



OCEANAGOLD



Basis of Preparation

2022 Sustainability Report

Chloe is a Store Person at our Waihi Operation

CONTENTS

About this document	2
Socio-Economic contribution.....	3
People and Culture	6
Health and Safety.....	9
Community and Human Rights	11
Environment and Climate Change	12
Unit Conversions.....	21



ABOUT THIS DOCUMENT

This document outlines the basis on which the data for OceanaGold's 2022 Sustainability Report has been generated and reported.

The data covers the performance and activities of OceanaGold's four operational mines from 1 January 2022 to 31 December 2022. It does not include data from the Company's corporate support offices, closure projects or any non-operating interests held by the company.

Exchange rate summary

Unless otherwise stated, all financial figures in this report have been converted to United States dollars using a weighted average.

2022 ANNUAL AVERAGE RATE	
AUD/USD	0.6932
NZD/USD	0.6331
USD/PHP	54.5667
GBP/USD	1.2327
SGD/USD	0.7259
CAD/USD	0.7670

Unless required to be displayed as a decimal, numbers and percentages have been rounded to the nearest whole number.

When determining the indicators contained in the sustainability/ESG performance data set, we aimed to achieve comparability year on year and with our peers and industry benchmarks, and ensure the reported data was reliable and met internal and external stakeholder expectations.

To make sure the data complemented or addressed other reporting needs, we considered various reporting requirements and frameworks. These included: the Global Reporting Initiative Standards and Mining and Metals Sector Disclosure Guidance; the Responsible Gold Mining Principles, and the Task Force on Climate-Related Disclosures recommendations; as well as OceanaGold's internal and external policies, frameworks and reporting requirements.

Enquiries and feedback on our reporting and performance are welcome. Please contact OceanaGold on info@oceanagold.com.

SOCIO-ECONOMIC CONTRIBUTION

Payments to governments

Includes income tax, royalties and other payments to governments where we operate including New Zealand, Australia, Philippines, and the United States of America (USA). Payments made to the governments of Singapore and Canada have not been included, due to the small workforce number in 2022 and the Company having no operations in-country.

Income tax

Income taxes paid as disclosed in the Consolidated Statement of Cashflows of OceanaGold Corporation's Financial Report.

Royalties

Royalties mainly on gold sales at prescribed levels paid to government bodies.

Other payments to governments

Includes excise, local business, property, payroll, taxes, duties, levies, permits, license and other fees paid to government bodies. Also includes mandatory funds released for social development and community related programs including those in the Philippines, where up to 3% of Didipio annual operating costs/gross revenue is allocated, and in the USA where OceanaGold is required to provide financial support to a Heritage Trust program in accordance with agreements in place with the South Carolina Department of Natural Resources.

Extractive Sector Transparency Measures Act (ESTMA)

Payments to Governments shown in Sustainability Report data sets differ from the Company's ESTMA Report for which we are required to disclose reportable payments based on the nature and threshold by payee to [Natural Resources Canada](#). Consumption taxes and employer payroll-related taxes are excluded from the ESTMA summary. The latest annual ESTMA submission is available on [our website](#).

Payments to capital providers

Dividends paid to shareholders, repayments of lease liabilities, and interest expense and finance costs.

Employee wages and benefits

The economic value of wages and benefits distributed to OceanaGold employees is comprised of the employee benefits expenses as disclosed in Note 6 of OceanaGold Corporation's Financial Report for 2022, plus other employee expenses.

Fines, penalties, legal settlements

Significant fines and penalties are defined as those that meet a category 3 level in the OceanaGold risk matrix. This has the financial equivalency at an individual operational level of between \$20,000 – \$200,000.

A legal settlement payment constitutes a monetary payment in respect of an acknowledged violation of a law/s enforceable through a court, or other institution able to issue settlement orders on behalf of a court of law.

Procurement

Definition of local, national, and international supplier for each operation

Didipio	Local: Host barangay and adjacent barangays as defined in the Social Development Management Plan National: All other areas within the Philippines International: All other countries
Waihi	Local: Waikato and Bay of Plenty local government areas National: All other areas within New Zealand International: All other countries
Macraes	Local: Within the Region of Otago National: All other areas within New Zealand International: All other countries
Haile	Local: State of South Carolina National: All other areas within the United States of America International: All other countries

Social investment

Includes voluntary company contributions only. Excludes amounts paid for community initiatives which are a mandatory operating license requirement.

