



Carbon Footprint Report, Post-event

Public Disclosure

For **Global Health Security Network**

Global Health Security Conference 2024

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Executive Summary

This Greenhouse Gas Inventory report has been prepared to assist the Global Health Security Network (GHSN) to understand the carbon footprint from delivering the Global Health Security Conference and to claim carbon neutrality against their June 2024 event.

This report reconciles the estimated emissions set out in the pre-event report, delivered to GHSN prior the June 2024 event took place, with post-event updated data where different to the input data used in the pre-event report.

This document lists the emissions by emission categories and emission sources, describes the calculation boundaries, calculation methodologies, assumptions, measurement results, and key references used to prepare an event greenhouse gas (GHG) inventory.

The Global Health Security Conference was held during:

- 18-21 June 2024.
- 22 June 2024. Field trip.

The event was held at the following Sydney locations:

- ICC Sydney, 18-21 June 2024.
- Taronga Zoo, Sydney, 22 June 2024.

Scope 1, 2 and 3 GHG emissions that occurred due to the operation and value chain of the event have been included.

Post-event, the Global Health Security Conference 2024's total GHG emissions have been estimated at 4,059.42 tonnes of carbon dioxide equivalent (t CO₂-e).

This is 18.19% higher than the pre-event estimated GHG emissions (3,434.55 t CO₂-e) which is a good result compared to an increase of 23.70% between expected number of attendees and the actual number of attendees.

The GHG emitting activities are associated with GHSN staff and attendee travel, purchased goods and services and accommodation as the main contributors (see Figure 1).

0.02% of GHG emissions result from Scope 1 emissions.

0.08% of GHG emissions are related to scope 2 grid-supplied electricity usage

The remaining 99.90% of GHG emissions result from Scope 3 activities associated with staff and attendee travel, purchased goods and services and accommodation.

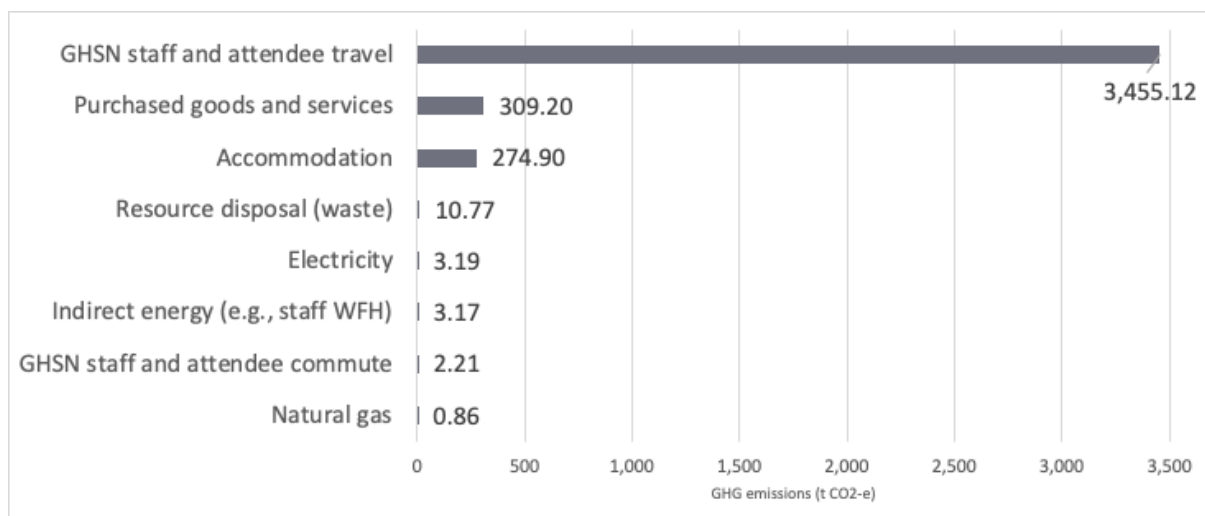


Figure 1. Summary of the Global Health Security Conference 2024's estimated emissions.

About Carbon Neutral

Carbon Neutral is an Australian owned carbon solutions consultancy and offsets provider. We have over 20 years of experience and we have worked with over a thousand partners and organisations to deliver tangible climate change solutions.

Carbon Neutral assists organisations across Australia to minimise their impact on our environment by measuring, reducing and offsetting greenhouse gas emissions. Carbon Neutral is a market leader, has built a strong reputation within the low carbon economy and was the developer of the first web-based vehicle emissions calculator in Australia.

