Covanta Energy Corporation - Climate Change 2022

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Covanta Holding Corporation (Covanta) is a world leader in sustainable materials management. Our end-to-end platform provides services that range from waste material handling, reuse, recycling, energy recovery, secure product destruction, industrial wastewater treatment and disposal, on-site cleaning services, and transportation services.

The company owns and operates Waste-to-Energy (WTE) facilities, Material Processing Facilities (MPFs), transfer stations, and residual management facilities. Our facilities provide options that are environmentally superior to landfilling, recover resources for the global economy and provide significant reductions in GHG emissions.

Our expanded service offerings provide our clients with alternatives to meet their zero-waste, zero-waste-to-landfill, circular economy and sustainability goals. As clients reduce, reuse, recycle and recover materials and energy, they reduce environmental impacts associated with materials and waste in our society. Ultimately, we seek not only to divert materials from landfills, but to find fully sustainable waste management solutions that consider economics and the environment.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2021	December 31 2021	No	<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

Canada
Ireland
Italy
United Kingdom of Great Britain and Northern Ireland
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Equity share

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	US22282E1029

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	Our Board has direct oversight of our sustainability strategy. Specifically, as directed in the committee's charter, our Environmental Justice and Sustainability Committee is responsible for review and oversight of sustainability and corporate social responsibility initiatives, performance, and reporting; and developments and trends regarding public policy affecting the Corporation. Specifically with regard to climate, the committee assesses and reviews changes in public policies pertaining to climate, including the evolving development of cap & trade programs, and implementation of the EU's waste framework directive; progress on goals and targets pertaining to GHG emissions; and content of our corporate sustainability report, including that pertaining to addressing climate change.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	At least twice annually, the Chief Sustainability Officer reviews pertinent aspects of the sustainability program with the Environmental Justice and Sustainability Committee, including with regard to climate change and GHG emissions. This regular interaction is important to ensure recognition of potential risks and opportunities regarding climate change. In 2021, for example, the discussion with the Environmental Justice and Sustainability Committee included a review of our sustainability-linked financing, which is aligned with GHG reductions through more sustainable waste management, and our goal to develop a science-based target.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Our board members are assessed by their professional and/or leadership experiences in the areas of safety & health, environment & climate change, community engagement, and materials management. Out of our 7 board members, 2 hold leadership positions at EQT Partners Inc. Infrastructure fund, which thematically seeks out companies with strong sustainability performance. At least two more board members have extensive experience in renewable energy and environmental risk management.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Annually

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The EVP / Chief Sustainability Officer (CSO) has overall responsibility for the entire sustainability program, including the assessment, management, and strategy development for climate related issues. The CSO reports directly to Covanta's CEO. Climate related issues are monitored by the retrospective departments consistent with the type of issue. For example, changes in legislative or regulatory policies pertaining to climate change are monitored by the Government Affairs group. Alternatively, exposure to physical climate risks are monitored by the maintenance group, which reports through the COO. In addition to climate change issues, the CSO is responsible for all elements of Covanta's sustainability program, Community Affairs, Environmental Compliance, Permitting, Government Affairs and environmental testing. The responsibilities of the position make it ideally suited to address risks and opportunities to climate change, as well as to coordinate the organizations' response.

Reporting to the CSO are the VP Environmental Affairs, VP Federal Government Relations, and VP State and Corporate Relations. Total staff is over thirty full-time employees.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Environment/Sustainability manager	Monetary reward	Other (please specify) (Overall Management)	The company has assigned specific personnel to manage the company's progress and status regarding climate change and each of those individuals receives an annual bonus based on individual performance wherein their success in the area of climate change would be among the factors considered. Furthermore, specific individuals in the company are tasked with implementation of specific initiatives that, among other benefits, result in net GHG emissions reductions. These employees are also evaluated on their individual performance on these initiatives. These evaluations impact the employees' bonuses.
Management group	Monetary reward	Emissions reduction project	Covanta's Metal Management group has been tasked with the overall growth of our metals recovery efforts, including both the quantity and quality of metals recovered from the ash remaining after the combustion process. Covanta recovers approximately 600,000 tons of metal a year for recycling. The metals recovered for recycling save significant amount of GHG emissions. For each ton of aluminum recovered, for example, 10 tons of GHGs as CO2e are saved relative to manufacturing aluminum from raw materials. Covanta's Metal Management Group is responsible for a large share of the company's GHG emissions reduction initiatives.
Corporate executive team	Monetary reward	Emissions reduction target	Covanta's material management business achieves GHG reductions by diverting waste from landfilling. Targets pertaining to growth of the business, either same store growth or new facilities, results in incremental greater overall GHG emissions reductions. Specifically, Covanta set a sustainability goal to "increase the amount of sustainably managed waste" through energy recovery and other recycling and reuse operations by 2.5% relative to a 2020 baseline by the end of 2025.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	
Medium-term	3	5	
Long-term	5	20	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

For purposes of determining risks and opportunities pertaining to climate change, we define substantive financial or strategic impact as impacts that could be expected to create a material financial impact consistent with relevant financial reporting and disclosure standards, impact our ability to operate our current facilities or pursue development opportunities, or create a significant change in the demand for our products or services.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
Annually

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
Risks are reviewed and managed by Senior Leadership and the Risk Committee of our Board of Directors. Risks are categorized into six main topics, including Environmental / Social / Governance (ESG), Operational, Financial, Information Technology, Macro, and General / Other. Each risk is assigned an impact category, either to EBITDA or Enterprise Value, likelihood, a risk owner, mitigation plan, and a lead from our executive leadership team. Identification of climate related risks, as well as mitigation plans, are the responsibility of the Chief Sustainability Officer and her team.

Value chain stage(s) covered
Upstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
Annually

