



GREENHOUSE GAS EMISSIONS INVENTORY REPORT - SHELL GROUP

February 2022

Reporting Period:	January 1, 2021 – December 31, 2021
Consolidation Boundary	Operational Control
Reporting Boundaries	Direct (Scope 1) and Energy Indirect (Scope 2)
Verification Status	Limited Assurance

Prepared by: PTS/IR

TABLE OF CONTENTS

Chapter 1: General description of the organisation, goals and inventory objectives.....	3
1.1 Introduction	3
1.2 Description of the reporting organisation.....	3
1.3 Persons or entity responsible for the report.....	3
1.4 Reporting Period Covered	4
1.5 GHG Inventory Verification Status	4
Chapter 2: Organisational Boundaries.....	4
Chapter 3: Reporting boundaries.....	4
3.1 Scope 1 emissions	4
3.2 Scope 2 emissions	5
Chapter 4: GHG Emissions Inventory	7
4.1 Consolidated statement of GHG emissions:	7
4.2 Methodologies for quantification of Scope 1 and 2 GHG emissions inventory included in this report.....	7
4.2.1 Methods and Emission Factors.....	8
4.2.2 Shell Environmental Reporting System (SERS)	8
4.2.3 Global Warming Potential (GWP) factors.....	9
4.2.4 Changes in calculation methodologies in 2021.....	9
4.3 GHG Uncertainty assessment and results.....	9
4.4 Base Year	10
4.5 GHG Removals	11
Appendix 1: List of included Operated Units.....	12
Appendix 2: ISO 14064-1:2018 Index.....	16

CHAPTER 1: GENERAL DESCRIPTION OF THE ORGANISATION, GOALS AND INVENTORY OBJECTIVES

1.1 Introduction

This report provides the Scope 1 and 2 greenhouse gas (GHG) emissions inventory under operational control for Shell Group for the reporting period between January 1, 2021 – December 31, 2021. It is prepared in line with the requirements outlined in Part 9.3 of the ISO 14064-1:2018 *Specification with Guidance at the Organisational Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals*.

The purpose of this GHG Report is to demonstrate conformity with ISO 14064-1:2018 and to facilitate GHG inventory verification.

1.2 Description of the reporting organisation

Shell is a global group of energy and petrochemical companies that aims to meet the world's growing need for more and cleaner energy solutions in ways that are economically, environmentally and socially responsible.

Our operations are divided into our businesses: Upstream, Integrated Gas and Renewables and Energy Solutions (formerly New Energies), and Downstream. Our Projects & Technology organisation manages the delivery of Shell's major projects and drives our research and innovation.

Our Upstream organisation manages the exploration for and extraction of crude oil, natural gas and natural gas liquids. It also markets and transports oil and gas, and operates the infrastructure necessary to deliver them to market.

Our Integrated Gas organisation manages our liquefied natural gas (LNG) activities and the production of gas-to-liquids (GTL) fuels and other products. It includes natural gas exploration and extraction, and the operation of the upstream and midstream infrastructure necessary to deliver gas to market. It markets and trades natural gas, LNG, crude oil, electricity, carbon-emission rights and also markets and sells LNG as a fuel for heavy-duty vehicles and marine vessels.

Renewables and Energy Solutions is the part of Shell focused on finding commercial ways to meet the evolving energy needs of our customers. These solutions include hydrogen, power from renewable and low-carbon sources such as wind, solar and natural gas and decarbonisation options including nature-based solutions and carbon capture and storage. This part of Shell also develops new business models such as clean power-as-a-service, which addresses how digital technology can better help customers with their energy needs.

Our Downstream organisation serves more than 30 million customers at about 46,000 retail service stations every day. It manages different Chemicals and Products activities as part of an integrated value chain that trades and refines crude oil and other feedstocks into a range of products which are moved and marketed around the world for domestic, industrial and transport use. The products we offer customers include conventional fuels for road, aviation and shipping; low-carbon fuels such as biofuels, renewable natural gas (RNG), hydrogen and electric-vehicle charging. We also produce and sell lubricants, bitumen, sulphur and petrochemicals worldwide.

