

# GRI Index

## GRI 102: General Disclosures 2016\*

DISCLOSURE	DESCRIPTION	CROSS-REFERENCE OR ANSWER
<b>ORGANIZATIONAL PROFILE</b>		
102-1	Name of the organization	Covanta Holding Corporation
102-2	Activities, brands, products and services	<a href="#">Materials Management 2019 10-K, pp. 5-6</a>
102-3	Location of headquarters	445 South Street, Morristown, NJ 07960
102-4	Location of operations	United States, Canada, Ireland, Italy and China <a href="#">2019 10-K, p. 5</a>
102-5	Ownership and legal form	Covanta is wholly owned by Covanta Holding Corporation, which is listed and publicly traded on the New York Stock Exchange under the ticker symbol CVA.
102-6	Markets served	<a href="#">Materials Management 2019 10-K, pp. 5, 8-16</a>
102-7	Scale of the organization	<a href="#">Performance Tables / Operations Data 2019 10-K, pp. 5, 8-16, 20</a>
102-8	Information on employees and other workers	<a href="#">Performance Tables / Workforce Data</a>  The vast majority (over 90%) of the organization’s activities, as measured by full-time equivalents, are performed by Covanta employees. We consider contractors that perform periodic work at our facilities, particularly for maintenance, to be outside of our regular activities. There are no significant variations in employment numbers.
102-9	Supply chain	<a href="#">2019 10-K, pp. 9-12</a>
102-10	Significant changes to the organization and its supply chain	<a href="#">2019 10-K, pp. 5-6</a>
102-11	Precautionary Principle or approach	<a href="#">Community Relations / Our Approach</a>
102-12	External initiatives	Covanta does not currently subscribe to or endorse any externally developed sustainability charters or principles.
102-13	Membership of associations	These industry groups include the Energy Recovery Council, Business Council for Sustainable Energy, Environmental Research and Education Foundation, Biomass Power Association and the Ontario Waste Management Association. Covanta plays a leadership role or actively contributes to these engagements, with our executives

		<p>serving on the boards or as association members.</p> <p>We collaborate and interact with select organizations, including the Go Green Initiative and the Ocean Conservancy Trash Free Seas Alliance, to strengthen our policies, activities and performance. Through our Community Outreach and Environmental Justice Policy, we work to understand and resolve issues and concerns of our local community members.</p>
<b>STRATEGY</b>		
102-14	Statement from senior decision-maker	<a href="#">Our Blueprint for Sustainability / A Message from our Management</a>
<b>ETHICS AND INTEGRITY</b>		
102-16	Values, principles, standards, and norms of behavior	<a href="#">Our Blueprint for Sustainability</a>
102-17	Mechanisms for advice and concerns about ethics	<p>If any employee has questions about the application of the Policy of Business Conduct or concerns about potential instances of non-compliance, they are encouraged to bring their concerns forward to the attention of their supervisor or members of senior management. Employees can also:</p> <ol style="list-style-type: none"> <li>1) Call Covanta's third-party hotline, THE NETWORK, at 1-800-241-5689 or internationally, at +1 770-409-5006.</li> <li>2) Write Covanta's Board of Directors at:  Chair, Audit Committee of the Board of Directors  Covanta Holding Corporation  P.O. Box 7  Cassville Station  Jackson, NJ 08527</li> </ol> <p>Information reported to The Network or Covanta's Audit Committee will be handled on a confidential and anonymous basis, if desired, and referred to Covanta's management for appropriate response. Covanta prohibits retaliation against an employee who has filed, in good faith, a complaint or expressed a concern under this policy or under any law, or for assisting in a complaint investigation.</p>
<b>GOVERNANCE</b>		
102-18	Governance structure	<a href="#">Governance Documents</a>
<b>STAKEHOLDER ENGAGEMENT</b>		
102-40	List of stakeholder groups	<a href="#">Our Blueprint for Sustainability / Listening to our Stakeholders</a>
102-41	Collective bargaining agreements	<a href="#">Performance Tables / Workforce Data</a> <a href="#">Performance Tables / Employee Data</a> As of December 31, 2018, approximately 7.5% of our employees are covered by collective

