



2025

CANADA
ARTISTIC
SWIMMING

Emissions Report

**Canada Artistic
Swimming**
2025

Prepared By:

Racing to Zero

November 2025

Racing to Zero

Racing to Zero (RTZ) is an Olympian-led sustainability consultancy focused on helping sport organizations of all sizes understand and minimize their impacts on the climate. Driven by a passion for environmental advocacy, and with a deep understanding of the Canadian sport ecosystem, RTZ champions eco-friendly practices and catalyzes sustainability efforts in sport.

Racing to Zero's programs focus on sustainability education, carbon accounting, and the strategic planning and implementation of carbon reduction projects, with a focus on creating tailored and actionable solutions.

For more information, visit www.racingtozero.ca.



Scope Boundaries

Time Boundary

The time boundary of this emissions inventory is the **2025 Calendar Year**, from January 1, 2025 to December 31, 2025.

Organizational Boundary

The organizational boundary includes all activities undertaken and funded by Canada Artistic Swimming (CAS) as an organization, as the governing body of the National Team, and as an event organizer.

Operational Boundary

The operational boundary includes:

- All activities related to CAS operating as an organization;
- Activities of the Senior and Junior National Team that are organized and/or funded by CAS;
- Events organized and/or funded by CAS, excluding participant travel and associated activities

Consolidation Approach

The *Operational Control* consolidation approach was used for determining which emissions were included.

Data Collection Methodology

An activity-based method was used for all sources except purchased goods and services, which were calculated via the spend-based method*.

Data Sources

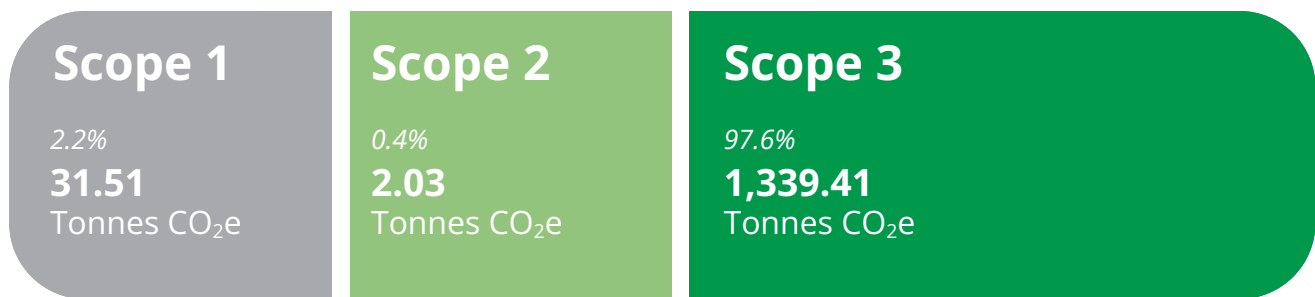
- All data was provided by CAS and calculated by RTZ, unless otherwise stated.
- All spend-based emissions factors were taken from Open CEDA, a free database provided by Watershed. All emissions factors used were from the most recent year available (2025) and were specific to Canada.

Results

The following section describes the results of this carbon inventory. The Emissions Report Summary is a comprehensive summary of the emissions across Scopes 1, 2, and 3, based on the categories defined in the GHG Protocol. Further analysis is available via an [Interactive Dashboard](#).

The total emissions that fall within the the organizational and operational boundaries are as follows.

1,373 Tonnes CO₂e



Attributed Emissions

Following international best practices, emissions from the travel of participants to hosted events are taken to be the responsibility of the Organization or Club who those athletes are representing¹. These emissions are therefore not the responsibility of CAS as the event host, and were not included in the figures above.

While the travel of spectators is also not the responsibility of the event host, as they do not represent a single organization, these emissions must be captured, and were therefore accounted for by CAS and included in the figures above.

