



ENVIRONMENTAL, HEALTH AND SAFETY GUIDELINE

EP-EHS-GUD-01012

REV. 1

DOCUMENT LEVEL 0

DATE:

02/05/2024

GREENHOUSE GAS (GHG) INVENTORY PROTOCOL

UNCONTROLLED WHEN PRINTED

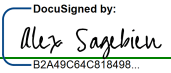

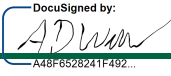
APPROVER	Alex Sagebien	 <small>DocuSigned by: Alex Sagebien B2A49C64C816498...</small>	2/19/2024
	VP, EHS		
REVIEWER	Myriam Mills		02/05/2024
	Senior Manager, Sustainability		
TECHNICAL AUTHORITY	Tony Webster	 <small>DocuSigned by: ADW... A48F0528241F492...</small>	2/16/2024
	Director, Sustainability		
	NAME	SIGNATURE	DATE
	TITLE		



TABLE OF CONTENTS

1.0	INTRODUCTION	5
1.1	Hess Greenhouse Gas Inventory	5
1.2	Regulatory Reporting	6
2.0	SCOPE	6
3.0	TERMS	6
4.0	ACCOUNTABILITIES	13
5.0	GHG INVENTORY PRINCIPLES	13
5.1	Introduction	13
5.2	The Five Principles	14
6.0	ORGANIZATIONAL BOUNDARIES	14
6.1	Introduction	14
6.1.1	Operational Control.....	15
6.1.2	Equity Share.....	15
6.1.3	Choosing an Approach.....	15
6.2	Organizational Boundaries (Scope 1 and Scope 2)	15
6.2.1	Operational Control.....	16
6.2.2	Equity Share.....	16
6.2.3	Inclusion of Assets in Transition (AIT) – Recently Acquired Assets.....	16
6.2.4	Inclusion of Assets in Transition – Recently Divested Assets.....	17
7.0	OPERATIONAL BOUNDARIES	17
7.1	Introduction	17
7.2	Direct and Indirect Emissions	17
7.2.1	Direct Emissions.....	17
7.2.2	Indirect Emissions.....	18
7.3	GHG Emissions Sources	19
7.3.1	Emissions Sources.....	19
7.3.2	Leases.....	21
8.0	BASE YEAR AND ADJUSTMENTS	21
8.1	Introduction to Base Year and Adjustments	22
8.2	Prior Base Year Selection and Considerations	22



8.3	Adjustment of Base Year Emissions	22
8.3.1	Organic Growth and Decline	22
8.3.2	Structural Changes	22
8.3.3	Insourcing and Outsourcing	23
8.3.4	Quantification Methodologies Changes and Data Improvement	23
8.3.5	Discovery of Errors in the Base Year Emissions	23
9.0	GHG EMISSIONS QUANTIFICATION METHODOLOGIES	24
9.1	Introduction	24
9.2	Data Collection and Quantification Methodologies	24
9.2.1	Non-Operated Assets	26
9.2.2	Application of the Quantification Methodologies	26
9.2.3	Value Chain Emissions Reporting	26
9.3	GHG Global Warming Potentials	26
9.4	Changes to Quantification Methodologies	27
10.0	INVENTORY QUALITY AND UNCERTAINTY	27
10.1	Introduction	27
10.2	Inventory Quality	28
10.2.1	Inventory Process and Systems	28
10.2.2	Methods	28
10.2.3	Data	29
10.2.4	Documentation	29
10.2.5	Independent Assurance	30
10.2.6	Inventory Uncertainty	30
11.0	REPORTING AND ASSURANCE	30
11.1	Reporting	30
11.1.1	Introduction to Reporting	30
11.1.2	Internal GHG Inventory Reporting Practices	30
11.1.3	External Voluntary GHG Reporting Practices	31
11.2	Reporting and Regulatory Requirements	31
11.3	Assurance	32
11.3.1	Introduction to Assurance	32
11.3.2	GHG Inventory Assurance	32
11.3.3	Verification Preparation	33



11.3.4	Corrective Action	33
12.0	REFERENCES	34
13.0	DOCUMENT HISTORY	35

UNCONTROLLED WHEN PRINTED



1.0 INTRODUCTION

1.1 Hess Greenhouse Gas Inventory

Hess Corporation collates an annual inventory of the greenhouse gas (GHG) emissions associated with Hess' global operations. The inventory supports and demonstrates the corporate commitment to meet the world's demand for energy in a way that protects the health and safety of stakeholders and respects the environment.

Hess uses the GHG Inventory to:

- Understand the company's relationship to the issue of climate change;
- Develop strategies for managing GHG issues in the future, including participation in policy development and implementation of emissions controls on its operations;
- Support Hess' efforts to transition to a lower carbon emissions economy;
- Report on environmental performance, both internally and externally; and
- Identify GHG emissions risks and opportunities (e.g., emissions trading).

The inventory is expressed in terms of carbon dioxide equivalents (CO_{2e}). The inventory is calculated by aggregating emissions of the individual GHGs (carbon dioxide, methane and nitrous oxide) associated with Hess' emissions sources included in the inventory and then applying the global warming potential (GWP) of the individual GHGs to convert each GHG to CO_{2e}.

Any GHG emissions sequestered in sinks or reservoirs are used to offset source emissions in the calculation of the inventory. Hess does not currently sequester carbon, so no sinks or reservoirs are included in the Hess GHG inventory.

This Hess Greenhouse Gas (GHG) Inventory Protocol (the Protocol) identifies and describes the processes and methodologies Hess uses to prepare the Hess GHG inventory and help ensure its reliability and validity. The Protocol establishes a set of acknowledged conventions and practices for the identification of GHG sources, and estimation methodologies for the quantification of their associated GHG emissions that apply across business units. The Protocol supports the creation of a robust data collection system that aims to ensure consistency, comparability, and transparency in the GHG inventory.

The Protocol is also an effective communication tool to inform interested stakeholders, such as the investment community, regulators, and public interest groups of Hess policies, practices, and methodologies for GHG data collection.

The first version of the Protocol was developed in 2007. The Protocol is a living document that is updated to reflect changing best practices and company circumstances. This version of the Protocol is the fourth version and has been updated to reflect changes in the inventory and its calculation. These changes include:

- Changes in the company's strategy and asset portfolio; and



- An updated list of key reference documents.

These changes are addressed in detail in the appropriate sections of the protocol.

1.2 Regulatory Reporting

Some Hess assets have legal reporting requirements for GHG emissions. Regulatory reporting requirements and obligations are not addressed by this protocol. Reporting to regulatory regimes is the responsibility of the business units.

2.0 SCOPE

This guideline applies to all Hess-operated assets and activities.

3.0 TERMS

For the purposes of this guideline, the following terms apply.

Term	Meaning
Activity Data	Data on the magnitude of human activity resulting in emissions or removals taking place during a given period of time.
API Compendium of Greenhouse Gas Emissions Estimation Methodologies for the Oil and Gas Industry	A document developed by the American Petroleum Institute that is a compendium of industry recognized GHG estimation methods for all oil and gas industry segments. The compendium is intended to enhance consistency in emissions estimation within the sector.
Asset (Enterprise)	Tangible and intangible property (including intellectual property) in which Hess has an ownership interest and that has economic value. Examples include Hess owned or leased equipment, vehicles or an office building.
Asset (Operational)	An entity or entities for which an Asset Value Plan is required to be prepared as part of Hess' Annual Budget and Plan process. The term Asset may include entities or facilities where Hess has a non-operated working or ownership interest. Examples of an Asset include Bakken Upstream, Guyana, North Malay Basin, and Stampede.
Asset in Transition (AIT)	A typical Hess acquisition or divestiture. An acquisition AIT is designated as an AIT if, at the time of acquisition, its operating emissions after a period of planning and development are expected to be greater than 20% of the base year emissions. A divestiture AIT is an asset that was divested or spun off during the reporting year.