Time horizon(s) covered
Short-term
Medium-term

Description of process
While carbon costs imposed by policy will have the most direct impact, concerns over climate change could increase or decrease the demand for our products and services. Our business management team normally responsible for waste procurement is responsible for reviewing the impact of climate-related market changes in collaboration with our sustainability and government affairs team. Our approach is to develop estimated market prices, taking into account a variety of factors, including climate-related impacts and associated policies. We also evaluate the uneven application of such impacts on the waste market, to elucidate any disparities of impact on WTE versus landfilling. For example, Connecticut, New Jersey, and California have moved forward with policies to require diversion of organics from landfill to recycling options (e.g. composting, anaerobic digestion) for large-quantity generators of food waste. Our assessment of these market risks was multi-dimensional and include a review of potential impact on tip fees (the price paid to Covanta for management of waste) as well as the potential opportunity from an investment in organics management infrastructure.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	WTE is a net source of GHG mitigation relative to the business as usual practice of landfilling, as recognized by many international organizations and protocols, including the EU, U.S. EPA, and CDM methodologies. However, WTE facilities also have stack emissions of CO2 which can be subject to regulation if not viewed consistently against other forms of waste management (e.g. landfilling). Regulations can also impact our industry indirectly, by changing the types of wastes that are remaining after waste reduction and recycling efforts are exhausted. For example, during the reporting year, we specifically evaluated the allowance allocation provisions of California's GHG reporting program (AB32) for financial impacts on our WTE facilities in California and the European Union's evolving proposals that will potentially change to EU Emission Trading Scheme, including a potential inclusion of WTE in the program in the future.
Emerging regulation	Relevant, always included	WTE is a net source of GHG mitigation relative to the business as usual practice of landfilling, as recognized by many international organizations and protocols, including the EU, U.S. EPA, and CDM carbon offset methodologies. However, WTE facilities also have stack emissions of CO2 which can be subject to regulation if not viewed from a systemic level. Because of the potential exposure, we are constantly evaluating our exposure to emerging regulations, legislation, and policy. For example, in 2021, we closely assessed the potential impacts of evolving policies under the New York State's Climate Leadership and Community Protection Act, including the NY Department of Environmental Conservation's proposed and adopted State-wide Greenhouse Gas Emission Limits regulation; Virginia's Carbon Trading Rule; and the continued evolution of the circular economy package in the European Union.
Technology	Relevant, always included	Waste-to-energy (WTE) is a net source of GHG mitigation relative to the business as usual practice of landfilling, however, there are emerging technologies which could offer even more GHG-efficient means of managing wastes remaining after waste reduction and recycling efforts have been exhausted. To date, these technologies have not been proven to be practical and/or economic at scale. However, we keep abreast of technological development to evaluate risk to our business. Recently, the interest around replacement of fossil fuels for transportation has driven proposals for waste to liquid fuels conversion. In this specific area, current risk is low given low fuel pricing and technological challenges in conversion of a heterogeneous feed stock like waste into a liquid fuel. In 2021, our focus continued to be on the recovery of additional metals and materials from our residue stream. For example, in 2021, we continued to engage university and/or private enterprise teams which were awarded funding from the U.S. Department of Energy's Advanced Research Programs Agency - Energy's funding opportunities for Mining Incinerated Ash Disposal Streams (MIDAS) and Waste into X (WiX). Both funding opportunities advance the idea of a more circular economy, where the return of useful materials into the economy helps reduce overall GHG emissions. We also teamed with the University of Illinois to submit a proposal for funding for a carbon capture pilot to be installed at one of our Waste to Energy facilities.
Legal	Relevant, always included	We closely watch legal developments, particularly those related to attribution of damages to specific entities. While WTE is a source of carbon mitigation, legal precedent could impact how our industry is viewed. In 2021, we closely followed the continuing discussion around the Securities and Exchange Commission regulations on sustainability reporting. Such reporting could impact reporting around climate change and GHG emissions issues.
Market	Relevant, always included	The market for the goods and services we provide can change based on the perception of our technology, i.e., WTE. which in turn can help to mitigate GHG emissions in the waste management sector. In addition, changes in products purchased and used by consumers and businesses that eventually wind up as waste can change based on climate initiatives. For example, NJ recently passed a bill to require large generators of food waste to divert food waste for composting and anaerobic digestion. While we don't anticipate commercial-scale diversion requirements to materially impact our business, requirements to divert residential food waste could reduce the demand for post-recycling waste management services and our traditional WTE facilities.
Reputation	Relevant, always included	Many of our customers rely on us to provide sustainable waste management services and a low carbon alternative to landfilling of municipal solid waste (MSW) and certain non-hazardous industrial, institutional, and commercial waste streams. However, some parties oppose the consideration of WTE in efforts to reduce the carbon intensity of waste management. For example, some proponents of Zero Waste efforts do not distinguish between landfilling and WTE despite international recognition of WTE as a source of GHG mitigation. Consequently, we closely evaluate reputation risks related to climate, and our role in helping reduce GHG emissions from the waste management sector. In addition, a growing recognition of the disproportionate burden faced by some environmental justice communities has caused increased attention to all air emissions sources, including WTE facilities. Failure to meet emissions limits or concerns of emissions of WTE facilities could impede future development. In 2020, we supported New Jersey's first-of-its-kind landmark Environmental Justice legislation, which aims to address cumulative environmental impacts in overburdened areas. We were the only corporation to advocate for its passage, by speaking on behalf of the bill in the state assembly, publicizing our support via advertisements, a website and op-eds. Currently, we are pursuing permit renewal processes within the state to be aligned with the intent of the yet to be promulgated regulations required by the EJ bill, and its associated executive orders.
Acute physical	Relevant, sometimes included	Covanta owns/operates a portfolio of relatively modern facilities, the oldest of which began operation in 1987. The facilities were built to modern hurricane standards and should be able to withstand these and other weather-related events. However, a few of our facilities in the United States are located on estuaries that could become affected by storm surge, and increased severity and frequency of storms can cause other disruptions to operations. Specific risks assessed include the disruption of local electrical grid requiring facility shut-down, disruption of supply chains in getting critical raw materials to the facility, and disruption of waste flows into the facility necessitating curtailment of operations.
Chronic physical	Relevant, sometimes included	Covanta owns/operates a portfolio of relatively modern facilities, the oldest of which began operation in 1987. The facilities were built to modern hurricane standards and should be able to withstand these and other weather-related events. Rising sea level attributable to climate change could become a long-term issue at several facilities; however, significant impacts are unlikely because the useful life of existing facilities would be expended by the time this phenomenon might result in sufficient sea level rise to impact these facilities. The more likely scenario is an increased risk in storm-related flooding. A few of our facilities in the United States are located on estuaries that could become affected by storm surge, and in fact were affected during Hurricane Sandy that impacted the northeast during fall 2012. Impacted facilities were reviewed for the exposure of critical infrastructure (e.g. electrical switchgear, back-up generators) to flood waters. These risks are not reviewed for facilities that are not located in areas of flooding risk. However, new business development opportunities have been evaluated for increased flood risk.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms

Primary potential financial impact

Increased direct costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

As is the case with all combustion processes, our facilities emit CO2, however WTE is recognized as a net GHG mitigation technology, because it: • avoids methane emissions from landfills • avoids CO2 emissions from fossil fuel power plants using wasted material as solid fuel; • and avoids GHG emissions from mining and metal processing because it recovers and recycles metals from waste. For policy makers at the local level who make decisions on sustainable waste management alternatives,

we believe that using WTE instead of landfilling will result in significantly lower net GHG emissions, while also introducing more control over the cost of waste management and supply of local renewable electrical power. We are actively engaged in encouraging policy makers at state and federal levels to enact legislation that supports WTE as a superior choice for communities to avoid both the environmental harm caused by landfilling waste and reduce local reliance on fossil fuels as a source of energy. Many of these same policy considerations apply equally to other renewable technologies. The extent to which such potential legislation and policy initiatives will affect our business will depend in part on whether WTE and our other renewable technologies are included within the range of clean technologies that could benefit from such legislation. Several jurisdictions are looking at carbon policies, including Oregon and Pennsylvania. New York passed the Climate Leadership and Community Protection Act in 2019 which will require significant reductions in GHG emissions in the state by 2050. Covanta has a significant presence in New York, currently operating six plants in the state. In 2020, the state continued the process of developing specific policies and regulations to implement the legislation. We are actively engaged in the regulatory development process, including through participation in a state-led waste sector working group by appointment by the state's environmental regulator. The State has recognized that the main source of GHG emissions from the waste sector is from methane via organic waste decomposition in landfills. Given WTE's international recognition as a means of reducing GHG emissions by avoiding methane from the waste management sector, we expect WTE facilities have an important role to play in the transition to a net zero economy; however, the exact impact on our business in New York is uncertain at this time.

Time horizon
Medium-term

Likelihood
Very unlikely

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
We are not providing a financial impact figure, but instead an example of a potential regulatory change. Prior to passage of the Climate Leadership and Community Protection Act, the New York Independent System Operator (NYISO) was developing a potential carbon pricing scheme to be implemented in the wholesale power markets. Despite WTE's recognized benefits relative to landfilling, NYISO's proposal had included WTE, but excluded landfills. While further development of the carbon pricing scheme has stalled in light of the new climate bill, an analysis of the NYISO's proposal revealed that the annual impact to the WTE industry in NY State could range from $50M - $70M / year, translating to a $17 - $24 / ton impact on solid waste disposal facilities. Such a financial impact would result in market pressures to increase landfilling, despite their higher lifecycle GHG emissions.

Cost of response to risk
0

Description of response and explanation of cost calculation
We are not providing a cost, but instead examples of how we are responding to the risk. Our overwhelming priority in responding to this risk is to engage with policymakers to ensure that carbon policies are aligned with lifecycle GHG emissions associated with various means of waste management. Our engagement consists of meeting with policy officials and regulators, participation in research groups, including the Environmental Research and Education Foundation (EREF) and Waste-to-Energy Research and Technology Council (WTERT) that engage in GHG analysis of waste management options, and sustainability reporting. We have also committed to develop a Science-based Target (SBT) by 2022 to provide a long-range plan for how WTE fits within an overall goal to reduce GHG emissions from waste management. We anticipate that this SBT will help inform long-term policy planning to achieve state-level reductions in GHG emissions from the waste sector. We have also begun tracking the development of carbon capture and sequestration technologies that can be deployed at WTE facilities over the long-term.

Comment
Current costs of management of this risk are not significant relative to our normal costs of business.