Community programs and infrastructure investment

Community programs and infrastructure investment represent financial contributions made in relation to community programs and infrastructure. A non-exhaustive list includes:

- Sponsorships of local students for part/full payment of schooling or tertiary costs
- Sponsorships for teacher aids, rescue equipment purchase.
- Infrastructure upgrades such as sporting structures, lighting, park equipment, native trees.

Donations and community investment

Donations and community investment represents financial contributions made in relation to donations to community to fund community outcomes. A non-exhaustive list includes:

- Monetary donations to clubs, schools, community projects
- Christmas hampers
- Travel costs for community school
- Monetary donations for prizes.

Value in-kind donations and community investment

Information with attributed financial value is provided by respective operational Community Relations representatives. In-kind donations represent non-financial contributions made in relation to community programs, charitable giving and social investment. A non-exhaustive list includes:

- Firewood donations, where wood has been sourced from OceanaGold-owned properties and cut and delivered by employees or contractors
- OceanaGold-owned property, land and accommodation made available for not-for-profit community organizations, women's domestic violence shelters
- Time contributed by OceanaGold employees or contractors to community events or projects
- Winnings or items of value donated for charity.

2022 methodology changes and restatements

Amended Haile and Waihi local supplier definition to include South Carolina and Waikato and Bay of Plenty local government areas to better capture impact in more sparsely populated areas and align the definition applied with that used for Didipio and Macraes.

Restated 2021 procurement data to exclude some payments to Government that were incorrectly classified and subsequently reported as both payments to Government and national procurement in the 2021 data.



PEOPLE AND CULTURE

Total workforce

Permanent

An individual hired on a full-time or part-time basis with no set end date for employment. Individuals engaged under a permanent employment agreement.

Temporary or casual

An individual hired on a temporary and flexible basis with no set requirements beyond completing a specific task/project. This includes individuals engaged under fixed-term (limited tenure) or casual employment agreements.

Full-time equivalent

The full-time equivalent or FTE definition is the number of hours considered full-time.

The calculation of full-time equivalent (FTE) is an employee's scheduled hours divided by the employee's hours for a full-time work week. For example, OceanaGold's 38-hour work week employees scheduled to work 38 hours per week are 1.0 FTEs. Employees scheduled to work 30.4 hours per week are 0.8.

Contractors

An individual or entity engaged by OceanaGold or its subsidiaries and not directly employed by OceanaGold performing a service under contract on either a long-term or permanent basis, where 'long-term' is defined as delivery of that service on at least a fortnightly basis for greater than, or equal to, three months.

This includes:

- 1) all contractors working on an OceanaGold-controlled site (for example, personnel at OceanaGold's exploration camps); and
- 2) all contractors in a personal services role under the direction of OceanaGold either on or off site. For example, individuals working at the direction of OceanaGold in a seconded role, but not an outsourced help desk operator who assists numerous clients other than OceanaGold.

We have defined full-time as approximately 10 hours per day, at five days per week, for 48 weeks of the year for full-time contractor positions across our Company.

Contractors are not included in any breakdowns in our People and Culture data set.

Employee segments

Workforce and turnover data includes all permanent, full-time and part-time, temporary and casual employees at Dec 31. It excludes all contractors.

Employee turnover

Calculated as the number of people who left the company during the year, divided by the number of employees at Dec 31.

Voluntary turnover includes employees who have chosen to resign or retire and employees who have completed fixed-term contracts.

Non-voluntary turnover includes redundancies and actions warranting termination under an employment contract and jurisdictional employment law. This includes misconduct, poor performance, redundancy, being absent without leave, and death.

Voluntary turnover only has been used to calculate the turnover rates reported by gender, age and region.

Employment classifications

Executive

SuccessFactors Position Level = Executive Committee Member.

Otherwise referred to as Executive Leadership Team (ELT). Includes President & CEO and senior executive level direct reports e.g., Chief Financial Officer Executive Vice President – Chief Technical & Projects Officer etc.

General Manager

SuccessFactors Position Level = General Manager.

This position level includes, for example General Manager - Didipio Operations (Site based), Senior Vice President – Business Development & Investor Relations (non-site based).

Manager

SuccessFactors Position Level = Senior Manager, Group Manager, Head of function.

Superintendent, Supervisor and Senior Professional

SuccessFactors Position Level = Manager or Superintendent or Senior Professional.

Professional

SuccessFactors Position Level = Supervisor or Professional.

General staff

SuccessFactors Position Level = non-supervisory staff.

