



Greenhouse Gas Verification Opinion Number UK.PRS.VOL.INV.0730.2021

The inventory of Greenhouse Gas emissions in the period
January 1st, 2021 – December 31st, 2021, for:

William Hare UAE LLC

M45, Mussafah Ind Area,
P.O. Box 9838
Abu Dhabi

has been verified in accordance with ISO 14064-3:2006
as meeting the requirements of
:

ISO 14064-1:2018

To represent a total amount of:

5,448 tCO₂e

For the following activities:

Steel Fabrication & Supply

Lead Assessor: Abdullah Buhidma
Technical Reviewer: Peter Simmonds

Authorised by:

Pamela Chadwick
Business Manager
SGS United Kingdom Ltd

Verification Statement Date 21st December 2022

This Statement is not valid without the full verification scope, objectives, criteria and conclusion available
on pages 2 to 4 of this Statement.



Schedule Accompanying Greenhouse Gas Verification Opinion Number UK.PRS.VOL.INV.0730.2021

Brief Description of Verification Process

SGS has been contracted by William Hare UAE LLC (William Hare) for the verification of direct and indirect carbon dioxide (CO₂) equivalent emissions as provided in their GHG statement in the form of a Greenhouse Gas Emissions Report covering CO₂ equivalent emissions.

Roles and responsibilities

The management of William Hare is responsible for the organization's GHG information system, the development and maintenance of records and reporting procedures in accordance with that system, including the calculation and determination of GHG emissions information and the reported GHG emissions.

It is SGS' responsibility to express an independent GHG verification opinion on the emissions as provided in the William Hare's GHG statement for the period January 1st, 2021, to December 31st, 2021.

SGS conducted a third-party verification following the requirements of ISO 14064-3:2006 of the provided CO₂ equivalent statement in the period November 2022-December 2022.

The assessment included a desk review and online meetings. The verification was based on the verification scope, objectives and criteria as agreed between William Hare and SGS on September 20th, 2022.

Level of Assurance

The level of assurance agreed is a reasonable level of assurance.

Scope

William Hare has commissioned an independent verification by SGS of reported CO₂ equivalent emissions arising from their activities, to establish conformance with the requirements of ISO 14064-1:2018 within the scope of the verification as outlined below. Data and information supporting the CO₂ equivalent statement were historical in nature and proven by evidence.

This engagement covers verification of emissions from anthropogenic sources of greenhouse gases included within the organization's boundary and meets the requirements of ISO 14064-1:2018.

- The organizational boundary was established following the operational control approach.
- Title or description of activities: Steel Fabrication & supply.
- Location/boundary of the activities: UAE, with the exception of scope 3 categories of downstream transportation and business travel.
- Physical infrastructure, activities, technologies and processes of the organization: Manufacturing facilities and stockyards
- GHG sources, sinks and/or reservoirs included:
Scope 1 – Stationary Combustion & Mobile Combustion
Scope 2 – Purchased Electricity



Scope 3 : Purchase of raw materials (paper), upstream transportation of raw materials by road, product transportation by road and sea, business travel (air), electricity transmission & distribution losses, water consumption, water treatment and treatment of waste generated during operations.

- Types of GHGs included: CO₂, N₂O, and CH₄
- Directed actions: none
- GHG information for the following period was verified: January 1st, 2021 – December 31st, 2021.
- Intended user of the Verification Opinion: internal, customers, general public.

Objective

The purposes of this verification exercise are, by review of objective evidence, to independently review:

- Whether the CO₂ equivalent emissions are as declared by the organization's CO₂ equivalent assertion
- That the data reported are accurate, complete, consistent, transparent and free of material error or omission.

Criteria

Criteria against which the verification assessment is undertaken are the requirements of ISO 14064-1:2018.

Materiality

The materiality required of the verification was considered by SGS to be below 5%, based on the needs of the intended user of the GHG statement

Conclusion

William Hare provided their GHG statement based on the requirements of ISO 14064-1:2018.

The GHG information for the period January 1st, 2021 – December 31st, 2021, disclosing gross emissions of 5,448 metric tonnes of CO₂ equivalent are verified by SGS to a reasonable level of assurance, consistent with the agreed verification scope, objectives and criteria.

Emissions per Scope are as follows:

Scope 1 : 1,893.6 tCO₂e.

Scope 2: 1,656.2 tCO₂e.

