Reporting Principles and Standard Disclosures

Intended for advanced compliance programs

For the full document, go to:
CATEGORY: ENVIRONMENTAL

Introduction

The environmental dimension of sustainability concerns the organization’s impact on living and non-living natural systems, including land, air, water and ecosystems.

The Environmental Category covers impacts related to inputs (such as energy and water) and outputs (such as emissions, effluents and waste). In addition, it covers biodiversity, transport, and product and service-related impacts, as well as environmental compliance and expenditures.

See references 94, 96.

Aspect: Materials

G4-EN1

MATERIALS USED BY WEIGHT OR VOLUME

a. Report the total weight or volume of materials that are used to produce and package the organization’s primary products and services during the reporting period, by:
   • Non-renewable materials used
   • Renewable materials used

G4-EN2

PERCENTAGE OF MATERIALS USED THAT ARE RECYCLED INPUT MATERIALS

a. Report the percentage of recycled input materials used to manufacture the organization’s primary products and services.
Aspect: Energy

G4-EN3

ENERGY CONSUMPTION WITHIN THE ORGANIZATION

a. Report total fuel consumption from non-renewable sources in joules or multiples, including fuel types used.
b. Report total fuel consumption from renewable fuel sources in joules or multiples, including fuel types used.
c. Report in joules, watt-hours or multiples, the total:
   • Electricity consumption
   • Heating consumption
   • Cooling consumption
   • Steam consumption
d. Report in joules, watt-hours or multiples, the total:
   • Electricity sold
   • Heating sold
   • Cooling sold
   • Steam sold
e. Report total energy consumption in joules or multiples.
f. Report standards, methodologies, and assumptions used.
g. Report the source of the conversion factors used.

G4-EN4

See reference 131.

ENERGY CONSUMPTION OUTSIDE OF THE ORGANIZATION

a. Report energy consumed outside of the organization, in joules or multiples.
b. Report standards, methodologies, and assumptions used.
c. Report the source of the conversion factors used.

G4-EN5

See references 130, 134.

ENERGY INTENSITY

a. Report the energy intensity ratio.
b. Report the organization-specific metric (the ratio denominator) chosen to calculate the ratio.
c. Report the types of energy included in the intensity ratio: fuel, electricity, heating, cooling, steam, or all.
d. Report whether the ratio uses energy consumed within the organization, outside of it or both.
G4-EN6

REDUCTION OF ENERGY CONSUMPTION

a. Report the amount of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples.
b. Report the types of energy included in the reductions: fuel, electricity, heating, cooling, and steam.
c. Report the basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it.
d. Report standards, methodologies, and assumptions used.

G4-EN7

REDUCTIONS IN ENERGY REQUIREMENTS OF PRODUCTS AND SERVICES

a. Report the reductions in the energy requirements of sold products and services achieved during the reporting period, in joules or multiples.
b. Report the basis for calculating reductions in energy consumption such as base year or baseline, and the rationale for choosing it.
c. Report standards, methodologies, and assumptions used.

Aspect: Water

See reference 8.

G4-EN8

TOTAL WATER WITHDRAWAL BY SOURCE

a. Report the total volume of water withdrawn from the following sources:
   - Surface water, including water from wetlands, rivers, lakes, and oceans
   - Ground water
   - Rainwater collected directly and stored by the organization
   - Waste water from another organization
   - Municipal water supplies or other water utilities
b. Report standards, methodologies, and assumptions used.

G4-EN9

WATER SOURCES SIGNIFICANTLY AFFECTED BY WITHDRAWAL OF WATER

a. Report the total number of water sources significantly affected by withdrawal by type:
   - Size of water source
   - Whether or not the source is designated as a protected area (nationally or internationally)
   - Biodiversity value (such as species diversity and endemism, total number of protected species)
   - Value or importance of water source to local communities and indigenous peoples
b. Report standards, methodologies, and assumptions used.
PERCENTAGE AND TOTAL VOLUME OF WATER RECYCLED AND REUSED

a. Report the total volume of water recycled and reused by the organization.
b. Report the total volume of water recycled and reused as a percentage of the total water withdrawal reported under Indicator G4-EN8.
c. Report standards, methodologies, and assumptions used.