Leadership positions

Includes employees with the following role designation: Executive Leadership, General Manager, Group Manager, Manager, Superintendent, Supervisor or is a Senior Professional who has employees or fixed-term contractors reporting to them (including acting arrangements).

Training hours

Average training hours per employee = Total training hours divided by FTE.

Training programs:

- Inclusive Culture
- Gold Leadership
- Anti-bribery and anti-corruption
- Human Rights
- Behavioural Interviewing Technique Training - Hire for potential program.

Anti-bribery training

Relevant employees and contractors, including Board members, are required to complete the OceanaGold online bribery and corruption training every two years. The total number reported represents those who completed the online training during the year, but not the total number of people who were compliant with respect to this training as at year end.

Local hire

Locally resourced employee – an employee who is a citizen of the country of operation or has acquired citizenship.

Externally resourced employee - an employee who is not a citizen or has not acquired citizenship and is on a working visa.

Total annual compensation ratio

Median annual total compensation of all employees of our company (other than the highest-paid individual) divided by the annual total compensation of our highest-paid individual.

Median annual total compensation of all employees - The total employee expenses as reported in the financial table divided the total workforce as at Dec 31, excluding the highest-paid individual from the People table in the Sustainability Report.

Annual total compensation of our highest-paid individual – The total compensation value of the highest-paid individual as reported in the Compensation of Named Executive Officers table in the [AGM Management Information Circular](#).

We did not annualise the pay of any other type of employee (e.g., part-time) or make any other adjustments to the payroll data.

2022 methodology changes and restatements

The turnover rate methodology was updated to use total number of employees at year end, rather than the average number of employees for the year. The female leadership % reported in 2021 has been restated to 21% as a result of applying the same methodology applied for 2022.

The position level of Executive General Manager was retired in 2022 with the reinstatement of the Chief Operating Officer (COO) position.



HEALTH AND SAFETY

Total work hours

Includes the hours worked for all employees and contractors at all OceanaGold offices and sites.

Lost Time Injury

Any injury or illness that results in one or more shifts away from work, excluding the day of the incident.

Medical Treated Injury

Any injury or illness that results in medical treatment but does not result in any lost or restricted shifts.

Restricted Work Injury

Any injury or illness that results in a person not being able to perform their normal duties.

Recordable Injury

Injuries that result in classification as lost time injury, restricted duties injury or medically treated injury.

High potential incident

Any potential or actual consequence Level 4 or 5 event.

Incident Categories

Category 1 First aid. Reversible health effects of little concern including precautionary restricted work and clinical referral but no medical treatment.

Category 2 Medical treatment undertaken, reversible health effects, LTI up to 1 week, RWI up to 2 weeks.

Category 3 LTI between 1 – 5 weeks, reversible health impacts of concern, RWI greater than 2 weeks.

Category 4 Permanent/irreversible disabling illness, injury or health impact, LTIs greater than 5 weeks.

Category 5 Fatality, significant irreversible health effect with reduced life expectancy.

Frequency rate

All rates are calculated using million hours worked.

TRIFR: Total recordable Injury Frequency Rate = number of lost time injuries, medically treated injuries and restricted work injuries x 1,000,000 / hours worked.

LTIFR: Lost Time Injury Frequency rate = number of lost time injuries recorded per million exposure hours worked. Total number of lost time injuries x 1 000 000 / hours worked.

RWIFR: Restricted Work Injury Frequency rate = number of restricted work injuries recorded per million exposure hours worked. Total number of restricted work cases x 1 000 000 / hours worked.

MTIFR: Medical Treatment Injury Frequency rate = number of medical treated injuries recorded per million exposure hours worked. Total number of medical treated injuries x 1 000 000 / hours worked.

Safety audit program

OceanaGold undertakes an annual internal and external audit program at an operational and corporate level to evaluate compliance to applicable statutory obligations, OceanaGold's IMS and Operational Performance Standards,

inclusive of identifying non-compliances, non-conformances and improvement opportunities. Operations are given an overall percentage on their compliance against the standards.

Occupational disease

Refers to instances where an Occupational Physician diagnoses a worker as having an illness, impairment, or as otherwise having their wellbeing affected due to repeated or long-term exposure to workplace hazards, agents or events, such as silica, diesel particulate matter.

Mechanism of injury

Refers to the way the injury occurred and the forces impacted on the body to cause an injury. These include, falls, slips and trips, object hit on body, moving objectives, exposure to heat, electricity and other environmental factors, sound and pressure, muscular stress, contact with chemicals and other substances, biological exposures and other unspecified mechanisms of injuries.

