



FIVE GLOBAL HOLDINGS

# FIVE: GREEN HOUSE GAS EMISSION REPORT - 2021

# GHG Inventory Report

Prepared in accordance with ISO 14064-1 & Greenhouse Gas Protocol: A  
Corporate Accounting and Reporting Standard

**Inventory Scope:** FIVE Holdings Limited  
**Reporting Period:** 1 January 2021 to 31 December 2021  
**Verification Status:** Verified by Ernst and Young LLP(EY)  
**GHG Verification Statement Number:**  
**Level of assurance:** Reasonable

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**Designation:** Director of Sustainability

**Date:** 24.03.2023

**Review & Approved by:** Hitanshu Trivedi

**Designation:** Senior BI Engineer

**Date:** 24.03.2023

## **DISCLAIMER:**

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This work shall not be used for the purpose of obtaining emissions units, allowances, or carbon credits from two or more different sources in relation to the same emissions reductions, or for the purpose of offering for sale carbon credits which have been previously sold. The consolidation approach chosen for the greenhouse gas inventory should not be used to make decisions related to the application of employment or taxation law.

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# 1. Greenhouse Gas Emissions Inventory Summary

Table 1: GHG emissions data summary

Consolidated Carbon Use Intensity (MtCO<sub>2</sub>e/AED in Mn) for Scope 1 and Scope 2 for 2021 from baseline of 2020

Region	Carbon Use Intensity	UoM	2020	2021
Dubai	Scope 1	MtCO <sub>2</sub> e/AED in Mn	5.70	3.99
	Scope 2	MtCO <sub>2</sub> e/AED in Mn	37.70	21.95
	<b>Total</b>	<b>MtCO<sub>2</sub>e/AED in Mn</b>	<b>43.40</b>	<b>25.94</b>

Dubai Scope 1 and Scope 2 Emission Inventory for 2021 from Baseline of 2020

Dubai			
Category	UoM	2020	2021
Electricity	KWh	26,209,541	25,935,164
Electricity	KgCO <sub>2</sub> e	10,483,816	10,374,066
Chilled Water	TRH	16,667,956	17,005,512
Chilled Water	KgCO <sub>2</sub> e	6,133,808	6,258,028
Gas (SNG)	M <sup>3</sup>	475,515	527,100
Gas (SNG)	KgCO <sub>2</sub> e	1,978,414	2,152,677
Water	ImpG	90,093,891	86,435,716
Potable/Packaged Water	Litres	822,294	2,258,325
Total Water	Litres	410,397,232	395,202,867
Refrigerant R290	Kg	7	-
	KgCO <sub>2</sub> e	20	-
Refrigerant R 410A	Kg	22	67
	KgCO <sub>2</sub> e	45,518	139,896
Refrigerant R 600A	Kg	7	-
	KgCO <sub>2</sub> e	20	-
Refrigerant R22	Kg	41	54
	KgCO <sub>2</sub> e	73,848	98,464
Refrigerant R 134A	Kg	22	22
	KgCO <sub>2</sub> e	31,174	31,174
Refrigerant R 452A	Kg	-	10
	KgCO <sub>2</sub> e	-	-
Refrigerant Ri41B	Kg	-	14
	KgCO <sub>2</sub> e	-	9,860
Refrigerant R 404A	Kg	55	109
	KgCO <sub>2</sub> e	213,749	426,714
Refrigerant R 407C	Kg	-	-
	KgCO <sub>2</sub> e	-	-
Refrigerant R 32	Kg	-	-
	KgCO <sub>2</sub> e	-	-
Diesel	Liters	51,605	60,933
	KgCO <sub>2</sub> e	138,707	164,856
Petrol	Liters	3,591	3,932
	KgCO <sub>2</sub> e	8,313	9,199
DG Set	Litres	1,027	1,027
	KgCO <sub>2</sub> e	2,761	2,779
Recyclable Waste	kg	40,307	83,950
Cooking Oil Waste	Kg	25,252	37,529
General Waste	kg	4,344,080	6,367,070
TOTAL CARBON EMISSION	KgCO <sub>2</sub> e	19,110,147	19,689,113
	MtCO <sub>2</sub> e	19,110	19,689
Revenue	Aed	440,161,027	757,679,997
Covers	Count	855,984	1,194,271
<b>Carbon Use Intensity</b>	<b>MtCO<sub>2</sub>e/ Aed Mn</b>	<b>43.4</b>	<b>26.0</b>
<b>Energy Intensity</b>	<b>KWh/Aed Mn</b>	<b>59,545</b>	<b>34,230</b>
<b>Energy Consumed per capita</b>	<b>KWh/Cover</b>	<b>31</b>	<b>22</b>
<b>Water Consumed per capita</b>	<b>Liters/Cover</b>	<b>479</b>	<b>331</b>
<b>Waste generated per capita</b>	<b>Kg/Cover</b>	<b>5</b>	<b>5</b>