Our Projects & Technology organisation manages the delivery of our major projects and drives research and innovation to develop new technology solutions. It provides technical services and technology capability for our Integrated Gas, Upstream and Downstream activities. It is also responsible for providing functional leadership across Shell in the areas of safety and environment, contracting and procurement, wells activities and greenhouse gas management.

1.3 Persons or entity responsible for the report

This report has been prepared by PTS/IR team in Shell Global Solutions BV.

The overall responsibility for preparing this report:

- Group & External Reporting Manager (Netherlands)

Support and preparation of inventory:

- Senior Group & External Reporting Specialist (Canada)

1.4 Reporting Period Covered

The report covers the following reporting period: January 1, 2021 – December 31, 2021.

1.5 GHG Inventory Verification Status

Direct GHG emissions (Scope 1) and Indirect GHG emissions from imported energy (Scope 2) inventory included in this report were verified by Lloyd's Register Quality Assurance (LRQA) to a limited level of assurance. The assurance statement is posted here: www.shell.com/ghg

CHAPTER 2: ORGANISATIONAL BOUNDARIES

The emissions in this report are consolidated using the operational control approach. Under this approach, we reported 100% of emissions from assets and activities under our operational control irrespective of our percent ownership.

GHG emissions are aggregated using a bottom-up approach: emission source -> asset -> operating unit -> business -> Group. GHG emissions in this Report include emissions from Upstream, Integrated Gas, Renewables and Energy Services, Downstream, Projects & Technologies businesses and Functions (mainly offices). There were no operated assets excluded from the GHG inventory in the reporting period.

The list of reporting entities included in the inventory is provided in Appendix 1 of this report.

CHAPTER 3: REPORTING BOUNDARIES

This report includes the following GHG emissions:

- Category 1: Direct GHG emissions (thereafter referred to as Scope 1)
- Category 2: Indirect GHG emissions from imported energy (thereafter referred to as Scope 2)

Emissions included in this GHG Report comprise carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). CO₂ and CH₄ are the most significant components.

3.1 Scope 1 emissions

Sources included in Scope 1 emissions comprised:

- Combustion of carbon-containing fuels in stationary equipment (e.g., boilers, gas turbines) for energy generation;
- Combustion of carbon-containing fuels in mobile equipment (e.g., trucks, vessels, mobile rigs);
- Flares;
- Venting and emissions from industrial processes (e.g., hydrogen plants, catalytic cracking units); and
- fugitive emissions, including piping and equipment leaks and non-routine events.

Emissions from equipment operated by contractors are included in Scope 1 emissions if contractors operated under Mode 1 or 2 Contracts¹.

Emissions associated with generation of exported electricity and steam are included in our total Scope 1 emissions.

CO₂ emissions from biogenic sources (e.g., biofuels, biomass) were not included in our Scope 1; instead, they are captured separately. CH₄ and N₂O emissions from biogenic sources are included in our Scope 1 emissions.

Captured CO₂ that was subsequently sold or otherwise transferred to 3rd parties is not included in our Scope 1 emissions.

CO₂ captured and sequestered using carbon capture and storage (CCS) technologies is not included in our Scope 1 emissions. However, the emissions from operating CCS are included in our Scope 1 and 2 emissions.

Carbon offset credits are not included in our Scope 1 GHG emissions shown in this report.

There were no material sources excluded from the Scope 1 inventory.

The following immaterial sources have been identified, for which data was not collected or where simplified methods were used. Collectively, these sources are estimated to be de minimis (< 1%):

- Fugitive emissions from domestic-sized appliances (e.g., refrigerators) were not included.
 - A materiality assessment for our industrial air conditioning units has shown the industrial sources to be non-material, and, therefore, fugitive emissions from domestic-sized appliances are also expected to be non-material.
- GHG emissions from some maintenance activities like welding were not included for all operations;
- GHG emissions from some short-term seismic campaigns or drilling activities were not included for all operations;
- Fugitive emissions of CO₂ from fire extinguishers were not included for all operations;
- Releases of HFCs were converted to CO₂ equivalents using a single Global Warming Potential (GWP);
- Where it is impractical to collect individually insignificant emissions, we used simplified methods for estimating the emissions:
 - Emissions for some offices were modelled by multiplying the number of employees and contractors assigned to these offices by an emission factor, which was derived from actual data;
 - Emissions for some retail stations were modelled by multiplying the number of sites by an average emission factor per site, which was derived from actual data;
 - Emissions for some vehicles were estimated by converting kilometres driven to fuel usage, which in turn was used to calculate emissions.