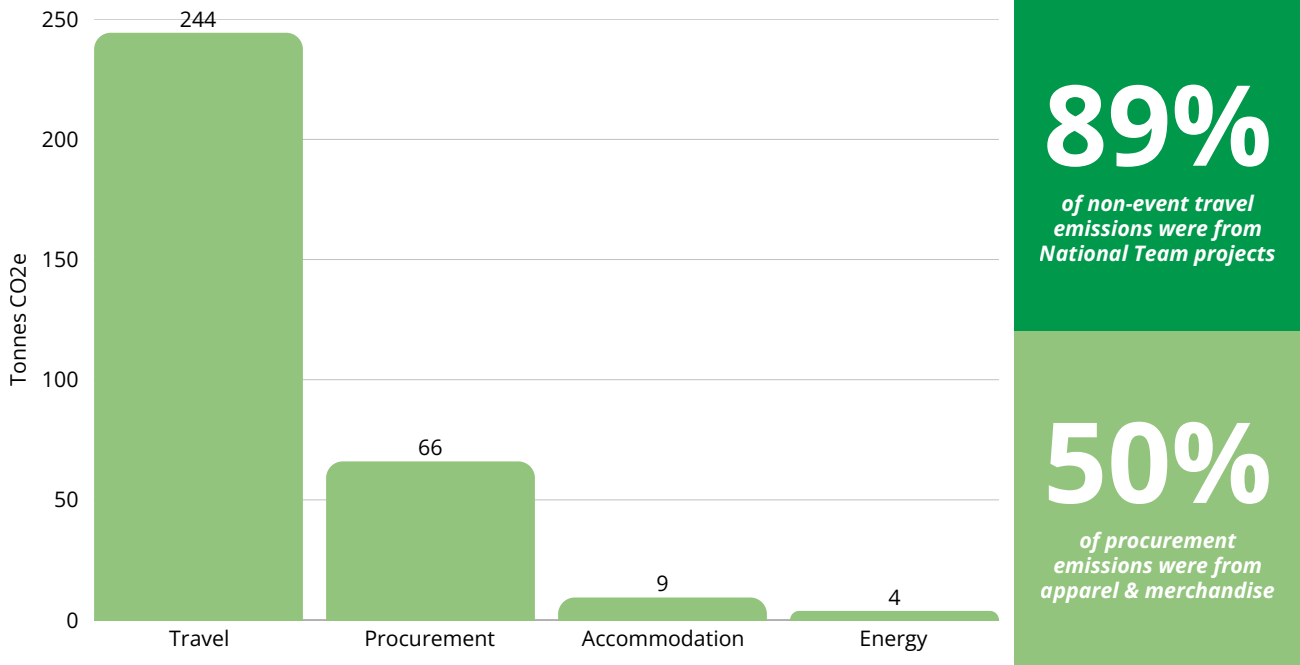
Emissions Summary

Attributed Annual Emissions

GHG EMISSIONS REPORT				
Category	Emission Source		Total Emissions (Tonnes CO2e)	
			2025	
GHG Protocol Standards: Corporate Scope - 1 and 2, Value Chain - Scope 3	Scope 1	Stationary Sources	Fuels	31.35
			Refrigerants	0.16
		Mobile Sources	Facility Vehicles / Generators	0.00
			Passenger Vehicles (excluding EVs)	0.00
	Total Scope 1			31.51
	Scope 2	Location-Based Emissions	Electricity & District Energy	2.03
			Facility Vehicles (EVs only)	0.00
			Passenger Vehicles (EVs only)	0.00
		Total Scope 2		
	Scope 3	1. Purchased Goods & Services	Water Supplied	0.12
			All Other Goods & Services Procured	121.18
		2. Capital Goods	All Capital Goods	0.00
		3. Fuel- & Energy-Related Activities Not Included in Scope 1 or 2	All	9.65
		4. Upstream Transportation & Distribution	Inbound Transportation of Purchased Goods	36.93
			Purchased Outbound Transportation Services of Sold Goods	0.18
5. Waste Generated in Operations		Waste	4.18	
		Wastewater Treatment	0.11	
6. Business Travel		Air Travel	952.88	
		Ground Travel (excluding EVs) [Business Travel]	138.19	
		Ground Travel (EVs only) [Business Travel]	0.33	
		Accommodation	71.66	
7. Employee Commuting		Travel	0.20	
		Work From Home	0.85	
8. Upstream Leased Assets		Office	1.91	
9. Downstream Transportation & Distribution	Outbound Transportation Services of Sold Goods	0.00		
	Storage Facilities	1.05		
10. Processing of Sold Products		0.00		
11. Use of Sold Products		0.00		
12. End-of-Life Treatment of Sold Products		0.00		
13. Downstream Leased Assets		0.00		
14. Franchises		0.00		
15. Investments		0.00		
Total Scope 3			1,339.41	
TOTAL EMISSIONS			1,372.95	

2025 Organizational Operations

As Canada Artistic Swimming does not own any facilities or vehicles, there were no Scope 1 or 2 emissions from the organization’s operations. Subsequently, **100% of non-event emissions are Scope 3**, broken up into the following categories.



Travel

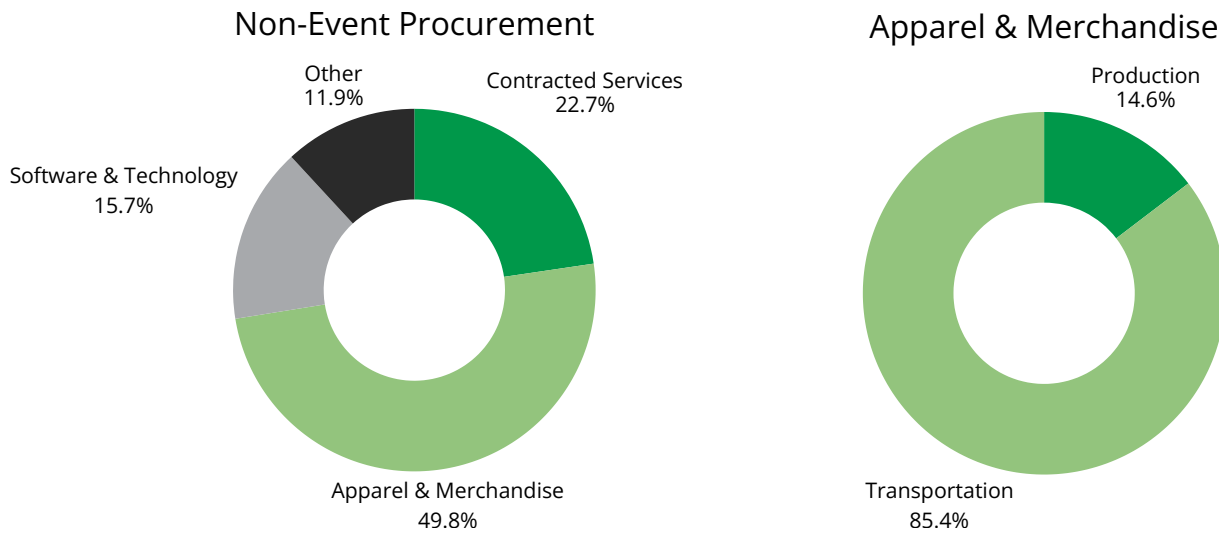
The majority of emissions from operations originate from the National Teams traveling to competitions and for centralized camps (particularly for the Junior National Team). Some travel, however, is external to National Teams, typically coming from travel of employees to site visits for events, conferences, and other meetings. The relative split between the National Teams and the Organization can be seen in Figure 3 above.



Procurement

Approximately 50% of the emissions from procurement came from the purchase of apparel and merchandise, including clothing provided through VIK sponsorships. Of this, ~85% of emissions were related to the transportation and delivery of the products.

Furthermore, just over 25 tonnes CO2e came from contracted services, software, and technology. These categories are difficult to obtain specific product carbon footprints and therefore broad spend-based emissions factors often lead to higher estimated emissions.