\*final figures are rounded to the nearest integer

Table 2: GHG emissions inventory summary by scope and greenhouse gas

Region	Scope	emission_name	2020			2021		
			CO2	CH4	N2O	CO2	CH4	N2O
Five JVC	Scope 1	Backup Generator (Diesel)	2,327	0	31	2,340	0	33
		Cooking (LPG)	0	0	0	0	0	0
		Refrigeration (R134A)	0	0	0	0	0	0
		Refrigeration (R404A)	85,656	0	0	85,656	0	0
		Refrigeration (R410A)	0	0	0	0	0	0
	Scope 2	District Energy (Dubai)	0	0	0	0	0	0
		Grid Electricity (Dubai)	0	0	0	0	0	
Five Palm	Scope 1	Backup Generator (Diesel)	398	0	5	320	0	4
		Cooking (SNG)	0	0	0	0	0	0
		Mobile (Diesel)	136,878	13	1,816	162,573	16	2,267
		Mobile (Petrol)	8,266	24	22	9,144	29	26
		Refrigeration (R134A)	0	0	0	0	0	0
		Refrigeration (R141B)	0	0	0	9,831	0	0
		Refrigeration (R22)	0	0	0	0	0	0
		Refrigeration (R290)	20	0	0	0	0	0
		Refrigeration (R32)	0	0	0	0	0	0
		Refrigeration (R404A)	128,249	0	0	341,214	0	0
		Refrigeration (R407C)	0	0	0	0	0	0
		Refrigeration (R410A)	0	0	0	0	0	0
		Refrigeration (R452A)	0	0	0	21,400	0	0
		Refrigeration (R600A)	127	0	0	0	0	0
	Scope 2	District Energy (Dubai)	0	0	0	0	0	0
			Grid Electricity (Dubai)	0	0	0	0	0

Table3: Deforestation of two hectares or more

Source	Mass	tCO2-e
No Activity	Not applicable	Not applicable

FIVE is not engaged in any operations contributing to deforestation and hence is marked as not applicable.

Table3: GHG stock liability (See table 7 for mass of individual gases)

Source	Mass	tCO2-e
No Activity	Not applicable	Not applicable

FIVE does include in its operations any emission source emitting PFCs or SF<sub>6</sub>.

Table4: Renewable electricity generation & use

Renewable generation on site	kWh generated	tCO2-e avoided
Generated from Solar panels installed	N.A	N.A

Table 5: Purchased emission reduction

Types of emission reductions purchased	Amount	tCO2-e
Certified green electricity	N.A	N.A

## 2. [Introduction](#)

The following document provides the FIVE Holdings full greenhouse gas (GHG) emissions inventory for the 2021 calendar year.

The inventory is a complete and accurate quantification of the amount of GHG emissions that can be directly attributed to the organization's operations within the declared boundary and scope for the specified reporting period. The inventory has been prepared in accordance with the measure-step certification requirements of the Program, which is based on the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised edition) developed by the World Resources Institute and the World Business Council for Sustainable Development (2004), and ISO 14064-1:2018 Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals. Where relevant, the inventory is aligned with industry or sector best practice for emissions measurement and reporting.

## 3. [Statement of intent](#)

Company's intent here is to demonstrate best practice with respect to consistency, comparability, and completeness in the accounting of greenhouse gas emissions

This report

- Relates to emissions for the FIVE Holdings Limited.
- Has been prepared in accordance with the requirements of the ISO 14064-1:2018 standard & GHG protocol.
- Reflects our commitment to better understanding and ultimately improving our operational performance with respect to emissions.
- Excludes specific targets

## 4. [Description of FIVE Holdings Limited](#)

FIVE Holdings Limited ("FIVE") is an international hospitality business developing and operating iconic luxury hotels uniquely underpinned by high-energy entertainment-driven experiences. Within its current portfolio, FIVE owns, operates and manages food and beverage focused luxury hotels, with 2 assets located in Dubai at the time. Balancing premier entertainment and leisure platforms with LEED Platinum and Three Star SPIRE rated development and operations, FIVE follows a distinct approach to pursuing sustainable indulgence.