3.2 Scope 2 emissions

Sources included in Scope 2 emissions comprised indirect emissions from purchased and consumed electricity, steam and heat. We did not identify any assets with imported cooling or compressed air used for energy purposes.

Scope 2 emissions are calculated using the market and location-based methods separately.

¹ In line with industry standards, we distinguish three contract modes. Mode 1: contractor/supplier performs work under Shell's HSSE Management System (HSSE MS); Mode 2: contractor/supplier performs work under its own HSSE MS, which is materially equivalent to Shell's HSSE MS; Mode 3: contractor/supplier performs work under its own HSSE MS.

There were no material sources excluded from our inventory.

The following immaterial sources have been identified, for which data was not collected or where simplified methods were used. Collectively, these sources are estimated to be de minimis (< 1%):

- Some country electricity grid factors are only available in CO₂ and not CO₂ equivalents. Where both are available the difference between them is immaterial (about 1%).
- Where it is impractical to collect individually insignificant emissions, we used simplified methods for estimating the emissions:
 - Emissions for some offices were modelled by multiplying the number of employees and contractors assigned to these offices by an emission factor, which was derived from actual data;
 - Emissions for some retail stations were modelled by multiplying the number of sites by an average emission factor per site, which was derived from actual data.

CHAPTER 4: GHG EMISSIONS INVENTORY

4.1 Consolidated statement of GHG emissions:

Reporting Organisation:	Shell			
Reporting Period Covered:	From January 1, 2021 to December 31, 2021			
Consolidation Approach:	Operational Control			
EMISSIONS	Unit	Total emissions	GWP used for converting emissions to CO ₂ e [B]	Total Emissions (in million tonnes CO ₂ e)
Direct GHG Emissions (Scope 1) [A]	million tonnes CO₂e	60		
Carbon dioxide (CO ₂)	million tonnes	58	1	58
Methane (CH ₄)	thousand tonnes	55	25	1.4
Nitrous oxide (N ₂ O)	thousand tonnes	0.7	298	0.2
Hydrofluorocarbons (HFCs)	tonnes	25	1430	0.04
Sulphur hexafluoride (SF ₆)	tonnes	0.008	22800	0.0002
Perfluorocarbons (PFC)	tonnes	0	7390	0
Nitrogen trifluoride (NF ₃)	tonnes	0	17200	0
Indirect GHG emissions from Imported energy (Scope 2)				
Scope 2 emissions – market-based method	million tonnes CO ₂ e	8	--	8
Scope 2 emissions – location-based method	million tonnes CO ₂ e	9	--	9
Other Direct GHG data (not included in Scope 1)				
Direct biogenic CO ₂ emissions	million tonnes	0.004	1	0.004
CO ₂ captured and stored	million tonnes	1.05	1	1.05
CO ₂ transferred out [C]	million tonnes	0.4	1	0.4

NOTES:

[A] GHG emissions are calculated using Global Warming Potential (GWP) factors from the IPCC's Fourth Assessment Report.

[B] GWP values shown in this column are in tonnes of CO₂ equivalent per tonne of individual greenhouse gas.

[C] CO₂ captured and transferred to another organisation (for example, sold or given for free) as product or feedstock.

Detailed information on our 2021 GHG performance is expected to be published in the Shell Sustainability Report in April 2022.

4.2 Methodologies for quantification of Scope 1 and 2 GHG emissions inventory included in this report

Shell assets are required to comply with Shell's Performance Monitoring and Reporting Specification (PMRS), which sets out the scope of what is to be reported. PMRS is part of our HSSE & SP (Health, Safety, Security, Environment & Social Performance) Control Framework.