Office & Remote Work

As the majority of CAS' staff works remotely 100% of the time, there are minimal emissions from employee commuting and WFH energy usage.

CAS does lease a small space within a larger office building for one employee. As there is no operational control, emissions from this fall within Scope 3, Category 8: Upstream Leased Assets.

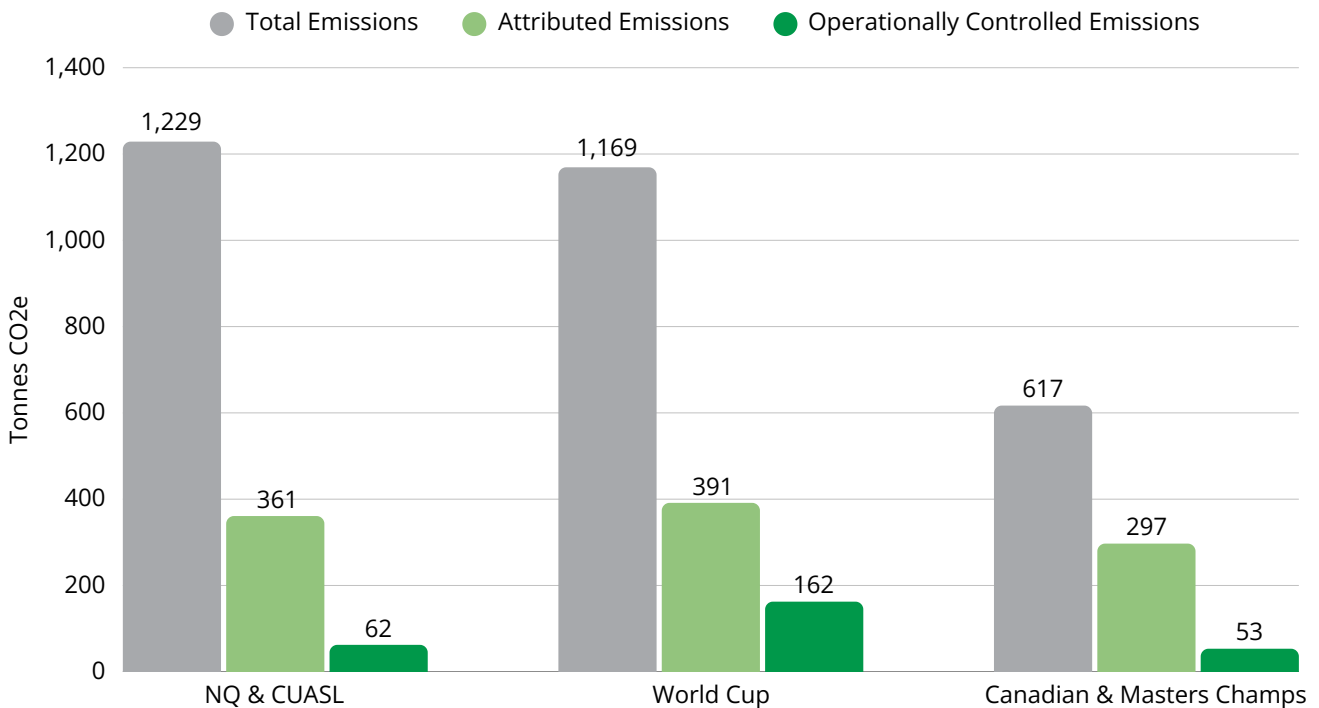
2025 Hosted Events

Canada Artistic Swimming CAS hosted five events, though two pairs were delivered as combined events as they were concurrent dates and hosted at the same venue. In this report, the events were calculated as follows:

- National Qualifier & Canadian University Artistic Swimming League (CUASL) National Championships (*March 16-23, Victoria, BC*)
- World Aquatics World Cup (*May 1-3, Markham, ON*)
- Canadian Championships & Masters Championships (*May 5-11, Markham, ON*)

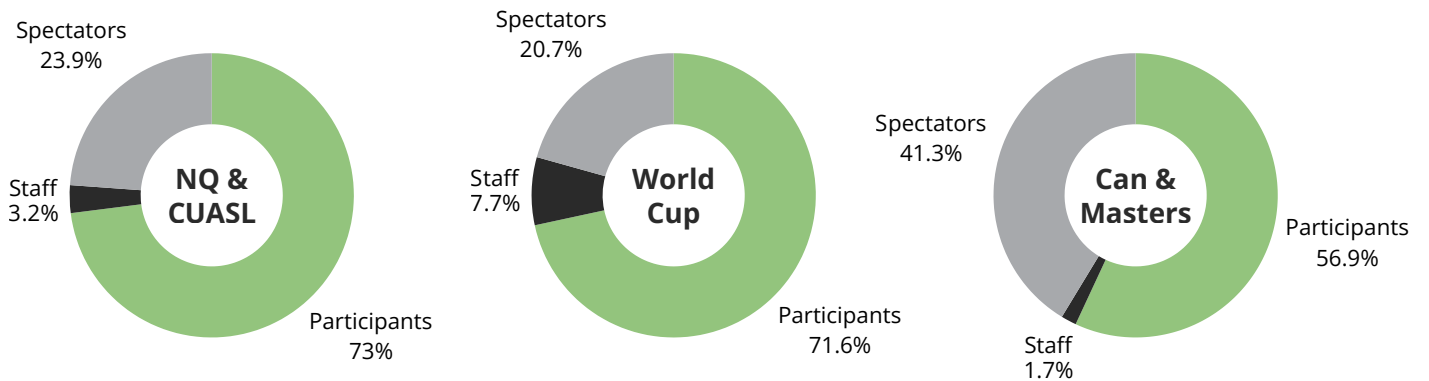
Although the travel and associated activities of participants were not included in CAS' carbon footprint, to fully understand the impacts of events it is still important to include them when analyzing each individual event. The chart below shows the difference between the total emissions and those attributed to CAS for each event. It also compares the emissions that CAS is operationally in control over, in which spectator travel and associated activities has also been removed.

Full emissions details for each event can be found in Appendix C.



Key Differences

Across the 3 events, over 85% of emissions came from travel. The key differences between the events are typically caused by the number of participants and spectators, where they are travelling from, and the length of the event itself.



Furthermore, at each of the events over 95% of the emissions from travel were from travel to the host city, with the remainder being from travel around the host city during the event itself.



Recommendations

The following section summarizes some key recommended actions that CAS can take to reduce its carbon footprint and improve the accuracy of its data collection. These recommendations align with the strategic objectives and actions laid out in their environmental sustainability strategy.

Organizational Travel

- Avoid unnecessary business travel, in particular air travel, for staff and Board members.
- Limit the travellers to only those whose attendance is essential.
- Encourage the use of trains or low-emissions vehicles for business travel in favour of short-haul flights.
 - Incentivize this behaviour by providing a portion of cost savings compared to air travel to the employee.
- Plan group business travel (e.g. board meetings) to coincide with other trips and events to reduce the total number of flights per year.
- Select locations for business travel with easily accessible airports to minimize layovers where possible.
- When booking accommodation for business travel, consider the relative sustainability and any certifications held by the hotel.
- When choosing accommodation, consider the proximity of the hotel to the venue to minimize daily travel.
- Leverage low-emission driving options like Uber Green to reduce “last mile” emissions for business trips.
- Incentivize low emission (i.e. less meat) meals among CGC staff during business travel.

National Teams

- Where possible, continue to combine international training camps with competitions to avoid back and forth travel.
- Encourage athletes to reduce waste when travelling through the use of reusable water bottles and bulk snacks

Procurement

- Minimize the amount of goods and equipment, especially clothing and merchandise, purchased or received each year.
- Opt for local suppliers over international ones for purchased goods wherever possible to reduce transportation-related emissions.
- Explore opportunities for repurposing, reuse, and recycling of major equipment purchases.

Events

- Integrate sustainability initiatives into hosting criteria and planning processes to continuously innovate and improve each year.
- Ensure all hosted events follow recommended actions from recognized frameworks and guidelines, including:
 - IOC Sustainability Essentials
 - Canada Games Council Sustainable Event Toolkit
 - UNS4CAF
- Prioritize reductions in the following categories:
 - Landfill waste
 - Single-use plastics
 - Red meat and other high-emissions foods
 - Apparel, signage, and other procurement

Data Collection

- Continue to improve data collection methodologies to increase accuracy and to better capture the benefits of reduction activities.

Disclaimer & Contact

While every effort has been made to ensure the accuracy and completeness of this emissions inventory, some degree of uncertainty is inherent in any data collection and estimation process.

Racing to Zero continuously works to refine its methodologies and improve data quality over time. For further details or clarification regarding the data, assumptions, and results presented in this report, please contact Racing to Zero directly.



Email Address

info@racingtozero.ca



Website

www.racingtozero.ca

Appendix A

Metadata

Description	2025 Operations	NQ & CUASL	World Cup	Canadian & Masters Champs
Calculation Period				
# Days	365	8	3	7
# Hours	8,760	--	--	--
# Working Days	251	--	--	--
# Working Hours	2,008	--	--	--
Organization				
# Employees	12	--	--	--
# Board & Other Members	10	--	--	--
# Home Provinces	6	--	--	--
Event				
# Events	3	--	--	--
# Participants	--	816	247	573
# Spectators	--	1,200	1,500	1,500
# Staff / Volunteers	--	39	24	21
Total Budget	--	\$77,434.38	\$337,412.09	\$96,975.18
Waste Diversion Rate	--	50%	52%	52%
Spectators				
# Local	--	500	750	500
# Regional	--	200	550	500
# National	--	500	100	500
# International	--	0	100	0
Travel				
# Short-Haul Flights (<482km)	0	443	10	40
# Medium-Haul Flights (482-3,700km)	140	1,518	222	1,178
# Long-Haul Flights (>3,700km)	150	293	470	2
# Train Journeys	4	0	32	7
# Car Journeys >100km	6	--	--	--

Appendix B

Emissions Sources

Category	Data Source / Information
Energy	
Office	<ul style="list-style-type: none"> Total spend
Remote Work	<ul style="list-style-type: none"> # Employees x % WFH
Event Venue	<ul style="list-style-type: none"> Estimated consumption based on research and comparative facilities
Refrigerants	<ul style="list-style-type: none"> Types of units provided by CAS <u>2024 BC Best Practices Methodology</u> used for capacity and leak rate
Water	
Event Venues	<ul style="list-style-type: none"> Estimated consumption based on research and comparative facilities
Waste	
Event Venues	<ul style="list-style-type: none"> Estimated total across various categories based on scale of event
Transportation	
Flights	<ul style="list-style-type: none"> Routes provided by CAS for all HP teams, Staff & Board Routes provided by CAS for all Staff & Participants at events Spectator routes estimated based on classification (Regional, National, International)
Ground Travel	<ul style="list-style-type: none"> Routes provided by CAS for all HP teams, Staff & Board Routes provided by CAS for all Staff & Participants at events Spectator routes estimated based on classification (Regional, National, International)
Employee Commuting	<ul style="list-style-type: none"> Total annual distance travelled provided by employee
Accommodation	<ul style="list-style-type: none"> Total room nights provided by CAS for all HP teams, Staff & Board Total room nights provided by CAS for all Staff & Participants at events Spectator room nights estimated based on classification & length of event
Purchased Goods & Services	
Organization	<ul style="list-style-type: none"> Total units and shipping information provided by CAS for uniforms and clothing Total spend provided by CAS for all other purchases All EFs taken from <u>Open CEDA</u>. For list of categories used, see the following page
Events	<ul style="list-style-type: none"> Total units and shipping information provided by CAS for all sold clothing & merchandise Total spend provided by CAS for all other purchases All EFs taken from <u>Open CEDA</u>. For list of categories used, see the following page

Appendix B

Emissions Sources

The following categories from the Open CEDA database were used when categorizing transactions:

- All other miscellaneous professional, scientific, and technical services
- Legal services
- Insurance agencies, brokerages, and related activities
- Software publishers
- Sporting and athletic goods manufacturing
- Household appliances and electrical and electronic goods
- Accounting, tax preparation, bookkeeping, and payroll services
- Other computer related services, including facilities management
- Office and commercial structures
- Radio & television broadcasting
- Photographic services
- All other food and drinking places
- Apparel manufacturing
- Internet publishing and broadcasting and Web search portals
- Wireless telecommunications carriers (except satellite)
- Advertising, public relations, and related services
- Warehousing and storage
- Data processing, hosting, and related services
- Office supplies (except paper) manufacturing
- All other converted paper product manufacturing
- Postal service
- Printing
- Specialized design services
- All other miscellaneous manufacturing
- Other support services

Appendix C

Emissions Summary - Total Event Emissions

GHG EMISSIONS REPORT					
Category	Emission Source		Total Emissions (Tonnes CO2e)		
			NQ & CUASL	World Cup	National Champs
Scope 1	Stationary Sources	Fuels	1.69	11.53	18.13
		Refrigerants	0.07	0.03	0.06
	Mobile Sources	Facility Vehicles / Generators	0.00	0.00	0.00
		Passenger Vehicles (excluding EVs)	0.00	0.00	0.00
	Total Scope 1		1.76	11.55	18.19
Scope 2	Location-Based Emissions	Electricity & District Energy	1.16	0.34	0.53
		Facility Vehicles (EVs only)	0.00	0.00	0.00
		Passenger Vehicles (EVs only)	0.00	0.00	0.00
	Total Scope 2		1.16	0.34	0.53
Scope 3	1. Purchased Goods & Services	Water Supplied	0.09	0.01	0.02
		All Other Goods & Services Procured	12.29	54.64	15.95
	2. Capital Goods	All Capital Goods	0.00	0.00	0.00
	3. Fuel- & Energy-Related Activities Not Included in Scope 1 or 2	All	3.31	2.46	3.87
	4. Upstream Transportation & Distribution	Inbound Transportation of Purchased Goods	4.07	4.04	1.30
		Purchased Outbound Transportation Services of Sold Goods	0.00	0.00	0.00
	5. Waste Generated in Operations	Waste	1.17	1.17	1.84
		Wastewater Treatment	0.08	0.01	0.02
	6. Business Travel	Air Travel	1,117.09	1,030.72	478.13
		Ground Travel (excluding EVs) [Business Travel]	38.35	42.39	57.21
		Ground Travel (EVs only) [Business Travel]	0.05	0.11	0.17
		Accommodation	49.31	21.76	39.68
	7. Employee Commuting	Travel	0.00	0.00	0.00
		Work From Home	0.00	0.00	0.00
	8. Upstream Leased Assets	Office	0.00	0.00	0.00
9. Downstream Transportation & Distribution	Outbound Transportation Services of Sold Goods	0.00	0.00	0.00	
	Storage Facilities	0.00	0.00	0.00	
10. Processing of Sold Products		0.00	0.00	0.00	
11. Use of Sold Products		0.00	0.00	0.00	
12. End-of-Life Treatment of Sold Products		0.00	0.00	0.00	
13. Downstream Leased Assets		0.00	0.00	0.00	
14. Franchises		0.00	0.00	0.00	
15. Investments		0.00	0.00	0.00	
Total Scope 3		1,225.81	1,157.31	598.18	
TOTAL EMISSIONS			1,228.72	1,169.21	616.91