

# 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</a> 2018 10-K, pp. 5-6
102-3	Location of headquarters	445 South Street, Morristown, NJ 07960
102-4	Location of operations	United States, Canada, Ireland, Italy and China 2018 10-K, p. 5
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</a> 2018 10-K, pp. 5, 8-16
102-7	Scale of the organization	<a href="#">Performance Tables / Operations Data</a> 2018 10-K, pp. 5, 8-17, 20
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="#">2018 10-K, pp. 9-12</a>
102-10	Significant changes to the organization and its supply chain	<a href="#">2018 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 serving on the boards or as association members.  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.
<b>STRATEGY</b>		
102-14	Statement from senior decision-maker	<a href="#">Our Blueprint for Sustainability / A Message from our CEO</a>

ETHICS AND INTEGRITY		
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>
GOVERNANCE		
102-18	Governance structure	<a href="#">Governance Documents</a>
STAKEHOLDER ENGAGEMENT		
102-40	List of stakeholder groups	<a href="#">Our Blueprint for Sustainability / Listening to our Stakeholders</a>
102-41	Collective bargaining agreements	<p><a href="#">Performance Tables / Workforce Data</a> <a href="#">Performance Tables / Employee Data</a> As of December 31, 2018, approximately 8% of our employees are covered by collective bargaining agreements with various expiration dates through 2021.</p>
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>
REPORTING PRACTICE		
102-45	Entities included in the consolidated financial statements	<a href="#">2018 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	<p><a href="#">Performance Tables / Operations Data</a> We have revised our Waste Processed performance data to reflect an update in our accounting procedures. Previously reported figures were inaccurate due to a calculation error.</p>
102-49	Changes in reporting	None.
102-50	Reporting period	January 1, 2017, through December 31, 2018
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="#">2018 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 CO2e emissions allowances or equivalent, broken down by carbon trading framework	<a href="#">Environmental Sustainability / Reducing Greenhouse Gases</a>

\* Covanta's 2018 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="#">2018 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="#">2018 10-K, pp. 12-13</a>	Communities Customers Investors
GRI 305: Emissions 2016	<a href="#">2018 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,
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			EXPLANATION OR OMISSION
<b>ECONOMIC</b>			
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	2018 10-K, p. 9 We report North America and totals, but not by specific country (e.g., Italy, Ireland, the United Kingdom). <a href="#">Performance Tables / Economic Data Community / What We Do</a>
	201-2	Financial implications and other risks and opportunities due to climate change	2018 10-K, p. 9 <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	2018 10-K, p. 11 <a href="#">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</a> <a href="#">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</a> <a href="#">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	<p><a href="#">Covanta Political Contribution Policy and Disclosure</a></p> <p>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.</p>
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 \$39,000 and \$110 in CY 2017 and CY 2018, respectively. No other fines, penalties or nonmonetary sanctions were received for the social and economic area in the period from 2017-2018.

\* 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>	2018	2017	2016	2015	2014
<b>OPERATING REVENUE</b>					
Waste and service revenue	1,327	1,231	1,187	1,104	1,032
Energy revenue	343	334	370	421	460
Recycled metals revenue	95	82	61	61	93
Other operating revenue	103	105	81	59	97
Total operating revenue	1,868	1,752	1,699	1,645	1,682
<b>OPERATING EXPENSE</b>					
Total operating expense	1,805	1,651	1,590	1,536	1,528
<b>INCOME TAX</b>					
Income tax expense (benefit)	(29)	(191)	22	(84)	15
<b>NET INCOME</b>					
Net (loss) income attributable to Covanta Holding	152	57	(4)	68	(2)
Cash flow provided by operating activities	238	242	264	226	333
<b>NON-GAAP FINANCIAL MEASURES</b>					
Adjusted EBITDA	457	408	410	428	474
Free Cash Flow	100	132	176	152	244
<b>DIVIDENDS</b>					
Annualized Cash Dividends per Share	\$1.00	\$1.00	\$1.00	\$1.00	\$0.86
<b>COMMUNITY INVESTMENT</b>					
Total donations	1.8	2.0	1.9	1.7	2.2