Body part injured

Refers to the part of the body that was injured. These include, head, neck, trunk, upper limbs including hands, lower limbs including feet and multiple body parts.

2022 methodology changes and restatements

No changes or restatements to prior year made.

COMMUNITY AND HUMAN RIGHTS

Complaints, incidents, disputes, grievances

General community complaint

Is an expression of dissatisfaction with a situation or the behaviour of the company.

General community concern

Is an expression of dissatisfaction with a situation or the behaviour of the company, where the complainant does not want to formally complain.

Human rights complaint

Any general community complaint or concern assessed as having a possible human rights impact.

Human rights grievance

An escalation of a human rights complaint, where the complainant has a serious feeling of wrongdoing. It includes situations where a complaint was not addressed to the satisfaction of the complainant.

A human rights grievance is considered 'resolved' when both parties (OceanaGold and complainant) come to a shared understanding of an outcome.

Disputes relating to the land or resource use

A concern or complaint that contains a claim that OceanaGold is not or has not in the past, adhered to a legal, permit or company policy requirement relating to land or resource use.

Indigenous Peoples

Indigenous agreements

A formal agreement with Indigenous Peoples is a document between the Company and representatives from local indigenous groups. It covers key aspects including agreed consultation and engagement processes, responsibilities or parties and avenues of recourse in the event of disagreements. At our New Zealand operations, these agreements with iwi are a legislated requirement.

Human rights training

OceanaGold Board, Executive Management and Senior leadership team members are required to complete human rights training every two years. The % reported is calculated as the number of members who have completed the training within the last two years as at Dec 31 divided by the total number of members as at Dec 31.

2022 Methodology changes and restatements

No changes or restatements to prior year made.

ENVIRONMENT AND CLIMATE CHANGE

OceanaGold reports environmental and climate change performance data on all operating mines for which it has operational control. These are:

- Didipio
- Haile
- Macraes
- Waihi.

With the exception of data related to tailing storage facilities, non-operating assets or closed mines e.g., Reefton and Junction Reefs, and corporate offices are not included in data reported.

Compliance reporting

Total environmental non-compliances

All non-compliances are reported in accordance with the following Compliance Consequence Classifications:

- **Non-Compliance (Technical)** - Non-compliance of regulatory requirement with NO measurable environmental impact
- **Non-Compliance (Measurable)** - Non-compliance of regulatory requirement with measurable environmental impact.

Moderate to major environmental spills

Environment event (incident) severity is assessed using the criteria specified in the OceanaGold Risk Matrix.

- **Category 1** - Limited impact and minimal area effected (remediated within 24 hrs).
- **Category 2** - Minor short-term impact (remediate within five days).
- **Category 3** - Measurable short-term impact off site (lasting less than two months post remediation) or reoccurring low-level events that could have a cumulative level 3 impact.
- **Category 4** - Measurable medium-term impact off site (lasting less than six months post remediation).
- **Category 5** - Measurable, serious long-term impact off site (lasting greater than six months post extensive remediation).

Energy and greenhouse gas

Direct and indirect energy

Energy consumption is reported based on:

- Total energy consumption within the operational boundaries (direct) from non-renewable fuel sources, and includes diesel, petrol (gasoline), LPG and LNG
- There is no consumption of energy that has been generated within the operational boundary from renewable sources
- Energy consumption outside the organization (indirect) and includes purchased electricity reported in kWh
- Publicly available energy conversion factors are used to calculate Kilowatt Hours to Gigajoules using 1 kWh = 0.0036 GJ
- Publicly available energy conversion factors are used to calculate the total energy consumption and report in Gigajoules (GJ) (See Table 1 and 2).

Greenhouse gas emissions

Emissions calculations include both direct (Scope 1) and indirect (Scope 2) emission sources and are reported as tCO₂-e.

Direct scope 1

The following sources are included, and incorporate work done by contractors that supply their own fuel:

- Emissions resulting from combustion of fuels in stationary sources e.g., generation of electricity, water pumping
- Emissions resulting from the combustion of fuels in mobile combustion sources e.g., transportation of materials, products, waste, workers, and passengers
- These energy sources include diesel, petrol (gasoline), LPG and LNG used by OceanaGold and contractor equipment used within the area of operational control
- Publicly available emissions factors are used to calculate the total amount of emissions based on total energy consumption and reported in Carbon Dioxide Equivalents (CO₂-e) (See Table 1 and 2)
- All diesel equipment uses the heavy-duty vehicles transport fuel energy and emissions factor e.g., there is no differentiation between stationary or transport fuels.

