suppliers	100%



For more information please visit:  
[www.cleanharbors.com/about-us/sustainability](http://www.cleanharbors.com/about-us/sustainability)  
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40 Years of Sustainability in Action