Term	Meaning
Asset Value Plan	A recommended investment case containing capital opportunities and development activities for an oil and gas property to produce the reserve and/or resource cases that are estimated over the life of the field. Requirement to develop an Asset Value Plan is determined by the Office of the Chief Financial Officer.
Base Year	A year corresponding to a set of GHG emissions data that represents typical operations. The emissions quantities associated with a base year inventory are the reference points against which future inventories are compared, especially with regard to emissions reduction targets.
Boundaries	The definition of which emissions are included in a company's GHG inventory and report. Typical reporting boundary dimensions include organizational and operational boundaries.
Business / Business Unit	An organizational grouping based on geography, regulatory, operating environment, fiscal structure and/or ownership structure, which may consist of one or more assets and/or facilities. Examples include Gulf of Mexico and Bakken (Upstream and Midstream).
Carbon Dioxide Equivalent	A metric used to compare the emissions from various GHGs based upon their global warming potential.
Combustion Emissions	Emissions resulting from the stationary or mobile combustion of fuels. Stationary combustion emissions result from boilers, furnaces, burners, heaters, and stationary turbines and engines, as well as the combustion of wastes in incinerators and flares. Mobile combustion emissions result from fuels in ships, barges, trains, trucks, automobiles, and aircraft.
Contracted Services	Services performed by third parties that can result in indirect, or in some cases, direct emissions.
Direct Emissions	Emissions from sources that are owned or controlled by the reporting entity.
Emissions Factor	The average emissions rate of a given GHG for a given source, relative to units of activity.
Emissions	The intentional or unintentional release of GHGs into the atmosphere.
Entity	A legally constituted business organization that owns or controls sources where GHGs are emitted.



Term	Meaning								
Environmental Management System	A continual cycle of planning, implementing, reviewing, and improving the processes and actions that an organization undertakes to meet its business and environmental goals.								
Equity Share	The percentage of economic interest in or benefit derived from a partially or wholly owned operation.								
Equity Share Approach	An approach for setting organizational boundaries that aligns emissions with other corporate assets and related financial matters. According to this approach, an entity reports its proportion of total GHG emissions from a partially owned facility according to its percentage of economic interest in or the benefits it derives from the facility.								
Facility	A distinct physical entity and its data structure, under Hess' operational control, consisting of the infrastructure, equipment or improvements used or installed for the exploration, withdrawal, production, gathering, storage, treatment, processing or transportation of materials and products. Examples include a wellsite, gas plant, pipeline or platform.								
Fugitive Emissions	Unintentional releases of GHGs from joints, seals, packing, gaskets, or valves.								
Global Warming Potential (GWP)	A measure of how much heat a GHG traps in the atmosphere relative to CO ₂ . A GWP is calculated over a specific time interval, commonly 100 years. The calculation of GWP takes into consideration the infrared absorbing characteristics of the gas and its lifetime in the atmosphere.								
Greenhouse Gases (GHGs)	For the purposes of the Hess GHG Inventory Protocol, GHGs are the three gases listed in the Kyoto Protocol: carbon dioxide (CO ₂), methane (CH ₄), and nitrous oxide (N ₂ O). The table below summarizes the GWPs used for each of these gases.								
	<table border="1"> <thead> <tr> <th>GHG</th> <th>2007 GWP AR-4 (IPCC Fourth Assessment Report): 100 years</th> </tr> </thead> <tbody> <tr> <td>CO₂</td> <td>1</td> </tr> <tr> <td>CH₄</td> <td>25</td> </tr> <tr> <td>N₂O</td> <td>298</td> </tr> </tbody> </table>	GHG	2007 GWP AR-4 (IPCC Fourth Assessment Report): 100 years	CO ₂	1	CH ₄	25	N ₂ O	298
GHG	2007 GWP AR-4 (IPCC Fourth Assessment Report): 100 years								
CO ₂	1								
CH ₄	25								
N ₂ O	298								



Term	Meaning
GHG Inventory	A list and associated quantities of an organization's GHG emissions sources according to a set of acknowledged conventions using established estimation methodologies.
GHG Inventory Assurance	An objective, post-inventory assessment of the GHG Inventory structure, approach, and data, conducted by an independent third party. The assessment assesses whether the GHG Inventory was undertaken in adherence to the Hess GHG Inventory Protocol. This assessment also evaluates the accuracy and quality of the resulting GHG emissions data.
GHG Inventory Guidance	Guidance that supports the Hess GHG Inventory Protocol by providing more detailed procedures and specific instructions for Hess corporate and facility staff regarding Hess GHG Inventory responsibilities, including determining boundaries, adjusting the base year, quantifying emissions, and data collection and submission.
GHG Inventory Protocol	A document that guides Hess Corporation in the compilation of its GHG Inventory. The Hess GHG Inventory Protocol is intended to inform interested stakeholder groups of the corporation's policies, practices and methodologies for GHG data collection. This document explains "why" the company is compiling a GHG Inventory and identifies general conventions regarding its development.
Hess	Hess Corporation and its affiliates and subsidiaries.
Indirect Emissions	Emissions that are a consequence of the reporting company but occur from sources owned or controlled by another company.
Inherent Uncertainty	A difference due to random error or the difference between a true amount and a quantified amount resulting from the quantification approach.
Insourcing	Activities performed by the entity that were previously performed by a third party, such as the production of raw materials, parts and supplies, and heat or electricity.
Inventory Quality	The general accuracy and consistency between an organization's actual GHG emissions and quantified GHG emissions.



Term	Meaning
ISO 14064	The International Organization for Standardization (ISO), which is a network of national standards institutes from 147 countries, has developed a standard for the quantification, monitoring, reporting and verification of project and entity level GHGs. This standard is comprised of three parts. The first part specifies requirements for designing and developing organization or entity-level GHG inventories. The second part details requirements for quantifying, monitoring and reporting emissions reductions and removal enhancements from GHG projects. The third part provides requirements and guidance for the conducting of GHG information validation and verification. The word “requirements” here is used to refer to what is required for companies that choose to adhere to this ISO standard.
May	A permissible or optional course of action.
Materiality	The concept of materiality in a GHG inventory is related to the principle of completeness. As stated by WRI/WBCSD in its <i>Greenhouse Gas Protocol</i> , “information is considered to be material if, by its inclusion or exclusion, it can be seen to influence any decisions or actions taken by users of it.”
Materiality Threshold	The magnitude of an omission or misstatement of GHG information, indicated as a level or percentage of total emissions, that makes it likely that the judgment of a reasonable person relying on the information would have been influenced by the omission or misstatement.
Material Misstatement	An error (for example from an oversight, omission, or miscalculation) that results in the reported quantity being significantly different from the true value.
Normalization	The expression or reporting of emissions relative to some measure of output, e.g., tons of CO ₂ e/barrels of crude oil produced.
Operational Boundaries	The scope of the specific types of emissions sources, generating direct and indirect emissions that an entity owns and controls and includes in its GHG inventory and report.
Operational Control	The authority to introduce and implement operational and environmental, health, and safety policies at an operation.



Term	Meaning
Operational Control Approach	An approach for setting organizational boundaries that reflects an entity's management of its operations. According to this approach, an entity reports 100% of GHG emissions from operations, including partially owned facilities, that are under its operational control. Furthermore, an entity does not report any emissions from partially owned facilities, which are not under its operational control.
Optimal Practice	An ideal practice which exceeds the industry benchmark procedure, process or condition.
Organic Growth/Decline	Increases or decreases in GHG emissions as a result of changes in production output, product mix, plant closures, and the opening of new plants that come about through increases or decreases in business volume.
Organizational Boundaries	The scope of specific entities and facilities, either wholly owned or partially owned by the entity, included in the GHG inventory and report.
Outsourcing	The contracting out of activities, such as the production of raw materials, parts and supplies, and heat or electricity, to third parties.
Partially Owned Assets	Entities, facilities, operations that are not wholly owned by the corporate entity. Partially owned assets may result from joint ventures, partnerships and other arrangements between separate entities.
Partnership	A business owned by two or more separate entities. The responsibilities, obligations, and benefits of the partners are usually described in a contract or partnership agreement.
Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions	A document developed by Ipieca (the global oil and gas association for advancing environmental and social performance across the energy transition), the International Association of Oil and Gas Producers (IOGP), and the American Petroleum Institute (API) that provides guidance for how GHG emissions should be accounted and reported for petroleum industry companies at the facility through the corporate level.
Primary Inventory Data	GHG source activity data submitted to the corporate entity for roll-up by individual facilities.