Scope 3:

Purchased Goods and Services (paper): 10.2 tCO₂e

Electricity transmission & distribution losses: : 379.8 tCO₂e

Upstream Transportation & Distribution: 788.4 tCO₂e

Waste Generated in Operations: 32.1 tCO₂e

Treatment of wastewater: 4.4 tCO₂e

Water consumption: 2.4 tCO₂e

Business Travel: 372.3 tCO₂e

Downstream Transportation and Distribution: 308.6 tCO₂e

SGS' approach is risk-based, drawing on an understanding of the risks associated with modeling GHG emission information and the controls in place to mitigate these risks. Our examination included assessment, on a sample basis, of evidence relevant to the voluntary reporting of emission information.



SGS concludes that the presented CO₂e equivalent assertion is materially correct and is a fair representation of the equivalent data and information and is prepared following the requirements of ISO 14064-1:2018. A list of Forward Action Requests are addressed by SGS to William Hare UAE LLC to enhance the GHG accounting and reporting process for the next reporting year.

We planned and performed our work to obtain the information, explanations and evidence that we considered necessary to provide a reasonable level of assurance that the CO₂ equivalent emissions for the period January 1st, 2021 – December 31st, 2021, are fairly stated.

This statement shall be interpreted with the CO₂ equivalent assertion of William Hare UAE LLC as a whole.

Note: This Opinion is issued, on behalf of Client, by SGS United Kingdom Ltd, Rossmore Business Park, Inward Way, Ellesmere Port, Cheshire, CH65 3EN ("SGS") under its General Conditions for GHG Validation and Verification Services. The findings recorded hereon are based upon an audit performed by SGS. This Opinion does not relieve Client from compliance with any bylaws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on SGS and SGS shall have no responsibility vis-à-vis parties other than its Client.



WILLIAM HARE UAE LLC

**ENVIRONMENT, HEALTH AND SAFETY
DEPARTMENT**

GHG Inventory Report

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

Inventory Scope: William Hare UAE LLC

Reporting Period: 1 January 2021 to 31 December 2021

Verification Status: Verified by SGS UK Limited

GHG Verification Statement Number: UK.PRS.VOL.INV.0730.2021

Level of assurance: Reasonable

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Prepared by:

Name: Jomish John

Designation: Senior Advisor, Environment Health and Safety

Signature:



Date: 02.12.2022

Review & Approved by:

Name: Jude Medard

Designation: Director , Environment Health and Safety

Signature:



Date: 03.12.2022

DISCLAIMER:

Every effort has been made to ensure that the report is accurate. William Hare UAE will not be liable in contract, tort, and equity or otherwise, for any reliance placed upon this report by any third party.

No part of this work covered by copyright may be reproduced or copied in any form or by any means (graphic, electronic or mechanical, including photocopying, recording, taping, information retrieval systems, or otherwise) without the written permission of the copyright holder.

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

William Hare UAE LLC- GHG Inventory (From 01.01.2021 to 31.12.2021)	
Scope & Emission Source	tCO ₂ -e
Scope 1 Fuel Gas	93.79
Scope 1 Fuel-Diesel	1451.32
Scope 1 Other Fuel-Petrol	348.56
Scope 2 Purchased energy-Electricity	1656.19
Scope 3 Electricity T & D losses	379.86
Scope 3 Water Consumption	2.40
Scope 3 Treatment of Waste Water	4.38
Scope 3 Purchased Paper	10.21
Scope 3 Waste Generated(General & Food Waste)	32.10
Scope 3 Employee Business Travel- Economy Class	367.90
Scope 3 Employee Business Travel- Business Class	4.35
Scope 3 Freight transport-Road (Raw Steel Upstream)	788.37
Scope 3 Freight transport-Road	264.98
Scope 3 Freight transport-Sea	43.69
Certified green electricity	0.00
Purchased emission reductions	0.00
Total GHG Inventory Emissions	

*final figures are rounded to the nearest integer

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

GHG Emission Inventory Summary by scope & Greenhouse gas						
Component Gas	Scope 1	Scope 2	Scope 3	Total	Removals	After Removals
CO ₂	1871354.26	1656189.98	1881337.40	5408881.63	0	5408881.63
CH ₄	1302.29	0	168.36	1470.65	0	1470.65
N ₂ O	21012.48	0	16728.08	37740.56	0	37740.56
HFCs	0	0	0	0.00	0	0.00
PFCs	0	0	0	0.00	0	0.00
SF ₆	0	0	0	0.00	0	0.00
Total	1893.669024	1656.189977	1898.233832	5448.09	0	5448.09