For further information see [www.fivehotelsandresorts.com](http://www.fivehotelsandresorts.com)

FIVE Holdings acknowledges the reality of climate change and that our business operations inherently impact the environment and contribute to the broader climate

crisis. FIVE therefore has committed to making sustainability central to its business strategy which includes a commitment to GHG emission reduction through the improvement of FIVE’s operations and supply chain.

FIVE understands that for companies to play a part in mitigating climate change, business continuity management must align with environmental impact reduction. FIVE has made environmental management an integral part of the management system of the Company (EMS). FIVE Holdings manages monitors and improves its environmental performance through the implementation of a formal environmental management system certified to the internationally recognised ISO 14001:2015 standards.

FIVE is committed to operating in an energy-efficient environment and considers the management of its CO2 emissions to be a principal component of its environmental and sustainability objectives. It is our aim to exploit all opportunities for energy savings throughout the business, in order to establish ourselves as an environmentally responsible organisation as well as a contributor to national and international carbon reduction targets.

By enabling an energy-aware culture amongst the company, we aim to align our environmental and financial priorities throughout our operations and be able to demonstrate regulatory compliance to existing and future legislation.

## 5. Organisational boundaries included for this reporting period

Organisational boundaries were set with reference to the methodology described in the GHG Protocol and ISO 14064-1:2018 standards. The GHG Protocol allows two distinct approaches to be used to consolidate GHG emissions: the equity share and control (financial or operational) approaches. The Programme specifies that the operational control consolidation approach should be used unless otherwise agreed with the Programme.

An operational control consolidation approach was used to account for emissions.

### List of Organization-Wide Facilities Included in this Inventory:

- FIVE Palm Jumeirah Hotel, Dubai, UAE – 100% Operational control
- FIVE Jumeirah Village Hotel, Dubai, UAE – 100% Operational control

Organization Name	Address	Purpose
FIVE Holdings Limited	FIVE Palm Jumeirah 13 <sup>th</sup> Floor Dubai, UAE 00000	FIVE Holdings develops and operates entertainment-driven luxury hotels around the world. The company engages primarily within real estate and hospitality activities and is headquartered in Dubai, UAE.  Employee count: 1574  Contact Person: David Shepley (+971 58 880 0425)

## 6. GHG emissions source inclusions

The GHG emissions sources included in this inventory are those required for the programme were identified with reference to the methodology described in the GHG Protocol and ISO 14064-1 standards. Identification of emissions sources was achieved through the solicited technical expertise of ESG Enterprise and personal communications with FIVE Holdings staff and cross-checked against operational expenditure records for the reporting period. These records were viewed in order to see what activities may be associated with emissions from all of the operations.

As adapted from the GHG Protocol, these emissions were classified into the following categories:

**Direct GHG emissions (Scope 1):** GHG emissions from sources that are owned or controlled by the company.

**Indirect GHG emissions (Scope 2):** GHG emissions from the generation of purchased electricity, heat and steam consumed by the company.

After liaison with the organisation, the emissions sources in Table 6 have been identified and included in the GHG emissions inventory.

## 7. Roles & Responsibilities

Point of Contact	Responsibility
David Shepley Director of Sustainability <a href="mailto:d.shepley@fiveglobalholdings.com">d.shepley@fiveglobalholdings.com</a>	<ul style="list-style-type: none"><li>• Coordinates submission of GHG inventory</li><li>• GHG Inventory Review and approval</li><li>• GHG Inventory compilation</li><li>• GHG Inventory Management plan</li></ul>
Hitanshu Trivedi Senior BI Engineer <a href="mailto:hitanshu@fiveglobalholdings.com">hitanshu@fiveglobalholdings.com</a>	