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Downstream

Risk type & Primary climate-related risk driver

Market	Changing customer behavior

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
The most effective means of reducing GHG emissions from solid waste management is to move the material up the waste management hierarchy (more preferred tiers), focusing on recycling. Such a movement should be focused on diverting wastes from landfilling, as has effectively been done in the European Union. As demand for landfilling decreases, pricing for post-recycled solid waste management could decrease due to an overabundance of waste management capacity in the market. Balancing this effect are expected decreases in available landfill capacity, and the tremendous remaining opportunity in the United States for further landfill diversion – annually, the U.S. still landfills approximately 250 million tons of municipal solid waste per year. Despite the potential benefits of expanded recycling and landfill diversion, the market for post recycled waste management services remains very strong. Policies developed to date to reduce landfilling, including food waste diversion efforts in California and Connecticut have not had material impact on post-recycled waste disposal. In fact, despite its efforts to increase recycling and divert organics, landfills are growing their share of the waste market in California. Furthermore, we are working to educate policymakers on the dangers of not addressing excess landfill capacity as they look at means of diverting waste up the waste management hierarchy and the importance of aligning policies with the goals of the solid waste management hierarchy.

Time horizon
Medium-term

Likelihood
Unlikely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
We routinely model and project trends in waste pricing on company revenues. At this time, we do not expect a material impact on revenues from change in demand for our services.

Cost of response to risk
0

Description of response and explanation of cost calculation
We are not providing a cost, but instead examples of how we are responding to the risk. We continue to engage with policy makers at the local, state, and federal levels to help design effective energy and waste policies that will encourage the use of MSW for electricity generation after recycling options have been exhausted. We also continue to engage to help design policies that provide a level playing field in the solid waste management sector on the basis of environmental impact. For example, we recently argued for the comparable treatment of Waste-To-Energy and landfilling under New Jersey's food waste diversion bill. Initial versions of the bill exempted landfills, despite published research revealing that landfills are the least preferred option for food waste management, remaining after recycling, composting, and anaerobic digestion efforts. In addition, we are working to diversify our management options in responses to waste management requests for proposals. For example, in recent proposals in Connecticut, Arizona, and New York we included concepts of complete sustainable waste management "parks", as part of a teamed approach to complement energy recovery. Such options will become increasingly important as communities and states seek ways to reduce GHG emissions from waste management. We are also developing a new total ash processing facility in Honolulu, HI that will further reduce environmental impacts, including lifecycle GHG emissions, from energy recovery by finding additional beneficial reuse options for materials removed from non-hazardous combustion ash. This is especially important for the island of Hawaii, that lacks local waste management resources and raw materials such as aggregate for road building.

Comment

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Upstream

Risk type & Primary climate-related risk driver

Acute physical	Flood (coastal, fluvial, pluvial, groundwater)

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Continued operation of our facilities can be subject to interruptions in the supply of waste. While storms can create additional wastes that need proper management, they can also disrupt transportation networks. Grid outages can prevent certain facilities not equipped with "black-start" capabilities from returning to operation.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
While we judge this risk to be likely, outages caused by grid failure or supply chain interruptions are generally of relatively short duration (hours to several days). Furthermore, there can be some opportunity to recover lost capacity by shifting planned outages or moving waste to other facilities in our network.

Cost of response to risk
0

Description of response and explanation of cost calculation
We are not providing a cost, but instead examples of how we are responding to the risk. We have reviewed our facilities and identified certain opportunities to resume operations more quickly after an interruption. For example, we installed a water-tight bunker around the emergency generator used to restore start-up power at our Essex County facility to eliminate the need to have grid power before start-up. We evaluate opportunities to reduce this risk by assessing the potential loss of revenue from plant disruptions and capital cost requirements for micro-grid connections, black plant start capabilities, or other capital improvements.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Many of our Material Processing Facilities customers pursue our waste-to-energy (WTE) service offering as a way to divert wastes from landfills and, increasingly, reduce GHG emissions from waste management. We also offer other sustainable waste management services with lower carbon footprints than WTE, including in-house zero waste management services. We can deploy teams to industrial sites to work with their existing contacts and our own resources to reduce waste from our client's processes.

Time horizon
Short-term

Likelihood
Virtually certain

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
We are not providing a financial figure. However, zero landfill goals have been a significant driver in the growth of our recycling and reuse service offerings.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
We are not providing a cost, but instead examples of how we are realizing this opportunity. In addition to our focus on WTE and related waste sourcing activities, we are actively expanding our service offerings through both organic growth and acquisitions. Specifically, offering wastewater treatment, various recycling outlets (oil, product packaging, pallets), and contracted composting services to help our customers further reduce their environmental footprint. As part of our sustainability-linked financing terms, we have also committed to grow our wastes recycled and reused by 25% relative to a 2020 baseline by 2025.

Comment

Identifier
Opp2

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Resilience

Primary climate-related opportunity driver

Resource substitutes/diversification

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
WTE facilities can be a resilient source of energy and waste management for communities. When weather and other natural events disrupt the grid, WTE facilities can remain operational, managing both routine waste and the resulting debris from those events, regardless of whether the grid is able to receive the power it can generate.

Time horizon
Medium-term

Likelihood
More likely than not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
We are not providing a financial impact figure. The variety of different possible project types make forecasting the financial impact difficult to determine, but the recognition of the role that waste-to-energy (WTE) facilities can play in community resiliency could have a material impact.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
We are not providing a cost, but instead examples of how we are realizing this opportunity. Our WTE facilities are designed to operate 24/7, even during times of crisis, to provide a baseload electricity. During Hurricane Ida in the summer of 2021, per NJDEP's request, our employees kept our Essex plant running as an essential service to ensure that local residential waste continued to be managed properly

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Development and/or expansion of low emission goods and services

Primary potential financial impact
Increased revenues resulting from increased production capacity

Company-specific description
We are in the midst of a permitting process with the County of Pasco in Florida, in order to expand the waste processing capacity at the Pasco County Resource Recovery Facility (PCRRF). By constructing one additional municipal waste combustor (MWC), adjacent to the existing three MWC units, the facility's solid waste processing will increase by a nominal design rated capacity of 475 tons per day (tpd). This will help address the increased municipal solid waste (MSW) generation associated with the growing population. Once constructed, Unit 4 will be the newest MWC in the U.S., following the construction of the West Palm Beach 2, FL facility in 2015.

Time horizon
Medium-term

Likelihood
Very likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
We are not providing a financial impact figure.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
The application is currently under review by Florida DEP. We have responded to a round of comments from that State, and anticipate a draft approval within the coming months.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan
No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a transition plan within two years

Publicly available transition plan
<Not Applicable>

Mechanism by which feedback is collected from shareholders on your transition plan
<Not Applicable>

Description of feedback mechanism
<Not Applicable>

Frequency of feedback collection
<Not Applicable>

Attach any relevant documents which detail your transition plan (optional)
<Not Applicable>

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future
We believe our operations will be key in transitioning the waste sector towards a low carbon future, and have a goal to develop a Science Based Target. More sustainable waste management, including the use of WTE for the materials remaining after recycling, could help meet climate change objectives, including limiting global warming to 2°C or lower.