Fugitive gases e.g., SF₆, HFC are not reported.

Scope 1 - Energy and emissions factors

Source - [National Greenhouse Accounts Factors 2022](#)

Table 1 - Direct (Scope 1) and indirect (Scope 3) emissions from consumption of including certain petroleum-based products for stationary energy purposes

FUEL COMBUSTED		ENERGY CONTENT FACTOR		SCOPE 1 EMISSION FACTOR (KG CO ₂ -e/GJ)	
	GJ/KL	CO ₂	CH ₄	N ₂ O	COMBINED GASES
LPG	25.7	60.2	0.2	0.2	60.60
Other Natural Gas	46.5	61.0	0.08	0.2	61.28

Table 2 - Direct (Scope 1) and indirect (Scope 3) emissions from consumption of transport fuels in different transport equipment

FUEL COMBUSTED	ENERGY CONTENT FACTOR GJ/KL	SCOPE 1 EMISSION FACTOR (KG CO ₂ -e/GJ)			
		CO ₂	CH ₄	N ₂ O	COMBINED GASES
Cars and Light Vehicles					
Gasoline	34.2	67.4	0.02	0.2	67.62
LPG	26.2	60.2	0.5	0.3	61.00
Heavy Duty Trucks					
Diesel Oil	38.6	69.9	0.02	0.4	70.4

See **Appendix A - Unit Conversions** for detail on conversion factors used.

Direct scope 2

- Indirect (Scope 2) GHG emissions include the CO₂ emissions from the generation of purchased or acquired electricity.
- Publicly available emissions factors are used to calculate the total amount of emissions based on total kWh consumed and report in CO₂-e (see Table 3).

Scope 2 - Energy and emissions factors

Table 3 Electricity Grid Emission Factors for each jurisdiction

JURISDICTION	REFERENCE YEAR	UNIT	SCOPE 2 EMISSION FACTORS (KG CO ₂ -e/KWH)			
			CO2	CH4	N2O	COMBINED GASES
New Zealand ¹	2020	kWh	0.117	0.0028	0.0002	0.120
Philippines ^{2,3}	2017	kWh				0.83 Contract Supply
	2018	kWh				0.86 Non-Contract Supply
South Carolina (US) ⁴	2021	MWh	639.7 lb /MWh	0.52 lb /MWh	0.007 lb /MWh	642.9 lb /MWh (0.2916145347 Kg CO ₂ -e/kWh)

Sources:

- [Measuring Emissions: A guide of Organizations 2022 Detailed Guide \(New Zealand\)](#)
- [Contract Supply – Sual Coal-Fired Thermal Power Plant in Sual, Pangasinan -Team Energy 2015-2017 Sustainability Report. The 2018-2022 Sustainability Report has not been published.](#)
- [Non-contract non-renewable energy supply - Limay Circulating Fluidized Bed Power Plant in Limay, Bataan - SMGP 2019-2020 Sustainability Report. The SMGP 2021-2022 Sustainability Report has not been published.](#)
- [eGRID Summary Tables 2021\(United States EPA\). Generator specific emissions factors are not available from the Haile energy retailer, therefore actual energy mix and emissions factors may be different than those quoted.](#)

New Zealand Renewable Energy Credits (NZRECs) have been purchased under a formal contract between OGNZL and Genesis Energy Limited. Where the purchased NZRECs are equivalent to the electricity energy consumed, the Emissions Factor (kg CO₂-e/kWh) is zero. The maximum RECs purchased for the relevant consumption period is provided in Table 4. Under this arrangement, the electricity supplied to our NZ operations is offset by eligible decarbonisation projects that are funded during the term of the agreement. Under this Scheme, the NZRECS do not certify that the actual electricity consumed was generated in a renewable method.

Table 4 Maximum NZRECs and consumption period

MAXIMUM CERTIFICATES (MWH)	CONSUMPTION PERIOD
321,600	Apr 1, 2021, to Mar 31 2022
321,600	Apr 1, 2022, to Mar 31 2023
321,600	Apr 1, 2023, to Mar 31 2024
215,007	Apr 1, 2024, to Nov 30 2024

Didipio received a commitment from its energy provider in 2021 to supply renewable energy of up to 50% of total energy requirements on an annual basis. In 2022, 28.8% of energy sourced was from renewable sources.

See **Appendix A - Unit Conversions** for detail on conversion factors used.

Emissions intensity

Emissions intensity is the total tCO₂-e emissions relative to the total amount of ounce of gold produced (AU Oz).

Energy intensity = tCO₂-e / Oz Au

Emissions (tCO₂-e) - Includes the total tCO₂-e emissions from both direct (scope 1) and indirect (scope 2) emission sources (excluding fugitive emissions).

Gold Production (Oz AU) - The total ounces of gold produced (AU Oz) from the operating mines for which OceanaGold has operational control (see above).

Gold production results are sourced from *OceanaGold Management and Discussion and Analysis Fourth Quarter and Full Year 2022 Results Feb 21, 2023*, <https://oceanagold.com/investor-centre/quarterly/>

The emissions intensity calculation does not include the gold equivalent amounts of other metals produced e.g., copper and silver.

OceanaGold has established a baseline emissions intensity of 0.52 tCO₂-e/Oz Au in 2019.

Water

Water withdrawn

OceanaGold applies the [Minerals Council of Australia Water Accounting Framework](#) methodology when calculating surface water withdrawn. The methodology is generally aligned to the GRI.

Water sources included: surface water, ground water, rainfall harvest and water supplied from a third-party.

The sum of water that enters the operational facility for use in a task and/or is actively managed (e.g., physically pumped, treated or has material evaporative losses) by the facility without being used in a task and includes water entrained in ore and groundwater seepage if known.

Entrained water – Water in the raw material calculated by multiplying the ore to be processed (dry milled tonnes) by an estimated or measured moisture percentage.

Groundwater seepage

Haile – Estimates of groundwater seepage rates are calculated by developing a relationship between the precipitation vs contact water generation data. This relationship has been calibrated from over 38 months of data. Based on this relationship it has been inferred that that value approximates seepage to the mine pits is 600 gpm (38 l/s).

This relationship considers:

- Contact water generation rates which are dependent on precipitation events (intensity and durations), size of the contact water catchment and groundwater inflow to pits. This water is stored in pits and precludes direct measurement of groundwater inflow.
- Contact water storage volumes are calculated via fill curves developed from pit configurations with water levels measured regularly. Monthly contact water balance is calculated by summing the change in storage + the water intake to the water treatment plant.
- A correlation between monthly precipitation and contact water generation utilizing the contact water generation data and plotting against monthly precipitation is developed. A correlation is then calculated as this relationship is not precise due to numerous variables including intensity and frequency of precipitation events, weather patterns, changes in size of the catchment (pit expansions) and changes to seepage rates.

Macraes - A seepage volume estimate has not been calculated and included.

Groundwater withdrawn from underground workings excludes any reuse water that has been supplied to an underground task.

Third-party water is any water supplied by an entity external to the operational facility and includes water that is purchased or supplied from an industrial or municipal water supplier.

Water stress

[Aqueduct Water Risk Atlas \(wri.org\)](#) is used to determine the classification of each facility for water stress. Water Stress is defined by the WRI Aqueduct 2019 as “*Baseline water stress measures the ratio of total water withdrawals to available renewable surface and groundwater supplies. Water withdrawals include domestic, industrial, irrigation, and livestock consumptive and non-consumptive uses. Available renewable water supplies include the impact of upstream consumptive water users and large dams on downstream water availability. Higher values indicate more competition among users*”.

The 2022 water stress classifications are:

- Macraes and Waihi (New Zealand) – Low
- Didipio (Philippines) – Low-medium
- Haile (South Carolina - United States) – Low-medium.

Water discharged

Water discharged is defined as the sum of effluents, used water and unused water released to surface water, ground water and/or to a third party for which the facility has no further use.

Surface water that does not contain mine-affected water and is passively collected and stored temporarily in a sediment dam prior to release to the receiving environment is not reported.

A third-party discharge is defined as water supplied to an entity external to the operational facility.

Water pumped underground for reuse in mining tasks, is not deemed a groundwater discharge and has not been included in this metric.

Destination

All water is discharged via defined discharge points into designated receiving water bodies.

Table 5 Water Discharge Destinations

WATER DISCHARGE DESTINATIONS	
Didipio	Dinauyan River
Haile	Tributary of the Little Lynches River
Macraes	N/A (water is not directly discharged but is stored and evaporates or is reused)
Waihi	Ohinemuri River

OceanaGold does not discharge into marine water bodies (the ocean).