Carbon Neutral's services include carbon consulting and reduction programs, carbon calculators, retailing of carbon offsets, developing biodiverse reforestation projects, energy and water auditing and Environmental Management System development and implementation. To date, Carbon Neutral has planted 30+ million trees in rural Australia.

Carbon Neutral is a long-standing, award-winning organisation that works with partners and businesses of all sizes to enrich landscapes, reduce the effects of climate crisis and deliver practical carbon solutions.

We are an independently certified (Climate Active) carbon neutral organisation.



About Global Health Security Conference 2024

The third Global Health Security conference, returned to Sydney in 2024. Even as the COVID-19 pandemic remains ongoing, the health challenges people confront from a changing climate, zoonotic pathogens, microbial resistance, conflict, and the social, political and economic determinants of health that exacerbate poor health, exposure to disease, and an inability to access affordable healthcare services, can seem insurmountable at times. Yet by working collaboratively to bring multiple stakeholders from across disciplines and professions where we can share learnings, research, policy innovation and solutions, we can build a safer world for all.

The Conference was a ticketed event that prior the event expected to attract 1,000 attendees, including 84 invited delegates to be part of this important dialogue. The event was held across 18-21st June 2024 and a visit to Taronga Zoo was organised for 22nd of June 2024. Post-event, GHSN has confirmed the event hosted 1,237 attendees, including invited delegates registered for the event.

The event was held at ICC Sydney and chosen as the venue due to being part of a socially responsible and environmentally sensitive convention, exhibition and entertainment precinct.

Three GHSN staff worked on organising the event across 15 months in the lead up to the event with an additional 20 volunteers working for five full days as hosts during the event.

The intent of the carbon reports (pre and post-event) is for GHSN to build on current skills and knowledge in relation to the carbon footprint and baseline analysis for their 2024 event and events in the future. Furthermore GHSN ran the event as a carbon neutral event, with carbon credits being purchased initially based on the estimated carbon footprint in the pre-event carbon report and now reconciling the carbon footprint at the post-event stage.

Event Boundary

GHSN's GHG emissions scope and event boundary have been determined in accordance with the GHG Protocol. The boundary is set based on the aspects of GHSN's supply chain that they have influence over in relation to the event held. GHG emissions from the event have been included and reported on where activity data was captured and recorded.

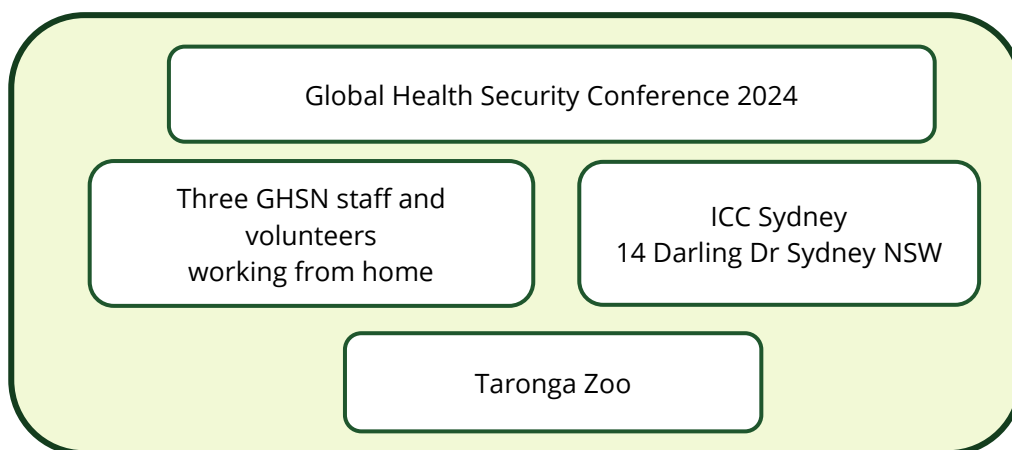


Figure 2. Event boundary of GHSN's carbon footprint report.

Emissions Scope

The seven key greenhouse gas sources recognised by the United Nations' Intergovernmental Panel on Climate Change have been considered in this assessment, and include:

- + Carbon dioxide (CO₂),
- + Methane (CH₄),
- + Nitrous oxide (N₂O),
- + Hydrofluorocarbons (HFCs),
- + Perfluorocarbons (PFCs),
- + Sulphur hexafluoride (SF₆) and,
- + Nitrogen trifluoride (NF₃)

All these different sources are included and reported on as units of carbon dioxide equivalents (CO₂-e). This provides the ability to compare various greenhouse gasses as a single unit.

Classification Method

The GHG Protocol categorises GHG emissions into three 'scopes' (Figure 3).

Scope 1

Direct GHG emissions controlled by GHSN's event (e.g., emissions from fuel usage).

Scope 2

Indirect emissions from the generation of purchased electricity consumed in relation to holding the event (e.g., electricity consumption from the grid).

Scope 3

Other indirect emissions (not included in scope 2) that occur in the value chain of GHSN, due to the event being held. (e.g., emissions from event activities such as purchased goods and services and attendees commuting).

Activities included in this GHG emissions inventory are shown in Figure 4.

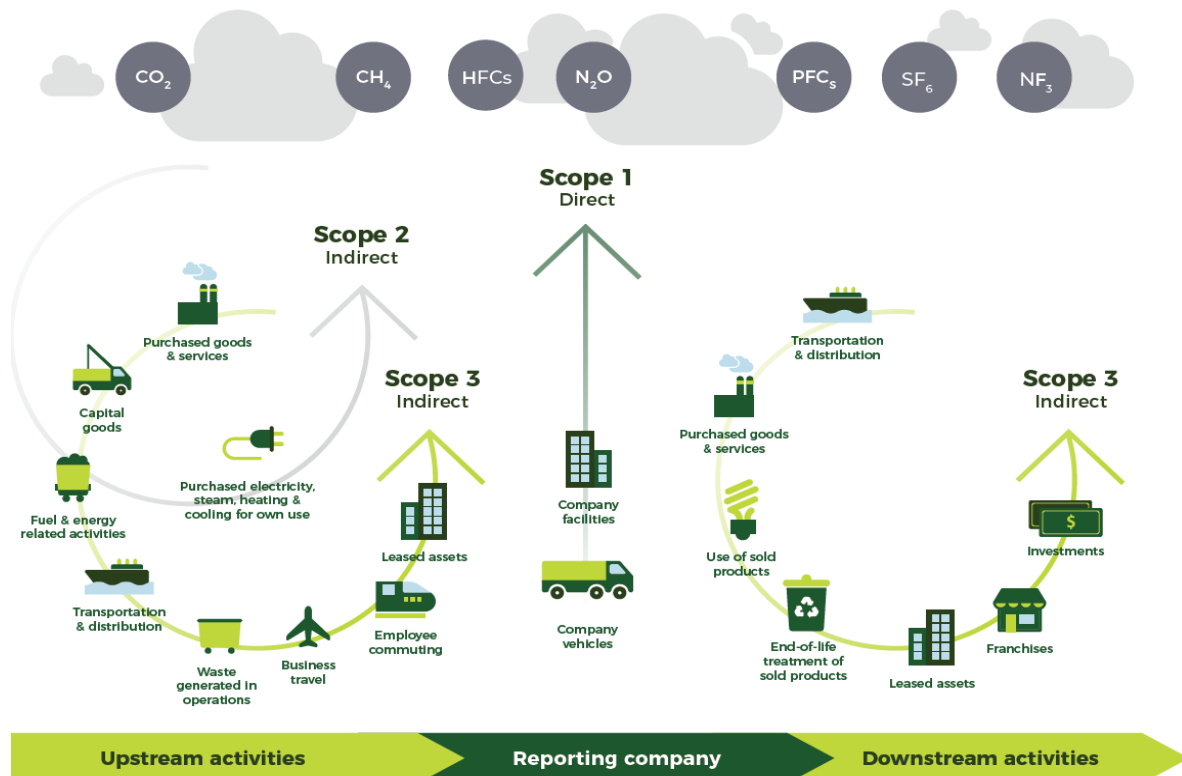


Figure 3. Scope 1-3 by source.

Total Emissions Summary

The total GHG emissions for the GHSN’s event have been estimated at **4,059.42 t CO₂-e**.

A breakdown of GHG emissions by scope is presented below in Table 1 and Figure 5.

Table 1. Total GHG emissions.

GHG emissions scope	Emissions (t CO ₂ -e)	Percentage
Scope 1 emissions	0.86 t CO ₂ -e	0.02 %
Scope 2 emissions	3.19 t CO ₂ -e	0.08 %
Scope 3 emissions	4,055.37 t CO ₂ -e	99.90 %
Total emissions	4,059.42 t CO₂-e	100.00 %

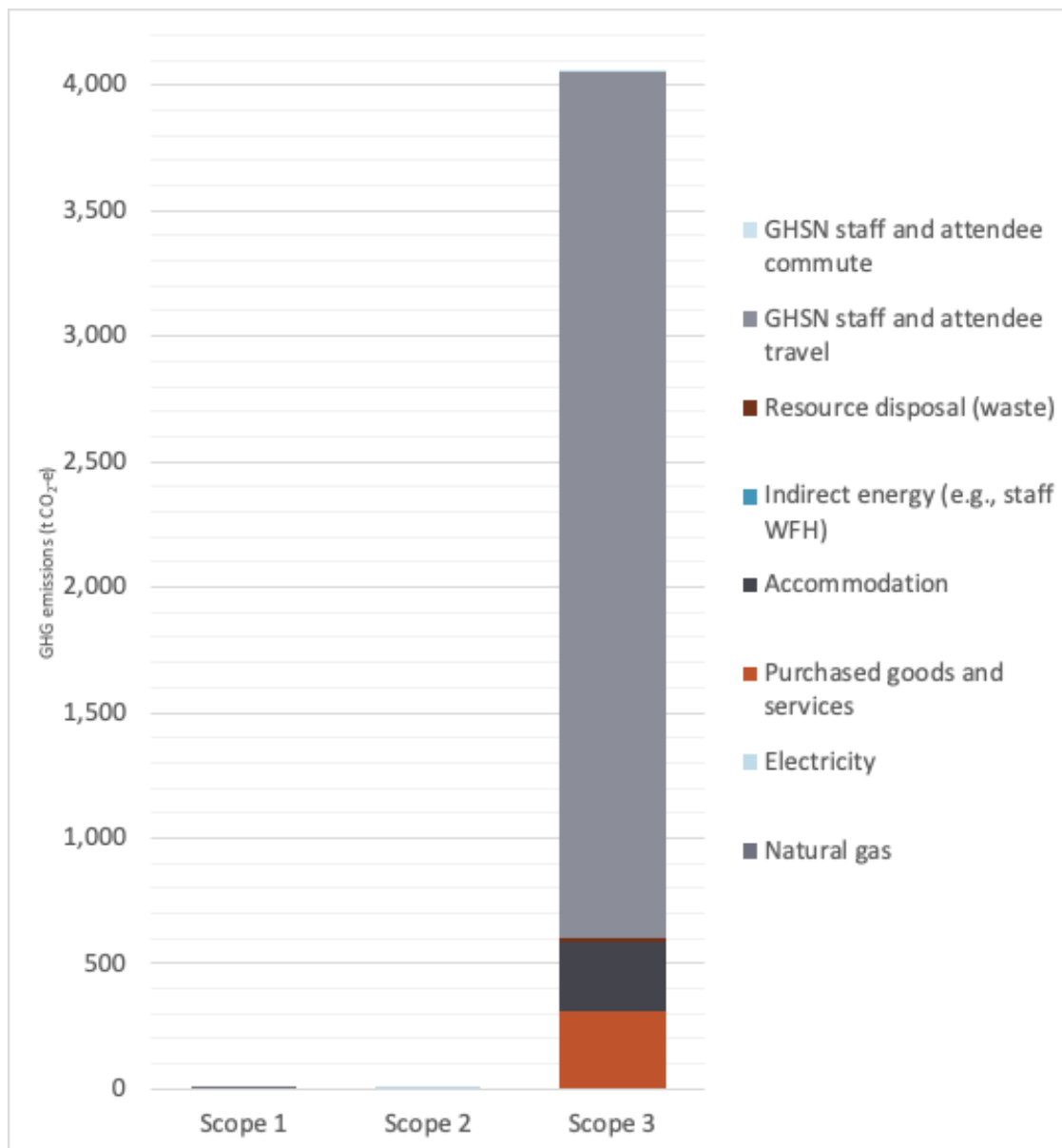


Figure 5. GHG emissions by scope and activities for the Global Health Security Conference 2024.

Scope 1 Emissions

Scope 1 GHG emissions are released directly from sources that are controlled or operated by GHSN due to the event.

Scope 1: Emissions were estimated at **0.86 t CO₂-e**.

Table 2. Scope 1 event emissions summary.

Scope 1 emissions		Input data	Emissions (t CO ₂ -e)	Percentage
Natural gas	ICC Sydney	16,724 MJ	0.86 t CO ₂ -e	100.00 %
Fuel (Stationary)		0 litres	0.00 t CO ₂ -e	0.00 %
Fuel (Transport)		0 litres	0.00 t CO ₂ -e	0.00 %
Refrigerant leaks		0 kg	0.00 t CO ₂ -e	0.00 %
Total scope 1 emissions			0.86 t CO₂-e	100.00%

Natural gas

GHSN confirmed that all staff work from home, hence no emissions associated with natural gas are included on the carbon inventory from a fixed office location.

ICC Sydney provided natural gas usage allocated to the GHSN event. This data has been derived based on the event floor space, event floor space percentage of venue, number of event days, duration and attendee numbers by ICC Sydney.

The 2023 NGA factors were used to calculate scope 1 emissions. Appendix 1.

Fuel (Stationary)

GHSN confirmed they do not own or operate stationary equipment. Neither is it expected by Carbon Neutral that the venue requires to combust fuel in stationary equipment for the purpose of the event. Hence no emissions attribute to the carbon inventory from this source.

Fuel (Transport)

GHSN confirmed they do not have own and operated vehicles in the lead up to or during the event. Hence no emissions attribute to the carbon inventory from this source.

Refrigerant leaks

GHSN confirmed they do not operate equipment which require replenishment of refrigerant gasses.

A potential loss of refrigerants in equipment at the venue is non-quantified and has been deemed immaterial by Carbon Neutral due to being a five-day event and one of many activities at the main location; ICC Sydney where one would expect they operate equipment with potential to leak refrigerants.

Scope 2 Emissions

Scope 2 emissions are indirect GHG emissions associated with electricity use due to the event. The GHG indirect were estimated at **3.19 t CO₂-e**.

Table 3. Scope 2 event emissions summary.

Scope 2 emissions	Units	Emissions (t CO ₂ -e)	Percentage
ICC Sydney	4,691.37 kWh	3.19 t CO ₂ -e	100.00 %
Total scope 2 emissions		3.19 t CO₂-e	100.00%

Electricity

GHSN confirmed that all staff works from home (WFH), hence no scope 2 emissions are included on the carbon inventory from a fixed office location. Emissions associated with staff WFH are allocated as indirect emissions under scope 3.

ICC Sydney provided electricity usage allocated to the GHSB event. This data has been derived based on the event floor space, event floor space percentage of venue, number of event days, duration and attendee numbers by ICC Sydney. The usage takes into account renewable electricity purchased from the grid and generated on site.

The 2023 NGA factors were used to calculate scope 2 emissions. Appendix 2.

Scope 3 Emissions

The GHG protocol (GHG Protocol, Carbon Trust & WRI, 2013) identifies scope 3 emissions as upstream and downstream emissions, based on the financial transactions of the event.

- + **Upstream emissions** are indirect GHG emissions related to purchased or acquired goods and services.
- + **Downstream emissions** are indirect GHG emissions and would have related to sold goods and services during the event. These have been deemed non-applicable for the event.

The indirect emissions of all scope 3 categories were estimated at **4,055.37 t CO₂-e**.

The most significant contribution to scope 3 emissions in GHSN value chain came from attendee travel, purchased goods and services and attendee accommodation.