## Summary of Emissions Source Inclusions

Table 6 : GHG emission sources included in the inventory

Emission Scopes	Assets	Emission Category	Emission Sources	Data Source & Uncertainty	Data Collection unit
Scope 1	FIVE Palm	Stationary Combustions	Total Fuel Consumed for steam/water heating + cooking and catering	Lootah gas invoices obtained from Accounts	m <sup>3</sup>
			Total Fuel Consumed for power backup (DG sets)	Estimation of consumption based on difference in diesel gauge divided by time period	Liters
		Fugitive Emissions	Refrigerants top up in AC	Based on annual LPO obtained from stores	Kg per cylinder
		Mobile Combustion	Transport Owned by FIVE Palm (Cars, Buses)	Monthly invoices received from ADNOC	Liters
	FIVE JVC	Stationary Combustions	Total Fuel Consumed for steam/water heating + cooking and catering	Lootah gas invoices obtained from Accounts	m <sup>3</sup>
			Total Fuel Consumed for power backup (DG sets)	Estimation of consumption based on difference in diesel gauge divided by time period	Liters
		Fugitive Emissions	Refrigerants top up in AC	Based on annual LPO obtained from stores	Kg per cylinder
Scope 2	FIVE Palm	Purchased Electricity	Purchased electricity consumed in lighting, ventilation, cooking, heating, other plug in consumption	DEWA monthly invoices obtained from Accounts	kWh
		Purchased Chilled Water	Purchased chilled water consumed to cool asset's air and equipment	Empower monthly invoices obtained from Accounts	RTh
	FIVE JVC	Purchased Electricity	Purchased electricity consumed in lighting, ventilation, cooking, heating, other plug in consumption	DEWA monthly invoices obtained from Accounts	kWh
		Purchased Chilled Water	Purchased chilled water consumed to cool asset's air and equipment	Empower monthly invoices obtained from Accounts	RTh

### **Other emissions – PFCs and SF6**

No operations use perfluorocarbons (PFCs), Nitrogen Trifluoride (N3) nor sulphur hexafluoride (SF6), therefore no holdings of these are reported and no emissions from these sources are included in this inventory.

### **Other emissions – biomass**

No biomass is combusted in the operations and therefore no emissions from the combustion of biomass are included in this inventory.

### **Other emissions – deforestation**

No deforestation has been undertaken by the organisation on land it owns and that is included in this inventory. Therefore no emissions from deforestation are included in this inventory.

### **Pre verified data**

No pre-verified data is included within the inventory.

## **8. GHG emissions source exclusions**

FIVE has excluded all Scope 3 Emissions from its GHG Emissions Inventory. FIVE has set a target to begin defining and reporting limited Scope 3 Emissions by 2025.

Table 7: GHG emission source excluded from the inventory

Scope	Emission source	Data Source	Data collection Unit	Methodology & Materiality
3	All Scope 3 Emissions	-	-	-

## **9. Data collection and uncertainties**

Table 6 provides an overview of how data were collected for each GHG emissions source, the source of the data and an explanation of any uncertainties or assumptions made. Estimated numerical uncertainties are reported with the emissions calculations and results.