Water type

Water types are classified in accordance with the WAF categories:

Table 6 Water Quality Classifications

WATER QUALITY (CATEGORY 1)	WATER QUALITY (CATEGORY 2)	WATER QUALITY (CATEGORY 3)
All other water	TDS > 1000 mg/L	TDS > 5000 mg/L
	pH 4-6 or 8-10	pH <4 or > 10
	Coliforms > cfu / 100ml	Constituents in concentrations harmful to human health
	Persistent turbidity: not removed by sedimentation	

Note: These categories are broader than the GRI categories which are based on Total Dissolved Solids only.

Water consumption

In reference to GRI, water consumption = total water withdrawn - total water discharge.

Water withdrawn is defined as the sum of water that enters the operational facility for use in a task and/or is actively managed (e.g., physically pumped, treated or has material evaporative losses) by the facility.

Water discharge is defined as the total water discharged to surface water, groundwater sources or provided to a third-party.

Reported discharge volumes do not account for:

- Reuse water pumped underground for a task
- Evaporation losses from water storages
- Water entrained (held) in tailings
- Seepage losses into groundwater where it has not been accounted for e.g., Macraes.

Waste generation

Hazardous waste

The following disposal methods have been included in the total weight of hazardous waste reported:

- Waste transported
- Waste imported
- Waste exported
- Waste treated.

Non-hazardous waste

The following disposal methods have been included in the total weight of non-hazardous waste reported:

- Reuse
- Recycling
- Composting
- Incineration (mass burn)
- Landfill
- On-site storage.

Tailings storage

The data relating to tailings storage facilities associated with non-operated interests owned by OceanaGold have not been included in this data, as disclosure obligations rest with the relevant operating entities.

Tailings Storage Facility (TSF)

Refers to a structure or location that is designed and managed to contain the tailings produced by the mine and refers to facilities that contain tailings in open pit mines or on the surface ('external tailings facilities'). Tailings placed in mined-out underground mines are not reported as a TSF for the purposes of an engineered structure.

Closed

A closed TSF is defined as a facility that is no longer accepting new mining tailings and is capped and/or rehabilitated (e.g., pit lake) in accordance with an agreed closure plan and the Engineer of Record has assessed the facility to be in a state of safe closure. Prior to reaching the closed state, the TSF is in an active closure phase which includes 'rehabilitation, monitoring and maintenance' activities.

Care and maintenance

Some TSFs are classified as being in care and maintenance until it has been determined the structure should progress to an active closure phase in accordance with Life of Mine plans. During this phase all requirements of an active TSF will continue to be met.

Independent reviews

Refers to reviews conducted by qualified third parties who are not and have not been directly involved with the design or operation of the particular TSF. These third parties have not been engaged for more than the maximum consecutive engagement term specified in the OceanaGold governance framework to ensure independence is maintained.

Material findings

Reporting of material findings identified in independent reviews are determined by the OceanaGold risk categories. Only matters assessed as being a level 3 category, or greater than, are deemed material after consideration of health and safety, environmental, social, financial, reputation and compliance consequences.

Biodiversity

All areas are reported in hectares (Ha) and have been measured be either survey or GIS digitizing based on aerial images.

Areas restored

Areas that were used during or affected by operational activities, and where remediation measures have either restored the environment to its original state or to a state where it has a healthy and functioning system. This includes progressive rehabilitation and landforms that meet the final landform closure criteria, which we anticipate will be approved by the regulator e.g., pit lakes, water course diversions etc.

Areas protected

Areas that have been protected from operational activities and the environment remains in its original state with a healthy and functioning ecosystem. These areas have not been disturbed by mining and have been protected by a legal instrument.

Each operation implements a Biodiversity Management Plan that describes how biodiversity values are managed, including the required monitoring to assess the condition of these areas and maintenance programs.

Land disturbance and rehabilitation

All areas are reported in hectares (Ha) and have been measured be either survey or GIS digitizing based on aerial images.

Land disturbed

Includes physical alteration which substantially disrupts the pre-existing habitats and land cover and is generally associated with land clearing associated with the advancing mining operations or installation of new ancillary infrastructure. It applies to all land owned or leased and managed for production activities or extractive use.

Land rehabilitated

Includes areas that were used during or affected by operational activities and where remediation measures have rehabilitated the disturbed land to achieve the required or agreed end use.

Agreed end use

An outcome defined as land being returned upon completion of rehabilitation, as a result of obligations in a permit or negotiation with affected parties where appropriate. It does not necessarily mean returning land to its prior condition, as post-mining end use may result in a changed state (such as flooded open-cast workings creating wetland habitat).

2022 Methodology changes and restatements

Water Withdrawal and Discharge

The Minerals Council of Australia (MCA) Water Accounting Framework (WAF) methodology for calculating surface water withdrawn was applied across all operations. This includes volumes for rainfall harvest and ground water entrained in ore. Previous surface water withdrawal data has not been restated.

Land Disturbance

Macraes - Total land disturbance area has been restated from 1,558.4 ha in 2021 to 1,551.7 ha as a result of updated GIS mapping.

Haile - Total land disturbance area has been restated from 623 ha to 968 ha to correct classification errors.

These changes restate the total land disturbed at the start of the reporting period to 3052.27 ha

Energy and GHG Emissions

To improve GHG emission calculation accuracy and correct data anomalies identified in 2022, the table below provides restated total Energy (Gigajoules) and Greenhouse Gas Emissions (tCO2-e) for the period 2018 to 2021. The restated energy and emissions values are due to:

- A cell reference error identified in the emissions calculation model resulted in minor overstatement of petroleum gas emissions for Waihi (2018 -2021) and Macraes (2020 – 2021) or 0.2% increase of total company Scope 1 emissions.
- In 2019 an error was made interpreting the actual indirect energy (Scope 2) consumption due to complexity in reading the Didipio electricity bills. This resulted in a 1% understatement of total company Scope 2 energy consumption (Gigajoules).
- In 2022, Didipio was able to obtain generator specific Scope 2 Emission Factors (EF) for the energy sourced from the Philippines electricity supply grid. These EFs were on average 37% higher than previous EFs referenced and allowed for a more accurate calculation of emissions back to 2019. The increase in EF resulted in 1.81% - 21% increase in total company Scope 2 emissions over this period after considering the amount of renewable energy received for each specific year.

- The 2018 EF for Didipio was obtained from [National Grid Emission Factor \(fe-doe-filmetrics.com\)](http://National Grid Emission Factor (fe-doe-filmetrics.com)). The EFs applied in 2019-2021 are consistent with the references provided in Table 3 Electricity Grid EF for each jurisdiction (see above).

Table 7 Restated energy and emissions data

		2018	2019	2020	2021
Total Energy (Direct - Scope 1)	GJ	1779345	1853314	2147109	2525767
Total Energy (Indirect - Scope 2)	GJ	1650998	1690836*	1363615	1399278
GHG Emissions (Direct - Scope 1)	tCO2e	123729*	130052*	150547*	177132*
GHG Emissions (Direct - Scope 2)	tCO2-e	147150*	136334*	95191*	56359*

**Restated company totals*

UNIT CONVERSIONS

CONVERSIONS	REFERENCE SOURCE
Kilowatt Hours are converted to Gigajoules using $1 \text{ kWh} = 0.0036 \text{ GJ}$	Unit Converter (unitconverters.net)
Pounds (lb) are converted to Kilograms using $1 \text{ lb} = 0.453592 \text{ kg}$	Unit Converter (unitconverters.net)
Megawatt Hours are converted to Kilowatt Hours using $1 \text{ MWh} = 1000 \text{ kWh}$	Unit Converter (unitconverters.net)
Natural Gas - 1 Dekatherm = 1.0550559 GJ	Unit Converter (unitconverters.net)
Liquid Petroleum Gas (LPG) (kg) = 1.96 Litres (AU) . Also referenced for Philippines.	https://www.elgas.com.au/blog/389-lpg-conversions-kg-litres-mj-kwh-and-m3/
Liquid Petroleum Gas (LPG) (kg) = 1.86 Litres (NZ)	https://www.elgas.co.nz/resources/elgas-blog/138-nz-lpg-conversion-values-kg-litres-mj-a-kwh
1 Gallon = 3.78541 Litres	Unit Converter (unitconverters.net)
1 acre = $0.40468564 \text{ hectares}$	Unit Converter (unitconverters.net)
1 Pound = 0.453592 Kg	Unit Converter (unitconverters.net)
1 Pound = $0.00045359 \text{ metric tonnes}$	Unit Converter (unitconverters.net)
1 Short ton (US) = $0.90718474 \text{ metric tonnes}$	Unit Converter (unitconverters.net)