*final figures are rounded to the nearest integer

Table 3: Mobile and stationary combustion of biomass

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Biomass	Mass	tCO ₂ -e
No Activity	n/a	n/a

Table3: Deforestation of two hectares or more

Source	Mass	tCO ₂ -e
No Activity	n/a	n/a

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

Source	Mass	tCO ₂ -e
No Activity	n/a	n/a

Table4: Renewable electricity generation & use

Renewable generation on site	kWh generated	tCO ₂ -e avoided
No Activity	n/a	n/a

Table 5: Purchased emission reduction

Types of emission reductions purchased	Amount	tCO ₂ -e
Certified green electricity (tCO ₂ -e)	n/a	n/a
Purchased emission reductions (tCO ₂ -e)	n/a	n/a
Total	n/a	n/a

2. Introduction

The following document provides the William Hare UAE full greenhouse gas (GHG) emissions inventory for the 2019 calendar year.

The inventory is a complete and accurate quantification of the amount of GHG emissions that can be directly attributed to the organisation'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 Programme, 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 William Hare UAE LLC.
- Has been prepared in accordance with the requirements of the ISO 14064-1 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 William Hare UAE LLC

William Hare UAE L.L.C is a wholly owned subsidiary of the William Hare Group UK. Our parent Company was first incorporated in the UK in 1945 and we are proud to share their long history of world class. William Hare UAE is a private limited company, employing around 750 people in our Mussafah facility. In addition to this, the company has a fluctuating number of personnel doth direct and sub-contract basis employed on various projects throughout the UAE.

The company's' core business is the design, fabrication and erection of structural steel in sectors such as Petrochemical, Oil and gas, Pharmaceutical, Airport and rail infrastructure, commercial, Leisure, Retail, etc.

For further information see www.hare.com

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WH UAE recognises that its operations may have a direct impact on the environment and has made environmental management an integral part of the management system of the Company (EHSMS). WH UAE manages monitors and improves its environmental performance through actively offering leadership and implementation of a formal environmental management system certified to the internationally recognised ISO 14001 standards.

WH UAE 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 carbon reduction targets.

By enabling an energy-aware culture amongst the company, we aim to balance 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 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:

- William Hare UAE LLC- Steel Fabrication Facility, Abu Dhabi, UAE
- William Hare UAE Al Markaz Steel Stockyard, Abu Dhabi, UAE
- William Hare UAE UAQ Steel Stockyard, Umm Al Quwain, UAE
-

Organization Name	Address	Purpose
William Hare UAE LLC	M45, Mussafah Industrial Area PO Box 9838 Plot No 3A Abu Dhabi	WH UAE carry out design, fabrication and erection of structural steel in sectors such as Petrochemical, Oil and gas, Pharmaceutical, Airport and commercial, Leisure, Retail, etc The major departments are Fabrication, EHS, Quality, Treatment etc. Employee count : 750 Contact Person: Jude Medard (050-106-8507)

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6. GHG emissions source inclusions

The GHG emissions sources included in this inventory are those required for programme were identified with reference to the methodology described in the GHG Protocol and ISO 14064-1 standards. Identification of emissions sources was achieved via personal communications with William Hare UAE 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.

Indirect GHG emissions (Scope 3): GHG emissions required by the programme that occur as a consequence of the activities of the company but occur from sources not owned or controlled by the company. Inclusion of other Scope 3 emissions sources is done on a case-by-case basis.

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
Jude Medard EH Director Jude.medard@hare.com	Coordinates submission of GHG inventory GHG Inventory Review and approval
Jomish John Senior Environmental Advisor Jomish.John@hare.com	GHG Inventory compilation GHG Inventory Management plan