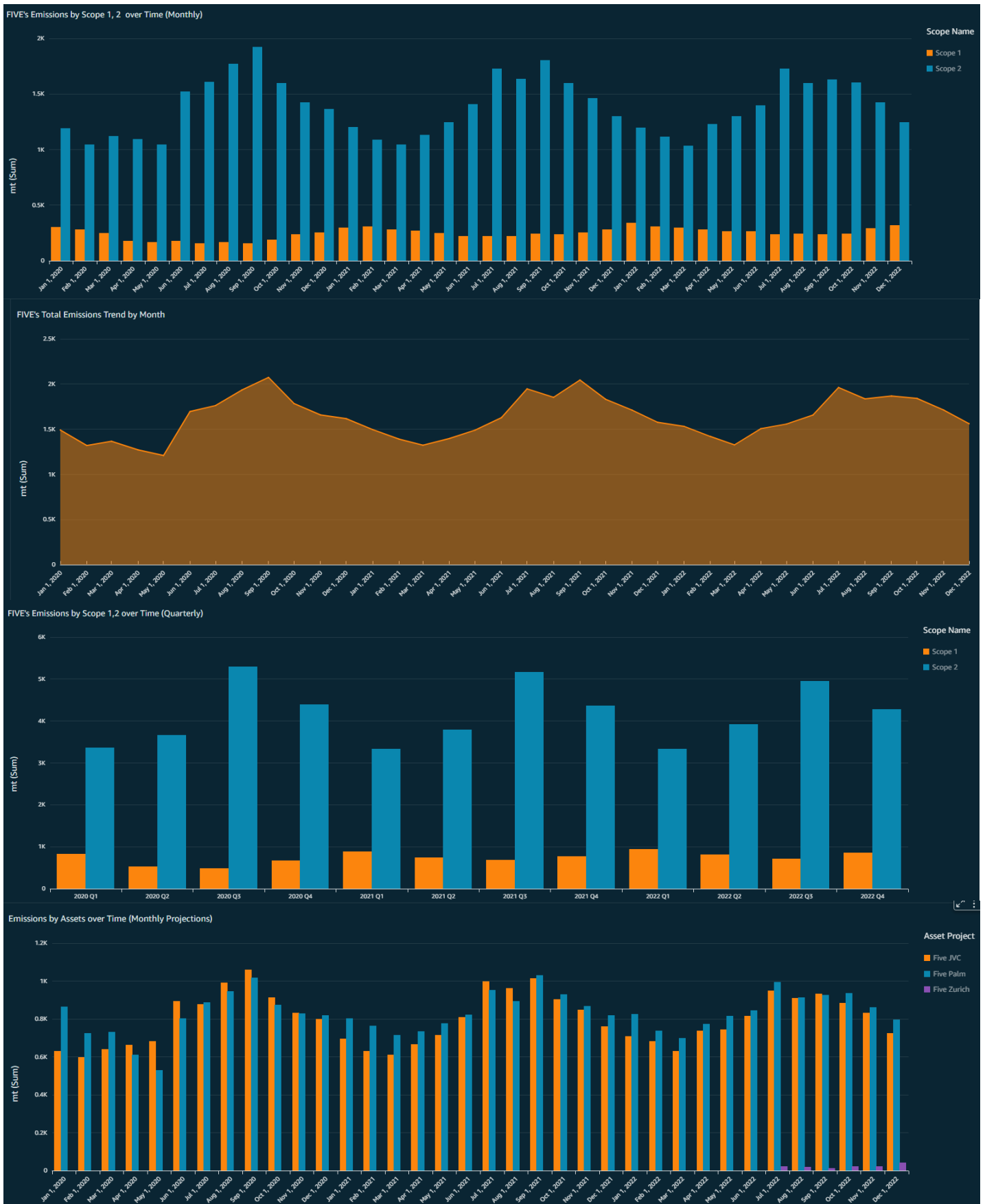
All data was calculated using excel sheets and GHG emissions factors as published by the Department for the Environment, Food and Rural Affairs (DEFRA) UK, UAE GHG Inventory report, DEWA sustainability reports

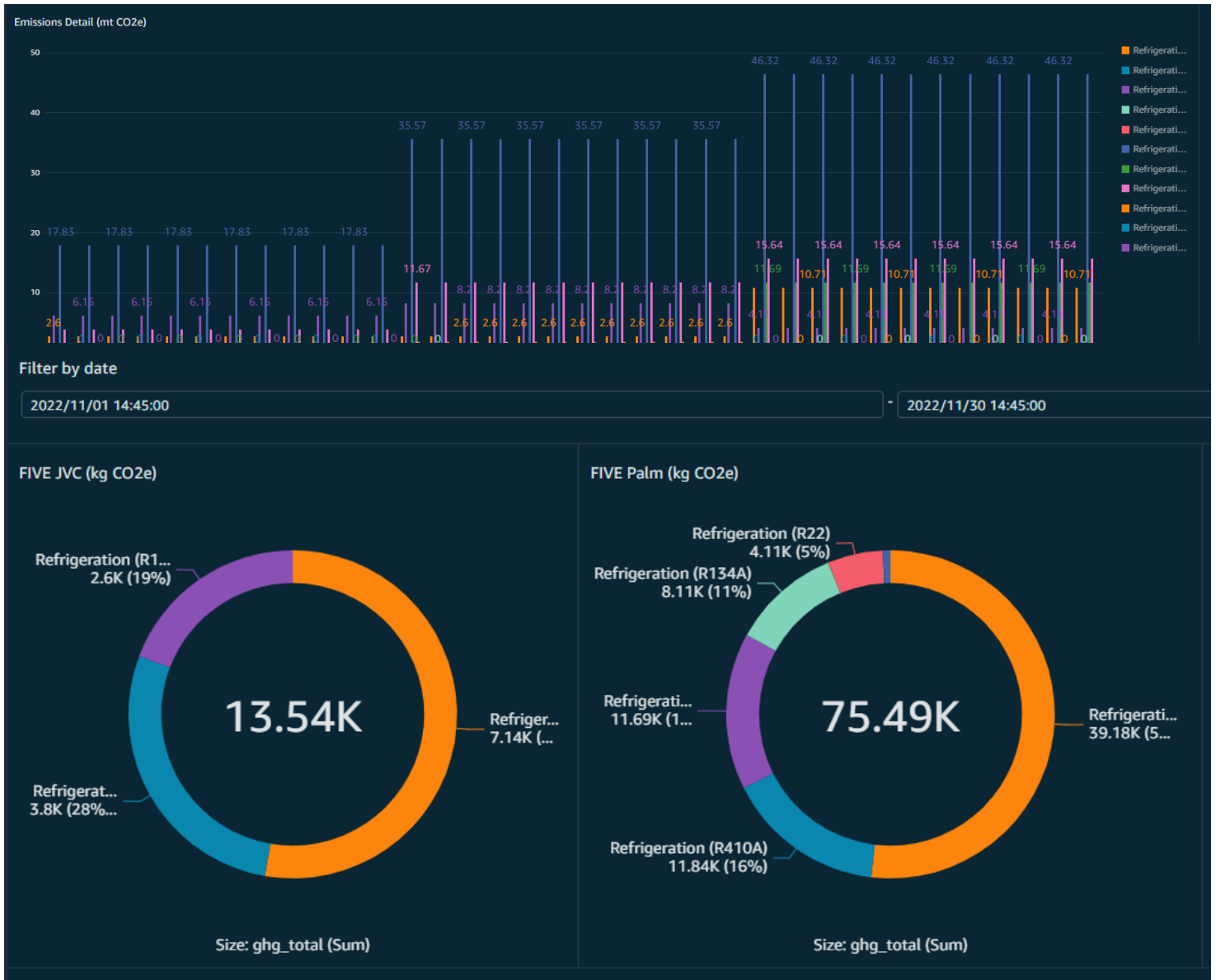
A calculation methodology has been used for quantifying the GHG emissions inventory using emissions source activity data multiplied by GHG emissions or removal factors.