Term	Meaning
Process Emissions	GHG emissions that result from the physical or chemical processing of materials such as petroleum refining, or petrochemical production. Releases occur during normal operations from stacks, vents, and other focused discharges.
Recommended Practice	An industry recognized benchmark procedure, process or condition which results in reliably achieving a desired result. Also known as a “best practice” and indicated by the word “should”.
Renewable Energy Certificates (RECs)	A market-based contractual instrument that certifies the bearer owns 1 megawatt-hour (MWh) of electricity generated from a renewable energy resource.
Reporting Unit	A business, facility, or group of related facilities which reports emissions into the organization-wide GHG inventory. Hess’ reporting units are listed in Hess’ GHG inventory guidance.
Scope 1 Inventory	A reporting organization’s direct GHG emissions.
Scope 2 Inventory	A reporting organization’s emissions associated with the generation of electricity, heating/ cooling, or steam purchased for own consumption.
Scope 3 Inventory	A reporting organization’s indirect emissions other than those covered in Scope 2 Inventory.
Secondary Inventory Data	GHG emissions data and supporting documentation calculated at the corporate level from individual facilities.
Should	A preferred course of action, indicates a recommended practice.
Sink	Any physical unit or process that stores GHGs; usually refers to forests and underground/deep sea reservoirs of CO ₂ .
Systemic Uncertainty	Errors resulting from subjective choices in the inventory process and selection of calculation methodologies, such as simplifying assumptions and improper selection of emissions factors.
The Corporate Value Chain (Scope 3) Accounting and Reporting Standard (September 2011)	A standard produced by WRI/WBCSD as a supplement to the <i>Greenhouse Gas Protocol</i> .



Term	Meaning
The Greenhouse Gas Protocol	<p>A Corporate Accounting and Reporting Standard (Revised Edition, 2015)</p> <p>A document developed by the World Resources Institute and the World Business Council for Sustainable Development that provides standards and guidance for organizations preparing a GHG emissions inventory. It covers the accounting and reporting of six GHGs covered by the Kyoto Protocol.</p>
The Location-Based Method for Scope 2 Imported Energy	Calculates GHG emissions based on the emissions intensity of the local grid area where the electricity usage occurs.
The Market-Based Method for Scope 2 Imported Energy	Calculates emissions based on the electricity that organizations have chosen to purchase, often spelled out in contracts or instruments like Renewable Energy Certificates (RECs).
Uncertainty	The range around a reported value in which the true value can be expected to fall.
Uncertainty Assessment	An evaluation to identify major areas of uncertainty associated with a GHG Inventory. The assessment may identify quantitative or qualitative uncertainty.
Upstream Operations	Operations involving the exploration and production of oil and gas.
Value Chain Emissions	Value chain emissions are emissions resulting from upstream (e.g., supply chain) or downstream (e.g., customer use) activities associated with a company's operations but which are not performed by the company.

4.0 ACCOUNTABILITIES

This guideline should be reviewed and re-issued every five years at a minimum.

5.0 GHG INVENTORY PRINCIPLES

5.1 Introduction

GHG accounting and reporting principles are established and relied upon to ensure an organization's inventory represents a true and fair account of its GHG emissions. They also support the collection and reporting of credible and unbiased GHG emissions. Adherence to these principles helps ensure that the inventories and the data which underlies them are free of material errors and capable of being relied and depended upon by users of the information.



5.2 The Five Principles

Hess recognizes the importance of establishing underlying principles to govern the development and reporting of its GHG inventory and, therefore, has applied these generally accepted GHG accounting and reporting principles:

1. **Relevance** – To prepare an Inventory that is relevant to internal and external users of the data, the Hess inventory includes all business units. This includes businesses in which Hess has an ownership stake unless the inventory states they are specifically excluded. Similarly, all operations by the business units are included unless specifically stated as being excluded.
2. **Completeness** – The Hess inventory accounts for and reports on all GHG emissions sources and activities within the chosen inventory boundary.
3. **Consistency** – Hess discloses any material changes identified in sources or calculation methodologies for emissions to allow meaningful comparison of emissions over time. For material changes, prior year reports may be restated to allow for valid year-to-year comparisons.
4. **Transparency** – Hess documents assumptions, references, data sources, and calculations sufficient to help ensure a competent third party could derive the same results if provided with the same source data. This helps provide a documented inventory that can be verified.
5. **Accuracy** – Hess aims to provide a level of care in the collection of data that is commensurate with the magnitude of the emissions associated with the source. This includes the use of flow calculations and/or properly maintained and calibrated monitoring and metering equipment used in the collection of data.

Adherence to these principles helps ensure that inventoried and reported GHG data is free of material errors and capable of being relied and depended upon by users of this information. We engage a third-party verifier to conduct assurance on the GHG data disclosed in our annual corporate sustainability report and Carbon Disclosure Project (CDP) climate change questionnaire submission.

6.0 ORGANIZATIONAL BOUNDARIES

6.1 Introduction

Determining the boundary for an operation or facility is fairly straightforward when ownership or financial control and management or operational control is vested in the same company. However, when a company owns part of an asset or has financial control of or operates an asset, determining which assets and operations belong within the organizational boundary is more challenging. Hess Corporation's organizational boundaries include GHG emissions data from all entities and facilities that are referenced in its annual financial and sustainability reports.



Hess uses both operational control and equity share to consolidate and report its GHG data on all entities and facilities included in its GHG inventory, as well as how to apportion (or consolidate) GHG emissions among the various partially owned entities and facilities.

6.1.1 Operational Control

Under the control method of consolidation, a company reports 100% of the emissions from facilities and operations over which it has either financial or operational control, whether these are wholly owned or have multiple owners. No emissions are included for partially owned assets that the company does not control. Under Ipieca reporting guidelines, the operational control method includes assets operated by the company and joint ventures where the company has the ability to determine management and board level operational decisions.

6.1.2 Equity Share

Under the equity share method of consolidation, a company reports GHG emissions according to its share of equity in partially and wholly owned facilities. Equity share is the percentage of economic interest in, or benefit derived from, a facility.

For assets that are 100% owned and operated, the operational control and equity share approaches both result in the inclusion of the same assets and emissions. For assets that involve shared ownership or control, the operational control and equity approach will result in the inclusion of different assets and emissions in the inventory.

6.1.3 Choosing an Approach

There is no single accepted approach for voluntary or mandatory GHG reporting programs. Thus, organizations can have assets or groups of assets that are subject to different boundary approaches. If the organization chooses to use one methodology for its inventory reporting, either the operational control or equity share basis, some assets may need to report under various regulatory or voluntary regimes using a different consolidation approach which can result in seemingly contradictory emissions being reported. Therefore, companies often opt to voluntarily calculate and report under both methodologies. This provides a clearer understanding of their emissions. In these circumstances, they identify the methodologies used and the resulting values.

6.2 Organizational Boundaries (Scope 1 and Scope 2)

The Hess GHG Inventory includes all fully owned and partially owned entities, including any associated facilities that are referenced either explicitly or implicitly, in the Hess Corporation Annual Report and other corporate reporting documents. To best capture emissions for all of the activities in which Hess is directly involved in the inventory and to provide a better understanding of its emissions, Hess uses both operational control and equity share approaches to define its organizational boundary. Hess does not use financial control. The ultimate aim is to report all emissions data, from both operated and non-operated assets, in a consistent manner.

The term *lease* applies to situations in which the use of equipment or specific facilities are conveyed to or from Hess by a contract identifying a specified term and/or a specified rent. When Hess is a lessee of operational facilities or equipment, e.g., a shorebase, emissions associated with leases are consolidated into the inventory as Scope 1/Scope 2 emissions consistent with the approaches of equity share and operational control.