Summary of Emissions Source Inclusions

Table 6 : GHG emission sources included in the inventory

GHG Scope	GHG Emission Type	Emission source	Data collection Unit	Data Source & Uncertainty
Scope 1	Stationary Combustion	Fuel Gas used for cutting and heating	Litres	Consumption records obtained from Stores-LPOs & Invoices obtained from Accounts
Scope 1	Mobile combustion	Diesel used by company Buses, Trailers, FLT's, Air compressors, Generators	Litres	Records of the purchase invoices and LPOs Data collected from accounts
Scope 1	Mobile combustion	Petrol used by company owned and leased cars	Litres	Records of the purchase bills and consolidated data- Obtained from Accounts
Scope 2	Electricity	Electricity consumed in WH UAE Mussafah	KWH	Accurate data from the ADDC bills
Scope 3	Air Travel	Business Travel- Flights	pKm	All travels are procured through purchasing department -Employee flight booking database
Scope 3	Paper	Paper consumed (Cost of Paper)	USD	Records obtained from purchase and calculated by Quantis Scope 3 Evaluator
Scope 3	Water	Water consumption & Treatment of Waste water	cbm	ADDC bills, Supplier Water delivery notes , LPOs
Scope 3	Road freight	Transportation of incoming raw materials	tKm	Estimation on total loads carried by sub contract hauliers
Scope 3	Road freight	Material Transportation by road – Finished goods	tKm	Estimation on total loads carried by sub contract hauliers- Data provided by Despatch
Scope 3	Sea Freight	Material Transportation by sea- Finished goods	tKm	Estimation on total distance shipped between ports - Data provided by Despatch
Scope 3	Waste	Waste Generated in Operations (General & Food Waste)	USD	Data obtained from the waste reduction reports- Calculated using Quantis Scope 3

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Other emissions – HFCs, PFCs and SF6

No refrigeration or air-conditioning or other equipment containing hydrofluorocarbons (HFCs) is used in the operations and therefore no emissions from these sources are included in the inventory.

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

The following emissions sources have been identified and excluded from the GHG emissions inventory.

Table 7: GHG emission source excluded from the inventory

Scope	Emission source	Data Source	Data collection Unit	Methodology & Materiality
Scope 1	Refrigerants	NA	NA	Difficult to obtain, estimated to be de minimis (<1%)
Scope 3	Taxis/Private hire	NA	NA	Difficult to obtain, estimated to be de minimis (<1%)
Scope 3	Hotel accommodation	NA	NA	Difficult to obtain, estimated to be de minimis (<1%)