		bargaining agreements with various expiration dates through 2021.
102-42	Identifying and selecting stakeholders	<a href="#">Our Blueprint for Sustainability / Listening to our Stakeholders</a>
102-43	Approach to stakeholder engagement	<a href="#">Our Blueprint for Sustainability / Listening to our Stakeholders</a>
102-44	Key topics and concerns raised	<a href="#">Our Blueprint for Sustainability / Listening to our Stakeholders</a>
<b>REPORTING PRACTICE</b>		
102-45	Entities included in the consolidated financial statements	<a href="#">2019 10-K, p. 5</a>
102-46	Defining report content and topic boundaries	<a href="#">Our Blueprint for Sustainability / Materiality Analysis</a>
102-47	List of material topics	<a href="#">Our Blueprint for Sustainability / Materiality Analysis</a>
102-48	Restatements of information	<a href="#">Performance Tables / Operations Data</a> We have revised our <i>Waste Processed</i> , <i>Water Use</i> , and <i>Energy Use</i> performance data to reflect an update in our accounting procedures. Previously reported figures were inaccurate due to a calculation error.
102-49	Changes in reporting	None.
102-50	Reporting period	January 1, 2019, through December 31, 2019
102-51	Date of most recent report	<a href="#">About This Report</a>
102-52	Reporting cycle	Biennial
102-53	Contact point for questions regarding the report	<a href="#">Contact</a>
102-54	Claims of reporting in accordance with the GRI Standards	<a href="#">About This Report</a>
102-55	GRI content index	<a href="#">About This Report</a>
102-56	External assurance	We currently do not assure our sustainability report; we may consider seeking external assurance for specific indicators in the future.
<b>ELECTRIC UTILITY SECTOR SUPPLEMENT</b>		
G4-EU1	Installed capacity, broken down by primary energy source and by regulatory regime	<a href="#">2019 10-K, pp. 11-12</a>
G4-EU2	Net energy output broken down by primary energy source and by regulatory regime	<a href="#">Performance Tables / Operations Data</a>
G4-EU5	Allocation of CO <sub>2</sub> e emissions allowances or equivalent, broken down by carbon trading framework	<a href="#">Environmental Sustainability / Reducing Greenhouse Gases</a>

\* Covanta's 2019 Sustainability Report applies the 2016 version of the GRI Standards; "2016" refers to the Standards issue date, not the date of information presented in this report.

## GRI 103: Topics and Topic Boundaries 2016\*

MATERIAL TOPIC	MANAGEMENT APPROACH CROSS-REFERENCE	RELEVANT EXTERNAL ENTITIES
<b>ECONOMIC</b>		
GRI 201: Economic Performance 2016	<a href="#">2019 10-K, p. 9</a>	Communities Customers Investors Regulators
GRI 202: Market Presence 2016	<a href="#">Community / What We Do</a>	Communities Customers
GRI 203: Indirect Economic Impacts 2016	<a href="#">Community / What We Do</a>	Communities
GRI 204: Procurement Practices 2016	<a href="#">Our Blueprint for Sustainability / Our Policies</a>	Communities Customers Investors Regulators
<b>ENVIRONMENTAL</b>		
GRI 301: Materials 2016	<a href="#">2019 10-K, pp. 12-13</a>	Communities Customers Investors
GRI 305: Emissions 2016	<a href="#">2019 10-K, pp. 16-20</a> <a href="#">Environmental Sustainability / Reducing Greenhouse Gases</a> <a href="#">Environmental Sustainability / Minimizing Air Emissions</a>	Communities Regulators
<b>SOCIAL</b>		
GRI 413: Local Communities 2016	<a href="#">Community / Our Approach</a>	Communities Regulators
GRI 416: Customer Health and Safety 2016	<a href="#">Community / Our Approach</a>	Communities Customers Regulators

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## GRI 200-400 Topic-Specific Disclosures 2016\* and 2018\*

GRI TOPIC	DISCLOSURE	DISCLOSURE DESCRIPTION	DISCLOSURE CROSS-REFERENCE, EXPLANATION OR OMISSION
<b>ECONOMIC</b>			
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	<a href="#">2019 10-K, p. 9</a> We report North America and totals, but not by specific country (e.g., Italy, Ireland, the United Kingdom). <a href="#">Performance Tables / Economic Data</a> <a href="#">Community / What We Do</a>
	201-2	Financial implications and other risks and opportunities due to climate change	<a href="#">2019 10-K, p. 9</a> <a href="#">Environmental Sustainability / Reducing Greenhouse Gases</a>

GRI 202: Market Presence 2016	202-2	Proportion of senior management hired from the local community	Covanta strives to hire senior management from the local community. Many of our facility managers have come up through the ranks at the facility, helping to ensure long-term ties to the community. With regard to recent hiring at facilities outside the United States, all of the senior management at the newly opened Durham York Energy Centre in Ontario, Canada, are from Canada. All staff, except for the facility manager, working at the Dublin Waste-to-Energy Project are local to the area and indeed 40% of all staff live within 6 miles of the facility. The facility manager was required to have 10 years of Waste-to-Energy experience by our operating license, experience not readily available in Ireland.
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	<a href="#">Community / What We Do</a>
	203-2	Significant indirect economic impacts	<a href="#">Community / What We Do</a>
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	A portion of Covanta's nationwide supply chain budget is also assigned to local suppliers. More information can be found in the Partners and Suppliers section of our website. <a href="#">Covanta Partners and Suppliers</a>
GRI 205: Anti-corruption 2016**	205-2	Communication and training about anti-corruption policies and procedures	100%. All of our employees (management and non-management) are expected to read and comply with our Policy of Business Conduct. The policy covers topics such as financial reporting, corruption, copyrights, and environmental safety and health.
<b>ENVIRONMENTAL</b>			
GRI 301: Materials 2016	301-1	Materials used by weight or volume	<a href="#">2019 10-K, p. 11 Performance Tables / Operations Data</a>
GRI 302: Energy 2016**	302-1	Energy consumption within the organization	<a href="#">Performance Tables / Operations Data</a>
GRI 303: Water and Effluents 2018**	303-3	Water withdrawal	<a href="#">Performance Tables / Environmental Data</a> <a href="#">Environmental Sustainability / Optimizing Water Use</a>
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	<a href="#">Performance Tables / Environmental Data</a>