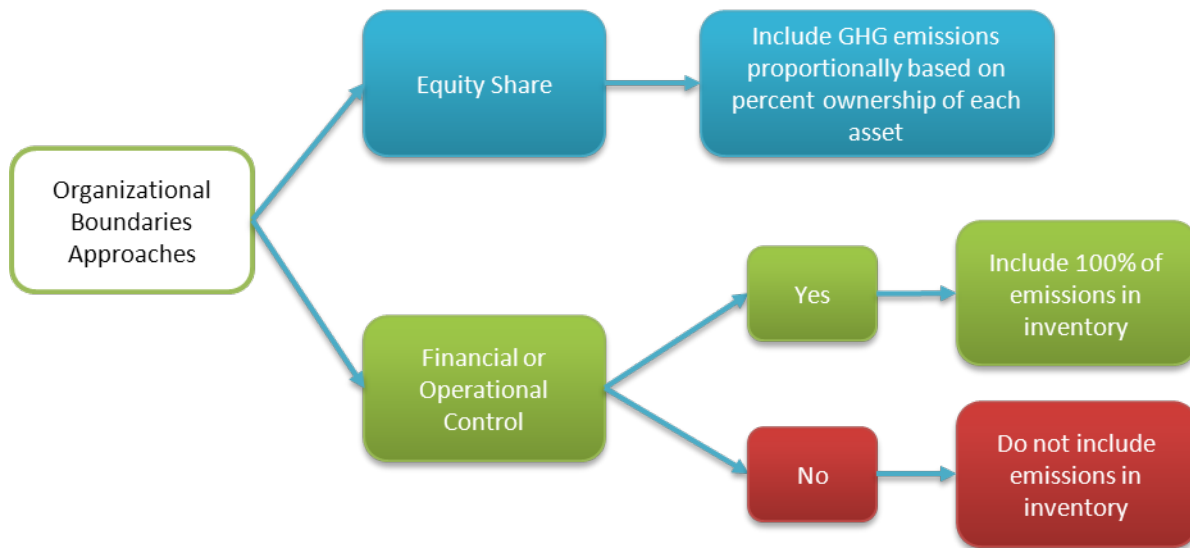


Figure 1. Determining Organizational Boundaries

Hess recognizes that compiling comparable detailed inventories for those assets not under direct operational control can present a challenge. Hess endeavors to ensure consistency with this protocol to the extent sufficient information and data allow but usually we only receive GHG emissions totals from our non-operated assets and rely on that data since we do not have access to the underlying activity data. We do compare year to year results and request explanation for deviations of more than 10%. Although Hess uses both methods, consolidation under each method occurs separately. Emissions quantities resulting from each of the two consolidation approaches are not combined.

6.2.1 Operational Control

Traditionally, Hess has reported its environmental data from entities or facilities on the basis of managerial or operational control. Operational control means that Hess has the authority to introduce and implement operational and environmental, health, and safety policies at an operation or facility. At other facilities, Hess does not have operational control because another entity may have operating responsibility and authority and Hess' interest is limited to financial matters. Consolidating by this methodology is consistent with historical corporate practices.

6.2.2 Equity Share

The equity share approach aligns Hess emissions with the rules that Hess already uses for corporate financial accounting. Consolidation by equity share includes GHG emissions data from all entities and facilities within the broad GHG inventory organizational boundary.

For a facility with multiple owners, the allocation of the total emissions of the facility that are associated with Hess is based on the equity percentage that Hess possesses in the facility.

6.2.3 Inclusion of Assets in Transition (AIT) – Recently Acquired Assets

For newly acquired assets, Hess provides a reasonable time period before including the AIT in the organizational boundary. This allows for the implementation of GHG data collection policies and procedures. In general, the AIT facility emissions will be included in the first full calendar year



that operational GHG data are available. There may be some exceptions based on extraordinary circumstances, but exceptions, if any, are specified when reporting our emissions inventory.

6.2.4 Inclusion of Assets in Transition – Recently Divested Assets

Hess reports partial data for the year in which the asset was divested, until the divestment date. The data may be reported with other assets in transition but separately from Hess' overall GHG inventory. There may be some exceptions based on extraordinary circumstances, but any exceptions are specified when reporting our emissions inventory.

7.0 OPERATIONAL BOUNDARIES

7.1 Introduction

Operational boundaries in a GHG inventory refer to GHGs accounted for in the entity's inventory, and the specific types of emissions sources that an organization (as defined by the organizational boundary) possesses and includes in its inventory and report. GHGs are gases that act to cause global warming. Six gases in particular, known commonly as the Kyoto gases, are most commonly considered for inclusion in GHG inventories.

Entities have a variety of emissions sources which are categorized to provide a general framework for the organization of the inventory. This framework also facilitates the identification of appropriate quantification methodologies for emissions sources, collection of data and reporting of inventory results.

7.2 Direct and Indirect Emissions

A key distinction in setting operational boundaries is whether GHG emissions sources are categorized as direct emissions or indirect emissions. Hess operational boundaries consist of direct (Scope 1) GHG emissions from combustion, process, and fugitive sources within its organizational boundary. Hess operational boundaries also include indirect emissions: GHG emissions from energy generated by another entity (Scope 2) and specified value chain emissions (Scope 3).

The Hess GHG Inventory identifies emissions of the following GHGs:

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂O)

These three GHG compounds were selected because they are the most relevant to the oil and gas industry and to Hess' operations.

7.2.1 Direct Emissions

Direct emissions, also known as Scope 1 emissions, occur from sources in operations within the organizational boundary of the entity. Direct emissions are generated primarily by the following activities:



- Operation of engines and turbines (drive pumps or compressors);
- Combustion in flares and incinerators;
- Production of electricity, heat, or steam;
- Physical or chemical process emissions such as gas processing emissions;
- Transportation in vessels and helicopters; and
- Fugitive emissions from equipment leaks such as compressor and pumps seals, pneumatic devices piping connections, and valves.

7.2.2 Indirect Emissions

Indirect emissions are emissions that are a consequence of the operation of the reporting company but occur from sources owned or controlled by another entity.

Indirect emissions themselves are broken into two categories: Scope 2 and Scope 3. Both Scope 2 and Scope 3 emissions share the characteristics that they are Scope 1 emissions of another entity. Scope 2 emissions are indirect GHG emissions that occur from energy consumption, where the energy is generated by another entity. Examples are the emissions associated with the generation of purchased electricity, steam, heat, or cooling consumed by the entity. These emissions physically occur at the utility where the energy is being generated (e.g., power plant) and would be considered Scope 1 or direct emissions for the utility.

Identification of both direct and indirect sources in the inventory is important for several reasons. Direct sources, because of ownership and/or control, must be included in an entity's inventory to ensure credibility, completeness, accuracy, and transparency. Inclusion of indirect (Scope 2) emissions provides a more complete picture of an entity's total GHG emissions.

Scope 3 emissions are indirect non-energy production-related GHG emissions that occur as a consequence of activities of the entity but originate from sources not owned or controlled by the entity. Scope 3 emissions occur within the value chain of the entity and are also known by that name. Value chain emissions are further categorized as upstream or downstream. Upstream refers to emissions associated with goods and services purchased by the entity; while downstream refers to emissions associated with goods or services sold by the entity. Upstream emissions occur before purchase or receipt by the entity. Downstream emissions occur after sale or transfer of the goods or services by the entity. Inclusion of Scope 3 emissions is based on materiality as well as the availability of reliable primary data and well-accepted methodology and emissions factors.



Figure 2. Operational Boundaries

7.3 GHG Emissions Sources

7.3.1 Emissions Sources

Hess' operational boundaries consist of direct Scope 1 GHG emissions from sources within the Hess organizational boundary and indirect Scope 2 GHG emissions from the generation by third parties of consumed electricity, heat and steam, as well as selected Indirect Scope 3 GHG emissions originating from the value chain. Since Hess does not purchase heat or steam from third parties so the only Scope 2 GHG are from purchased electricity. The following sections further define and describe direct and indirect emissions sources as they apply to Hess.

- A. Scope 1 Routine Sources – Hess' operational boundaries primarily consist of all direct GHG emissions from sources within the Hess organizational boundary. Direct emissions are further classified into routine sources and non-routine sources. There are three categories of direct routine sources: stationary and mobile combustion, process, and fugitive.
- Stationary combustion sources typically include combustion in boilers/heaters/engines, as well as gas flaring. Emissions from distributed electricity generating equipment such as gas turbines and diesel generators are also categorized as stationary combustion sources.
 - Mobile combustion sources include fleet vehicles for moving personnel and equipment, bulk transportation, and corporate aviation.
 - Process sources refer to releases of CO₂, CH₄, and N₂O emissions that result from the physical or chemical processing of materials. Releases occur during normal



operations from stacks, vents, or other focused discharges. Hess exploration and production (E&P) process sources typically include process vents from dehydration and gas sweetening. Other E&P process sources are venting from tanks and chemical injection pumps. Exploratory drilling and well testing also produce process source emissions. Venting occurs at storage facilities not only during loading and unloading operations, but also from the storage tanks themselves. While these sources typically contain control devices such as a vapor recovery unit (VRU) or vapor combustion unit (VCU), there are still emissions associated with these activities.

- iv. Fugitive sources refer to CO₂ and CH₄ emissions that result from equipment leaks and other unintended emissions, as well as releases from open and/or unfocused discharges. Fugitive sources generally include leaks from equipment including pipelines, vents, pumps, pneumatic devices and compressors.
- B. Scope 1 Non-Routine Sources – In addition to the routine source categories, direct emissions of CO₂, CH₄, and N₂O result from non-routine sources (non-routine operations or unexpected situations). Any storage facility or pipeline may further have upset sources as the result of pipeline breaks. Examples include:
- i. Maintenance and turnaround operations may result in releases from equipment cleaning, repairs, replacements, and upgrades. An example is equipment depressurization (blowdown).
 - ii. Maintenance and turnaround sources in E&P include compressor starts; well workovers; and vessel, pipeline, and compressor blowdowns. Additional sources related to transportation and distribution include pigging operations and compressor station blowdowns.
- Hess E&P sources include pressure relief valves (PRVs), surge tanks, and emergency shutdowns or blowdowns. Specific E&P sources may include well tests. Upset sources result from unplanned preventative and corrective actions related to emergency situations.
- C. Scope 2 Consumed Third-Party Energy – Consumed third-party energy refers to the use of electricity, hydrogen, steam, or hot water generated by and acquired from a third party. As previously stated, when Hess explicitly pays for consumed third-party energy, associated emissions are included as Scope 2 indirect emissions.
- D. Scope 3: GHG Value Chain Emissions – To assess our Scope 3 GHG emissions, we use industry guidance (i.e., *Estimating Petroleum Industry Value Chain [Scope 3] Greenhouse Gas Emissions* from Ipeica and API) for the WRI/WBCSD *Corporate Value Chain (Scope 3) Accounting and Reporting Standard* methodology. Scope 3 emissions are emissions generated from corporate value chain activities that are not accounted for or reported in our Scope 1 and 2 emissions.

The Ipeica/API guidance is based on the WRI/WBCSD GHG Protocol *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*, which includes 15 categories of



Scope 3 emissions.

The Ipeca/API guidance recognizes that Category 11, Use of Sold Products, can represent more than 90% of total GHG emissions associated with the entire value chain of oil and gas from production through to consumer use. In general, Hess uses a materiality threshold of 5% of emissions associated with Category 11, Use of Sold Products, which represents the vast majority of Scope 3 emissions. Only two of the Scope 3 emissions categories are material to Hess. Category 11, The Use of Sold Products, accounts for the emissions from consumers' use of the end products of our oil and gas production (diesel and gasoline fuels and natural gas). Based on the 5% materiality threshold, the only other material Scope 3 category is Category 10, Processing of Sold Products, that accounts for the processing of crude oil by third party petroleum refineries. Although not material, we track and report GHG emissions associated with Category 6, Employee Business Travel, because Hess has committed to purchase carbon offsets to mitigate these emissions.

7.3.2 Leases

Emissions associated with leases may be classified as Scope 1, Scope 2 or Scope 3, depending on the nature of the sources included in the lease. Emissions from leased equipment in which Hess maintains operational control, such as leased generators or vehicles, are included in our Scope 1 direct emissions associated with engine combustion. Leased office space contributes emissions associated with consumed electricity (Scope 2).

In addition, in certain situations where Hess does not possess control, but leased assets are associated with contracted services, emissions from such situations are included in Hess direct (Scope 1) inventory when Hess supplies or pays for the energy or fuel. For example, emissions from contracted drilling, completions and workover operations, contracted trucking, and other operations in which Hess supplies fuel as part of a contractual obligation are included as Scope 1 emissions.

8.0 BASE YEAR AND ADJUSTMENTS

Base year emissions are adjusted in response to these changes:

- Structural changes including acquisitions and divestitures that result in a 5% or greater change to overall emissions;
- Source ownership and control changes;
- Changes related to insourcing and outsourcing, if the operations related to these changes existed before the base year;
- Quantification methodology changes or data improvements that result in a 5% or greater change to overall emissions; or



- Discovery of errors in the base year emissions that result in a 5% or greater change to the total.

8.1 Introduction to Base Year and Adjustments

The base year is a year corresponding to a set of GHG emissions data that represent typical operations. The base year inventory provides the reference points to which future inventories are compared. Corporate GHG targets are also commonly defined relative to base year emissions. The current base year for Hess is calendar year 2017.

8.2 Prior Base Year Selection and Considerations

The base year applies to Scopes 1 and 2 emissions only. No base year is established for Scope 3 value chain emissions.

Certain operations and facilities may be subject to a specific base year requirement of regulatory programs under which they operate (i.e., the EPA Mandatory Reporting Rule and others). In these cases, the relevant operations and/or facilities maintain the respective base year information for these programs in addition to the designated corporate base year.

8.3 Adjustment of Base Year Emissions

Hess Corporation is a dynamic organization. In the pursuit of growth, its structure and operations change to reflect both internal and external business drivers. Significant structural changes in the corporation could impair the comparability of GHG reports. Therefore, adjustments to the base year may be made in some cases but not in others. The following are descriptions of various circumstances and the corresponding impact (if any) to the base year emissions.

8.3.1 Organic Growth and Decline

Increasing or decreasing production and the opening and closure of facilities or operating units are a part of the organic growth and decline of the company and therefore are not considered reason to adjust the base year emissions totals. Similarly, base year emissions are not adjusted in response to the shutdowns of existing operating units or the start-ups of new operating units.

8.3.2 Structural Changes

In cases of acquisitions and divestitures and source ownership and control changes, Hess adjusts its base year emissions if the change exceeds 5% of the original base year emissions total. Consideration of structural changes when determining exceedance of the significance threshold is limited to operations that existed prior to the established base year.

The adjustment of the base year emissions in response to significant acquisitions may occur subsequent to the year in which the acquisition occurs. As discussed in the organizational boundary section, Hess may delay inclusion of new assets in the organizational boundaries of the Hess GHG inventory to allow for operational control change and data collection implementation. Assessment of the significance of the structural change of an acquisition and any associated base year emissions adjustment occurs in the year when the asset enters the inventory.

There are situations in which Hess does not delay the inclusion of acquired assets into its GHG inventory organizational boundaries due to the existence of appropriate processes and data. If



such additions occur prior to August 1st in a particular year and are recognized as significant structural changes, Hess will make adjustments addressing the entire base year.

In addition, on rare occasions, Hess makes acquisitions that, at the time of acquisition, do not reflect the operations or the emissions that are expected during a typical year of its ownership. The size of the expected future emissions from these acquisitions relative to the Hess base year emissions has the potential to complicate inventory comparisons over time. To address this situation, when Hess determines that an acquisition of this type will produce emissions that are 20% of its base year emissions, Hess will designate these assets at the time of acquisition as Assets in Transition (AITs) for the purposes of its GHG Inventory. AITs will not be included in the inventory until operations and emissions reach expected capacity, and the base year emissions will be adjusted in response to this acquisition at the time of expected operations and incorporation into the organizational boundaries.

8.3.3 Insourcing and Outsourcing

Changes related to outsourcing and insourcing, or the transfer of the procurement of services or products from Hess or a third party to the other, may require Hess to adjust its base year emissions according to these conventions:

- Hess base year emissions are adjusted if the insourced or outsourced operations related to these changes existed before the base year. If insourced or outsourced operations did not exist prior to the established base year, these changes are related to organic growth and therefore no adjustments to base year emissions occur.
- Because Hess tracks both direct emissions as well as indirect emissions from third-party services, many outsourcing and insourcing changes do not alter the presence of emissions sources within Hess GHG Inventory boundaries. Outsourcing and insourcing does change source ownership and control and therefore impacts direct and indirect emissions amounts that are separately reported. Accordingly, Hess adjusts its base year emissions by shifting emissions between these source categories as appropriate. While this adjustment does not impact the overall inventory's base year emissions total, it allows ongoing relevance and comparability of direct and indirect emissions figures.

8.3.4 Quantification Methodologies Changes and Data Improvement

Base year emissions are adjusted if the circumstances associated with the individual categories below result in a 5% change in the Hess GHG inventory base year emissions total:

- Changes in the quantification methodologies; or
- Improvement of inventory data.

8.3.5 Discovery of Errors in the Base Year Emissions

Base year emissions are adjusted in response to the discovery of an error or cumulative errors in the base year emissions if correction of the discovered errors or cumulative errors results in a 5% change in the Hess GHG inventory base year emissions total.



9.0 GHG EMISSIONS QUANTIFICATION METHODOLOGIES

9.1 Introduction

Hess Corporation quantifies its GHG emissions using petroleum industry best practice methodologies.

Recognizing that preferred activity data may not be available, Hess defines three tiers of quantification approaches for particular emissions sources, representing decreasing levels of certainty. Tier A is the designated preferred Hess approach. Operations and facilities are encouraged to upgrade to higher tiered approaches.

Hess currently uses global warming potentials of the Intergovernmental Panel on Climate Change (IPCC)'s *Fourth Assessment Report: Climate Change 2007 (AR4)*.

Hess rolls up its emissions from facilities and operations within its GHG management system.

Quantification methodologies are used to convert activity data, which is data indicating the magnitude of activity associated with the source, into emissions estimates. The methodologies are specific to source types (mobile combustion, highway vehicles, purchased electricity). Methodologies specify the activity data used; the appropriate emissions factor; and the formula applied to the emissions factor and activity data to calculate the emissions estimate. Various methodologies exist for calculating emissions.

Methodologies used to arrive at source emissions can be calculated from different types of activity data. The activity data used, however, can affect the level of confidence that can be placed in the calculated emissions data. For example, fuel consumption by a vehicle is the preferred activity data to calculate the CO₂ emissions; however, vehicle mileage and engine efficiency provide better estimates when calculating CH₄ and N₂O emissions. In the case in which a type of activity data is unavailable, such as vehicle mileage, an alternative less accurate methodology, such as fuel consumption, can be used to estimate CH₄ and N₂O. Another key consideration in the methodology is the global warming potential (GWP) value used.

9.2 Data Collection and Quantification Methodologies

Hess calculates Scope 1 emissions using emissions factors from the EPA Mandatory Reporting Rule (MRR) 40 CFR Parts 86, 87, 89, et al. In the absence of emissions factors in the MRR, we use other EPA emissions factors or emissions factors recognized as petroleum industry best practices such as set forth in the American Petroleum Institute (API) *Compendium of Greenhouse Gas Emissions Methodologies for the Natural Gas and Oil Industry* (2021).

Hess calculates and reports Scope 2 emissions on both a location-based and market-based method. The location-based method is based on the average GHG emissions intensity of the electricity grid from which electricity consumption occurs. The market-based method is used when Hess purchases Renewable Energy Certificates (RECs) to claim credit for an equivalent amount of renewable energy generated electricity at another location. Hess purchases Green-e certified RECs that are validated as 100% renewable with zero GHG emissions per MWh generated.



Hess calculates Scope 3 emissions using both the WRI/WBCSD *Corporate Value Chain (Scope 3) Accounting and Reporting Standard* (2011) and the Ipieca/API document *Estimating Petroleum Industry Value Chain (Scope 3) Greenhouse Gas Emissions* (June 2016).

Hess uses the best quality of activity data available to calculate source emissions. Hess recognizes, though, that the level of control, technical and environmental management capacity, and other considerations will affect what activity data is available. In recognition that availability and quality of activity data varies across the corporation, Hess allows alternative methodology by source type to be used for the calculation of emissions (Figure 3). For each source type, up to three acceptable methodologies are identified. The alternate methodologies are used in order of preference according to the quality of the emissions data generated by the methodology. When submitting activity data for rollup into the GHG inventory, reporting units select the most accurate methodology available. The most accurate methodology utilizes actual activity and fuel composition data. If actual activity and composition data are unavailable, periodic direct measurement or models are used. In the event that these data are unavailable, default emissions factors are employed. For our largest sources (fuel combustion and flaring), electronic flow data is captured monthly in the data warehouse and then reviewed and used to perform GHG calculations.

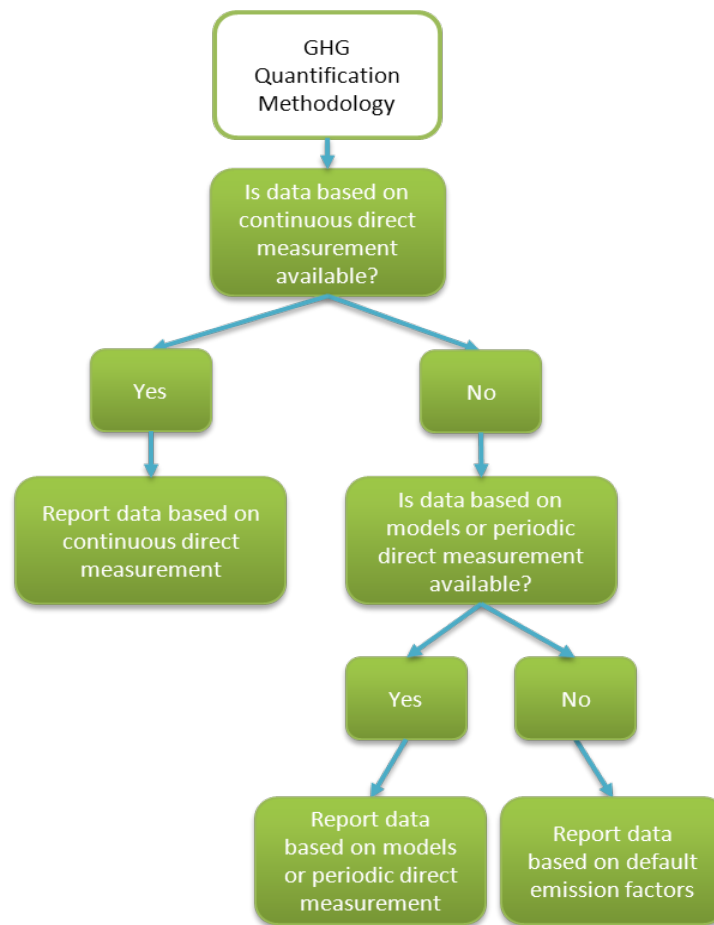


Figure 3. GHG Emissions Quantification Methodology Decision Tree



9.2.1 Non-Operated Assets

For facilities and operations in which Hess does not have operational control (equity share organizational boundary approach), EHS Sustainability and Reporting is responsible for obtaining the activity data or GHG emissions estimates from the operator. Data provided by the Operator is compared to the previous year submittal to identify significant discrepancy but is not independently validated by Hess.

In the case of operations or facilities which do not provide sufficient conforming activity data or GHG emissions estimates to generate a complete inventory, Hess will utilize appropriate available data to generate emissions estimates. For example, using actual facility emissions data from a previous year to generate emissions factors and apply to the current year production volume. Another example is using emissions estimates from similar Hess operated facilities in the same geographical location.

9.2.2 Application of the Quantification Methodologies

Hess employs a specialized emissions quantification software system that rolls up emissions data from facilities and business units. This application allows flexibility in how it consolidates and reports GHG emissions and supports consistent use of selected quantification methodologies.

9.2.3 Value Chain Emissions Reporting

Value chain emissions are emissions resulting from upstream (e.g., supply chain) or downstream (e.g., customer use) activities associated with a company's operations but which are not performed by the company.

Reporting of value chain emissions is based primarily on the WRI/WBCSD *Greenhouse Gas Protocol*. Hess also refers to the Ipieca/API document *Estimating Petroleum Industry Value Chain (Scope 3) Greenhouse Gas Emissions* (June 2016). Hess has applied a materiality threshold of 5% of Category 11 emissions to determine the materiality of other Scope 3 categories. The only other category to exceed this materiality threshold is Category 10, processing of sold products. Even though it is not material, Hess does calculate and report on Category 6, employee business travel.

9.3 GHG Global Warming Potentials

To convert inventory emissions from varied GHGs to the common unit of carbon dioxide equivalents (CO₂e), the IPCC identified 100-year GWPs in *Climate Change 1995: The Science of Climate Change*, also known as the *Second Assessment Report (AR-2)*. Changes to GWPs were made in the *IPCC Third Assessment Report: Climate Change 2001*, and *Fourth Assessment Report: Climate Change 2007 (AR-4)*. Since 2014, Hess' GHG inventories reflect the AR-4 values. This is consistent with the US EPA's Inventory of US GHG Emissions and Sinks which complies with international GHG reporting standards under the United Nations Framework Convention on Climate Change.



Table 1. Global Warming Potentials Utilized by Hess

GHG	AR-4
CO ₂	1
CH ₄	25
N ₂ O	298

9.4 Changes to Quantification Methodologies

Hess' largest direct GHG emissions sources are fuel combustion and flaring. Hess uses the GHG emissions factors from EPA's Mandatory Reporting Rule and has a regulatory tracking tool that notifies the Air Subject Matter Experts (SMEs) if these factors are revised by EPA. If the factors are revised, the Air SME is responsible for inputting the updated factors into the GHG calculation tool. The Air SMEs also monitor regulatory and industry emissions factor activity and will update emissions factors as needed.

10.0 INVENTORY QUALITY AND UNCERTAINTY

10.1 Introduction

GHG Inventory quality refers to the general accuracy and consistency between an organization's actual GHG emissions and quantified GHG emissions. Since a GHG Inventory is a data product upon which a variety of stakeholders may rely, overall GHG emissions quality affects the confidence that these stakeholders can have in the final inventory. Quality and confidence have increased significance when the decisions or actions are related to issues of regulatory compliance or financial management, such as emissions trading.

The difference between actual and quantified GHG emissions results from uncertainty introduced during activity data collection, data management, emissions calculations, and reporting. Inventory quality is potentially impacted as data progresses from "stack" to report.

All GHG inventories are subject to uncertainty, both inherent and systemic:

- Inherent uncertainty refers to random errors or the difference between a true amount and a quantified amount resulting from a quantification approach. Although inherent uncertainty can be minimized, it always exists.
- Systemic uncertainty refers to errors resulting from the inventory process. Systemic uncertainty can be minimized by careful inventory design and the implementation of quality assurance and control measures.

Methods to reduce and control uncertainty include use of:

- Best practice processes;



- Best practices emissions calculations and factors;
- Reviews and accuracy checks on activity data; and
- Third party assurance reviews.

Control is related to uncertainty. For assets and operations for which an organization does not have operational control (assets included in the equity share approach to boundaries), higher levels of uncertainty are introduced due to the limited ability of the organization to ensure the use of methods and practices to reduce and control uncertainty. Scope 3 emissions may also have higher levels of uncertainty due to the control issue.

10.2 Inventory Quality

Hess works to ensure inventory quality throughout the data collection, documentation, calculation and roll-up processes. Checks begin at the source of emissions and follow the data to its final aggregated form.

Specific actions regarding Hess inventory quality are applied to the following major components of its GHG management system:

- Inventory process and systems,
- Responsibilities,
- Methods,
- Data, and
- Documentation.

10.2.1 Inventory Process and Systems

The Hess GHG Inventory process is based upon recognized best practices including the WRI/WBCSD *Greenhouse Gas Protocol* and the Ipieca guidelines. These reference documents compile the insights of a broad group of industry, environmental, and government experts and have adhered to guidance provided to implement quality-based inventory process and systems. Key to the inventory process and systems are the identification of the inventory principles which provide direction to all aspects of the effort. Hess uses environmental management systems at many of its operated facilities.

10.2.2 Methods

Inventory methods include all technical aspects of conducting the GHG Inventory. The methods used in the Hess GHG Inventory have been chosen and effectively implemented to help ensure quality results. The Hess GHG Inventory boundaries consider aspects of operational control and equity share to provide flexibility to choose whatever approach is recognized as best practice.



Hess has selected industry GHG emissions quantification methods prescribed by EPA's Mandatory Reporting Rule (MRR) as the primary approach where data is available. These quantification methods are applied consistently to all facilities within the corporation's organizational boundaries.

10.2.3 Data

Throughout the GHG Inventory process, systems and methods create an environment that supports data quality. The GHG Inventory process includes data quality management at several points.

Inventory quantification methodologies use submitted activity data to estimate emissions for particular facility sources. Data collection processes and procedures are designed to maximize clarity and understanding of expectations and minimize errors in these efforts.

Hess conducts a variety of data checks of facility submitted data, including but not limited to:

- Periodic sampling of activity data during internal audits to confirm accuracy and quality;
- Different activity data for particular sources are cross-referenced; and
- Comparison of previous years' data to current data to identify inconsistencies.

Hess also confirms that quantification methods are accurately performed in the following ways, including but not limited to:

- Review of the emissions factors employed; and
- Independent recalculation of sampled computations.

10.2.4 Documentation

Inventory documentation is key to inventory quality in terms of execution and assessment. Systems, processes, and methods are documented to help ensure that the inventory is built on quality data. Such documentation, including records and work products, from the performance of inventory tasks allows for the review, confirmation, clarification, and verification that these tasks met quality expectations. The GHG calculation tool holds all of the calculation input and output data and can generate reports to assist in data review and verification.

Hess GHG Inventory documentation includes this GHG Inventory Protocol which provides an overview of the approach and the process. Previously mentioned references also provide additional clarification for inventory efforts. Finally, documentation related to Hess environmental management systems acts as an additional reference for both environmental management and quality assurance issues related to the inventory.

Detailed records of primary and secondary inventory data are maintained in addition to clear records of calculations and assumptions used in the generation of data and supporting text. This documentation is necessary to explain changes over time and forms part of the audit trail necessary for assurance.



10.2.5 Independent Assurance

In pursuit of quality data, Hess submits its GHG Inventory to assurance by an independent third party. Assurance is discussed in further detail in a subsequent section of this protocol.

10.2.6 Inventory Uncertainty

Although the Hess GHG Inventory is subject to uncertainty that cannot be eliminated, such uncertainty should be identified and managed. Quality control and assurance measures identified in the previous subsection are intended to address and minimize systemic and inherent uncertainty in the Hess GHG Inventory. Hess also takes steps to specifically understand the uncertainty in its GHG Inventory.

- Facilities or Air SMEs identify the source of data when submitting inventory data for corporate rollup so that uncertainty can be assessed.
- Hess Air SMEs conduct assessments to identify the major areas of uncertainty associated with its GHG inventory.
- Hess provides information regarding uncertainty in its GHG inventory in the company's annual CDP climate change questionnaire response.

11.0 REPORTING AND ASSURANCE

11.1 Reporting

Hess communicates the results of its GHG Inventory internally to managers via internal reporting and externally to its stakeholders as part of its annual sustainability report.

Hess conducts third party assurance of its annual sustainability report which includes review of the GHG Inventory. The level of assurance is set at limited (see 11.3.1 for more information). This Hess GHG Inventory Protocol acts as the standard against which assurance is performed.

The materiality threshold for a material misstatement of the Hess GHG Inventory is 5% of either direct emissions or indirect emissions totals, respectively.

11.1.1 Introduction to Reporting

A GHG inventory report is a specialized document that summarizes relevant information drawn from the GHG inventory for different stakeholders of the report. In response to concerns from stakeholders related to environmental issues, many corporations publicly provide GHG emissions information. Specific parties that analyze public corporate GHG reports include stockholders, investment firms, environmental groups, government agencies, members of facility communities, and others.

11.1.2 Internal GHG Inventory Reporting Practices

Internal reporting of the GHG Inventory is provided to managers at the corporate, business unit, and facility level. In addition to summary tables provided to give internal users a quick overview



of key information, these reports include information at a level of detail necessary to assist individuals with operational decisions related to GHG management.

11.1.3 External Voluntary GHG Reporting Practices

Hess reports its GHG emissions, which are assured by an independent third party, as part of its annual corporate sustainability report.

In general, public reporting of the Hess GHG inventory, either in the annual corporate sustainability report, the annual CDP climate change questionnaire, or both, includes:

- A description of the organizational and operational boundaries;
- The approach to the consolidation of the inventory (by business unit, GHG type, scopes);
- The reporting period, base year, and adjustments to base year;
- Current year and previous year emissions data on both an operated and net equity basis;
- The methodologies used;
- Identification of material exclusions;
- Results of third-party assurance;
- Information on GHG projects and offsets;
- Context for emissions changes including restatements, if any;
- Explanation of use of normalized data;
- Assessment of performance against benchmarks;
- Discussion of inventory quality and uncertainty; and
- Other information sufficient to provide the reader the ability to interpret and understand the inventory.

Hess reports indirect emissions separate from its direct emissions, and specific direct and indirect emissions categories are also individually reported.

11.2 Reporting and Regulatory Requirements

The described reporting for the purposes of this protocol applies to the GHG Inventory of the entire Hess Corporation, as defined by its organizational boundaries. Certain operations and facilities may be subject to additional specific reporting requirements of regulatory programs under which they operate (i.e., EPA Mandatory Reporting Rule and others). In these cases, relevant operations and/or facilities, with corporate support as necessary, submit the necessary reports to these programs. This protocol does not address this type of regulatory reporting.



11.3 Assurance

11.3.1 Introduction to Assurance

Assurance is a post-inventory assessment to determine if the GHG inventory adhered to specified standards regarding its structure and approach. Assurance also serves to assess the accuracy and quality of resulting GHG emissions data. GHG inventory assurance is most credible when conducted by independent third parties.

Assurance can be particularly relevant for organizations that are seeking early action protection from future regulations or participation in emissions trading. A verifier's opinion provides subsequent users of the GHG information, including the sellers and buyers of the emissions and reductions, an assurance of its reliability and quality.

GHG assurance includes a review of the inventory process and systems, and interviews with personnel having inventory responsibilities to identify areas where potential errors might be likely to occur (due to a lack of clear instructions or weak controls for example). Verifiers then focus on these risk areas and follow an audit trail by checking calculations and sampling input data sources to identify if errors actually exist.

Assurance considers the significance, or the "materiality," of any errors identified. A materiality threshold is the magnitude of an omission or misstatement of GHG information, indicated as a level or percentage of total emissions, that makes it likely that the judgment of a reasonable person relying on the information would have been influenced by the omission or misstatement. Materiality in the context of assurance addresses the significance of omissions, errors, or other misstatements that are identified during the assurance assessment. Small random errors, particularly if easily corrected, are considered immaterial. Larger, multiple, or systemic errors are generally recognized as material and require corrective action. The materiality threshold is a level or percentage of the total emissions that verifiers use to determine whether an error or omission is a significant misstatement.

The verifier provides either reasonable or limited assurance. For a reasonable level of assurance, the validator or verifier provides a reasonable, but not absolute, level of assurance that the responsible party's GHG assertion is materially correct. A limited level assurance is distinguishable from a reasonable level of assurance in that there is less emphasis on detailed testing of GHG data and information supplied to support the GHG assertion.

Hess provides verification results in a report of the verifiers' findings, and include a statement, summarizing the process and an overall assessment of the data, including any qualifications. Hess shares this opinion with GHG Report users as evidence of inventory quality.

11.3.2 GHG Inventory Assurance

The Hess GHG Inventory assurance is guided by this Hess GHG Inventory Protocol.

- A. Approach and Process – The Hess GHG Inventory is verified by an independent third party on an annual basis. This GHG Inventory assurance may be undertaken as part of the wider corporate sustainability report verification and auditing efforts or as a separate engagement. The third-party independent assurance is performed according to



appropriate standards. In addition, the competence and performance of the independent third party are determined according to appropriate standards.

- B. Scope and Standards – Hess defines and provides the assurance scope to its verifiers during the contracting process. The verification of the Hess GHG Inventory uses this Protocol as the principal standard. Hess may also verify its GHG inventory against other appropriate standards, such as the International Organization for Standardization (ISO) 14064-3:2019: *Specification with guidance for the validation and verification of greenhouse gas statements*.
- C. Materiality Threshold – The materiality threshold for a material misstatement of the Hess Scope 1 and Scope 2 GHG Inventory is 5% of the combined Scope 1 and Scope 2 emissions totals, respectively. The materiality threshold for a material misstatement of the Hess Scope 3 GHG Inventory is 5% of Category 11, Use of Sold Products emissions.
- D. Independent Third-Party Assurance – The Hess inventory is verified by an independent third party.

11.3.3 Verification Preparation

Hess prepares for verification, generally by:

- Understanding, in advance, the verification process and objectives; and
- Careful planning and deliberate execution of its GHG inventory.

Specific preparation entails:

- Selecting representative sites for source data reviews;
- Documenting the inventory process, systems, procedures, and methods;
- Defining and communicating inventory roles and responsibilities;
- Documenting inventory activities and retaining relevant records ensuring accessibility; and
- Recognizing the level of assurance and the materiality threshold of inventory results required by Hess.

11.3.4 Corrective Action

In the event that the assurance process identifies errors, omissions, or deficiencies in the Hess inventory, such as a material misstatement, or insufficient evidence to evaluate conformance, the corrective action is assigned to the party in Hess with responsibility for the activity subject to the corrective action, consistent with the role responsibilities assigned in the protocol.



12.0 REFERENCES

The Hess GHG Inventory Protocol, consistent with best practices for inventory development, is derived from guidance provided in the documents in Table 1: Reference Documents.

The content of Hess GHG Inventory Protocol is compatible with and does not contradict the substance and intent of the above-mentioned guidance documents. The Hess GHG Inventory Protocol is, however, tailored to match Hess specific operations and industry conditions.

Table 2: Reference Documents


Source	Document Title
World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol	<i>The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard</i> (Revised Edition, 2015)
	<i>GHG Protocol Scope 2 Guidance – An amendment to the GHG Protocol Corporate Standard</i> (2016)
	<i>Corporate Value Chain (Scope 3) Accounting and Reporting Standard</i> (2011)
	<i>Technical Guidance for Calculating Scope 3 Emissions</i> (version 1.0) Supplement to the Corporate Value Chain (Scope 3) Accounting and Reporting Standard
International Standards Organization	ISO 14064-1:2018, <i>Greenhouse gases – Part 1: Specification with guidance at the organizational level for quantification and reporting of greenhouse gas emissions and removals</i>
	ISO 14064-2:2019, <i>Greenhouse gases – Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements</i>
	ISO 14064-3:2019, <i>Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements</i>
American Petroleum Institute (API) and Ipieca	American Petroleum Institute's <i>Compendium of Greenhouse Gas Emissions Methodologies for the Natural Gas and Oil Industry</i> (2021). (This is a compendium of industry recognized GHG estimation methods for all oil and gas industry segments to enhance consistency in emissions estimation within the sector.)



Source	Document Title
	<p>Ipieca/API Estimating Petroleum Industry Value Chain (Scope 3) Greenhouse Gas Emissions (June 2016). (This guidance is used to determine Scope 3 categories that are material for Hess.)</p> <p>Ipieca/API/IOGP Sustainability Reporting Guidance for the Oil and Gas Industry, Module 3 Climate Change and Energy (2020).</p> <p>API Guidance Document for GHG Reporting (2022).</p>
US Environmental Protection Agency	Mandatory Reporting of Greenhouse Gases, Oct 30, 2009, 40 CFR Parts 86, 87, 89, et al.

13.0 DOCUMENT HISTORY

Table 3. Document History

Revision Number	Date	Description of Amendment	Sections	Approver(s)
1	02/05/2024	<p>HOMS template applied</p> <p>Updated to reflect changes in the company's strategy and asset portfolio, and to provide an updated list of key reference documents</p>	All	
0	01/20/2017	Issued for use	All	AS