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 2019 to 31st December 2019

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

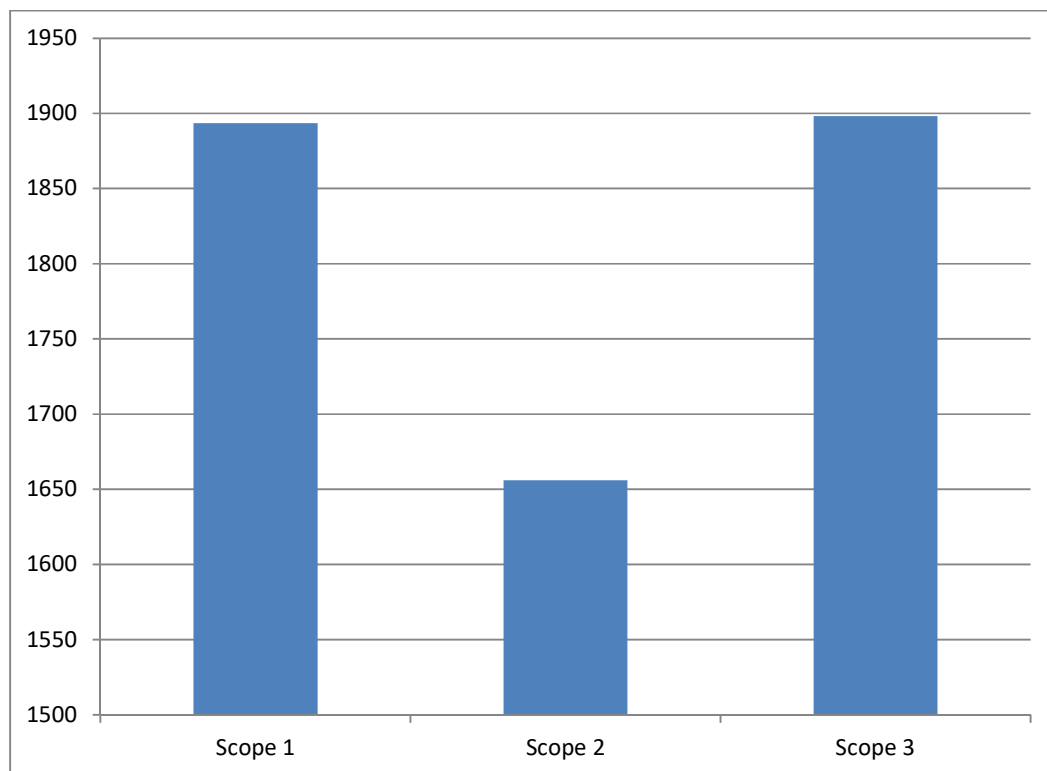


Figure 1: GHG emissions (tCO₂-e) by scope

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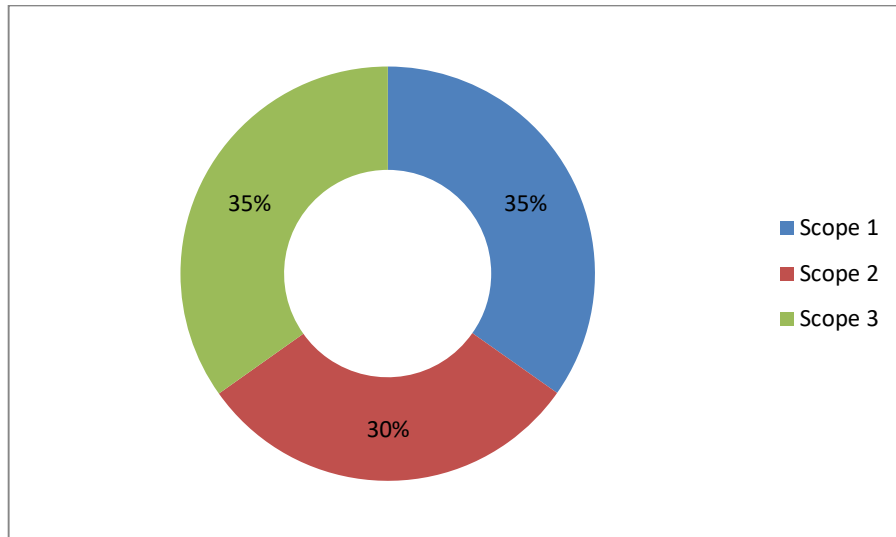


Figure 2: GHG emissions scope distributions

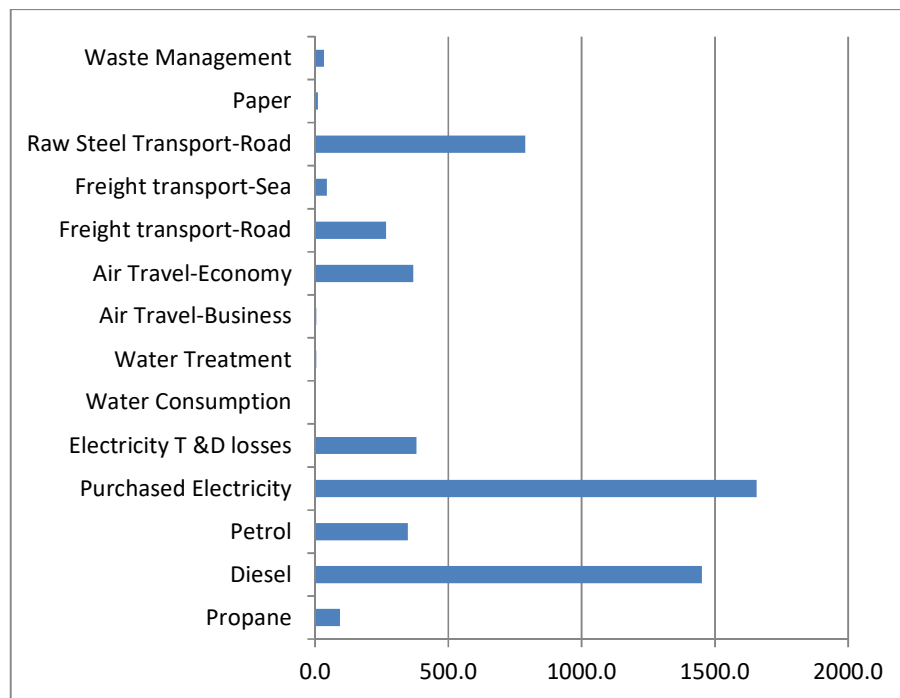


Figure 3: GHG emissions (tCO₂-e) by source

11. Liabilities

Liabilities – GHG stocks held

HFCs, 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 Programme

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GHG stocks have not been reported in this inventory

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 14064-1:2019. 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 WH UAE GHG inventory spreadsheet for detailed emission data

16. Appendix 2: GHG Verification Statement

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