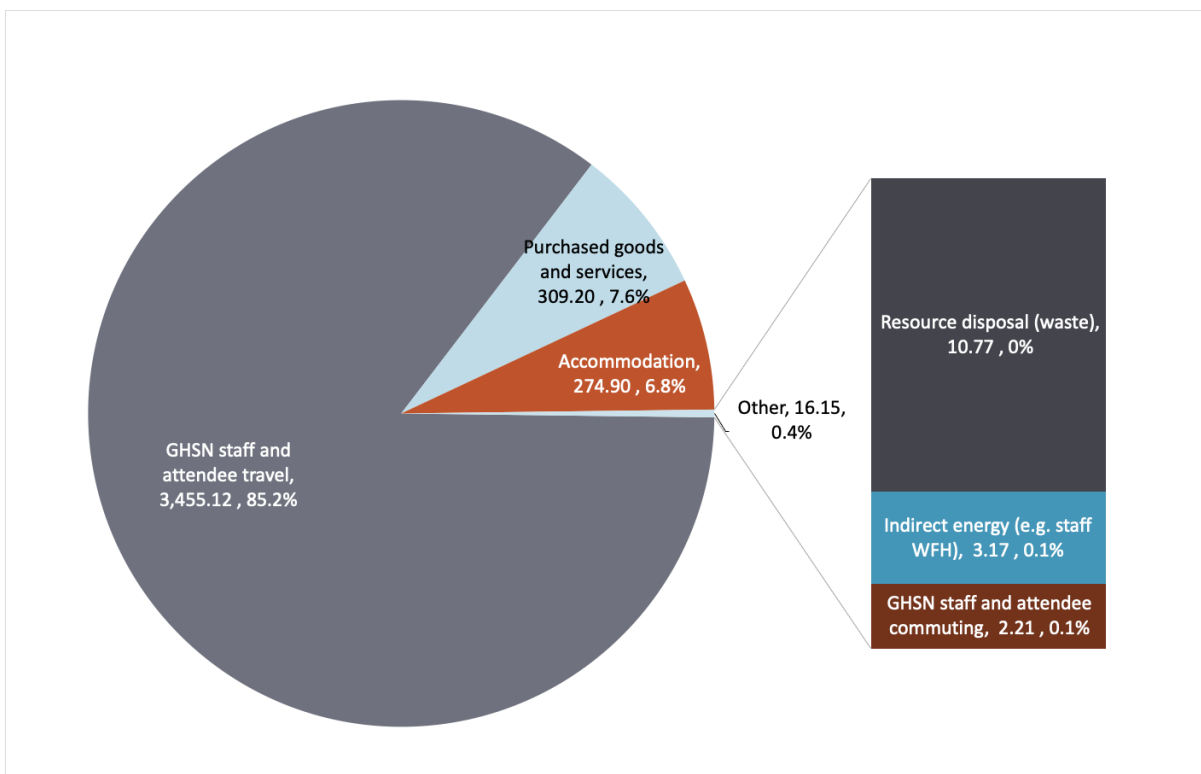


Figure 6. GHSN Scope 3 categories emissions (t CO₂-e).

Scope 3 Emissions Summary

Table 4. Scope 3 emissions.

Scope 3 GHG emissions		Emissions (t CO ₂ -e)	Percentage
1	Purchased goods and services	309.20 t CO ₂ -e	7.62 %
2	Accommodation	274.90 t CO ₂ -e	6.78 %
3	Indirect energy (e.g., staff WFH)	3.17 t CO ₂ -e	0.08 %
4	Freight	0.00 t CO ₂ -e	0.00 %
5	Resource disposal (waste)	10.77 t CO ₂ -e	0.27 %
6	GHSN staff and attendee travel	3,455.12 t CO ₂ -e	85.20 %
7	GHSN staff and attendee commuting	2.21 t CO ₂ -e	0.05 %
Total scope 3 emissions		4,055.37 t CO₂-e	100.00 %

Emissions Intensity

Emissions intensity expresses GHG impact per unit of physical activity or unit of economic output. Such metric(s) allow for a comparison of emissions between events.

The carbon intensity of an event's footprint can be calculated by dividing emissions by a relevant measure of activity.

Table 5 displays the emissions pre-event and post-event intensities of Global health Security Conference 2024 by attendee.

Table 5. Event emissions intensity (Attendees).

Event Emissions	Number of Event Attendees	GHG Emissions (t CO ₂ -e)	GHG Emissions Intensity (t CO ₂ -e / Event Attendees)
Global Health Security Conference 2024, pre-event	1,000	3,434.55	3.43
Global Health Security Conference 2024, post-event	1,237	4,059.47	3.28

Pre- and post-event comparison

GHSN's post-event carbon footprint increased 18.19% compared to its pre-event estimation. Please see Table 6 and Figure 7 below. The increase is largely due to the increase in attendees, and therefore air travel and accommodation.

Table 6. Emissions pre and post event comparison by emission activity¹

Activity	Pre-event (t CO ₂ -e)	Post-event (t CO ₂ -e)	Difference (%)
Natural gas	0.07 t CO ₂ -e	0.86 t CO ₂ -e	1128 %
Electricity	0.00 t CO ₂ -e	3.19 t CO ₂ -e	N/A
Purchased goods and services	387.35 t CO ₂ -e	309.20 t CO ₂ -e	- 20.18 %
Accommodation	227.86 t CO ₂ -e	274.90 t CO ₂ -e	20.64 %
Indirect energy	2.74 t CO ₂ -e	3.17 t CO ₂ -e	16.96 %
Resource disposal (waste)	8.92 t CO ₂ -e	10.77 t CO ₂ -e	20.74 %
GHSN staff and attendee travel	2,805.41 t CO ₂ -e	3,455.12 t CO ₂ -e	23.16 %
GHSN staff and attendee commute	2.20 t CO ₂ -e	2.21 t CO ₂ -e	0.45 %
Total	3,434.55 t CO₂-e	4,059.42 t CO₂-e	18.19 %

¹ Table columns may not sum due to rounding

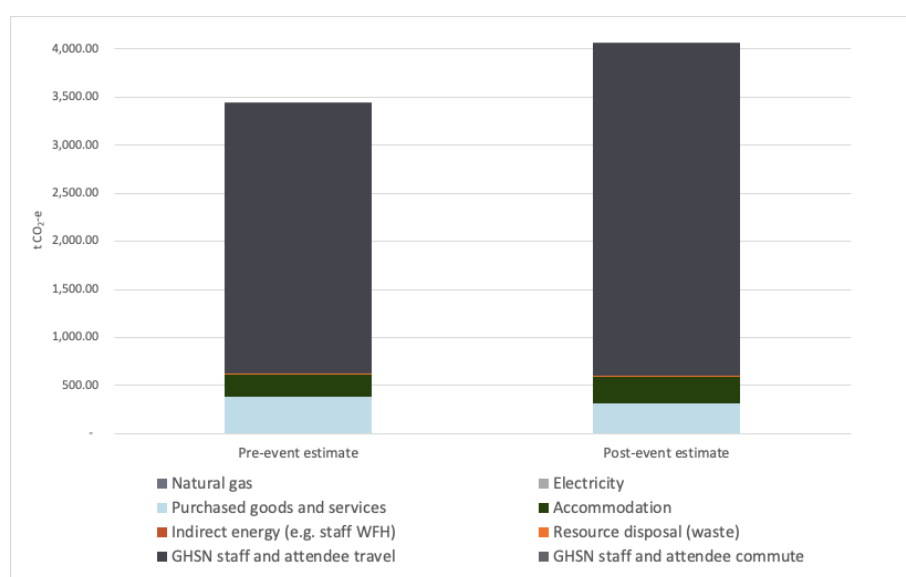


Figure 7. Comparison of pre- and post-event GHG emissions

Carbon Neutrality

Based on the pre-event report, GHSN purchased **3,435** carbon credits with the details of the carbon offset retirements shown in the following table.

Table 7: Pre-event carbon offset summary

Details	Serial Numbers	t CO ₂ -e
2024 Pre-event gross emissions		3,434.55
Offset credits		
Malawi (Balaka district) M'tetezi Improved Cook Stoves	GS1-1-MW-GS4539-16-2021-24889-41014-41073	60.00
Indonesia (Borneo) Rimba Raya - avoided deforestation	6979-362453100-362453159-VCU-016-MER-ID-14-674-01012014-30062014-1	60.00
Uganda Safe Water 'Gender Responsive' Lango Project	GS1-1-UG-GS6349-16-2021-24814-698-747	50.00
Congo, Mai Ndombe Project – avoided deforestation	5376-232735063-232738327-VCU-048-MER-CD-14-934-01012015-31122015-1	3265.00
Total Offsets		3,435.00
2024 event net emissions		- 0.45 (ZERO)

The **post-event report** has estimated the GHSN's gross event carbon footprint to be **4,059.47 t CO₂-e**. Having already purchased **3,435** carbon credits, **625** carbon credits were left to be purchased, to reconcile the GHSN carbon neutral claim for their event 2024.

GHSN has achieved carbon neutrality for the Global Health Security Conference 2024 by retiring 4,060 tonnes of carbon offsets, effectively cancelling its GHG emissions for the event. Details of the final carbon offset retirements are shown in the following table.

Table 8: Post-event carbon offset summary

Details	Serial Numbers	t CO ₂ -e
2024 Post-event gross emissions		4,059.47
Offset credits		
Pre-event offsets purchased		3,435.00
Congo, Mai Ndombe Project – avoided deforestation	5376-232739173-232739797-VCU-048-MER-CD-14-934-01012015-31122015-1	625.00
Total Offsets		4,060.00
2024 event net emissions		- 0.53 (ZERO)