	305-2	Energy indirect (Scope 2) GHG emissions	<a href="#">Performance Tables/ Environmental Data</a>
	305-3	Other indirect (Scope 3)	<a href="#">Performance Tables / Environmental Data</a> <a href="#">Environmental Sustainability / Reducing Greenhouse Gases</a>
	305-4	GHG emissions intensity	<a href="#">Performance Tables / Environmental Data</a>
	305-5	Reduction of GHG emissions	<a href="#">Performance Tables / Environmental Data</a> <a href="#">Environmental Sustainability / Reducing Greenhouse Gases</a>
	305-7	NOx, SOx and other significant air emissions	<a href="#">Performance Tables / Environmental Data</a> <a href="#">Environment / Minimizing Air Emissions</a>
GRI 306: Effluents and Waste 2016**	306-2	Waste by type and disposal method	<a href="#">Performance Tables / Environmental Data</a>
GRI 307: Environmental Compliance 2016**	307-1	Non-compliance with environmental laws and regulations	<a href="#">Environment / Improving Our Environmental Performance</a>
GRI 308: Supplier Environmental Assessment 2016**	308-1	New suppliers screened using environmental criteria	Nearly 100% of new suppliers were screened using environmental criteria in 2018.
<b>SOCIAL</b>			
GRI 401: Employment 2016**	401-1	New employee hires and employee turnover	<a href="#">Performance Tables / Workforce Data</a> <a href="#">Performance Tables / Employee Turnover and New Hires</a>
	401-2	Full-time benefits not provided to temporary / part-time employees	<a href="#">Workforce Engagement / Building a Great Place to Work Benefits</a>
GRI 403: Occupational Health and Safety 2018**	403-1	Occupational health and safety management system	<a href="#">Safety and Health / Ensuring Safety in the Workplace</a>
	403-4	Worker participation, consultation and communication on occupational health and safety	At our operating facilities, formal joint management–worker health and safety committees are run by our hourly employees. In all cases, these teams provide feedback to, and collaborate with, facility and regional safety leads, as well as the Covanta safety management team.
	403-9	Work-related injuries	<a href="#">Safety and Health / Delivering on Safety Performance</a> <a href="#">Performance Tables / Workforce Data</a>
GRI 404: Training and Education 2016**	404-1	Average hours of training per year per employee	<a href="#">Workforce Engagement / Investing in Training and Development</a>

	404-2	Programs for upgrading employee skills and transition assistance programs	<a href="#">Workforce Engagement / Investing in Training and Development</a>
	404-3	Percentage of employees receiving regular performance and career development reviews	<a href="#">Workforce Engagement / Investing in Training and Development</a>
GRI 405: Diversity and Equal Opportunity 2016**	405-1	Diversity of governance bodies and employees	<a href="#">Workforce Engagement / Promoting Diversity and Inclusion Performance Tables / Workforce Data</a>
GRI 407: Freedom of Association and Collective Bargaining 2016**	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining might be at risk	Covanta does not have operations in which employees' rights to exercise freedom of association or collective bargaining are at risk.
GRI 411: Rights of Indigenous Peoples 2016**	411-1	Incidents of violations involving rights of indigenous peoples	None. The vast majority of Covanta's facilities are not cited among indigenous regions. There are no known incidents of violations involving rights of indigenous peoples and actions taken.
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	<a href="#">Community / Our Approach</a>
GRI 414: Supplier Social Assessment 2016**	414-1	New suppliers that were screened using social criteria	Nearly 100% of new suppliers were screened using social criteria in 2018.
GRI 415: Public Policy 2016**	415-1	Political contributions	<a href="#">Covanta Political Contribution Policy and Disclosure</a>  Covanta reports all political contributions as required by law. In addition, Covanta reports its annual political contributions to the Public Policy Committee of its Board of Directors and provides a summary report of its annual political contribution on its corporate investor relations website.
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	Our primary services are sustainable waste management and electrical generation at our energy-from-waste (EfW) plants. The emissions of EfW facilities are closely regulated through federal and state permit requirements and limits. All EfW facilities operate well below these limits, and we continue to improve our performance, as indicated in our section on environment performance within this report.

			Health impacts associated with emissions from EfW facilities have been studied extensively. For example, one major study from the UK Health Protection Agency concluded that the negative health impacts associated with well-regulated EfW facilities are likely to be very small, if even detectable. More information on these studies is provided in <a href="#">Environmental Sustainability / Minimizing Air Emissions</a> .
GRI 418: Customer Privacy 2016**	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	None. There have been no complaints regarding breaches of customer privacy and losses of customer data.
GRI 419: Socioeconomic Compliance 2016**	419-1	Noncompliance with laws and regulations in the social and economic area	The total amount of safety-related fines and penalties at our North American facilities were \$110 and \$3250 in CY 2018 and CY 2019, respectively. No other fines, penalties or nonmonetary sanctions were received for the social and economic area in the period from 2018-2019.

\* With the exception of GRI 303 and 403 that apply the 2018 version of the GRI Standards, Covanta's 2019 Sustainability Report applies the 2016 version of the GRI Standards; "2016" refers to the Standards issue date, not the date of information presented in this report.

\*\*We have reported additional disclosures not related to material topics.



# Performance Tables

## Economic Data<sup>1</sup>

(data for Covanta Holding Corp., including all global operations, in millions, except per share amounts, USD)<sup>2</sup>

	2019	2018	2017	2016	2015
<b>OPERATING REVENUE</b>					
Waste and service revenue	1,393	1,327	1,231	1,187	1,104
Energy revenue	329	343	334	370	421
Recycled metals revenue	86	95	82	61	61
Other operating revenue	62	103	105	81	59
Total operating revenue	1,870	1,868	1,752	1,699	1,645
<b>OPERATING EXPENSE</b>					
Total operating expense	1,780	1,805	1,651	1,590	1,536
<b>INCOME TAX</b>					
Income tax expense (benefit)	(7)	(29)	(191)	22	(84)
<b>NET INCOME</b>					
Net (loss) income attributable to Covanta Holding	10	152	57	(4)	68
Cash flow provided by operating activities	226	238	242	264	226
<b>NON-GAAP FINANCIAL MEASURES</b>					
Adjusted EBITDA	428	457	408	410	428
Free Cash Flow	140	100	132	176	152
<b>DIVIDENDS</b>					
Annualized Cash Dividends per Share	\$1.00	\$1.00	\$1.00	\$1.00	\$1.00
<b>COMMUNITY INVESTMENT</b>					
Total donations	1.9	1.8	2.0	1.9	1.7

<sup>1</sup> For complete information, please refer to Covanta's Form 10-K filings.

<sup>2</sup> For the years ended December 31

## Workforce Data

	2019	2018	2017	2016	2015
<b>EMPLOYEES</b>					
Total employees	3,881	3,911	3,719	3,582	3,539
Salaried	1,228	1,230	1,193	1,157	1,142
Hourly <sup>3</sup>	2,653	2,683	2,526	2,425	2,397
<b>GLOBAL HEAD COUNT</b>					
North America	3,803	3,834	3,649	3,537	3,511
United States	3,638	3,676	3,520	3,454	3,431
Canada	165	158	129	83	80
Asia	13	15	14	15	21
Europe	65	62	56	30	7
<b>SAFETY AND HEALTH<sup>4</sup></b>					
DART (Days Away/ Restricted/ Transfer Rate)	0.44	0.61	0.77	0.81	0.73
TCIR (Total Case Incident Rate)	0.80	0.81	1.06	1.00	1.26
Fatality Rate	0	0	0.02	0.02	0
Number of sites in OSHA VPP program	32	33	35	37	38
Contractor DART <sup>5</sup>	1.08	1.19	0.90	0.89	0.70

Contractor TCIR <sup>5</sup>	1.63	1.80	1.40	1.48	1.22
<b>DIVERSITY</b>					
Women (% of total workforce)	11%	11%	11%	10%	10%
Minorities (% of total workforce)	28%	28%	26%	26%	25%

## 2019 Employee Data

	Total <sup>6</sup>	Female	Male
Employees	3,881	431	3,448
Part-time	48	15	32
Full-time	3,831	415	3,415
Contractors	2	1	1
<b>COLLECTIVE BARGAINING</b>			
Employees	298	8	290
Percent of workforce	7.5%	0.2%	7.3%
<b>EMPLOYEE GEOGRAPHY</b>			
Americas	3,638	377	3,260
Region 1	921	45	876
Region 2	853	45	808
Region 3	737	23	714
Transfer Station	132	9	123
Covanta Field Services	123	1	122
Corporate Headquarters	510	170	339
Covanta Environmental Solutions	498	125	372
Asia	13	6	7
Canada	165	44	120
Europe	65	6	59

## 2019 Diversity by EEO Category

<b>RACE/ETHNIC COMPOSITION OF OUR EMPLOYEES</b>									
	American Indian	Black	White	Hispanic	Asian	Pacific Islander	Two or more races	N/A	Total
Executives	0	2	50	1	2	0	0	2	57
Directors	0	7	211	4	9	0	2	7	240
Managers	1	10	235	20	23	0	2	24	315
Professionals/ administrative	3	57	551	38	42	6	9	55	761
Hourly <sup>3</sup>	13	354	1,537	282	91	58	51	122	2,508
Total	17	430	2,584	345	167	64	64	210	3,881
<b>AGE COMPOSITION OF OUR EMPLOYEES</b>									
	Executives	Directors	Managers	Professionals/ administrative	Hourly <sup>3</sup>	Total			
Under 30 years old	0	0	6	78	407	491			
30-50 years old	13	79	166	353	1,266	1,877			
Over 50 years old	44	161	143	330	835	1,513			
Total	57	240	315	761	2,508	3,881			
<b>GENDER COMPOSITION OF OUR EMPLOYEES</b>									
Female	9	26	86	238	73	432			
Male	48	214	229	522	2,434	3,447			
Total <sup>6</sup>	57	240	315	761	2,508	3,881			

## 2019 Governance Body Diversity

### GENDER COMPOSITION WITHIN OUR BOARD OF DIRECTORS

Female	3
Male	9

### AGE COMPOSITION OF OUR BOARD OF DIRECTORS

Under 30 years old	0
30-50 years old	0
Over 50 years old	12

## 2019 Employee Statistics

### 2018 EMPLOYEE TURNOVER STATISTICS

	Salaried	Hourly <sup>3</sup>	Total	Average Service (years)	# of Voluntary Separations	# of Involuntary Separations	Total # of Separations	Total Rate (%)
Total <sup>6</sup>	203	592	805	6.1	547	258	805	21%
Female	43	90	139	4.7	97	42	139	4%
Male	160	501	665	6.4	449	216	665	17%
Age less than 30	13	207	223	0.9	180	43	223	6%
Age 30-50	89	227	321	4.0	217	104	321	8%
Age over 50	101	158	261	12.8	150	111	261	7%
United States	188	558	754	6.3	504	250	754	19%
Asia	3	0	3	2.3	3	0	3	0.1%
Canada	4	30	36	4.1	30	6	36	1%
Europe	8	4	12	1.2	10	2	12	0.3%

### 2018 NEW HIRE STATISTICS

	Salaried	Hourly <sup>3</sup>	Total
Total <sup>6</sup>	171	562	733
Female	52	79	131
Male	119	482	601
Age less than 30	25	220	245
Age 30-50	91	269	360
Age over 50	55	73	128
United States	151	529	680
Asia	1	0	1
Canada	8	28	36
Europe	11	5	16

## 2019 Employee Safety, Health and Environmental (SHE)

### Training

#### EFW FACILITY PERSONNEL

	Average Training Hours
Environmental	12
Safety and Health	24

#### CORPORATE SUPPLY CHAIN PERSONNEL

Combined Safety, Health and Environmental	16
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#### COVANTA ENVIRONMENTAL SOLUTIONS PERSONNEL

Safety, Health and Transportation	5.5
Environmental	4.5

<sup>3</sup> Hourly = Technicians/ sales workers/ admin support workers/ craft workers/ operatives/ laborers/ helpers.

<sup>4</sup> Safety and Health data is for U.S. and Canada only.

<sup>5</sup> Contractor safety performance rates reflect the overall safety performance of the contractors employed by Covanta, not their specific performance on Covanta's sites.

<sup>6</sup> Reported genders may not add up to the totals due to undisclosed/non-binary gendered employees

## Operations Data

	2019	2018	2017	2016	2015
<b>FACILITIES (OWNED, EQUITY INVESTMENTS IN, AND/ OR OPERATED)</b>					
Number of EfW operations	44	45	43	43	46
Total electrical generation capacity (MW)	1,791	1,714	1,574	1,557	1,541
Total capacity (TPD)	65,172	63,294	58,938	58,249	59,288
Number of material processing facilities	20	20	19	15	12
Number of transfer stations	14	16	17	17	18
Number of landfills	4	4	4	4	4
Number of electronic waste recycling facilities	1	1	1	1	1
<b>WASTE PROCESSED</b>					
Total waste processed (million tons)	22.2	21.2	19.5	20.4	21.6
Municipal waste processed (thousand tons)	21,584	20,574	18,976	19,992	21,247
Commercial and industrial waste (thousand tons)	1,638	1,571	1,475	1,357	1,288
Waste recycled (thousand tons)	1,028	933.0	842.1	789.2	744.2
Waste processed as EfW (million tons)	21.6	20.6	19.0	20.0	21.2
Waste incinerated, no energy recovery (thousand tons)	0.035	0.056	0.068	0	0
Waste sent to landfill <sup>7</sup> (thousand tons)	174	140	139	97	109
Total hazardous waste processed (thousand tons)	7.2	0.0	0.0	0.0	0.0
EfW ash sent to landfill (million tons)	5.0	4.8	4.4	4.7	4.6
Metals recycled (tons)	551,588	500,253	460,598	513,439	497,109
E-waste recycled (million lbs.) <sup>8</sup>	13.6	14.5	16.5	15.0	13.8
<b>ENERGY GENERATION</b>					
Net electricity exported to the grid (million MW hours)	10.1	9.5	8.7	9.1	9.8
Steam exported (billion lbs.)	9.1	9.8	9.1	9.1	12.0
Total energy, million MWh electrical equivalent	10.8	10.3	9.5	9.9	10.8
RECs, value recognized (\$M)	12.2	12.1	12.9	11.5	22.0
<b>ENERGY USE</b>					
Total energy consumption (GJ) <sup>9</sup>	204,548,034	205,556,141	194,119,485	200,601,106	220,642,869
Waste (GJ)	200,476,717	200,887,072	189,942,310	196,149,302	202,908,655
Fossil fuel (GJ)	3,666,449	4,240,422	3,769,015	3,839,415	7,398,593
Biogenic fuel (GJ)	0	22,031	18,466	16,842	10,032,220
Fossil fuel (% of total energy input)	1.8%	2.1%	1.9%	1.9%	3.4%
Fleet fuel consumption (GJ) <sup>10</sup>	169,998	135,349	149,735	–	–
Natural gas as fleet fuel (%)	0%	0%	0%	0%	0%
Renewable fuel as fleet fuel (%)	0%	0%	0%	0%	0%

<sup>7</sup> Not including ash from WTE facilities, reported separately.

<sup>8</sup> Reflects total e-waste received for processing. Earlier reports attempted to estimate tons recycled, which impacted comparability between years.

<sup>9</sup> Energy consumption total includes heat input from MSW and auxiliary fuel, as well as purchased electricity. Purchased electricity is not reflected in the breakdown below.

<sup>10</sup> Represents fleet operations, insignificant prior to 2017, predominately associated with Covanta Environmental Solutions (CES).

## Environmental Data

	2019	2018	2017	2016	2015
Monetary fines and compliance frequency					
EfW CEM fines	\$19,092	\$83,172	\$108,504	\$95,423	\$64,998

EfW Stack test fines	\$10,080	\$-	\$-	\$25,600	\$5,200
Other environmental fines, including biomass and other facilities	\$1,250	\$86,350	\$423,228	\$1,000	\$177,800
Percent compliance—stack tests (EfW facilities)	99.9%	100%	100%	99.9%	99.9%
Percent compliance—CEMs (EfW facilities)	99.97%	99.95%	99.96%	99.95%	99.92%

	Federal Standard	2019	2018	2017	2016	2015
<b>WATER</b>						
Total potable water use (Mgal.)	–	6,014	6,020	5,648	5,903	5,919
Reclaimed water use (Mgal.)	–	3,499	2,649	2,331	2,749	2,672
Saline/other non-potable water use (Mgal.)	–	31,524	58,276	1,052	1,089	1,030
Alternative freshwater use as % of total freshwater use	–	38.9%	32.9%	31.5%	33.8%	33.1%
<b>NET EFW LIFE CYCLE GHG BENEFIT (THOUSAND METRIC TONNES CO<sub>2</sub>E REDUCED, NET BASIS)</b>						
Equity-share basis	–	10,900	11,100	9,997	10,600	11,100
Operational control basis	–	18,800	18,200	16,860	17,800	18,800
<b>GHG EMISSIONS (THOUSAND METRIC TONNES CO<sub>2</sub>E) (EQUITY SHARE BASIS)</b>						
Total Scope 1, 2, and 3 GHG emissions	–	4,542	4,599	4,142	4,548	4,865
Scope 1	–	4,345	4,449	3,997	4,402	4,744
Scope 2	–	24	23	25	28	8
Scope 3	–	124	129	120	118	112
Biogenic CO <sub>2</sub>	–	6,388	6,289	5,781	5,928	7,099
GHG emission intensity (metric tonnes CO <sub>2</sub> e/ \$ revenue)	–	.0024	0.0025	0.0023	0.0026	0.0026
GHG emissions covered under an emissions-limiting regulation (%)	–	2.4%	2.3%	1.6%	1.4%	2.2%
<b>AIR EMISSIONS</b>						
Total landfill gas generated (MMBtu)	–	63,217	58,236	68,687	76,234	60,863
Percentage flared (%) <sup>11</sup>	–	78%	77%	84%	84%	84%
Percentage used for energy (%)	–	0%	0%	0%	0%	0%
Lead (µg/ dscm)	400	9.8	10.7	11.5	12.1	12.3
Cadmium (µg/ dscm)	35	1.2	1.2	1.2	1.2	1.3
Mercury (µg/ dscm)	50	2.0	2.3	1.8	2.7	2.5
Total dioxins and furans (ng/ dscm)	30	2.3	2.2	2.0	3.4	2.4
Particulate matter (mg/ dscm)	25	3.3	2.7	2.4	2.8	3.0
Hydrogen chloride (ppm)	29	6.2	7.0	7.0	6.8	6.7
Carbon monoxide (ppm)	100	30.5	32.0	30.3	29.1	29.3
Sulfur oxides (ppm)	29	8.4	7.5	7.0	7.5	8.0
Nitrogen oxides (ppm)	205	128.9	132.1	134.3	136.4	138.1

<sup>11</sup> Percentage flared based on LFG collection efficiency methodology in U.S. EPA Mandatory Reporting Rule, equation HH-3.

## Non-GAAP Reconciliation (Adjusted EBITDA and Free Cash Flow)<sup>12,13</sup> (\$ in Millions)

	2019	2018	2017	2016	2015
<b>Net Income (Loss) Attributable to Covanta Holding Corporation</b>	<b>\$10</b>	<b>\$152</b>	<b>\$57</b>	<b>\$(4)</b>	<b>\$68</b>
Operating loss related to insurance subsidiaries	–	–	–	–	–
Depreciation and amortization expense	221	218	215	207	198
Interest expense, net	143	145	147	138	134
Income tax expense (benefit)	(7)	(29)	(191)	22	(84)

Impairment charges	2	86	2	20	43
Loss on extinguishment of debt	–	15	84	–	2
(Gain) loss on sale of business and investments	(49)	(217)	6	(44)	–
Property insurance recoveries (net)	–	(18)	(2)	–	–
Net income (loss) attributable to noncontrolling interests in subsidiaries	–	–	–	–	1
<b>OTHER ADJUSTMENTS</b>					
Debt service billings in excess of revenue recognized	–	(1)	5	4	1
Business development and transaction costs	2	3	5	2	3
Severance and reorganization costs	13	5	1	3	4
Capital type expenditures at service-fee operated facilities <sup>12</sup>	34	37	55	39	31
Non-cash compensation expense	25	24	18	16	18
Adjustments to reflect Adjusted EBITDA from unconsolidated investments	25	23	–	–	–
Other	9	14	6	7	9
<b>Subtotal other adjustments</b>	<b>108</b>	<b>105</b>	<b>90</b>	<b>71</b>	<b>66</b>
<b>Total adjustments</b>	<b>418</b>	<b>305</b>	<b>351</b>	<b>414</b>	<b>360</b>
<b>Adjusted EBITDA</b>	<b>428</b>	<b>\$457</b>	<b>\$408</b>	<b>\$410</b>	<b>\$428</b>
Cash paid for interest, net of capitalized interest	(152)	(136)	(132)	(135)	(131)
Cash paid for taxes	(5)	(2)	–	(6)	(2)
Equity in net income from unconsolidated investments	(6)	(6)	(1)	(4)	(13)
Adjustments to reflect Adjusted EBITDA from unconsolidated investments	(25)	(23)	–	–	–
Dividends from unconsolidated investments	9	13	2	2	5
Capital-type expenditures at service-fee operated facilities <sup>14</sup>	(34)	(37)	(55)	(39)	(31)
Working capital/ other	11	(28)	20	36	(30)
<b>Cash flow provided by operating activities<sup>15</sup></b>	<b>\$226</b>	<b>\$238</b>	<b>\$242</b>	<b>\$264</b>	<b>\$226</b>
Plus: Changes in restricted funds—operating <sup>16</sup>	20	4	\$1	\$22	\$28
Plus: Cash flow provided by operating activities from insurance subsidiaries	–	–	–	–	–
Less: Maintenance capital expenditures	(106)	(142)	(111)	(110)	(102)
<b>Free Cash Flow</b>	<b>\$140</b>	<b>\$100</b>	<b>\$132</b>	<b>\$176</b>	<b>\$152</b>

<sup>12</sup> For complete information, please refer to Covanta's Form 10-K filings.

<sup>13</sup> For the years ended December 31.

<sup>14</sup> Adjustment for impact of adoption of FASB ASC 853 — Service Concession Arrangements

<sup>15</sup> Prior years were revised to reflect adoption of FASB ASU 2016-18 Statement of Cash Flows (Topic 230) —Restricted Cash adopted 1/1/2018 and FASB 2016-09 Compensation — Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting adopted 1/1/2017.

<sup>16</sup> Adjustment for impact of adoption of FASB ASU 2016-18 Statement of Cash Flows (Topic 230) — Restricted Cash

# SASB Index

## SASB Waste Management Standard 2018\*

CODE	ACCOUNTING METRIC	CROSS-REFERENCE, OMISSION, AND EXPLANATION
<b>GREENHOUSE GAS EMISSIONS</b>		
SASB IF-WM-110a.1	(1) Gross global Scope 1 emissions, percentage covered under: (2) emissions-limiting regulations, and (3) emissions-reporting regulations	<a href="#">Performance Tables / Environmental Data</a> <a href="#">Environmental Sustainability / Reducing Greenhouse Gases</a>
SASB IF-WM-110a.2	(1) Total landfill gas generated, and (2) percentage flared (3) percentage used for energy	<a href="#">Performance Tables / Environmental Data</a>
SASB IF-WM-110a.3	Discussion of long-term and short-term strategy or plan to manage Scope 1 and lifecycle emissions, emissions reduction targets, and an analysis of performance against those targets	<a href="#">Environmental Sustainability / Reducing Greenhouse Gases</a> <a href="#">Environmental Sustainability / Minimizing Air Emissions</a>
<b>FLEET FUEL MANAGEMENT</b>		
SASB IF-WM-110b.1	(1) Fleet fuel consumed, and (2) percentage natural gas (3) percentage renewable	<a href="#">Performance Tables / Operations Data</a>
SASB IF-WM-110b.2	Percentage of alternative fuel vehicles in fleet	0% of our fleet is made up of alternative fuel vehicles.
<b>AIR QUALITY</b>		
SASB IF-WM-120a.1	Air emissions of the following pollutants: (1) NO <sub>x</sub> (excluding N <sub>2</sub> O), (2) SO <sub>x</sub> , (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	<a href="#">Performance Tables / Environmental Data</a>
SASB IF-WM-120a.2	Number of facilities in or near areas of dense population	Covanta operates 70 facilities, including Energy from Waste, Transfer Stations and Material Processing Facilities, in or near areas of dense population.
SASB IF-WM-120a.3	Number of incidents of non-compliance associated with air emissions	<a href="#">Performance Tables / Environmental Data</a>
<b>MANAGEMENT OF LEACHATE &amp; HAZARDOUS WASTE</b>		
SASB IF-WM-150a.1	(1) Total Toxic Release Inventory (TRI) releases, and (2) percentage released to water	Covanta is not subject to TRI regulations, and is therefore not required to report TRI releases.
SASB IF-WM-150a.2	Number of corrective actions implemented for landfill releases	Number of corrective actions: 0
SASB IF-WM-150a.3	Number of incidents of non-compliance associated with environmental impacts	<a href="#">Environmental Sustainability / Improving Our Performance</a>



LABOR PRACTICES		
SASB IF-WM-310a.1	Percentage of active workforce covered under collective bargaining agreements	<u>Performance Tables / Employee Data</u> As of December 31, 2019, approximately 7.5% of our employees are covered by collective bargaining agreements with various expiration dates through 2021.
SASB IF-WM-310a.2	(1) Number of work stoppages, and (2) total days idle	Number of work stoppages: 0 Total number of days idle: 0
WORKFORCE HEALTH & SAFETY		
SASB IF-WM-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR) for: (a) direct employees (b) contract employees	<u>Performance Tables / Workforce Data</u>
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 (6) Hazardous Materials Compliance	Well below Intervention Thresholds*** shown in parenthesis: (1) Unsafe Driving: 3.25% (60%) (2) Hours-of-Service Compliance: 24% (60%) (3) Driver Fitness: 0% (75%) (4) Controlled Substances / Alcohol: 0% (75%) (5) Vehicle Maintenance: 43.2% (75%) (6) Hazardous Materials Compliance: 0% (80%)
SASB IF-WM-320a.3	Number of road accidents and incidents	Number of road accidents and incidents: 5
RECYCLING & RESOURCE RECOVERY		
SASB IF-WM-420a.1	(1) Amount of waste incinerated, and (2) percentage hazardous (3) percentage used for energy recovery	<u>Performance Tables / Operations Data</u>
SASB IF-WM-420a.2	Percentage of customers receiving: (1) recycling (2) composting services	This is not applicable as Covanta does not serve retail customers.
SASB IF-WM-420a.3	Amount of material: (1) recycled (2) composted (3) processed as waste-to-energy	<u>Performance Tables / Operations Data</u>
SASB IF-WM-420a.4	Amount of electronic waste collected, percentage recovered through recycling	<u>Performance Tables / Operations Data</u>
ACTIVITY METRICS		
SASB IF-WM-000.A	Number of customers by category: (1) municipal (2) commercial (3) industrial (4) residential (5) other	Municipal: 600 Commercial: 700 Industrial: 3,000 Residential: 0 Other: n/a
SASB IF-WM-000.B	Vehicle fleet size	Vehicle fleet size: 210
SASB IF-WM-000.C	Number of: (1) landfills (2) transfer stations (3) recycling centers	<u>2019 10-K, p. 31</u>



	(4) composting centers (5) incinerators (6) all other facilities	
SASB IF-WM-000.D	Total amount of materials managed, by customer category: (1) municipal (2) commercial (3) industrial (4) residential (5) other	<u>Performance Data / Operations Data</u>

\*Covanta's 2019 Sustainability Report applies the 2018 version of the SASB Standards; "2018" refers to the Standards issue date, not the date of information presented in this report.

\*\* BASIC Percentile data based on a 24 month period

\*\*\* Intervention Thresholds are percentages at which the Federal Motor Carrier Safety Administration (FMCSA) will intervene to help motor carriers comply with safety regulations