4.2.1 Methods and Emission Factors

PMRS requires assets to use local regulatory methods where they exist. Where there are no local regulatory methods, assets are required to use the highest practicable tier from the PMRS hierarchy (with the highest hierarchy being Tier 6: continuous emissions monitoring and the lowest being Tier 1: use of default/ standard emission factors). Where Tier 1 is used, assets are required to follow *API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Gas Industry, August 2009*.

Actual examples found in Shell's Environmental Reporting System (SERS) of higher tier methods and/or emission factors defined by local regulations or regulatory agencies are listed below.

- Australia – NGER
- Canada - BC Oil and Gas Commission
- Canada - Alberta Carbon Offset Program
- Canada – Alberta Greenhouse Gas Quantification Methodologies (QMD)
- Canada – Canadian Association of Petroleum Producers (CAPP), Calculating Greenhouse Gas Emissions
- Canada - National Inventory Report (NIR)
- Netherlands – EJMV
- Netherlands - VROM
- Norway - Norwegian Oil and Gas Association
- USA – Code of Federal Regulations (CFR) Part 98 - Mandatory Greenhouse Gas Reporting
- USA – Environment Protection Agency (EPA) Subpart C and Y
- USA – Environment Protection Agency (EPA) AP 42
- UK - DEFRA

4.2.2 Shell Environmental Reporting System (SERS)

SERS is Shell's environmental reporting tool, which is used to collect environmental reporting parameters specified in the PMRS, which includes GHG parameters. SERS is comprised of several systems including:

1. Microsoft SQL Server Integration Services™ (SSIS) – an interface which is used to extract transactional data from disparate source systems including OSIsoft Pi™ and Energy Components™.
2. SAP EC™ – an environmental reporting system and calculation engine, which contains Shell's asset hierarchy, equipment, emission factors and environmental calculations.
3. ERS – a reporting layer which is based on SAP HANA™ and contains tables, views, procedures, reports, etc. which allow the data from SAP EC to be aggregated and reported.

GHG data captured in SERS includes data from Shell Operated Ventures (SOV) and Non-Operated Ventures (NOV). There are two separate workflows for SERS:

1. implemented sites [SOV]; and
2. data loader sites [SOVs and NOV], where quarterly PMRS parameters are pulled from local systems or entered manually into data loaders.

For implemented sites, the SAP EC system is structured such that all environmental reporting parameters can be calculated per operating unit. Each operating unit is configured based on the specifications provided by the assets. In general, all operating units contain several facilities, and their equipment is grouped into categories of combustion, flaring, venting, fugitives, and metrics. For GHG, individual emission sources are configured per the respective category. The calculations and emission factors are determined using the criteria as defined in the section 4.2.1 above. The emission sources are joined with a hierarchy called "API hierarchy", which provides context as to the category of the emission (e.g., flaring, stationary combustion).

Transactional data is fed into SAP EC either by the aforementioned interface, bulk upload file (BUF), or via manual data entry. BUFs are generated quarterly and use an 'integration tag', which uniquely identifies the equipment and consumption material combination along with the date range corresponding

to the consumption, measurement, or emissions. Once the transactional data has been entered, the SAP EC system performs the emissions calculations. Each emission contains a material (e.g., CO₂, CH₄, N₂O), which, in combination with the API hierarchy (and/or potentially other attributes), allows the data to be correctly reported into the appropriate parameter defined in the PMRS (e.g., CO₂ from flaring).

Once the emission data is calculated in SAP EC, the data is pushed to the ERS environment (~every 5 minutes) to enable reporting. The data is normalised into monthly values and is further aggregated in views and displayed on reports. This data is referred to as 'live' data.

In order to comply with the PMRS requirement on data control and assurance plan (DCAP), the data is presented in a Submit and Approve Dashboard (S&A), which aggregates the data per PMRS parameter on a quarterly and year-to-date (YTD) basis for implemented sites. For data loader sites, once this data is uploaded, it appears on the S&A dashboard in the same manner as for implemented sites and the subsequent steps are the same.