Explain why climate-related risks and opportunities have not influenced your strategy
<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	No, but we anticipate using qualitative and/or quantitative analysis in the next two years	Important but not an immediate priority	Covanta has not yet completed a climate-related scenario analysis because of the already recognized role of WTE in reducing GHG emissions, including by Clean Development Mechanism, the IPCC, and the World Economic Forum. We have performed several analyses that have quantified the role that more sustainable waste management can play. For example, our engineers co-authored a 2009 paper that assessed how implementing the waste management hierarchy of the U.S. EPA and EU (i.e., in order of decreased preference: reduce, reuse, recycle, recover energy and disposal) to the extent proven by global leaders like Germany, Austria and the Netherlands could reduce overall GHG emissions. The analysis found that by 2050, more sustainable waste management could reduce global GHG emissions by 1 Gigatonne of carbon equivalents per year. (See Bahor et al., Integrated waste management as a climate stabilization wedge, Waste Management & Research, 2009: 27: 839-849.) We recently performed a similar analysis for the waste sector in the United States. The analysis found that with improved waste reduction efforts, increased recycling (especially organics recycling), and a shift from landfilling to WTE, the waste sector has the potential to cut U.S. net GHG emissions by upwards of 700 million metric tons of CO2 per year by 2050. That's on par with shuttering 90 percent of coal plants or removing three-quarters of gasoline vehicles from U.S. roads. The analyses, however, did not relate those emissions reductions to a specific scenario, such as the 1.5°C or lower scenario referenced by CDP. We believe scenario analysis could be a very useful exercise to help demonstrate how more sustainable waste management, including the use of WTE for the materials remaining after recycling, could help meet climate change objectives, as well as better inform our short- and long-term business strategy. We expect to begin scenario analysis planning in conjunction with our commitment to develop a science-based target by 2022.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Providing sustainable waste, materials, and energy services to our customers is the cornerstone of our business. Each of our service offerings responds to customer demand for sustainable waste management services that are superior to landfilling according to the "waste hierarchy" and assists our customers in meeting their own zero-waste, zero-waste-to-landfill, circular economy, and other sustainability goals. These goals, and the waste management hierarchy itself, are designed to reduce the environmental impacts of waste management, including the emission of GHGs. Each of our service offerings is focused on providing cost effective and sustainable solutions that leverage our extensive network of WTE and Materials Processing facilities (MPFs), and transfer stations in North America. As part of our sustainability-linked financing (SLF), we committed to increase both tons diverted from landfilling, and well as increase tons recycled and reused, both of which are inextricably linked with the services that we provide that help reduce societal GHG emissions relative to business as usual practices.
Supply chain and/or value chain	Yes	While our primary business is recovering energy from waste, the recovery of metals from the residue remaining after the energy recovery process is becoming increasingly important to our business. The production of metals from raw materials is very GHG-intensive. As society moves toward a carbon constrained economy, we expect that the value of metals and other recoverable materials in the residue will increase. As such, we have invested heavily in equipment and technology to improve our metal recovery efficiency. In furtherance of that direction, we completed our first full year of operating our Total Ash Processing System located in Fairless Hills, Pennsylvania, adjacent to our metal processing facility in 2021. This technology separates the combined ash from WTE facilities into its component parts enabling increased recycling of small metal fractions and the recovery of aggregate for reuse as construction material while further reducing the volume of residue requiring disposal. Recovery of additional metal for recycling helps reduce GHG emissions associated with production of metals from raw materials. The diversion of residue from landfilling also helps reduce the GHG impacts associated with transportation and the placement of residue in the landfill.
Investment in R&D	Yes	We have recently partnered with several university research teams in their proposals to secure funding through the U.S. Department of Energy's Advanced Research Program Agency – Energy (ARPA-e) to pursue advanced metal recovery and ash beneficial use. These technologies, if successful, will help recover additional metal for recycling, including precious and rare earth elements, resulting in further lifecycle GHG emissions reductions from materials management. Furthermore, use of ash as a potential cement replacement or admixture can help with cement decarbonization. In 2021, we teamed with the University of Illinois to submit a proposal for funding for a carbon capture pilot to be installed at one of our Waste to Energy facilities. With 60-65% of the carbon in waste derived from biogenic sources, WTE offers a very attractive opportunity to help achieve net removals of carbon from the atmosphere though the capture and sequestration and/or use of biogenic carbon. Waste sources of biomass are particularly attractive, as they do not contribute to land use change.
Operations	Yes	We have, at several of our sites, implemented capital projects designed to harden critical infrastructure against flooding that is potentially exasperated by sea-level rise and/or the increased frequency of storm events. We have also made capital investments to help improve the ability of certain facilities to operate during periods of local grid outages. We anticipate that climate change could lead to increased intensity and duration of storm events that could make power disruptions more likely.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets	Our company's mission is to provide more sustainable waste management services. Increasingly, sustainable waste management is inextricably linked to reducing GHG emissions. As such, climate-related risks, and to an even greater extent, opportunities, have been a key factor in capital allocation, revenues, capital expenditures, acquisitions and divestitures, and assets. Most importantly, our decision to pursue sustainably-linked financing (SLF) is a direct reflection of the role that we see climate playing in financial planning. As the first leveraged buyout (LBO) completed with SLF, EQT's acquisition of Covanta capitalized on the greenhouse gas mitigating aspects of Covanta's business, as well as the further GHG emissions reductions that could be achieved through growth in the business, specifically in tons diverted from landfilling, and additional reuse and recycling. We believe that such an approach provided as additional opportunities in the market to find attractive financing. In addition, we recently completed an acquisition of Miller Environmental Transfer (MET), a leading provider of environmental services across the South-Central US specializing in a variety of waste services including transportation and waste treatment to companies of all sizes seeking sustainable waste services. The addition of MET's services to Covanta's existing portfolio of environmentally sustainable solutions enables the company to significantly expand its carbon neutral capabilities for customers while simultaneously optimizing existing assets such as our Tulsa Waste-to-Energy facility.

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Year target was set

2017

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
Category 1: Purchased goods and services

Intensity metric
Other, please specify (Metric tons CO2e per thousand short tons of MSW processed)

Base year
2016

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in base year for Scope 3 (metric tons CO2e per unit of activity)
10.12

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)
10.12

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure
<Not Applicable>

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure
<Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this Scope 3 intensity figure
50

% of total base year emissions in all selected Scopes covered by this intensity figure
50

Target year
2022

Targeted reduction from base year (%)
10

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]
9.108

% change anticipated in absolute Scope 1+2 emissions
0

% change anticipated in absolute Scope 3 emissions
-9.1

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3 (metric tons CO2e per unit of activity)
9.33

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)
9.33

% of target achieved relative to base year [auto-calculated]
78.0632411067193

Target status in reporting year
Underway

Is this a science-based target?
No, but we anticipate setting one in the next 2 years

Target ambition
<Not Applicable>

Please explain target coverage and identify any exclusions
The calculation of purchased goods is based on the consumption of relevant raw materials, including lime, carbon, limestone, urea, ammonia, steel, and Inconel metal and published emission factor data. The target is calculated on an equity share basis, and further discussed in question C6.5 of this disclosure. Emissions factors and sources: Lime= 0.768 ton CO2 / ton lime (source: NREL LCA Database) Carbon = 0.13 ton CO2 / ton GAC (source: CH2MHill Life Cycle Assessment of Greenhouse Gases for the Product: Amended Silicates) Limestone= 0.103 ton CO2 / ton limestone (source: University of TN Center for Clean Products (2008) Limestone Quarrying and Processing: A Life-Cycle Inventory) Urea= 0.002 ton CO2 / gal. urea (source: Kool et al (2012) GHG Emissions of N, P and K fertilizer production, Table 13) Ammonia= 2.56 ton CO2 / ton NH3 (source: Kool et al (2012) GHG Emissions of N, P and K fertilizer production, Table 13) Steel= 1.82 ton CO2 / ton steel tubing (source: ATHENA 2002) Inconel (average) = 5.86 ton CO2/ton Inconel (source: avg based on Inconel 600, 625, 718 emissions factors from SpecialMetals.com)

Plan for achieving target, and progress made to the end of the reporting year
The Waste-to-energy (WTE) business is itself a source of GHG mitigation. Net Carbon offsets are achieved as a result of increased waste processed. An absolute target to reduce GHG emissions associated with raw material consumption would not be compatible with the overall goal to grow the business (which, given WTE's recognition as a source of GHG mitigation, results in overall GHG reductions). We set the goal as an intensity target to promote efficient raw material usage while increasing throughput, ultimately resulting in greater economy-wide GHG emissions.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Target(s) to reduce methane emissions

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2021

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please specify	Other, please specify (Total wastes recycled or reused (short tons))

Target denominator (intensity targets only)
<Not Applicable>

Base year
2020

Figure or percentage in base year
1066000

Target year
2025

Figure or percentage in target year
1332000

Figure or percentage in reporting year
1130000

% of target achieved relative to base year [auto-calculated]
24.0601503759398

Target status in reporting year
Underway

Is this target part of an emissions target?
Meeting this target helps us expand the low carbon waste management offerings we provide to our clients, both by expanded our service offerings to include wastewater treatment, waste depackaging, composting, and recycling, as well as recover additional metals from those wastes we receive for energy recovery. In general, recycling reduces GHG emissions relative to making new products from virgin materials and resources.