Aspect: Biodiversity


OPERATIONAL SITES OWNED, LEASED, MANAGED IN, OR ADJACENT TO, PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS

a. Report the following information for each operational site owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas:
   • Geographic location
   • Subsurface and underground land that may be owned, leased, or managed by the organization
   • Position in relation to the protected area (in the area, adjacent to, or containing portions of the protected area) or the high biodiversity value area outside protected areas
   • Type of operation (office, manufacturing or production, or extractive)
   • Size of operational site in km²
   • Biodiversity value characterized by:
     – The attribute of the protected area or high biodiversity value area outside the protected area (terrestrial, freshwater, or maritime ecosystem)
     – Listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation)
SECTION 5

DESCRIPTION OF SIGNIFICANT IMPACTS OF ACTIVITIES, PRODUCTS, AND SERVICES ON BIODIVERSITY IN PROTECTED AREAS AND AREAS OF HIGH BIODIVERSITY VALUE OUTSIDE PROTECTED AREAS

a. Report the nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following:
   • Construction or use of manufacturing plants, mines, and transport infrastructure
   • Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources)
   • Introduction of invasive species, pests, and pathogens
   • Reduction of species
   • Habitat conversion
   • Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level)

b. Report significant direct and indirect positive and negative impacts with reference to the following:
   • Species affected
   • Extent of areas impacted
   • Duration of impacts
   • Reversibility or irreversibility of the impacts

HABITATS PROTECTED OR RESTORED

a. Report the size and location of all habitat protected areas or restored areas, and whether the success of the restoration measure was or is approved by independent external professionals.

b. Report whether partnerships exist with third parties to protect or restore habitat areas distinct from where the organization has overseen and implemented restoration or protection measures.

c. Report on the status of each area based on its condition at the close of the reporting period.

d. Report standards, methodologies, and assumptions used.

TOTAL NUMBER OF IUCN RED LIST SPECIES AND NATIONAL CONSERVATION LIST SPECIES WITH HABITATS IN AREAS AFFECTED BY OPERATIONS, BY LEVEL OF EXTINCTION RISK

a. Report the total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk:
   • Critically endangered
   • Endangered
   • Vulnerable
   • Near threatened
   • Least concern
Aspect: Emissions

Introduction

In the Guidelines, the Emissions Aspect includes Indicators on greenhouse gas (GHG) emissions as well as ozone-depleting substances, NOx, SOx, and other significant air emissions.

Reporting of GHG emissions is based on the reporting requirements of the WRI and WBCSD ‘GHG Protocol Corporate Accounting and Reporting Standard’ (GHG Protocol).

The GHG Protocol includes a classification of GHG emissions called ‘Scope’ – Scope 1, Scope 2 and Scope 3.

Scope is a classification of the operational boundaries where GHG emissions occur. Scope classifies whether GHG emissions are created by the organization itself, or are created by other related organizations, for example, electricity suppliers or haulage companies, as follows:

• Direct (Scope 1) emissions from operations that are owned or controlled by the organization
• Energy Indirect (Scope 2) emissions result from the generation of purchased or acquired electricity, heating, cooling, and steam consumed within the organization
• Other Indirect (Scope 3) emissions are all indirect emissions (not included in Scope 2) that occur outside of the organization, including both upstream and downstream emissions

Scopes 1, 2, and 3 of the GHG Protocol align with ISO 14064 definitions and the GRI Indicators as follows:

• Scope 1 = direct GHG emissions (GRI Indicator G4-EN15)
• Scope 2 = energy indirect GHG emissions (GRI Indicator G4-EN16)
• Scope 3 = other indirect GHG emissions (GRI Indicator G4-EN17)

The GHG Protocol prescribes reporting direct (Scope 1) emissions and energy indirect (Scope 2) emissions. Reporting other indirect (Scope 3) emissions is optional. The WRI and WBCSD ‘GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard’ prescribes reporting other indirect (Scope 3) emissions.

DIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 1)

a. Report gross direct (Scope 1) GHG emissions in metric tons of CO2 equivalent, independent of any GHG trades, such as purchases, sales, or transfers of offsets or allowances.

b. Report gases included in the calculation (whether CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, or all).

c. Report biogenic CO2 emissions in metric tons of CO2 equivalent separately from the gross direct (Scope 1) GHG emissions.

d. Report the chosen base year, the rationale for choosing the base year, emissions in the base year, and the context for any significant changes in emissions that triggered recalculations of base year emissions.

e. Report standards, methodologies, and assumptions used.

f. Report the source of the emission factors used and the global warming potential (GWP) rates used or a reference to the GWP source.

g. Report the chosen consolidation approach for emissions (equity share, financial control, operational control).
ENERGY INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 2)

a. Report gross energy indirect (Scope 2) GHG emissions in metric tons of CO₂ equivalent, independent of any GHG trades, such as purchases, sales, or transfers of offsets or allowances.
b. Report gases included in the calculation, if available.
c. Report the chosen base year, the rationale for choosing the base year, emissions in the base year, and the context for any significant changes in emissions that triggered recalculations of base year emissions.
d. Report standards, methodologies, and assumptions used.
e. Report the source of the emission factors used and the global warming potential (GWP) rates used or a reference to the GWP source, if available.
f. Report the chosen consolidation approach for emissions (equity share, financial control, operational control).