The S&A dashboard compares the values to previous submissions (prior YTD and the same quarter for resubmissions). Comments are required for deviations greater than 10% from prior YTD for GHG-related parameters (free-form text, mandatory). In addition, if data for a prior quarter has changed, the submitters are required to select a reason from a pre-defined pick list when the change is greater than five percent. After this critical review process is complete, the data is submitted by the environmental focal point and then approved by their manager. The approved data at this point is considered 'frozen'. Data can be unlocked and resubmitted if the underlying data has changed.

4.2.3 Global Warming Potential (GWP) factors

In line with external standards, Shell aggregates its emissions of greenhouse gases into tonnes of CO₂ equivalent by applying Global Warming Potential (GWP) factors to each greenhouse gas. The GWP factors used for converting the mass of individual gases to their CO₂ equivalents are shown in the consolidated statement of GHG emissions in section 4.1 above. These factors are taken from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) over a 100-year time horizon, in line with the UK Government GHG Conversion Factors for Company Reporting.

4.2.4 Changes in calculation methodologies in 2021

A key change in the quantification methodologies for 2021 relates to GHG uncertainty. Previously, uncertainty was only calculated for Scope 1 emissions and the detailed assessment was typically updated on a three-year cycle. From 2021, GHG uncertainty is required to be calculated twice a year (in Q3 and Q4) and includes Scope 2 (market-based and location-based methods). In addition, there has been a significant change in the methodology and tools used to calculate uncertainty, which resulted in a more robust calculation of uncertainty for 2021 (see Chapter 4.3 below).

Grid factors for calculating Scope 2 emissions using the location-based method are reviewed and updated at the beginning of every year. Where grid factors have changed for 2021 reporting cycle, they have been updated in SERS or local reporting systems and have been reviewed by the business environmental reporting analysts.

4.3 GHG Uncertainty assessment and results

As mentioned above, there has been a significant change in methodology for calculating uncertainty. Based on recommendations from external guidance documents, external Subject Matter Experts, regulations in various jurisdictions where Shell operates, and Shell Subject Matter Experts (statisticians, metering and process engineers, and air specialists), the internal *Uncertainty Reporting Guide* has been developed for assets to calculate uncertainty.

As with GHG emission calculation methods and factors as mentioned above, this guide for calculating uncertainty is based on a tiered approach (with the highest hierarchy being Tier 4: site-specific uncertainty values and the lowest being Tier 1: use of default uncertainty values). The *PMR Guide* has been expanded to include an extensive table with uncertainty values for activity data and emission factors for different source types (flaring, venting, etc.) and different data sources (e.g., gas composition data from an online analyser versus from a weekly gas sample analysed in a laboratory). In addition, propagation

of uncertainty values from source to asset and then to Operating Unit (or Class of Business), Business and Group includes correlation in uncertainties (or covariance between pairs of emission sources) resulting in a more robust and conservative calculation of uncertainty.

GHG uncertainty is calculated using SERS for both implemented sites and sites using data loaders. For implemented sites, uncertainty is calculated in SAP EC™. For data loaders, a standard calculation workbook (the Uncertainty Calculation Tool) has been developed, where assets can calculate uncertainty based on the methodology in the *PMR Guide*. Assets using data loaders can then upload uncertainty values into SERS. ERS propagates uncertainty values for both implemented sites and data loader sites from Operating Unit to Business and Group.

The uncertainty values for total Scope 1 and Scope 2 market-based and location-based methods for 2021 are provided in the table below.

Category	Uncertainty, %	Uncertainty, mln tonnes CO ₂ e
Direct GHG Emissions (Scope 1)	4%	2.2
Indirect GHG Emissions from imported energy (Scope 2) – market-based method	6%	0.5
Indirect GHG Emissions from imported energy (Scope 2) – location-based method	6%	0.6

The reported uncertainty values for Scope 1 show an increase from uncertainty values calculated for 2020 (2%). This increase was due to Shell adopting a more detailed and conservative methodology for calculating GHG emissions uncertainty as described above.

The uncertainty for Scope 2 is higher than for Scope 1 on a percentage basis in part due to higher uncertainty for GHG emissions from imported steam and heat. Scope 2 uncertainty is also higher in part due to fewer emission sources included under Scope 2 compared to Scope 1, which results in less cancelling out of uncertainty values during propagation of uncertainty values from individual emissions sources all the way to the Group total.

4.4 Base Year

Shell uses the prior year's emissions as the base year for comparison purposes. In line with our reporting requirements detailed in the PMR, the base year is recalculated in the following cases:

- Structural changes in operations (such as acquisition or divestment) involving the transfer of ownership or control of emissions-generating activities or operations from one company to another.
- Changes in calculation methodology or improvements in the accuracy of emission factors or activity data.
- Discovery of significant errors in reported emissions.

For all of the above cases, the base year is recalculated if the magnitude of change is >5% of Business emissions. Only Major Installations are included in the scope of base year review. As defined in the Shell PMRS, Major Installations are crude oil and natural gas terminals, gas plants, manned offshore production platforms, manned onshore production stations or flow stations, floating production and storage vessels, refineries, chemicals manufacturing facilities, mines or upgraders.

The 2020 base year Scope 1 emissions in 2021 did not change by more than the 5% threshold; therefore, the base year has not been recalculated.

The 2020 base year Scope 2 emissions (market-based method) in 2021 have changed by more than the 5% threshold; therefore, the base year Scope 2 emissions have been recalculated from 9 to 8 million tonnes on a CO₂ equivalent basis.

	2020 Actual	2020 Base Year	Comment
Scope 1 (mln tonnes CO ₂ e)	63	63	2020 Base Year did not change by >5%
Scope 2 (mln tonnes CO ₂ e)	9	8	2020 Base year changed by 13%

4.5 GHG Removals

There were no GHG removals reported in 2021.

Note: CO₂ emissions of fossil origin (oil and/or natural gas) captured and stored using carbon capture and storage (CCS) technologies do not meet the definition of carbon removal. For treatment of CO₂ captured and stored using CCS, see Chapter 3 of this document.

APPENDIX 1: LIST OF INCLUDED REPORTING ENTITIES

The following Operating Units are included in the Shell Downstream inventory for 2021:

Operating Unit Name (as reported in SERS)	Companies and assets included
DMA-PSPC Tabangao (PHILIPPINES)	Tabangao Terminal
DMA-SEPL Bukom (SINGAPORE)	Pulau Bukom Energy & Chemicals Park
DMA-Shell Jurong Island (SINGAPORE)	Jurong Island Chemicals
DMG-DPCP Deer Park Chemicals (USA)	Deer Park Chemicals
DMG-DPRLP Deer Park Refinery (USA)	Deer Park Refinery
DMG-SMRP Mobile (US)	Mobile Refinery
DMS-SDO Rheinland (GERMANY)	Rheinland Energy & Chemicals Park
DMS-SNC Moerdijk (NETHERLANDS)	Moerdijk Chemicals
DMS-SNR Pernis (NETHERLANDS)	Pernis Energy & Chemicals Park
DMW-SCT Scotford Chemicals (CANADA)	Scotford Chemicals
DMW-SCT Scotford Refinery (CANADA)	Scotford Refinery
DS-AOSP - Upgrader (CANADA)	Scotford Upgrader
DS-AOSP CCS Quest (CANADA)	Quest CCS at Scotford Upgrader
DS-Road Transport Model (INTERNATIONAL)	Downstream Road Transport
DS-TS STASCO Operated Fleets (INTERNATIONAL)	Operated Shipping Fleet
DS-TSO Trading & Supply Terminals (INTERNATIONAL)	Trading & Supply Terminals
DS-USP US Pipeline Midstream Partners (USA)	US Midstream Partners
DSGC Lubricant Supply Chain (International)	Global Lubricants
DSGC-Aviation (INTERNATIONAL)	Aviation
DSGC-Specialities (INTERNATIONAL)	Construction & Road
DSM-DANSK Fredrica (DENMARK)	Fredericia Refinery
DSM-GCP Geismar (USA)	Geismar Chemicals
DSM-NCP Norco Chemical (USA)	Norco Chemicals
DSM-SAR Sarnia (CANADA)	Sarnia Refinery
DSM-SOPUS Convent (USA)	Convent Refinery
DSM-SOPUS Norco Refinery (USA)	Norco Refinery
DSM-SPM Monaca (USA)	Monaca Chemicals
DSM-SPR Puget Sound (USA)	Puget Sound Refinery
DSN-SOPUS Junction City (USA)	New Energies Junction City
DSR-Mobility Company Operated (INTERNATIONAL)	Mobility Company Operated Stations

The following Operating Units are included in the Shell Integrated Gas, Renewables and Energy Solutions inventory for 2021:

Operating Unit Name (as reported in SERS)	Companies and assets included
IGA-FLNG Prelude (AUSTRALIA)	Prelude FLNG
IGA-QGC LNG (AUSTRALIA)	QGC Midstream
IGA-QGC Pipeline (AUSTRALIA)	QGC Pipeline
IGA-QGC Power - Condamine (AUSTRALIA)	Condamine Power Plant

Operating Unit Name (as reported in SERS)	Companies and assets included
IGA-QGC Upstream Production (AUSTRALIA)	Queensland Gas Company
IGA-SA Logistics (AUSTRALIA)	Activities under operational control of Shell Australia
IGQ-QSGTL (QATAR)	Qatar Shell GTL (Pearl)
IGV-GASNOR (NORWAY)	Gasnor AS
IGV-HLPL (INDIA)	Shell Energy India Pvt Ltd (formerly Hazira)
IGV-Shell Bolivia SOV (BOLIVIA)	Activities under Shell operational control in Bolivia
IGV-Shell Trinidad and Tobago SOV (TRINIDAD & TOBAGO)	Shell-operated assets in Trinidad and Tobago
IGV-SMDS (MALAYSIA)	Shell MDS
IGN-Brazos (US)	Brazos Wind Ventures LLC
IGN-ERM Power – Neerabup (AUSTRALIA)	ERM Neerabup Power Pty Ltd
IGN-ERM Power – Oakey (AUSTRALIA)	ERM Oakey Power Pty Ltd
IGN-Tejas Power (US)	Tejas Power Generation
IGN-Moerdijk Solar (NETHERLANDS)	Moerdijk Solar Project
IGN-Emmen (NETHERLANDS)	Emmen Solar Project
IGN-Gangarri (AUSTRALIA)	Gangarri Solar Project
IGN-Greenlots (INTERNATIONAL)	Greenlots (Shell Recharge Solutions)
IGN-Heerenveen (NETHERLANDS)	Heerenveen Solar Project
IGN-Noordzeewind (NETHERLANDS)	Noordzeewind B.V.
IGN-Sas van Gent (NETHERLANDS)	Sas van Gent Solar Project
IGN-Shell Energy Retail (INTERNATIONAL)	Shell Energy Retail Limited
IGN-Sohar (OMAN)	Sohar Solar Qabas (FZC) LLC
IGN-Sonnen (INTERNATIONAL)	Sonnen
IGN-Munmu Baram (KOREA)	Munmu Baram Wind Project
IGN-New Motion (INTERNATIONAL)	New Motion (Shell Recharge Solutions)
IGN-Carbon Select (AUSTRALIA)	Carbon Select

The following Operating Units are included in the Shell Upstream inventory for 2021:

Operating Unit Name (as reported in SERS)	Companies and assets included
UPC-NAM (NETHERLANDS)	Assets operated by NAM (Nederlandse Aardolie Maatschappij BV)
UPC-NORSKE (NORWAY)	Assets operated by Norske Shell AS
UPC-SMEP DW (MALAYSIA)	Assets operated by Sabah Shell Petroleum Company
UPC-SMEP (MALAYSIA)	Assets operated by Sarawak Shell Berhad
UPC-SNEPCO (NIGERIA)	Assets operated by Shell Nigeria Exploration and Production Company
UPC-SNG (NIGERIA)	Shell Nigeria Gas
UPC-SPDC AFAM (NIGERIA)	Afam Power Plant

Operating Unit Name (as reported in SERS)	Companies and assets included
UPC-SPDC (NIGERIA)	Assets operated by Shell Petroleum Development Company of Nigeria
UPC-SPEX (PHILIPPINES)	Shell-operated Upstream assets in Philippines
UPC-Tunisia (TUNISIA)	Shell-operated Upstream assets in Tunisia
UPC-UK (UK)	Shell-operated Upstream assets in the UK
UPD-GOM (US)	Shell-operated Upstream Deepwater assets in the Gulf of Mexico in the USA
UPD-SBEP (BRAZIL)	Shell-operated Upstream Deepwater assets in Brazil
UPU-O&GD (ARGENTINA)	Shell-operated Upstream assets in Argentina
UPU-PERMIAN (US)	Shell-operated Upstream assets in the Permian Basin in the USA
UPU-SCAN (CANADA)	Shell-operated Upstream assets in Canada
UPX-Albania (ALBANIA)	Shell Upstream Albania BV
UPX-SSM (MEXICO)	Shell Servicios Mexico SA de CV

The following Operating Units are included in the Shell Global Functions (GF) and Projects & Technology (PT) inventory for 2021:

Business Unit	Operating Unit Name (as reported in SERS)	Companies and assets included
GF	GF-SRE Modelled (INTERNATIONAL)	Shell Real Estate Office Model (excluding UK)
GF	GF-SRE Modelled (UK)	Shell Real Estate Offices Model for the UK
GF	PT-GMR (US)	Gasmer Prototype Test Facility in the USA
GF	PT-SCSA (INDIA)	Shell Technology Centre Bengaluru, India
GF	PT-SDSG (GERMANY)	Shell Technology Centre Hamburg
GF	PT-SSHTL (CHINA)	Shell (Shanghai) Technology Limited
GF	PT-STC Atsuigi (JAPAN)	Shell Technology Centre Japan
GF	PT-STC (NETHERLANDS)	Shell Technology Centre Netherlands
GF	PT-WTC (US)	Shell Technology Centre Houston
PT	PT-GHENT (BELGIUM)	Shell Catalysts & Technologies Belgium
PT	PT-KATALEUNA (GERMANY)	Shell Catalysts & Technologies Leuna GmbH
PT	PT-MARTINEZ (US)	Martinez Catalyst Plant
PT	PT-MICHIGAN CITY (US)	Michigan City Catalyst Plant
PT	PT-ONSHORE PROJECTS (AMERICAS)	P&T activities in Shales Canada (Groundbirch and GoldCreek)
PT	PT-PITTSBURG (US)	Pittsburg Catalyst Plant
PT	PT-PORT ALLEN (US)	Port Allen Catalyst Plant
PT	PTP-VITO (US)	Vito Project
PT	PTW-CHANGBEI PH-2 (CHINA)	Changbei II Phase 1 Project

Business Unit	Operating Unit Name (as reported in SERS)	Companies and assets included
PT	PTW-JAGUAR (BOLIVIA)	Jaguar Project
PT	PTW-YAPUCAITI X1 (BOLIVIA)	Yapucaiti Project

APPENDIX 2: ISO 14064-1:2018 INDEX

ISO Clause	Section in this report
9.3.1 (a)	1.2
9.3.1 (b)	1.3
9.3.1 (c)	1.4
9.3.1 (d)	2
9.3.1 (e)	3
9.3.1 (f)	4.1
9.3.1 (g)	3.1
9.3.1 (h)	4.5
9.3.1 (i)	3
9.3.1 (j)	4.1
9.3.1 (k)	4.4
9.3.1 (l)	4.4
9.3.1 (m)	4.2.1
9.3.1 (n)	4.2.4
9.3.1 (o)	4.2.1
9.3.1 (p)	4.3
9.3.1 (q)	4.3
9.3.1 (r)	1.1
9.3.1 (s)	1.5
9.3.1 (t)	4.2.3