Is this target part of an overarching initiative?
Reduce short-lived climate pollutants

Please explain target coverage and identify any exclusions
This is one of our two sustainability-linked financing commitments. This goal is to increase our total wastes recycled or reused 25% by 2025 relative to a 2020 baseline of 1.066 million tons. Tonnage is assessed on an operational control + equity interest basis. Recycled and reused wastes include both metals that we recover from our combustion ash, as well as waste recycling or reuse services we offer to our clients. This is inclusive of, but not limited to, water pre-treatment, non-ferrous and ferrous metal recycling, composting & anaerobic digestion, and e-waste recycling.

Plan for achieving target, and progress made to the end of the reporting year
We anticipate further gains with the expansion of our material processing services, such as our acquisition of Miller Environmental Transfer (MET). A leading provider of environmental services across the South-Central U.S., MET specializes in a variety of waste services including transportation and waste treatment to companies of all sizes seeking sustainable waste services. Waste reduction, reuse and recycling is recognized as generally reducing GHG emissions relative to both disposal (landfilling) and energy recovery.

List the actions which contributed most to achieving this target
<Not Applicable>

Target reference number
Oth 2

Year target was set
2021

Target coverage

Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please specify	Other, please specify (Total Sustainably Processed Waste (thousand short tons))

Target denominator (intensity targets only)
<Not Applicable>

Base year
2020

Figure or percentage in base year
21590

Target year
2025

Figure or percentage in target year
22130

Figure or percentage in reporting year
21586

% of target achieved relative to base year [auto-calculated]
-0.740740740740741

Target status in reporting year
Underway

Is this target part of an emissions target?
Diverting wastes from landfills will help reduce overall country and region GHG emissions from the waste management sector, particularly methane.

Is this target part of an overarching initiative?
Reduce short-lived climate pollutants

Please explain target coverage and identify any exclusions
This is one of our two sustainability-linked financing commitments. This goal is to increase our total sustainably processed wastes by 2.5% by 2025 relative to a 2020 baseline of 21.586 million tons. Tonnage is assessed on an operational control + equity interest basis. Sustainably processed tons include wastes processed through WTE as well as any additionally recycled or reused tons as described in the previous goal..

Plan for achieving target, and progress made to the end of the reporting year
Our progress will largely be driven by expanded recycling services as identified in the previous goal, as well as any expanded WTE capacity. Our acquisition of MET and the boiler expansion at our Pasco, FL facility are both such examples.

List the actions which contributed most to achieving this target
<Not Applicable>

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.
Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	1	132000
Implementation commenced*	1	4000
Implemented*	1	2000
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes	Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)
2000

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
0

Investment required (unit currency – as specified in C0.4)
0

Payback period
<1 year

Estimated lifetime of the initiative
>30 years

Comment
We have a sustainability goal to achieve additional energy efficiency improvements at our energy recovery facilities of 60,000 MWh in total by the end of 2020. Although we did not reach the target in time, we continue to implement these energy efficiency projects. In 2021, we developed another 2,500 MWh-e in efficiency improvements.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Financial optimization calculations	Many of the GHG emissions reductions opportunities that are within our control are aligned with financial signals. A greater return on metals recovery projects that results from higher separation efficiency also optimizes lifecycle GHG emissions reductions.
Other	We have embarked on a rigorous Continuous Improvement program aimed at making our operations more efficient. Many of the opportunities for optimizing efficiency also reduce lifecycle GHG emissions.
Dedicated budget for other emissions reduction activities	Our Covanta Metals Management group was specifically created to identify and implement projects to recover additional metals from the ash remaining after the combustion process at our waste-to-energy facilities. These projects both create additional revenue for Covanta and generate lifecycle GHG emissions reductions as a result of the additional metal recovered for recycling. The use of recycled metal saves significant amounts of GHG emissions relative to using raw materials.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (Lifecycle methodology, USEPA MSW DST)

Type of product(s) or service(s)

Other	Other, please specify (Waste Management)

Description of product(s) or service(s)
Our core business, waste-to-energy, is widely recognized as a source of GHG mitigation. These facilities, and other like them around the world, are recognized internationally as a source of Greenhouse gas (GHG) emissions mitigation and low carbon energy generation, including by the U.S. EPA; U.S. EPA scientists; the Intergovernmental Panel on Climate Change (“IPCC”); the World Economic Forum; the European Union; CalRecycle; California Air Resources Board; and the Joint Institute for Strategic Energy Analysis (NREL). WTE facilities generate carbon offsets credits under both the Clean Development Mechanism (CDM) of the Kyoto Protocol and voluntary carbon offset markets. WTE was recognized as a compliance option for reducing GHG emissions from electricity generation in the final version of the Obama Administration's Clean Power Plan promulgated in 2015. New WTE facilities were eligible to generate Emission Rate Credits (ERCs). Existing facilities were not a covered source and were considered a source of zero carbon energy under the program.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (Lifecycle methodology, USEPA MSW DST)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
End-of-life stage

Functional unit used
Tons of MSW processed

Reference product/service or baseline scenario used
Landfilling

Life cycle stage(s) covered for the reference product/service or baseline scenario
End-of-life stage

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
18500000

Explain your calculation of avoided emissions, including any assumptions
On average, the U.S. EPA has determined that WTE facilities reduce GHG emissions by 1 ton of CO2 equivalents (CO2e) for every ton of municipal solid waste (MSW) diverted from landfill and processed. By eliminating emissions that would have otherwise occurred, WTE is the only major source of electricity that reduces GHG emissions. Furthermore, WTE can generate carbon offset credits under the Kyoto Protocol’s Clean Development Mechanism and the Verified Carbon Standard. Two U.S. WTE facilities, eligible due to their recent expansion, have sold carbon offset credits into the voluntary market. WTE was also eligible to generate emission rate credits under the Obama Administration's Clean Power Plan. WTE contributes to the reduction of GHGs in the environment by: - generating energy that otherwise would likely be generated by fossil-fueled facilities; - diverting solid waste from landfills where it would have emitted methane for decades, even when factoring in landfill gas collection; and - recovering metals for recycling, saving the GHGs and energy associated with the production of products and materials from virgin inputs.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
100

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?
No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?
Yes, an acquisition

Name of organization(s) acquired, divested from, or merged with
EQT Infrastructure

Details of structural change(s), including completion dates
On November 30, 2021, Covanta Holding Corporation (“Covanta”), was acquired by the EQT Infrastructure V fund (“EQT Infrastructure”), unveiling its strategy to become the most sustainable provider of waste solutions. The acquisition of Covanta by EQT did not affect the structure of the organization under Covanta Holding Corporation.

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.1c

(C5.1c) Have your organization's base year emissions been recalculated as result of the changes or errors reported in C5.1a and C5.1b?

	Base year recalculation	Base year emissions recalculation policy, including significance threshold
Row 1	No, because the impact does not meet our significance threshold	EQT's acquisition did not affect our inventory of assets ; no recalculation needed.

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start
January 1 2011

Base year end
December 31 2011

Base year emissions (metric tons CO2e)
3955726

Comment

Scope 2 (location-based)

Base year start
January 1 2011

Base year end
December 31 2011

Base year emissions (metric tons CO2e)
26224

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 6: Business travel

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

US EPA Center for Corporate Climate Leadership: Indirect Emissions From Purchased Electricity
US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
4371617

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment
Covanta generates electricity for export to the grid. However, we do, on occasion, purchase electricity from the grid to sustain operations during maintenance outages or for other purposes. Our 2021 purchased electricity was equivalent to less than 1% of our total gross electrical generation. For the location-based figure, we report using the average grid factors from U.S. EPA's eGRID tool which are a data-based set of emission factors for individual power control regions in the U.S. We are able to access public electricity supplier emissions factors in order to calculate the market-based figure, however, we do not have renewable contracts from our suppliers, as required by the CDP. We do not actively source renewable electricity because it is supplemental to our generation, making up less than a percent of our total gross generation.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
17289

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source
Regional Offices

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
An assessment of our Morristown corporate office, our largest office, found total Scope 1 and Scope 2 emissions to be approximately 0.01% of our total Scope 1 and Scope 2 emissions. Other offices are significantly smaller than our Morristown office. Furthermore, many of our remaining office locations are co-located with our operating facilities, where their GHG emissions are counted in the existing inventory as part of our operating facilities.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Explain how you estimated the percentage of emissions this excluded source represents
An assessment of our largest office, located in Morristown, NJ included the impacts of electricity and gas use. The impact represented about a tenth of a percent of our overall Scope 1&2 emissions. Our other offices are significantly smaller and will have an even smaller impact, totaling to much less than a percent . We have reported 0% excluded emissions as this form only allows whole number entries.