OTHER INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 3)

a. Report gross other indirect (Scope 3) GHG emissions in metric tons of CO₂ equivalent, excluding indirect emissions from the generation of purchased or acquired electricity, heating, cooling, and steam consumed by the organization (these indirect emissions are reported in Indicator G4-EN16). Exclude any GHG trades, such as purchases, sales, or transfers of offsets or allowances.
b. Report gases included in the calculation, if available.
c. Report biogenic CO₂ emissions in metric tons of CO₂ equivalent separately from the gross other indirect (Scope 3) GHG emissions.
d. Report other indirect (Scope 3) emissions categories and activities included in the calculation.
e. Report the chosen base year, the rationale for choosing the base year, emissions in the base year, and the context for any significant changes in emissions that triggered recalculations of base year emissions.
f. Report standards, methodologies, and assumptions used.
g. Report the source of the emission factors used and the global warming potential (GWP) rates used or a reference to the GWP source, if available.

GREENHOUSE GAS (GHG) EMISSIONS INTENSITY

a. Report the GHG emissions intensity ratio.
b. Report the organization-specific metric (the ratio denominator) chosen to calculate the ratio.
c. Report the types of GHG emissions included in the intensity ratio: direct (Scope 1), energy indirect (Scope 2), other indirect (Scope 3).
d. Report gases included in the calculation.
REDUCTION OF GREENHOUSE GAS (GHG) EMISSIONS

a. Report the amount of GHG emissions reductions achieved as a direct result of initiatives to reduce emissions, in metric tons of CO₂ equivalent.
b. Report gases included in the calculation (whether CO₂, CH₄, N₂O, HFCs, PFCs, SF₆, NF₃, or all).
c. Report the chosen base year or baseline and the rationale for choosing it.
d. Report standards, methodologies, and assumptions used.
e. Report whether the reductions in GHG emissions occurred in direct (Scope 1), energy indirect (Scope 2), other indirect (Scope 3) emissions.

EMISSIONS OF OZONE-DEPLETING SUBSTANCES (ODS)

b. Report substances included in the calculation.
c. Report standards, methodologies, and assumptions used.
d. Report the source of the emission factors used.

NOₓ, SOₓ, AND OTHER SIGNIFICANT AIR EMISSIONS

a. Report the amount of significant air emissions, in kilograms or multiples for each of the following:
   • NOₓ
   • SOₓ
   • Persistent organic pollutants (POP)
   • Volatile organic compounds (VOC)
   • Hazardous air pollutants (HAP)
   • Particulate matter (PM)
   • Other standard categories of air emissions identified in relevant regulations
b. Report standards, methodologies, and assumptions used.
c. Report the source of the emission factors used.
Aspect: Effluents and Waste

G4-EN22

TOTAL WATER DISCHARGE BY QUALITY AND DESTINATION

a. Report the total volume of planned and unplanned water discharges by:
   • Destination
   • Quality of the water including treatment method
   • Whether it was reused by another organization
b. Report standards, methodologies, and assumptions used.

G4-EN23

TOTAL WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD

a. Report the total weight of hazardous and non-hazardous waste, by the following disposal methods:
   • Reuse
   • Recycling
   • Composting
   • Recovery, including energy recovery
   • Incineration (mass burn)
   • Deep well injection
   • Landfill
   • On-site storage
   • Other (to be specified by the organization)
b. Report how the waste disposal method has been determined:
   • Disposed of directly by the organization or otherwise directly confirmed
   • Information provided by the waste disposal contractor
   • Organizational defaults of the waste disposal contractor

G4-EN24

TOTAL NUMBER AND VOLUME OF SIGNIFICANT SPILLS

a. Report the total number and total volume of recorded significant spills.
b. For spills that were reported in the organization’s financial statements, report the additional following information for each such spill:
   • Location of spill
   • Volume of spill
   • Material of spill, categorized by:
     – Oil spills (soil or water surfaces)
     – Fuel spills (soil or water surfaces)
     – Spills of wastes (soil or water surfaces)
     – Spills of chemicals (mostly soil or water surfaces)
     – Other (to be specified by the organization)
c. Report the impacts of significant spills.
**G4-EN25**

**WEIGHT OF TRANSPORTED, IMPORTED, EXPORTED, OR TREATED WASTE DEEMED HAZARDOUS UNDER THE TERMS OF THE BASEL CONVENTION\(^2\) ANNEX I, II, III, AND VIII, AND PERCENTAGE OF TRANSPORTED WASTE SHIPPED INTERNATIONALLY**

a. Report the total weight for each of the following:
   - Hazardous waste transported
   - Hazardous waste imported
   - Hazardous waste exported
   - Hazardous waste treated
b. Report the percentage of hazardous waste shipped internationally.

**G4-EN26**

**IDENTITY, SIZE, PROTECTED STATUS, AND BIODIVERSITY VALUE OF WATER BODIES AND RELATED HABITATS SIGNIFICANTLY AFFECTED BY THE ORGANIZATION’S DISCHARGES OF WATER AND RUNOFF**

a. Report water bodies and related habitats that are significantly affected by water discharges based on the criteria described in the Compilation section below, adding information on:
   - Size of water body and related habitat
   - Whether the water body and related habitat is designated as a protected area (nationally or internationally)
   - Biodiversity value (such as total number of protected species)

**Aspect: Products and Services**

**G4-EN27**

**EXTENT OF IMPACT MITIGATION OF ENVIRONMENTAL IMPACTS OF PRODUCTS AND SERVICES**

a. Report quantitatively the extent to which environmental impacts of products and services have been mitigated during the reporting period.
b. If use-oriented figures are employed, report the underlying assumptions regarding consumption patterns or normalization factors.

**G4-EN28**

**PERCENTAGE OF PRODUCTS SOLD AND THEIR PACKAGING MATERIALS THAT ARE RECLAIMED BY CATEGORY**

a. Report the percentage of reclaimed products and their packaging materials for each product category.
b. Report how the data for this Indicator has been collected.
Aspect: Compliance

G4-EN29

MONETARY VALUE OF SIGNIFICANT FINES AND TOTAL NUMBER OF NON-MONETARY SANCTIONS FOR NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

a. Report significant fines and non-monetary sanctions in terms of:
   • Total monetary value of significant fines
   • Total number of non-monetary sanctions
   • Cases brought through dispute resolution mechanisms
b. Where organizations have not identified any non-compliance with laws or regulations, a brief statement of this fact is sufficient.

Aspect: Transport

G4-EN30

SIGNIFICANT ENVIRONMENTAL IMPACTS OF TRANSPORTING PRODUCTS AND OTHER GOODS AND MATERIALS FOR THE ORGANIZATION’S OPERATIONS, AND TRANSPORTING MEMBERS OF THE WORKFORCE

a. Report the significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce. Where quantitative data is not provided, report the reason.
b. Report how the environmental impacts of transporting products, members of the organization's workforce, and other goods and materials are mitigated.
c. Report the criteria and methodology used to determine which environmental impacts are significant.

Aspect: Overall

G4-EN31

TOTAL ENVIRONMENTAL PROTECTION EXPENDITURES AND INVESTMENTS BY TYPE

a. Report total environmental protection expenditures by:
   • Waste disposal, emissions treatment, and remediation costs
   • Prevention and environmental management costs
Aspect: Supplier Environmental Assessment

G4-EN32

PERCENTAGE OF NEW SUPPLIERS THAT WERE SCREENED USING ENVIRONMENTAL CRITERIA

a. Report the percentage of new suppliers that were screened using environmental criteria.

G4-EN33

SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE ENVIRONMENTAL IMPACTS IN THE SUPPLY CHAIN AND ACTIONS TAKEN

a. Report the number of suppliers subject to environmental impact assessments.
b. Report the number of suppliers identified as having significant actual and potential negative environmental impacts.
c. Report the significant actual and potential negative environmental impacts identified in the supply chain.
d. Report the percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment.
e. Report the percentage of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment, and why.

Aspect: Environmental Grievance Mechanisms

G4-EN34

NUMBER OF GRIEVANCES ABOUT ENVIRONMENTAL IMPACTS FILED, ADDRESSED, AND RESOLVED THROUGH FORMAL GRIEVANCE MECHANISMS

a. Report the total number of grievances about environmental impacts filed through formal grievance mechanisms during the reporting period.
b. Of the identified grievances, report how many were:
   • Addressed during the reporting period
   • Resolved during the reporting period
c. Report the total number of grievances about environmental impacts filed prior to the reporting period that were resolved during the reporting period.