The base year of this inventory is 01 January 2020 to 31<sup>st</sup> December 2020

## 10. GHG emissions calculations and results

GHG emissions for the organisation for this measurement period are provided in Table 1 where they are stated by greenhouse gas, by scope, source and as total emissions





## 11. Liabilities

### Liabilities – GHG stocks held

PFCs and SF6 represent GHGs with high global warming potentials. Their accidental release could result in a large increase in emissions for that year, and therefore the stock holdings are reported under the Program

Table 8: GHG Stocks Held

Business Unit	Sources	Units	Amt. held at start of 2021	Amt. held at end of 2021	Potential liability – tCO2e
No Activity recorded	N.A	N.A	N.A	N.A	N.A

## 12. Purchased reductions

Purchased reductions could include certified ‘green’ electricity, verified offsets or other carbon- neutral-certified services. Organisations may choose to voluntarily purchase carbon credits (or offsets) or green electricity that meets the eligibility criteria set by a regulatory authority. Renewable generators may gain ROCs, but if these are claimed, the carbon reduction cannot also be claimed.

There are no purchased reductions or emissions removals to declare in this reporting

period.

### 13. [Double counting / double offsetting](#)

Double counting refers to situations where:

- Parts of the organisation have been prior offset.
- Emissions have been included and potentially offset in the GHG emissions inventories of two different organisations, e.g. a company and one of its suppliers/contractors. This is particularly relevant to indirect (Scope 2 and 3) emissions.
- The organisation generates renewable electricity, uses or exports the electricity and claims the carbon benefits. Also, double counting may occur where ROCs are claimed and the organisation still tries to claim the carbon reduction benefits.
- Emissions reductions are counted as removals in an organisation's GHG emissions inventory and are counted or used as offsets/carbon credits by another organisation.

Double counting / double offsetting has not been included in this inventory

### 14. [References](#)

- International Standards Organisation, ISO 14064-1:2018. Greenhouse gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas GHG emissions and removals. ISO: Geneva, Switzerland.
- World Resources Institute and World Business Council for Sustainable Development, 2004 (revised). The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. WBCSD: Geneva, Switzerland.

### 15. [Appendix 1: GHG emissions data summary](#)

See FIVE GHG inventory spreadsheet for detailed emission data

### 16. [Appendix 2: GHG Assurance Statement](#)

FIVE has received limited ESG assurance from Ernst and Young Associates LLP on all its ESG KPIs. The assurance assessment was conducted in accordance with the GRI Criteria. FIVE acknowledges the results of the assessment and is committed to continuously improving its ESG performance. This Assurance covers the Scope 1 and Scope 2 GHG emission inventories as presented in this report.



EY ESG Assurance  
2021