Source
HFCs and PFCs

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)
No emissions from this source

Explain why this source is excluded
A detailed review of facility-level GHG emissions completed in 2008 estimated emissions of HFCs and PFCs, predominately from the servicing of air conditioning equipment, to represent approximately 0.01% of our total Scope 1 GHG inventory. No changes have occurred to our operations since 2008 that would fundamentally change the magnitude of the expected emissions of HFCs and PFCs.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Explain how you estimated the percentage of emissions this excluded source represents
A detailed review of facility-level GHG emissions completed in 2008 estimated emissions of HFCs and PFCs, predominately from the servicing of air conditioning equipment, to represent approximately 0.01% of our total Scope 1 GHG inventory. No changes have occurred to our operations since 2008 that would fundamentally change the magnitude of the expected emissions of HFCs and PFCs. We have reported 0% excluded emissions as this form only allows whole number entries.

Source
SF6 Emissions

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
Covanta has relatively minor emissions of SF6, predominately associated with high-voltage switchgear. A detailed review of facility-level GHG emissions completed in 2008 estimated emissions of SF6 to represent approximately 0.04% of our total Scope 1 GHG inventory. No changes have occurred to our operations since 2008 that would fundamentally change the magnitude of the expected emissions of SF6 and several facilities have replaced their SF6 switchgear with those equipped with other dielectric gases.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Explain how you estimated the percentage of emissions this excluded source represents
The detailed facility review described above determined that SF6 emissions represent about 0.04% of Scope 1 emissions, and an even smaller percentage of Scope 1&2 emissions. We have reported 0% excluded emissions as this form only allows whole number entries.

Source
Transfer Stations

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions are not relevant

Explain why this source is excluded
A detailed assessment of GHG emissions performed in several states as part of our earlier participation in The Climate Registry found that transfer station Scope 1 and Scope 2 GHG emissions represented 0.02% of total Scope 1 and Scope 2 GHG emissions. Exclusion of transfer station emissions is not expected to have a material impact on the inventory.

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Explain how you estimated the percentage of emissions this excluded source represents
We performed a detailed GHG assessment of our transfer stations in order to determine its relevance to our inventory. The results indicated they represent 0.02% We have reported 0% excluded emissions as this form only allows whole number entries.

C6.5

(C6.5) Account for your organization’s gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
113400

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We base our emissions estimates based on actual quantities of materials used in the reporting year, or, if this data is not available, purchasing records. Calculation based on consumption of relevant raw materials, including lime, carbon, limestone, urea, ammonia, steel, and Inconel metal and published emission factor data. Emissions factors and sources: Lime= 0.768 ton CO2 / ton lime (source: NREL LCA Database) Carbon = 0.13 ton CO2 / ton GAC (source: CH2MHill Life Cycle Assessment of Greenhouse Gases for the Product: Amended Silicates) Limestone= 0.103 ton CO2 / ton limestone (source: University of TN Center for Clean Products (2008) Limestone Quarrying and Processing: A Life-Cycle Inventory) Urea= 0.002 ton CO2 / gal. urea (source: Kool et al (2012) GHG Emissions of N, P and K fertilizer production, Table 13) Ammonia= 2.56 ton CO2 / ton NH3 (source: Kool et al (2012) GHG Emissions of N, P and K fertilizer production, Table 13) Steel= 1.82 ton CO2 / ton steel tubing (source: ATHENA 2002) Inconel (average) = 5.86 ton CO2/ton Inconel (source: avg based on Inconel 600, 625, 718 emissions factors from SpecialMetals.com)

Capital goods

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
53500

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We estimate our emissions from capital goods based on emissions factors from peer reviewed studies. The scope 3 emissions from capital goods have been found to represent a minor portion of total facility emissions. One study determined that about 7-14 kg CO2e per tonne of waste combusted over a facility's lifetime is associated with capital goods. (See L.K. Brogaard, C. Riber, T.H. Christensen. Quantifying capital goods for waste incineration, International Journal of Integrated Waste Management, Science and Technology, https://www.sciencedirect.com/science/article/pii/S0956053X13001232) In 2021, 3 of our four UK projects were under construction (Rookery and Earls Gate). The scope 3 emissions from construction in the reporting year were calculated using the design MSW / year for each facility, assuming that each facility will have a 30 year lifespan (as estimated in the study) and distributing the scope 3 emissions over the anticipated construction timeline.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
30400

Emissions calculation methodology
Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
We estimate our emissions from upstream fuel related activities based on emissions factors used by the US EPA. Calculation based on upstream emissions from propane, diesel, and natural gas. Emissions factors are based on industry averages, pulled from the following sources: Propane = 0.05 ton CO2e / MWh (source: GTI (2017) GHG and Criteria Pollutant Emissions Analysis) Natural Gas = 0.05 ton CO2e / MWh (source: GTI (2017) GHG and Criteria Pollutant Emissions Analysis) Diesel = 0.07 ton CO2e / MWh (source: U.S. EPA (2020) Summary Lifecycle Analysis Greenhouse Gas Results for the U.S. Renewable Fuels Standard Program Version 1.1)

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
67400

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
In most cases, we do not have operational control over waste haulers who deliver MSW to our facility. In general, transportation is arranged by the waste generator. The resulting Scope 3 CO2e emissions represent about 20% of our Scope 3 emissions, but less than 2% of the total emissions (Scope 1, 2, and 3) Calculation based on tons of waste processed (equity-share basis), average truck capacity of 13 tons, average transportation distance of 50 miles, and average emissions factor of 1.47 kg CO2e / vehicle-mile

Waste generated in operations

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Covanta's primary business is management of waste in our waste-to-energy facilities. These operations generate an inert ash that is either beneficially used, placed in MSW landfills, or placed in ash monofills. Long term testing of leachate from an ash disposal facility in Marion County, Oregon revealed no detectable concentrations of semi-volatile organic compounds (SVOCs). (See Roffman, Haia K. Municipal Waste Combustion Ash Landfill Leachate Quality – Long Term Monitoring. Presented at the Air & Waste Management Association 90th Annual Meeting & Exhibition, June 8-13, 1997, Toronto, Canada) The absence of SVOCs supports the premise that minimal biological degradation of carbon, and subsequent evolution of methane, occurs with ash in landfills. Furthermore, ash was observed to solidify significantly in the monofill, likely rendering any remaining carbon in the ash unavailable to biological processes. Recent research has also identified municipal waste combustor ash as a slight GHG sink. (See Rendek, E., G. Ducom, P. Germain, Carbon dioxide sequestration in municipal solid waste incinerator (MSWI) bottom ash, Journal of Hazardous Materials, 128: 1, 73-79. doi:10.1016/j.jhazmat.2005.07.033)

Business travel

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
2600

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Emissions estimate provided by travel agency vendors for air, rental cars, and hotels

Employee commuting

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
6200

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
The resulting Scope 3 CO2e emissions are considered irrelevant. In 2021, approximately 15% of our workforce worked remotely due to the global pandemic. On average our employees live 19 miles away from their place of work. An emissions factor of 3.98 x 10e-4 metric tons CO2e/mile is based of the EPA GHG calculator for passenger vehicles. Note that this is a conservative estimate which includes all Covanta employees, not an equity share basis.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Covanta does not have any appreciable upstream leased assets.