<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					
	2018	2017	2016	2015	2014
<b>EMPLOYEES</b>					
Total employees	3,911	3,719	3,582	3,539	3,224
Salaried	1,230	1,193	1,157	1,142	1,033
Hourly <sup>3</sup>	2,683	2,526	2,425	2,397	2,191
<b>GLOBAL HEAD COUNT</b>					
North America	3,834	3,649	3,537	3,511	3,202
United States	3,676	3,520	3,454	3,431	3,122
Canada	158	129	83	80	80
Asia	15	14	15	21	21
Europe	62	56	30	7	1
<b>SAFETY AND HEALTH<sup>4</sup></b>					
DART (Days Away/ Restricted/ Transfer Rate)	0.61	0.77	0.81	0.73	0.72
TCIR (Total Case Incident Rate)	0.81	1.06	1.00	1.26	1.02
Fatality Rate	0	0.02	0.02	0	0
Number of sites in OSHA VPP program	33	35	37	38	41
Contractor DART <sup>5</sup>	1.19	0.90	0.89	0.70	0.78
Contractor TCIR <sup>5</sup>	1.80	1.40	1.48	1.22	1.31
<b>DIVERSITY</b>					
Women (% of total workforce)	11%	11%	10%	10%	9%
Minorities (% of total workforce)	28%	26%	26%	25%	28%

## 2018 Employee Data

	Total	Female	Male

Employees	3,911	438	3,472
Part-time	34	14	20
Full-time	3,877	424	3,452
Contractors	0	–	–
<b>COLLECTIVE BARGAINING</b>			
Employees	298	16	282
Percent of workforce	8%	1%	7%
<b>EMPLOYEE GEOGRAPHY</b>			
Americas	3,676	387	3,289
Mid-Atlantic	533	23	510
West Central	329	22	307
Northeast	524	27	497
NY/ NJ	457	28	429
South	713	29	684
Covanta Field Services	117	1	116
Corporate Headquarters	584	178	406
Covanta Environmental Solutions	419	79	340
Asia	15	7	8
Canada	158	37	120
Europe	62	7	55

## 2018 Diversity by EEO Category

### RACE/ETHNIC COMPOSITION OF OUR EMPLOYEES

	American Indian	Black	White	Hispanic	Asian	Pacific Islander	Two or more races	N/A	Total
Executives	0	3	58	2	2	0	0	4	69
Directors	0	8	223	8	12	0	5	8	264
Managers	0	9	237	19	24	0	2	20	311
Professionals/ administrative	3	50	437	42	37	4	9	34	616
Hourly <sup>3</sup>	12	329	1,695	307	104	59	49	96	2,651

### AGE COMPOSITION OF OUR EMPLOYEES

	Executives	Directors	Managers	Professionals/ administrative	Hourly <sup>3</sup>	Total
Under 30 years old	0	0	8	66	433	507
30-50 years old	17	97	165	340	1,244	1,863
Over 50 years old	52	167	138	338	846	1,541
Total	69	264	311	744	2,523	3,911

### GENDER COMPOSITION OF OUR EMPLOYEES

	Female	Male	Total
Female	13	26	85
Male	56	238	226
Total	69	264	311

## 2018 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

## 2018 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	159	445	604	6	432	172	604	15%
Female	33	28	61	7	47	14	61	2%



Male	126	416	542	6	384	158	542	14%
Gender N/A	1	1	1	6	1	0	1	0%
Age less than 30	14	119	133	2	106	27	133	3%
Age 30-50	65	199	264	4	196	68	264	7%
Age over 50	80	127	207	13	130	77	207	5%
United States	154	427	581	7	412	169	581	15%
Asia	0	0	0	0	0	0	0	0%
Canada	4	8	12	1	10	2	12	0%
Europe	1	10	11	1	10	1	11	0%

**2018 NEW HIRE STATISTICS**

	Salaried	Hourly <sup>3</sup>	Total					
Total	158	614	772					
Female	32	48	80					
Male	126	565	691					
Age less than 30	19	189	208					
Age 30-50	74	315	389					
Age over 50	65	110	175					
United States	148	571	719					
Asia	1	0	1					
Canada	4	31	35					
Europe	5	12	17					

## 2018 Employee Safety, Health and Environmental (SHE) Training<sup>5</sup>

**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.

## Operations Data

	2018	2017	2016	2015	2014
<b>FACILITIES (OWNED, EQUITY INVESTMENTS IN, AND/ OR OPERATED)</b>					
Number of Efw operations	45	43	43	46	46
Total electrical generation capacity (MW)	1,714	1,574	1,557	1,541	1,587
Total capacity (MW)	117	117	89	89	89
Total capacity (TPD)	63,294	58,938	58,249	59,288	60,908
Number of material processing facilities	20	19	15	12	1
Number of transfer stations	16	17	17	18	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)	21.2	19.5	20.4	21.6	20.8
Municipal waste processed (thousand tons)	20,574	18,976	19,992	21,247	20,711
Commercial and industrial waste (thousand tons)	1,571	1,475	1,357	1,288	881
Waste recycled (thousand tons)	933.0	842.1	789.2	744.2	568.3
Waste processed as Efw (million tons)	20.6	19.0	20.0	21.2	20.7
Waste incinerated, no energy recovery (thousand tons)	0.056	0.068	0	0	0
Waste sent to landfill <sup>6</sup> (thousand tons)	140	139	97	109	10
Total hazardous waste processed (thousand tons)	0.0	0.0	0.0	0.0	0.0
Efw ash sent to landfill (million tons)	4.7	4.4	4.6	4.6	4.5
Metals recycled (tons)	500,253	460,598	513,439	497,109	489,320

E-waste recycled (million lbs.) <sup>7</sup>	14.5	16.5	15.0	13.8	14.1
<b>ENERGY GENERATION</b>					
Net electricity exported to the grid (million MW hours)	9.5	8.7	9.1	9.8	9.8
Steam exported (billion lbs.)	9.8	9.1	9.1	12.0	12.6
Total energy, million MWh electrical equivalent	10.3	9.5	9.9	10.8	10.9
RECs, value recognized (\$M)	12.1	12.9	11.5	22.0	22.0
<b>ENERGY USE</b>					
Total energy consumption (GJ)	206,876,643	194,119,485	200,601,105	220,642,869	226,573,051
Waste (GJ)	206,470,028	193,729,772	200,005,559	220,339,467	226,245,299
Fossil fuel (GJ)	4,202,198	3,769,015	3,839,415	7,398,593	9,107,429
Biogenic fuel (GJ)	109,295,348	100,745,938	102,103,215	117,619,014	124,709,973
Fossil fuel (% of total energy input)	2.0%	1.9%	1.9%	3.4%	4.0%
Fleet fuel consumption (GJ) <sup>8</sup>	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>6</sup> Not including ash from WTE facilities, reported separately.

<sup>7</sup> Reflects total e-waste received for processing. Earlier reports attempted to estimate tons recycled, which impacted comparability between years.

<sup>8</sup> Represents fleet operations, insignificant prior to 2017, predominately associated with Covanta Environmental Solutions (CES).

## Environmental Data

Monetary fines and compliance frequency	2018	2017	2016	2015	2014
EfW CEM fines	\$83,172	\$101,138	\$68,061	\$49,200	\$53,857
EfW Stack test fines	\$-	\$-	\$22,600	\$5,200	\$-
Other environmental fines, including biomass and other facilities	\$20,750	\$4,400	\$1,000	\$177,800	\$22,686
Percent compliance—stack tests (EfW facilities)	100%	100%	99%	99%	100%
Percent compliance—CEMs (EfW facilities)	100%	100%	100%	100%	100%

	Federal Standard	2018	2017	2016	2015	2014
<b>WATER</b>						
Total potable water use (Mgal.)	–	6,020	5,648	5,903	5,919	6,341
Reclaimed water use (Mgal.)	–	2,649	2,331	2,749	2,672	1,892
Saline/other non-potable water use (Mgal.)	–	58,276	1,052	1,089	1,030	1,013
Alternative freshwater use as % of total freshwater use	–	32.9%	31.5%	33.8%	33.1%	25.4%
<b>NET EFW LIFE CYCLE GHG BENEFIT (THOUSAND TONS CO<sub>2</sub>E REDUCED, NET BASIS)</b>						
Equity-share basis	–	11,100	9,997	10,600	11,100	11,300
Operational control basis	–	18,200	16,860	17,800	18,800	18,200
<b>GHG EMISSIONS (THOUSAND TONS CO<sub>2</sub>E) (EQUITY SHARE BASIS)</b>						
Total Scope 1, 2, and 3 GHG emissions	–	4,481	4,142	4,548	4,865	5,066
Scope 1	–	4,329	3,997	4,402	4,744	4,912
Scope 2	–	23	25	28	8	23
Scope 3	–	129	120	118	112	131
Biogenic CO <sub>2</sub>	–	6,289	5,781	5,928	7,099	8,052
GHG emission intensity (tons CO <sub>2</sub> e/ \$ revenue)	–	0.0021	0.0023	0.0026	0.0026	0.0028
GHG emissions covered under an emissions-limiting regulation (%)	–	4.0%	1.6%	1.4%	2.2%	3.7%
<b>AIR EMISSIONS</b>						
Total landfill gas generated (MMBtu)	–	58,236	68,687	76,234	60,863	–
Percentage flared (%) <sup>9</sup>	–	77%	84%	84%	84%	–
Percentage used for energy (%)	–	0%	0%	0%	0%	–
Lead (µg/ dscm)	400	10.7	11.5	12.1	12.3	11.2
Cadmium (µg/ dscm)	35	1.2	1.2	1.2	1.3	1.3
Mercury (µg/ dscm)	50	2.3	1.8	2.7	2.5	5.9
Total dioxins and furans (ng/ dscm)	30	2.2	2.0	3.4	2.4	2.4
Particulate matter (mg/ dscm)	25	2.7	2.4	2.8	3.0	2.6
Hydrogen chloride (ppm)	29	7.0	7.0	6.8	6.7	7.2
Carbon monoxide (ppm)	100	32.0	30.3	29.1	29.3	29.3
Sulfur oxides (ppm)	29	7.5	7.0	7.5	8.0	8.2
Nitrogen oxides (ppm)	205	132.1	134.3	136.4	138.1	140.4

<sup>9</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>10,11</sup> (\$ in Millions)

	2018	2017	2016	2015	2014
<b>Net Income (Loss) Attributable to Covanta Holding Corporation</b>	<b>\$152</b>	<b>\$57</b>	<b>\$(4)</b>	<b>\$68</b>	<b>\$(2)</b>
Operating loss related to insurance subsidiaries	–	–	–	–	2
Depreciation and amortization expense	218	215	207	198	211
Interest expense, net	145	147	138	134	147
Income tax expense (benefit)	(29)	(191)	22	(84)	15
Impairment charges	86	2	20	43	64
Loss on extinguishment of debt	15	84	–	2	2
Loss (gain) on asset sales	(217)	6	(44)	–	–
Property insurance recoveries (net)	(18)	(2)	–	–	–
Net income (loss) attributable to noncontrolling interests in subsidiaries	–	–	–	1	1
<b>OTHER ADJUSTMENTS</b>					
Debt service billings in excess of revenue recognized	(1)	5	4	1	2
Business development and transaction costs	3	5	2	3	–
Severance and reorganization costs	5	1	3	4	9
Capital type expenditures at service-fee operated facilities <sup>10</sup>	37	55	39	31	–
Non-cash compensation expense	24	18	16	18	17
Adjustments to reflect Adjusted EBITDA from unconsolidated investments	23	–	–	–	–
Other	14	6	7	9	6
<b>Subtotal other adjustments</b>	<b>105</b>	<b>90</b>	<b>71</b>	<b>66</b>	<b>34</b>
<b>Total adjustments</b>	<b>305</b>	<b>351</b>	<b>414</b>	<b>360</b>	<b>476</b>
<b>Adjusted EBITDA</b>	<b>\$457</b>	<b>\$408</b>	<b>\$410</b>	<b>\$428</b>	<b>\$474</b>
Cash paid for interest, net of capitalized interest	(136)	(132)	(135)	(131)	(119)
Cash paid for taxes	(2)	–	(6)	(2)	(11)
Equity in net income from unconsolidated investments	(6)	(1)	(4)	(13)	(10)
Adjustments to reflect Adjusted EBITDA from unconsolidated investments	(23)	–	–	–	–
Dividends from unconsolidated investments	13	2	2	5	11
Capital-type expenditures at service-fee operated facilities <sup>12</sup>	(37)	(55)	(39)	(31)	–
Working capital/ other	(28)	20	36	(30)	(12)
<b>Cash flow provided by operating activities<sup>13</sup></b>	<b>\$238</b>	<b>\$242</b>	<b>\$264</b>	<b>\$226</b>	<b>\$333</b>
Plus: Changes in restricted funds—operating <sup>14</sup>	4	\$1	\$22	\$28	\$11
Plus: Cash flow provided by operating activities from insurance subsidiaries	–	–	–	–	1
Less: Maintenance capital expenditures	(142)	(111)	(110)	(102)	(101)
<b>Free Cash Flow</b>	<b>\$100</b>	<b>\$132</b>	<b>\$176</b>	<b>\$152</b>	<b>\$244</b>

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

<sup>11</sup> For the years ended December 31.

<sup>12</sup> Adjustment for impact of adoption of FASB ASC 853 — Service Concession Arrangements

<sup>13</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>14</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 63 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>
<b>LABOR PRACTICES</b>		
SASB IF-WM-310a.1	Percentage of active workforce covered under collective bargaining agreements	<a href="#">Performance Tables / Employee Data</a> As of December 31, 2018, approximately 8% 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
<b>WORKFORCE HEALTH &amp; SAFETY</b>		
SASB IF-WM-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate, and	<a href="#">Performance Tables / Workforce Data</a>

	(3) near miss frequency rate (NMFR) for: (a) direct employees (b) contract 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 (6) Hazardous Materials Compliance	Well below Intervention Thresholds*** shown in parenthesis: (1) Unsafe Driving: 10% (60%) (2) Hours-of-Service Compliance: 7.25% (60%) (3) Driver Fitness: 0% (75%) (4) Controlled Substances / Alcohol: 0% (75%) (5) Vehicle Maintenance: 17.75% (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
<b>RECYCLING &amp; RESOURCE RECOVERY</b>		
SASB IF-WM-420a.1	(1) Amount of waste incinerated, and (2) percentage hazardous (3) percentage used for energy recovery	<a href="#">Performance Tables / Operations Data</a>
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	<a href="#">Performance Tables / Operations Data</a>
SASB IF-WM-420a.4	Amount of electronic waste collected, percentage recovered through recycling	<a href="#">Performance Tables / Operations Data</a>
<b>ACTIVITY METRICS</b>		
SASB IF-WM-000.A	Number of customers by category: (1) municipal (2) commercial (3) industrial (4) residential (5) other	Municipal: 632 Commercial: 725 Industrial: 3,050 Residential: 0 Other: n/a
SASB IF-WM-000.B	Vehicle fleet size	Vehicle fleet size: 180
SASB IF-WM-000.C	Number of: (1) landfills (2) transfer stations (3) recycling centers (4) composting centers (5) incinerators (6) all other facilities	<a href="#">2018 10-K, p. 32</a>
SASB IF-WM-000.D	Total amount of materials managed, by customer category: (1) municipal (2) commercial (3) industrial (4) residential (5) other	<a href="#">Performance Data / Operations Data</a>

\*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