Downstream transportation and distribution

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
6900

Emissions calculation methodology
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
Covanta's primary products / outputs are energy products in the form of steam and electricity. Any downstream losses associated with delivery of these products are already included in our scope 1 emissions. After the combustion process, approximately 10% of the initial volume of wastes processed remains as an inert ash which must be managed, either in a regular MSW landfill, as landfill daily cover, or in an ash monofill. These applications are typically located off-site. The scope 3 emissions associated with the ash transportation is based on tons of ash processed, typical ash truck capacity of 20 tons, average transportation distance of 35 miles, and average emissions factor of 1.47 kg CO2e / vehicle-mile.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Covanta's sold products include electricity, steam and metals recovered for recycling. Steam and electricity are not subject to further processing, therefore, there are no emissions from processing of these products. Metals recovered for recycling generate GHGs during the recycling process; however, per the Greenhouse Gas Protocol Technical Guidance for Calculating Scope 3 Emissions, emissions from the processing of recycled inputs are allocated to the company that uses the recycled material.

Use of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Covanta's primary products are electricity, steam, and metals for recycling. The use of electricity and steam downstream does not generate emissions, although the processes in which these products are used may have different sources of emissions. Similarly, the metals sold for recycling are not finished products. They will likely be incorporated into other products that could have emissions in the use phase; however, those emissions would be attributable to a downstream manufacturer.

End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Covanta's primary products steam and electricity, do not require end of life treatment. The recovery of metals for recycling is further processed and the end of life emissions associated with the final product into which the recovered metal is used is not attributable to Covanta.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Covanta does not have downstream leased assets.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Covanta does not have franchises.

Investments

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Covanta does not have significant investments outside of equity investments in those facilities already included in our Scope 1 inventory

Other (upstream)

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We have not evaluated upstream emissions outside of those already included in our Scope 3 calculations.

Other (downstream)

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We have not evaluated downstream emissions outside of those already included in our Scope 3 calculations.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	6553839	Covanta's biogenic CO2 emissions are derived from waste sources of biomass, widely recognized as nearly carbon neutral.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.0021

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
4388905

Metric denominator
unit total revenue

Metric denominator: Unit total
2000000000

Scope 2 figure used
Location-based

% change from previous year
8.9

Direction of change
Decreased

Reason for change
Revenue increased slightly in 2021.

Intensity figure
1144

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
4388905

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
3836

Scope 2 figure used
Location-based

% change from previous year
3.8

Direction of change
Increased

Reason for change
Full time employees slightly decreased in 2021.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	4327597	IPCC Fifth Assessment Report (AR5 – 20 year)
N2O	39234	IPCC Fifth Assessment Report (AR5 – 20 year)
CH4	4786	IPCC Fifth Assessment Report (AR5 – 20 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	4128112
Canada	391
Italy	7513
Ireland	211435
United Kingdom of Great Britain and Northern Ireland	21790
China	2375

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Waste-to-Energy	4320821
Natural Gas Steam Generation	38181
Material Processing Facilities	3967
Waste Transportation	8647

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
United States of America	16520	
Canada	238	
Italy	53	
Ireland	478	

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Waste-to-Energy	15173	
Material Processing Facilities	2115	

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Remained the same overall

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	5700	Decreased	0.2	As a waste services provider, we cannot control the properties of the waste we receive for energy recovery. Therefore, our energy recovery facilities are subject to variations in carbon content and the fraction of carbon that is derived from biogenic sources from year to year. From 2020 to 2021, we saw a slight decrease in the average fossil carbon intensity of the waste we processed at our WTE facilities.
Other emissions reduction activities	0	No change	0	
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	0	No change	0	In 2021, our scope 1 CO2 emissions slightly decreased. This is likely due to a slight increase in biogenic content of our waste.
Change in methodology	2000	Decreased	0.05	In 2021, we updated our inventory to use the AR5 20-year GWP for both CH4 and N2O emissions. While overall emissions did not change, the increased CH4 GWP and decreased N2O GWP resulted in a 2000 MT CO2e decrease.
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	5700	Increased	0.1	In 2021, electricity and fuel usage at our Material Processing Facilities were calculated as an average of previous years' reported usage due to a change in ability to aggregate actual usage data. This resulted in a slight uptick in emissions, that are likely not reflective of actual increases in operational emissions.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	18528711	16348207	34876918
Consumption of purchased or acquired electricity	<Not Applicable>	7928	45280	53208
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	18536639	16393487	34930126

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	Yes

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
HHV

Total fuel MWh consumed by the organization
18528711

MWh fuel consumed for self-generation of electricity
15618255

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
2910456

Comment

Other biomass

Heating value
HHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
We do not use biomass other than the biogenic content of our waste feedstock.

Other renewable fuels (e.g. renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
We do not use renewable sources other than the biogenic content of our waste feedstock.

Coal

Heating value
HHV

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment
We do not use coal.

Oil

Heating value
HHV

Total fuel MWh consumed by the organization
73944

MWh fuel consumed for self-generation of electricity
71439

MWh fuel consumed for self-generation of heat
2506

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
0

Comment

Gas

Heating value
HHV

Total fuel MWh consumed by the organization
490545

MWh fuel consumed for self-generation of electricity
125069

MWh fuel consumed for self-generation of heat
18262

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
347214

Comment
This represents a sum of natural gas and propane use.

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
15783717

MWh fuel consumed for self-generation of electricity
13304440

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
2479277

Comment
This represents the non-biogenic portion of energy generation from MSW.

Total fuel

Heating value
HHV

Total fuel MWh consumed by the organization
34876918

MWh fuel consumed for self-generation of electricity
29119203

MWh fuel consumed for self-generation of heat
20768

MWh fuel consumed for self-generation of steam
0

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
5736947

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	6467740	861697	6349037	849928
Heat	0	0	0	0
Steam	2503148	0	2264540	0
Cooling	0	0	0	0

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area
United States of America

Consumption of electricity (MWh)
51012

Consumption of heat, steam, and cooling (MWh)
843879

Total non-fuel energy consumption (MWh) [Auto-calculated]
894891

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
China

Consumption of electricity (MWh)
0

Consumption of heat, steam, and cooling (MWh)
2593

Total non-fuel energy consumption (MWh) [Auto-calculated]
2593

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Ireland

Consumption of electricity (MWh)
1117

Consumption of heat, steam, and cooling (MWh)
26152

Total non-fuel energy consumption (MWh) [Auto-calculated]
27269

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Canada

Consumption of electricity (MWh)
950

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
950

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
Italy

Consumption of electricity (MWh)
130

Consumption of heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
130

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

Country/area
United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)
0

Consumption of heat, steam, and cooling (MWh)
2866

Total non-fuel energy consumption (MWh) [Auto-calculated]
2866

Is this consumption excluded from your RE100 commitment?
<Not Applicable>

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Other, please specify (Total Sustainably Processed Waste)	Covanta's KPI performance will be verified by an external auditor annually. A "Limited Assurance" report will be published on Covanta's investor website.	The sustainably processed waste KPI has been chosen to reflect one of our greatest net emissions reduction potential. Sustainably processing waste results in landfill avoidance that would otherwise create significant GHG emissions over a long period of time. 2020 Limited Assurance Review.pdf Sustainability-Linked Financing Framework - final 11-8-21.pdf
C4. Targets and performance	Other, please specify (Total wastes avoided, recycled or reused)	Covanta's KPI performance will be verified by an external auditor annually. A "Limited Assurance" report will be published on Covanta's investor website.	The waste recycled or reused KPI has been chosen to reflect one of our greatest net emissions reduction potential. Waste recycled or reused is an initiative to optimize waste output, reduce future energy requirements, and contribute to the circular economy 2020 Limited Assurance Review.pdf Sustainability-Linked Financing Framework - final 11-8-21.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

California CaT - ETS

RGGI - ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

California CaT - ETS

% of Scope 1 emissions covered by the ETS

2.1

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1 2021

Period end date

December 31 2021

Allowances allocated

76415

Allowances purchased

59941

Verified Scope 1 emissions in metric tons CO2e

93478

Verified Scope 2 emissions in metric tons CO2e

Details of ownership

Facilities we own and operate

Comment

CA Cap & trade program compliance periods are 3 years, with the current period from 2021 - 2023. Purchases made in the 2021 year apply to the previous period (2018-2020). Note, the Scope 1 emissions are currently undergoing verification. We do not anticipate any major adjustments post-verification.

RGGI - ETS

% of Scope 1 emissions covered by the ETS

0.4

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1 2021

Period end date

December 31 2021

Allowances allocated

0

Allowances purchased

21500

Verified Scope 1 emissions in metric tons CO2e

16970

Verified Scope 2 emissions in metric tons CO2e

Details of ownership

Facilities we own and operate

Comment

We operate one natural gas-fired boiler at our Niagara Falls, NY facility that is used as a back-up source of steam for an industrial park steam loop. While the use of the boiler is strictly to satisfy steam demand, the high-pressure output of the boiler is connected to a turbine which operates in a combined heat and power mode. Therefore, according to RGGI rules, all of the emissions from the boiler are subject to the program.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Covanta is subject to the RGGI cap and trade program for an auxiliary boiler installed at our Niagara Falls, NY facility. Our current strategy is to purchase allowances needed through the secondary market. Our core business, WTE, is not subject to the RGGI cap and trade program. Therefore, we currently have minimal market exposure to this program.

In 2017, Covanta was effectively exempt from the California cap and trade program under AB32; however, beginning in 2018, our Stanislaus County facility in Crows Landing, CA started to incur a compliance obligation. While the facility receives the majority of its allowances directly from the state as a free allocation, there is a shortfall of allowances provided relative to our compliance obligation. To make up the shortfall, we purchase either allowances, offsets, or offset derivative products from the secondary market.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price
Navigate GHG regulations
Stakeholder expectations
Identify and seize low-carbon opportunities

GHG Scope
Scope 1

Application
We use the U.S. Federal Government's Social Cost of Carbon (2013) to demonstrate and communicate the economic benefits of landfill diversion and waste-to-energy with policy and decision makers.

Actual price(s) used (Currency /metric ton)
50

Variance of price(s) used
To date, we use a static, uniform price range, but anticipate moving toward evolutionary pricing over time. Given the uncertainty in the social cost of carbon, we use a range of $11 - $89 / metric tonne, reflecting range in 2010 Social Cost of Carbon from Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866, authored by the Interagency Working Group on Social Cost of Carbon, United States Government.

Type of internal carbon price
Shadow price

Impact & implication
Applying a cost of carbon has helped us demonstrate the economic efficiency of using waste-to-energy technologies to help mitigate climate change. In general, the operation of waste-to-energy plants is more expensive per ton of waste managed than landfilling. However, normal accounting practices do not account for the social cost of the higher GHG emissions from landfilling. Considering the social cost of carbon allows policymakers to better understand the relative cost of waste-to-energy and landfilling when the GHG externalities are considered.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our customers/clients

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
Many of our customers have an interest in the GHG emissions from their downstream waste management. Therefore, we make available to all of our customers information on climate change related to more sustainable waste management. The exact nature of the engagement varies depending on the client and can range from 1. assistance with lifecycle inventories and analysis, 2. development of GHG emissions savings metrics associated with operating milestones, 3. assistance with Scope 3 inventory development, 4. participation in employee and public meetings and hearings, 5. development of facility-specific websites to better educate the public (municipal customers) on the GHG and other environmental impacts of WTE, and 6. dissemination of technical information on climate change through our sustainability report, website, and white papers.

Impact of engagement, including measures of success
Educating our customers generally results in a more engaged relationship and collaboration on key issues related to GHG emissions, including state and federal policy design. We track website traffic metrics (e.g. time on page, unique users) and downloads of climate related reference materials to gauge efficacy and usage.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?
No, and we do not plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate
Yes, we engage directly with policy makers
Yes, we engage indirectly through trade associations
Yes, we engage indirectly by funding other organizations whose activities may influence policy, law, or regulation that may significantly impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?
No, but we plan to have one in the next two years

Attach commitment or position statement(s)
<Not Applicable>

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy
As a sustainable materials management company, we are committed to supporting policy that moves waste up the hierarchy. We consistently bring the concepts of reduction, reuse, recycling and energy recovery to the table when discussing landfill diversion opportunities.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Focus of policy, law, or regulation that may impact the climate
Methane emissions
Other, please specify (GHG Emissions Reductions)

Specify the policy, law, or regulation on which your organization is engaging with policy makers
NY Climate Leadership and Community Protection Act

Policy, law, or regulation geographic coverage
Regional

Country/region the policy, law, or regulation applies to
United States of America

Your organization's position on the policy, law, or regulation
Support with minor exceptions

Description of engagement with policy makers
Covanta supports a transition to more sustainable waste management as an important means of reducing GHG emissions. Our Government Affairs team focuses on educating policymakers on sustainable waste management practices and the potential to mitigate climate change with the appropriate tools in place. Minimizing methane emissions by diverting wastes from landfills is one of the strongest levers we have to minimize the climate impacts of the waste sector, and the overall economy. This means not only promoting WTE over landfilling, but also supporting reduction, recycling, and reuse opportunities. We make the case for organics diversion technologies such as composting and anaerobic digestion, as well as reduction and recycling efforts such as Product Stewardship.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
We support policy that advances the use of waste management technology on higher tiers of the waste hierarchy in a way that reduces overall GHGs.

Have you evaluated whether your organization's engagement is aligned with the goals of the Paris Agreement?
No, we have not evaluated

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (Energy Recovery Council)

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
The Energy Recovery Council is active in communicating waste-to-energy's (WTE's) role as a key source of GHG mitigation and advocating for the proper treatment of WTE in state and federal policies in recognition of its benefits. As a member of the Energy Recovery Council's board, we are involved in developing policy positions for the organization

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

Trade association
Other, please specify (Biomass Power Association)

Is your organization's position on climate change consistent with theirs?
Consistent

Has your organization influenced, or is your organization attempting to influence their position?
We publicly promote their current position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)
The Biomass Power Association (BPA) is actively involved in the legislative process, promoting biopower as an important addition to America's energy portfolio, and helping to shape government policies that encourage the development and use of biomass energy. BPA's advocacy efforts are vital as American policymakers at every level explore ways to reduce our nation's dependence on foreign oil, and reduce the greenhouse gas emissions that contribute to global warming. As a member of the Biomass Power Association's board, we are involved in developing policy positions for the organization.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
No, we have not evaluated

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization
Research organization

State the organization to which you provided funding
Environmental Research and Education Foundation

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)
0

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate
The Environmental Research and Education Foundation (EREF) is the only private, grant making institution with a national and international scope whose sole mission is to support solid waste research and education initiatives. EREF's grants program is led by our Research Council, a body of volunteers consisting of technical experts in industry, academia and consulting. The work of the Council is guided by a long-range strategic plan with the goal to achieve greater sustainability, good environmental stewardship, higher process efficiency and increased knowledge. This work provides foundational knowledge to enable sound policy decisions in the waste and materials management sector. We are not providing a financial figure in this disclosure.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?
No, we have not evaluated

Type of organization
Research organization

State the organization to which you provided funding
Earth Engineering Center, Columbia University

Funding figure your organization provided to this organization in the reporting year (currency as selected in C0.4)
0

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate
The mission of EEC is to conduct research and education on the use of materials and energy resources for sustainable development, with preservation of land and water resources; and disseminate this information by means of publications, presentations, and the web. The guiding principle is that responsible management of renewable and non-renewable resources must be based on science, best available technology, and economics that include "external" environmental costs. This work provides foundational knowledge to enable sound policy decisions in the waste and materials management sector. We are not providing a financial figure in this disclosure.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?
No, we have not evaluated

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In voluntary sustainability report

Status
Complete

Attach the document
2022-Covanta-Sustainability-Update-220718.pdf

Page/Section reference
44

Content elements
Emissions figures
Other metrics

Comment

Publication
In mainstream reports, incorporating the TCFD recommendations

Status
Complete

Attach the document
Covanta_2021_TCFD-Disclosure.pdf

Page/Section reference

Content elements
Governance
Strategy
Risks & opportunities

Comment

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	No, and we do not plan to have both within the next two years	<Not Applicable>	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	No, and we do not plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	No, and we do not plan to assess biodiversity-related impacts within the next two years	<Not Applicable>

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	No, and we do not plan to undertake any biodiversity-related actions	<Not Applicable>

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No	Please select

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
No publications	<Not Applicable>	<Not Applicable>

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Environmental Engineer - Sustainability	Environment/Sustainability manager

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms