

**Guidance on  
Core indicators for entity reporting  
on the contribution towards the attainment  
of the Sustainable Development Goals**

UNCTAD

---

## Contents

I. Introduction: rationale and objective	4
II. Underlying principles on core SDG indicators selection and reporting	6
2.1 Key methodological points	6
2.2. Selection criteria	7
2.3 Reporting principles	8
2.4 Underlying accounting data	9
III. Core SDG indicators for entities	12
A. Economic indicators	13
A.1. Revenue and/or (net) value added	13
A.2. Payments to the Government	19
A.3. New investment/expenditures	21
A.4. Local supplier/purchasing programmes	29
B. Environmental indicators	31
B.1. Sustainable use of water	31
B.2. Waste management	37
B.3. Greenhouse gas emissions	44
B.4. Ozone-depleting substances and chemicals	48
B.5. Energy consumption	50
C. Social area	54
C.1. Gender equality	54
C.2. Human capital	58
C.3. Employee health and safety	62
C.4. Coverage of collective agreements	67
D. Institutional area	68
D.1. Corporate governance disclosures	69
D.2. Anti-corruption practices	74
Annex I: Table of selected core SDG indicators	77

---

## Main abbreviations

<b>FTE</b>	Full-time equivalent
<b>GAAP</b>	Generally accepted accounting principles
<b>GHG</b>	Greenhouse gas
<b>GRI</b>	Global Reporting Initiative
<b>IAEG-SDGs</b>	Inter-Agency and Expert Group on Sustainable Development Goal Indicators
<b>IAS</b>	International Accounting Standard
<b>IFRS</b>	International Financial Reporting Standard
<b>IIRC</b>	International Integrated Reporting Council
<b>ODS</b>	Ozone-depleting substance
<b>SDG</b>	Sustainable Development Goal
<b>SME</b>	Small and medium-sized enterprise
<b>SNA</b>	System of National Accounts
<b>TCFD</b>	Task Force on Climate-related Financial Disclosures

---

## I. Introduction: rationale and objective

1. In 2015, Member States of the United Nations adopted the 2030 Agenda for Sustainable Development, containing 17 Sustainable Development Goals (SDGs) and 169 targets.<sup>1</sup> In resolution 70/1, the General Assembly stated that the Goals and targets would be followed up and reviewed using a set of global indicators focused on measurable outcomes. Consequently, the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) was established to develop a global indicator framework to monitor implementation of the 2030 Agenda. Member States are in the process of developing their national indicators in line with the 2030 Agenda, according to which targets are defined as aspirational and global, with each Government setting its own national targets guided by the global level of ambition but taking into account national circumstances.<sup>2</sup> Full development of the indicator framework is a process that requires time and the possibility of refinement as knowledge and data availability improve.

2. The report of the Inter-Agency and Expert Group requires global monitoring to be based, to the greatest possible extent, on comparable and standardized national data, obtained through well-established mechanisms for country reporting to the international statistical system. Efforts should be made to fill data gaps and improve international comparability through the increased adoption of internationally agreed standards at national levels, strengthening of national statistical capacities and improved reporting mechanisms.

3. These developments have a direct impact on the accounting and reporting agenda. Target 12.6 explicitly encourages companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycles. Indicator 12.6.1 requires data on the number of companies publishing sustainability reports. Several other SDG indicators refer to data already being provided by many enterprises in their reports, such as on the use of energy and water, carbon dioxide emissions, waste generation and recycling, and to human resource management, gender equality and community development, among others.

4. Company reporting may therefore be an important data source for the newly established SDGs monitoring framework. As a primary source of information on company performance, reporting can enrich and enhance Goals monitoring mechanisms by providing stakeholders such as Governments and

---

<sup>1</sup> UN General Assembly, Transforming our world: the 2030 Agenda for Sustainable Development, 21 October 2015, A/RES/70/1, available at: <http://www.refworld.org/docid/57b6e3e44.html> [accessed 25 September 2018]. A/RES/70/1.

<sup>2</sup> UN Economic and Social Council. Report of the inter-agency and expert group on sustainable development goal indicators. New York: United Nations (2016). E/CN.3/2016/2.

capital providers with the means to assess the economic, environmental and social impacts of companies on sustainable development.

5. Relevant data on companies' contribution towards the SDGs is critical for assessing the progress of the SDG implementation; enhancing the SDG oriented corporate governance mechanisms, decision making by investors and other key stakeholders; as well as promoting behavioural change at the enterprise level. The SDG agenda requires comparable and reliable data reflecting companies' performance towards targets and indicators agreed by the United Nations member States. This in turn gives a new impetus towards aligning harmonization of sustainability reporting with the SDG monitoring framework.

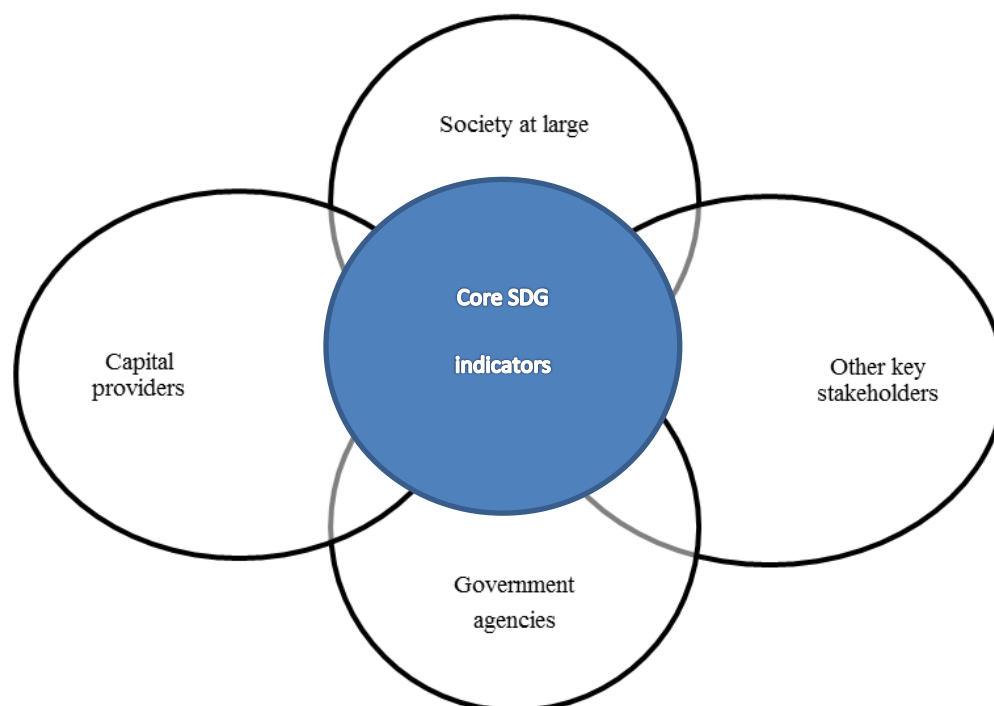
6. In response to this challenge in 2016, during its XIVth ministerial conference in Kenya, UNCTAD has launched its initiative on selecting a limited number of core SDG indicators in companies reporting.

7. This Guidance is prepared by UNCTAD in accordance with the Agreed Conclusions of the thirty-fourth session of the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR), which in 2017 requested UNCTAD to develop a guiding document on a limited number of core indicators for entity reporting, aligned with the SDGs. The Guidance is based on elaborations on this issue over the last three years during the ISAR annual sessions and at the intersessional forums, including such as Consultative Group meetings convened by UNCTAD from 2016 to 2018.

8. During these discussions a limited number of core SDG indicators has been identified (Annex I), based on key reporting principles, selection criteria, main reporting frameworks and companies reporting practices.

9. **The objective of this Guidance** is to provide practical information on how these indicators could be measured in a consistent manner and in alignment with countries needs on monitoring the attainment of the SDG agenda. It is intended to serve as a tool **to assist governments** to assess the private sector contribution to the SDG implementation and to enable them to report on SDG indicator 12.6.1. It also intends **to assist entities** to provide baseline data on sustainability issues in a consistent and comparable manner that would meet common needs of many different stakeholders of the SDG agenda (Figure 1). It also envisaged that the Guidance will facilitate capacity building in the area of the SDG reporting in member States at the country and company level as part of the ongoing UNCTAD project in this area

*Figure 1: Key users of the SDG reporting by entities*



## II. Underlying principles on core SDG indicators selection and reporting

### 2.1 Key methodological points

10. The Guidance is based on the following main methodological considerations.

11. **Simplicity:** The Guidance is intended to be a user-friendly tool for preparers of information (both at legal entity and consolidated levels) and for different users, in the public and the private sectors, for understanding the entities' performance and impacts across the core sustainability/SDG indicators;

12. **Baseline approach:** Selected core indicators are common to any business as they focus on a rational use of resources (such as water, energy, air; waste reduction); social issues related to human capital development and gender equality; as well as governance and transparency – which is part of the regular business operational cycle. The Guidance takes into consideration entities' practices and the fact that entities are at different stages in their sustainability reporting journey. It is not aimed at creating new norms, its objective is to select common sustainability indicators based in entities' current reporting practices and leading reporting frameworks (IFRS, GRI, IIRC and others); it provides a

measurement methodology for each of the selected core indicators and suggests accounting sources of data collection. It remains up to individual businesses in different operating contexts to start from this baseline indicators and provide additional information as needed to reflect their specific SDG-related practices;

13. **Emphasis on quantitative indicators:** although the importance of qualitative, narrative disclosure and of understanding these indicators in specific context are acknowledged, the Guidance does not discuss narrative disclosures and focuses on quantitative indicators.

14. For each reporting indicator, a relevant SDG indicator and its metadata guidance is referred to, in order to facilitate the **alignment between the micro- and macro-level indicators**. In some cases, a macro-level indicator is referred for more than one reporting indicator. In other cases, there is no straightforward relation between the reporting indicator and the macro-level indicator mentioned, but it represents the best possible alignment with the SDG macro-level and the usefulness of the reporting indicator will be proved through pilot testing. The alignment between the micro and macro-level indicators is based on the approach of a statistical framework jointly developed by the EC, IMF, OECD, United Nations and the World Bank, titled “The System of National accounts” (SNA)<sup>3</sup>. The SNA states that there would be considerable analytical advantages in having micro-databases that are fully compatible with the corresponding macroeconomic accounts for sectors or the total economy and due to the IT improvements, it becomes progressively easier to derive data from administrative and business records. While it recognizes that for various reasons it may be difficult, if not impossible, to achieve micro-databases and macroeconomic accounts that are fully compatible with each other in practice; nevertheless, as a general objective, the concepts, definitions and classifications used in economic accounting should as far as possible, be the same as both a micro and macro level to facilitate the interface between the two kinds of data.

## 2.2. Selection criteria

15. Selection of the core indicators is based on the following criteria:

- Relevance to at least one Sustainable Development Goal monitoring indicator;
- Based on existing key initiatives or reporting frameworks and/or should be found in corporate reports;
- Be universal (applicable to all reporting entities);
- Facilitate comparability across industries;
- Address issues over which an entity has control and for which it gathers data (incremental approach);

<sup>3</sup> System of National Accounts, NY, 2009

- Facilitate convergence of financial and non-financial reporting principles and data;
- Capable of consistent measurement; and
- Suitable for consolidated reporting and legal entity reporting.

### 2.3 Reporting principles

16. The Guidance is based on the consideration that the reporting framework for the SDG indicators should be consistent with the existing institutional foundations for the international financial reporting system. Such framework needs to ensure the coherence of financial and non-financial reporting models and allow for the consistent integration of sustainability information into company reporting cycles. This includes relevance of the international financial reporting conceptual framework to the SDG reporting; consistency in measurement methodology and data comparability; clarity of reporting boundaries; and incremental approach<sup>4</sup>.

17. **Materiality vs universality:** One key consideration related to the principle of materiality. Defining materiality as an entity-specific aspect may create a conflict with the criterion of universality. In the context of the SDG reporting, materiality has a new dimension. Adoption of the Goals required multi-stakeholder consultations, and all parties agreed that certain aspects of economic, environmental and social activities were material to them. Therefore, the selection of core SDG indicators relies on the idea that the targets are integrated into the current materiality assessments of companies and thus guide the sustainability disclosure framework. It is also consistent with the Task Force on Climate-related Financial Disclosures (TCFD) report on climate-related financial risk disclosure, which indicates climate-related risk as a non-diversifiable risk that affects nearly all industries.<sup>5</sup>

18. Furthermore, enhanced transparency is required on the materiality assessment process that should accompany the reporting of data on the core SDG indicators. It is nevertheless important for companies to remain able to report on additional sustainability information that may not be covered by the core indicators, for instance with regard to specific issues whose materiality might not be sufficiently widespread.

19. **Clarity of reporting boundaries:** Consistency with international financial reporting standards makes it important to disclose the basis of

---

<sup>4</sup> For more details see: United Nations Conference on Trade and Development. Enhancing the role of reporting in attaining the Sustainable Development Goals: Integration of environmental, social and governance information into company reporting (2016). TD/B/C.II/ISAR/78

<sup>5</sup> For additional information on how the UNCTAD secretariat considers materiality as part of the conceptual framework of the core indicators, reference is made to: United Nations Conference on Trade and Development. The role of disclosure in risk assessment and enhancing the usefulness of corporate reporting in decision-making (2017). TD/B/C.II/ISAR/81.



---

determining the boundaries of the reporting entity and other assumptions and methods that underpin sustainability reporting. In some jurisdictions, international financial reporting standards may not be required for the preparation of legal entity financial statements, but only for consolidated reports. This may pose a difficulty in compiling non-financial data, as companies may use different accounting rules in their reporting of statutory financial data. Consolidation rules play an important role in the process of aggregating data from the company to the corporate level, thus having an impact on the link between corporate reporting and the monitoring of achievement of the Goals that will be observed at a country level. In any case, when information attributable to entities, facilities or activities outside the organization's mainstream reporting boundary is also reported, it should be clearly distinguished from information about entities and activities within the financial boundaries.<sup>6</sup>

20. **Incremental approach:** The selection of core indicators takes into account existing data-gathering capacities or access-to-information channels of companies. Placing an excessive burden on companies may be detrimental to engaging the private sector under the 2030 Agenda. An incremental approach is therefore recommended, whereby selected indicators first address issues that a company has control over and for which it already gathers data, or situations in which a company has access to relevant sources of information.

21. **Consistency in measurement methodology and data comparability:** indicators need to be comparable across entities, time and geography, thereby requiring transparent and traceable documentation on scope, data quality, methods used and limitations.

22. **Reporting period:** it is important that financial and non-financial data refer to the same reporting period, both in terms of length (typically one year) and starting/ending dates. Reporting information should be complete and consistent with reference to the time period declared by the reporting organization for its financial statements.

## 2.4 Underlying accounting data

---

<sup>6</sup> See on this point “CDSB Framework Advancing and aligning disclosure of environmental information in mainstream reports for reporting environmental information, natural capital and associated business impacts”, [https://www.cdsb.net/sites/default/files/cdsb\\_framework\\_2.1.pdf](https://www.cdsb.net/sites/default/files/cdsb_framework_2.1.pdf), April 2018, p. 27. “REQ-07 Organizational boundary” also states that the basis on which the organizational reporting boundary has been determined shall be described.

---

### 2.4.1 Definition of the unit for collecting information for the core indicators

23. The Guidance suggests that the underlying accounting data for the core indicators should be recorded and collected at a business unit/facility level and be aggregated not only with reference to the financial boundaries defined above, but also with reference to certain geographical boundaries as applicable.

24. In developing an accounting system for both financial and non-financial data, it is important to ensure that it can meet a range of reporting requirements and users' needs. This can be done by making sure that data are collected and recorded at a disaggregated level, so that it is possible to consolidate them in various forms and according to different needs. Entities are usually made up of a number of different "units", especially in case of large and diverse businesses (different locations, different products). Collection of such disaggregated data enables entities with the required flexibility to meet a range of reporting requirements.

25. Such modularity facilitates the compilation of the environmental, social and institutional indicators. Information can be collected and prepared at activity, facility, or entity level, responding to the regulatory requirements if applicable. For example, it could be required that environmental and social data collected and reported at the level of individual facilities (e.g. a factory, or business office, among others).<sup>7</sup> This is the case, for example, of certain emissions trading programs for GHG data, or the identification of water-stressed areas or the frequency of occupational injuries. If an entity has operations (such as factories) at various locations, it is likely that these factories operate under different conditions and have different environmental and social impacts. It is therefore useful to collect and compile environmental and social indicators per facility first and aggregate the business unit accounts later on.<sup>8</sup>

26. Even when country-specific information is not publicly disclosed, the majority of entities operating in different countries collect, elaborate and use such information through internal management reports. Therefore, country-specific data are already being gathered by the majority of organizations operating in multiple countries.

27. International Financial Reporting Standards (IFRS) require reporting entities that control other entities, for example subsidiaries, to prepare consolidated financial statements. In accordance with IFRS, consolidated financial statements are "the financial statements of a group in which the assets, liabilities, equity, income, expenses and cash flows of the parent and its subsidiaries are presented as those of a single economic entity". A similar

---

<sup>7</sup> <http://ghgprotocol.org/sites/default/files/ghgp/standards/ghg-protocol-revised.pdf> p. 20-21.

<sup>8</sup> On this purpose, see also:

[http://waterfootprint.org/media/downloads/TheWaterFootprintAssessmentManual\\_2.pdf](http://waterfootprint.org/media/downloads/TheWaterFootprintAssessmentManual_2.pdf)

approach, including at the national level, is needed in aggregating data required for preparing the core indicators proposed in this Guidance.

#### 2.4.2. Quality and reliability of information for the SDG reporting

28. The accuracy of information available will vary depending on the source and on the subsequent ability of the reporting entity to assure this information. It is thus important that entities use the right mix of internal and external assurance to ensure the reliability of the published data. For example, the European Commission has recently suggested that entities can make non-financial information fairer and more accurate through, for example:

- Appropriate corporate governance arrangements (for instance, certain independent board members or a board committee entrusted with responsibility over sustainability and/or transparency matters);
- Robust and reliable evidence, internal control and reporting systems;
- Effective stakeholder engagement;
- Independent external assurance.

29. In contrast to financial reporting, assurance of sustainability reporting by a third party is still voluntary in most countries. Still, it should be noted that the GRI (Global Reporting Initiative) and Accountancy Europe<sup>9</sup>, for instance, encourage independent assurance to increase the quality of sustainability reporting. Also, the UNCTAD Research Paper N.1<sup>10</sup> states that the quality of non-financial data must be verifiable and of the same quality as financial data. It also proposes that the audit of the data for the core indicators is done within the ISAE 3000 *Assurance Engagements Other than Audits or Reviews of Historical Financial Information* review framework (which does not prevent entities from using also AA1000).<sup>11</sup> The two international standards that are most referred internationally are ISAE 3000 and AA1000AS *Assurance Standard*. Both are indicated as consistent with different reporting frameworks such as, for example,

---

Accountancy Europe was named previously as the Federation of European Accountants (FEE). It unites 51 professional organizations from 37 countries.

<sup>10</sup> Reporting on the Sustainable Development Goals: A Survey of Reporting Indicators, UNCTAD Research Paper n. 1, UCTAD/SER.RP/2018/1 [http://unctad.org/en/PublicationsLibrary/ser-rp-2018d1\\_en.pdf](http://unctad.org/en/PublicationsLibrary/ser-rp-2018d1_en.pdf), p. 23.

<sup>11</sup> For a review of the state-of-the-art on assurance practices see <https://www.cpajournal.com/2017/07/26/current-state-assurance-sustainability-reports/>

the GRI and the Integrated Reporting (<IR>) frameworks.<sup>12</sup> Entities can choose between reasonable and limited assurance.

30. In a reasonable assurance engagement, the practitioner gathers sufficient appropriate evidence to conclude that the subject matter conforms in all material respects with identified suitable criteria and gives a report in the form of a positive assurance (e.g., 'the financial statements have been prepared in accordance with applicable legislation and accounting standards'). In a limited assurance engagement, the practitioner gathers sufficient appropriate evidence to conclude that the subject matter is plausible in the circumstances and gives a report in the form of a negative assurance (e.g., 'nothing has come to our attention that causes us to believe that the financial statements are not prepared in accordance with applicable criteria (such as legislation and/or accounting standards)'). For a limited assurance engagement, the practitioner collects less evidence than for a reasonable assurance engagement, performs different or fewer tests than those required for reasonable assurance and uses smaller sample sizes for the tests.<sup>13</sup>

31. The International Integrated Reporting Council (IIRC) also takes into consideration the possibility of having hybrid or mixed assurance levels, so that assurance can vary on a disclosure by disclosure basis (reasonable on some disclosures and limited on others). It is therefore suggested that entities disclosing core indicators choose one form of the aforementioned assurance guidelines, taking into consideration also their relative costs.

### **III. Core SDG indicators for entities**

32. This section provides information on the core indicators suggested by UNCTAD, covering areas of economic, environmental, social and institutional performance. For each indicator, the Guidance provides definition, measurement methodology, and potential sources of information. The Guidance also discusses a link and alignment with relevant macro SDG indicators.

33. Reporting on the SDG indicators requires that entities prove the following contextual information:<sup>14</sup>

- Location of the organization's headquarters.

---

<sup>12</sup> Assurance on <IR>. An exploration of issues, [http://integratedreporting.org/wp-content/uploads/2014/07/ Assurance-on-IR-an-exploration-of-issues.pdf](http://integratedreporting.org/wp-content/uploads/2014/07/Assurance-on-IR-an-exploration-of-issues.pdf)

<sup>13</sup> See for example:

<https://www.icaew.com/en/technical/audit-and-assurance/assurance/process/scoping/assurance-decision/limited-assurance-vs-reasonable-assurance>

<sup>14</sup> This is in line with the GRI recommendations about the description of the Organizational Profile.

- Number of countries where the entity operates, and names of countries where either it has significant operations, or they are specifically relevant to the sustainability topics covered in the report.
- Nature of ownership and legal form.
- Markets served (including geographic breakdown, sectors, and types of customers and beneficiaries).
- Significant changes during the reporting period regarding the organization's size, structure, ownership, including: changes in the location of, or changes in, operations, including facility openings, closings, and expansions; changes in the share capital structure and other capital formation, maintenance, and alteration operations (such as mergers or acquisitions).

#### A. Economic indicators

34. In the economic area, the following core indicators are suggested:

- Revenue;
- Value added;
- Net value added;
- Taxes and other payments to the Government;
- Green investment;
- Community investment,
- Total expenditures on research and development; and
- Percentage of local procurement.

#### A.1. Revenue and/or (net) value added

##### A.1.1. Revenue

35. **Definition and measurement:** Revenues should be preferably defined and measured according to the “IFRS 15 Revenue from Contracts with Customers”.<sup>15</sup> In case of an entity that is not applying IFRS 15 and using IFRS

---

<sup>15</sup> This is in line with several proposals already applied in practice by entities. Global Reporting Initiative (GRI) standard 201-1 requires similar reporting on revenue. The GRI guidance specifies that an organization is expected to compile information for economic disclosures using figures from its audited financial statements or from its internally-audited management accounts, whenever possible. Data can be compiled using, for example, the relevant International Financial Reporting Standards (IFRS), published by the International Accounting Standards Board (IASB), and the Interpretations developed by the IFRS Interpretations Committee (specific IFRS are referenced for some of the disclosures), as well as national or regional standards recognized internationally for the purpose of financial reporting. Also, the UNCTAD/EEI (III.G) (“A

for SMEs, it should be clearly stated and explained. The reference to the IFRS framework is also consistent with the preparation of macro-level statistical data (such as gross domestic product), in line with the System of National Accounts (SNA), established by the United Nations, the European Commission, the Organization for Economic Co-operation and Development, the International Monetary Fund and the World Bank Group.<sup>16</sup>

36. **Sources of data collection:** Revenues are to be found as the first line of the income statement. The information about the single transactions to calculate revenues in the reporting period are recorded within financial accounting systems (accounts receivables, revenue cycle). Management accounting systems/internal management reports usually present segment revenues with reference to different dimensions (segment reporting). Country-specific data can be recovered from these systems.

37. The figure for total revenues should correspond to the same data as reported elsewhere in the entity's management accounts and in its audited financial statements.

### A.1.2. Value added

38. **Definition:** Value added is defined as the difference between the revenues and the costs of bought-in materials, goods and services. In other terms, value added is the wealth the entity has been able to create and that can be distributed among different stakeholders (employees, lenders, authorities, shareholders).

### Measurement methodology:

---

Manual for the Preparers and Users of Eco-efficiency Indicators", [http://unctad.org/en/Docs/iteipc20037\\_en.pdf](http://unctad.org/en/Docs/iteipc20037_en.pdf), p. 103) specifies that all financial items, including revenues, should be defined in line with the International Accounting Standards.

<sup>16</sup> The full text of the SNA is available at:

<https://unstats.un.org/UNSD/nationalaccount/docs/SNA2008.pdf>.

## Relevance to the SDGs

This indicator is relevant to SDG indicator 8.2.1 Annual growth rate of real gross domestic product per employed person. The International Labour Organization (ILO) is the custodian United Nations agency for indicator 8.2.1. Its metadata guidance defines gross domestic product and suggests that this aggregate be calculated based on the production side of national accounts, thereby stressing the importance of high-quality entity information.

Furthermore, references to revenue are used in the denominator of several SDG indicators, which underscores the importance of a consistent and coherent approach to the calculation of this indicator.

39. Value added can be calculated as part of the following equation<sup>17</sup>:

Direct economic value generated (revenues and other income)

Minus

Economic value distributed (operating costs, employee wages and benefits, payments to providers of capital, payments to government by country, and community investments)

= Economic value retained

Where:

40. *Direct economic value generated* is calculated starting from revenues and considering also other income from financial investments (such as interest on financial loans; dividends from shareholdings) and from the sale of assets (such as physical assets, e.g. property, infrastructure, and equipment, and intangibles, e.g. intellectual property rights).

41. *Economic value distributed* is calculated considering:

- Operating costs, i.e., all payments made outside the organization for materials, product components, facilities, and services purchased. Some examples of operating costs, in addition to the costs for materials and components used in production processes, include: property rental, license fees, payments for contract workers.
- Employee wages and benefits, i.e., total payroll (including employee salaries and amounts paid to government institutions on behalf of employees) plus total benefits (excluding training, costs of protective

---

<sup>17</sup> This is in line with several approaches including the GRI (Disclosure 201-1, pp. 6-7) and the UNCTAD/EEI (“A Manual for the Preparers and Users of Eco-efficiency Indicators”, [http://unctad.org/en/Docs/iteipc20037\\_en.pdf](http://unctad.org/en/Docs/iteipc20037_en.pdf), p. 103), which defines Value Added as Revenue – Purchase of Goods and Services. However, it should be noted that the proposed calculation of value added may underestimate the economic value generated by some businesses, particularly those operating in the technology and innovation fields where the generation of own-account capital can create significant economic value for the business and its owners. Examples of this own-account capital can include: the generation of intellectual property through the research and development process, as well as construction and engineering projects to support extractive and transportation industries. In these cases, it is thus suggested to also separately report the own-account capital generated during the reporting period.

equipment or other cost items directly related to the employee's job function). Amounts paid to government institutions on behalf of employees can include employee taxes, levies, and unemployment funds. Total benefits can include: regular contributions, such as to pensions, insurance, entity vehicles, and private health; other employee support, such as housing, interest-free loans, public transport assistance, educational grants, and redundancy payments.

- Payments to providers of capital, i.e., dividends to all shareholders, plus interest payments made to providers of loans (interests on all forms of debt and borrowings, not only long-term debt).

- Payments to government; i.e. all of the organization's taxes plus related penalties paid at the international, national, and local levels (see also *A.2.1. Taxes and other payments to the Government*).

## Relevance to the SDGs

This indicator is relevant to SDG indicators 8.2.1 Annual growth rate of real gross domestic product per employed person, 9.4.1 CO<sub>2</sub> emission per unit of value added, and SDG target 9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.

The International Labour Organization (ILO) has prepared a metadata guidance for 8.2.1, which requires the calculation of Gross Domestic Product, defined as “the sum of gross value added of all resident producer units plus that part (possibly the total) of taxes on products, less subsidies on products, that is not included in the valuation of output.” Explicit references to value added also exist in target 9.b, including guidance prepared by the United Nations Industrial Development Organization (UNIDO) for indicator 9.b.1 which revolves around the concept of manufacturing value-added. UNIDO and the International Energy Agency have also prepared a metadata guidance for indicator 9.4.1 which explicitly mentions value added, using the same definition as in indicator 8.2.1. This underscores the essential importance of accurate, reliable and comparable information on value added, and thus of the selection of value added as a core entity reporting indicator.

Furthermore, references to value added are used in the denominator of several SDG indicators, which underscores the importance of a consistent and coherent approach to the calculation of this indicator.



- Community investments, i.e., voluntary donations plus investment of funds in the broader community where the target beneficiaries are external to the organization. These can include: contributions to charities, NGOs and research institutes (unrelated to the organization's commercial research and development); funds to support community infrastructure, such as recreational facilities; direct costs of social programs, including arts and educational events. If reporting infrastructure investments, an organization can include costs of goods and labor, in addition to capital costs, as well as operating costs for support of ongoing facilities or programs (see also A.3.2. *Community investment*).

42. Specifically, starting from this equation, *Value added* is calculated as:
43. Direct economic value generated MINUS the above defined operating costs (the costs of goods and services purchased from external suppliers).<sup>18</sup>

This is normally referred to as *Gross Value Added (GVA)*.

#### **Potential sources of information:**

44. Value Added Statement - financial statement that depicts wealth created by an organization and how that wealth distributed among various stakeholders comprising employees, shareholders, government, creditors and the wealth that is retained in the business.

45. The preparation of a Value-Added Statement is based on the data collected within the traditional accounting systems, so that value added is calculated on an accruals basis.

46. If an entity does not prepare a Value-Added Statement the calculation of value added should be done from data in the organization's audited profit and loss (P&L) statement, or its internally audited management accounts (internal management reports for the country-specific data should be used). In particular, if an entity would like to prepare a Value-Added Statement: operating costs can be derived from all the bills to external suppliers of goods and services (recorded in the accounts payable); the data on employee wages and benefits and the related information flows are normally managed by the HR function, typically within a Compensation & Payroll management information system. Many entities use specialized software for collecting and elaborating payroll information; payments to the different providers of capital are recorded into specific accounts (e.g., interest payables or dividend payables) and can be found in the P&L as interest expenses or in the cash flow statement as dividends paid;

---

<sup>18</sup> Value added can be calculated also as: Salaries + Depreciation + Amortisation + Interest Paid + Taxes + Community investments + Dividends + Retained Profit. This approach can be found in: "A Manual for the Preparers and Users of Eco-efficiency Indicators", [http://unctad.org/en/Docs/iteipc20037\\_en.pdf](http://unctad.org/en/Docs/iteipc20037_en.pdf), p. 104.

community investments in the form of donations are recorded in a specific account that is usually called charitable contributions (in an internal report they will appear as a discrete expense line item most likely called Charitable Contributions).

### A.1.3. Net value added

47. **Definition:** Net value added consists of value added from which depreciation has been subtracted.

#### Measurement methodology:

48. Net value added is calculated by considering indicator A.1.2 on value added, and by subtracting depreciation of tangible assets.<sup>19</sup>

Figure 2 presents a comparative example for indicators A.1.1. Revenue, A.1.2. Value added and A.1.3. Net value Added.

### Relevance to the SDGs

This indicator is relevant to SDG indicators 8.2.1 Annual growth rate of real gross domestic product per employed person, 9.4.1 CO<sub>2</sub> emission per unit of value added, and SDG target Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.

Please see the box in indicator A.1.2 for further information on the statistical relevance of company reporting on net value added.

<sup>19</sup> Net value added can also be calculated as Salaries + Amortization on intangible assets + Interest paid + Taxes + Community investments + Dividends + Retained Profit. This approach can be found in: “A Manual for the Preparers and Users of Eco-efficiency Indicators”, [http://unctad.org/en/Docs/iteipc20037\\_en.pdf](http://unctad.org/en/Docs/iteipc20037_en.pdf), p. 104.

Figure 2: Illustrative example of the computation of indicators A.1.1, A.1.2 and A.1.3

	A.1.1 Revenues	A.1.2. & A.1.3. Value added
REVENUE		1a
COST OF SALES		Costs of goods and services from external suppliers 2a Depreciation 3a Other costs
GROSS PROFIT		
OPERATING EXPENSES		Costs of goods and services from external suppliers 2b Depreciation 3b Other costs
Selling, general and administrative expense		
OPERATING INCOME (LOSS)		
OTHER INCOME		1b
Investment income, other gain and losses		
EBIT (earnings before interest and taxes)		
INTEREST EXPENSE/FINANCE COSTS		
EBT (earnings before taxes)		
INCOME TAXES		
NET INCOME		

$$GVA = 1a + 1b - 2a - 2b$$

$$NVA = 1a + 1b - 2a - 2b - 3a - 3b$$

### Potential sources of information

Reference is made to the Value-Added statement and other possibilities for calculation of value added-related data, discussed in indicator A.1.2.

## **A.2. Payments to the Government**

### **A.2.1. Taxes and other payments to the Government**

#### Definition

49. This indicator is defined as the amount of taxes (encompassing not only income taxes, but also other levies and taxes, such as property taxes or value added taxes) plus related penalties paid, plus all royalties, license fees, and other payments to Government for a given period.

#### Measurement methodology

50. An organization can calculate this indicator by summing up all of the organization's taxes, which can include income, and property as well as excise duties, value added tax (VAT), local rates and other levies and taxes that may be

industry/country specific<sup>20</sup>, all royalties, license fees, and other payments to Government.

51. This indicator does not include the amounts related to the acquisition of government assets (e.g., purchase of formerly state-owned enterprises). Penalties and fines for non-compliance issues unrelated to tax payment (e.g. environmental pollution) need to be excluded from this indicator.

52. In case an entity receives subsidies and other payments from the Government<sup>21</sup>, it is suggested to indicate them separately.

53. If operating in more than one country, it is suggested, in line with what already suggested for other indicators, that the organization reports this indicator by country. The definition of segmentation used should remain consistent for all the economic indicators presented at a country level. Alternatively, this indicator could be calculated based on a legal entity reporting.

54. It is important to note that legal entity reporting does not necessarily equate to country-by-country reporting. There can be multiple legal entities in a host country that are controlled by a parent in a host country. The legal entity data of the multiple entities in a country needs to be aggregated at a country level to provide meaningful information to stakeholders interested in country-level information. Therefore, country-by-country is more than legal entity reporting.

#### Potential sources of information:

## Relevance to the SDGs

This indicator is relevant to SDG indicator 17.1.2.

Proportion of domestic budget funded by domestic taxes.

The United Nations metadata guidance for indicator 17.1.2 is provided by the International Monetary Fund (IMF), using the Government Finance Statistics (GFS) 2014 tax classification. In the GFS, taxes are classified into six major categories: (i) taxes on income, profits, and capital gains; (ii) taxes on payroll and workforce; (iii) taxes on property; (iv) taxes on goods and services; (v) taxes on international trade and transactions; and (vi) other taxes. As stated in the SNA, payments to the government are recognized as revenue in government finance. The SNA also discusses how entities should account for tax liabilities in their reporting cycle, spanning both paid and payable taxes.

<sup>20</sup> On this point, see also: Guidance on Corporate Responsibility Indicators in Annual Reports, published by UNCTAD in 2008 (UNCTAD/CRI). United Nations publication, UNCTAD/ITE/TEB/2007/6, available at: [http://unctad.org/en/Docs/iteteb20076\\_en.pdf](http://unctad.org/en/Docs/iteteb20076_en.pdf), (indicator 14); <http://www.ifrs.org/issued-standards/list-of-interpretations/ifric-21-levies/>

<sup>21</sup> For example, tax concessions, such as exemptions, credits, or deferrals and subsidies for specific sectors (e.g., farm subsidies, oil subsidies, auto dealer subsidies, housing subsidies).

55. Taxes and other payments to the Government can be found either as an expense or as a liability (asset) in the balance sheet.

56. For example, income tax expense is an income-statement item, a line that comes immediately after the EBT (earnings before taxes). Property taxes are part of the general expenses. Specific taxes and payments to the Government are usually recorded within identifiable accounts referred to each type of tax/payment. In many accounting software programs, a VAT account is used to keep track of sales taxes collected and paid (VAT). Specific accounts are also used to record certain fees, concessions, contributions or royalties' fees imposed on industries which are regulated by the government, e.g., telecommunications, mining, airline, banking, insurance, dairy produce, energy and natural resources, etc.

57. Internal management reports for the country-specific data should also be referred to when identifying information on taxes and other payments to the Government at the country level. Internal management reports could be maintained at various levels of detail and could be aggregated at a country level to inform decision making for example with respect to operations in a country.

### **A.3. New investment/expenditures**

#### **A.3.1. Green investment**

##### Definition

58. Green investment refers to investment that can be considered positive for the environment in a direct or indirect manner. In other words, this indicator includes all the expenditures for those investments whose *primary purpose* is the prevention, reduction and elimination of pollution and other forms of degradation to the environment.<sup>22</sup> This means that investments that are beneficial to the environment but that primarily satisfy the technical needs or the internal requirements for hygiene or safety and security of an entity are excluded from this definition.

##### Measurement methodology

59. There are a number of different definitions of 'green' for different economic activities and of synonyms that are employed by entities (environmental, ecological, eco-friendly) to denote this kind of investments. Typically, green investments might comprise low carbon power generation and vehicles, smart grids, energy efficiency, pollution controls, recycling, waste

---

<sup>22</sup> This definition is consistent with the approach based on the Environmental Protection Expenditure Accounts (EPEA) (see SEEA CF section 4.3) that can be found at: [https://seea.un.org/sites/seea.un.org/files/seea\\_techncial\\_note\\_-\\_epea\\_jan\\_2017\\_draft.pdf](https://seea.un.org/sites/seea.un.org/files/seea_techncial_note_-_epea_jan_2017_draft.pdf)

management and waste of energy, and other technologies that contribute to solving particular environmental problems.

60. The High-Level Expert Group on Sustainable Finance (HLEG), in collaboration with the European Commission's Action Plan on Sustainable Finance, has developed a framework for a full sustainability taxonomy which entails the identification and classification of sectors, sub-sectors and associated assets including the following: climate change mitigation (avoided emissions or increased sequestration<sup>23</sup>), climate change adaptation (reduced disruption and damage arising from acute or chronic effects of climate change), healthy natural habitats (protecting and enhancing land & marine habitats and biodiversity), water resource management & conservation (water efficiency and sustainable management and withdrawals), waste minimization (reuse of waste and circular economy).<sup>24</sup>

61. In order to understand which types of underlying technologies are related to green investments and as a starting point to decide which investments can be incorporated in the calculation of this indicator, it is also suggested to use the following check-list<sup>25</sup>:

- General environmental management (including waste management, air and water pollution abatement, soil remediation);
- Renewable energy (including bio fuels);
- Combustion technologies for improved efficiency;
- Climate change mitigation (e.g., capture, storage, sequestration, disposal of GHG);
- Indirect contribution (e.g. energy storage);
- Transportation (emissions abatement, efficiency); and
- Buildings (energy efficiency).

---

It is a set of technologies that can greatly reduce CO<sub>2</sub> emissions usually through a three-step process including: capturing CO<sub>2</sub> from power plants or industrial processes, transporting the captured and compressed CO<sub>2</sub> (usually in pipelines), underground injection and geologic sequestration (named also as storage) into underground deep rock formations.

<sup>24</sup> This classification can be found at ([https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report\\_en.pdf](https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf), p. 18).

<sup>25</sup> Researchers of the European Patent Office and OECD (2011) have developed this list. Refer to Indicator of Environmental Technologies (ENV-Tech Indicator) and to Inderst, G., Kaminker, Ch., Stewart, F. (2012), "Defining and Measuring Green Investments: Implications for Institutional Investors' Asset Allocations", OECD Working Papers on Finance, Insurance and Private Pensions, No.24, OECD Publishing. For other illustrative examples of possible green investments see also: Inderst, G., Kaminker, Ch., Stewart, F. (2012), "Defining and Measuring Green Investments: Implications for Institutional Investors' Asset Allocations", OECD Working Papers on Finance, Insurance and Private Pensions, No.24, OECD Publishing.

---

62. The European Union Classification of Environmental Protection Activities (CEPA) also includes in the expenditures for environmental protection, outlays and other transactions related to:

- Capital formation and the buying of land for environmental protection activities;
- The buying of environmental protection products, i.e., goods which directly serve protection purposes (e.g. septic tanks, rubbish containers, compost containers); and
- Investments in adapted goods, which are goods that have been specifically modified to be greener (i.e., mercury free batteries, CFC-free products). Only the extra costs paid in excess of the cost of the “normal” product is counted.

63. In any case, given the lack of a shared definition across industries and that the definition of green investment is likely to depend on the entity’s location and operational context, it is important to complement the disclosure of this indicator with a consistent explanation for why an investment has been categorized as ‘green’.<sup>26</sup>

64. This indicator should be measured in monetary units (the costs as indicated on the corresponding invoices), i.e., it should be calculated as the total amount of green investments referred to the reporting period under consideration.

65. It would be useful to calculate also additional ratios expressing a firm’s green capital expenditure amount in period t as a percentage of the entity’s period t total assets and/or revenue. These indicators would be expressed in percentage (%) terms.

66. Similar to what is recommended for other economic indicators included in this guidance, multinational entities are encouraged to disclose green investments by country.

---

<sup>26</sup> In the United States, for example, disclosure of material capital expenditures for pollution abatement and control is mandated by the Securities and Exchange Commission, and such expenditures are defined as ‘environmental capital spending’ or ‘environmental capital expenditures’.

Potential sources of information:

67. Information regarding these expenditures can be found as an operating expense when the corresponding expenses are not capitalized. They can be found in the P&L as part of production costs or as part of selling expenses depending on the nature of the corresponding investment. When these investments are material, they are most likely capitalized, and they are budgeted at the beginning of the reporting period so that it is possible to find the corresponding amounts in internal management reports such as capital budgets. Once the entity has capitalized such expenses, they are included in the fixed assets in the balance sheet of the entity (typically as part of plant, property and equipment (PPE)).

**Relevance to the SDGs**

These indicator is relevant to SDG indicator 7.b.1. Investment in energy efficiency as a proportion of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services.

The International Energy Agency (IEA) is in the process of elaborating on the methodology for indicator 7.b.1. This methodology will draw on the IEA's experience with its World Energy Investment and Energy Efficiency Market reports.

PROFIT AND LOSS (INCOME STATEMENT) - ILLUSTRATIVE EXAMPLE	
	A.3.1. Green investments
REVENUE	
COST OF SALES	
GROSS PROFIT	
OPERATING EXPENSES Selling, general and administrative expense	
OPERATING INCOME (LOSS)	
OTHER INCOME Investment income, other gain and losses	
EBIT (earnings before interest and taxes)	
INTEREST EXPENSE/FINANCE COSTS	
EBT (earnings before taxes)	
INCOME TAXES	
NET INCOME	

BALANCE SHEET - ILLUSTRATIVE EXAMPLE	
	A.3.1. Green investments
<b>CURRENT ASSETS:</b>	
CASH	
ACCOUNTS RECEIVABLE	
INVENTORIES	
OTHER ASSETS	
<b>NON-CURRENT ASSETS:</b>	
PROPERTY, PLANT AND EQUIPMENT	
INTANGIBLE ASSETS	
FINANCIAL ASSETS	
OTHER ASSETS	
<b>TOTAL ASSETS</b>	

Figure 3: Illustrative example of green investments in financial statements



### A.3.2. Community investment

#### Definition

68. Community investment refers to charitable/voluntary donations and investments of funds in the broader community where the target beneficiaries are external to the entity. This excludes legal and commercial activities or investments whose purpose is driven primarily by core business needs or to facilitate the business operations of the entity (e.g., building a road to a factory). The calculation of community investment can include infrastructure built outside the main business activities of the organization, such as a school or hospital for workers and their families.

#### Measurement methodology

69. The amount of community investment should be expressed in monetary terms and should comprise the expenditures (both capital expenditure and operating ones if applicable) incurred in the reporting period.

Examples of expenditure that could be included in the calculation are the following:

- a) contributions to charities, non-governmental organizations and research institutes (not related to the entity's commercial research and development);
- b) funding of community infrastructures (e.g., education, medical and recreational facilities) including infrastructures outside the main business activities of the entity, such as a school or hospital for employees and their families;
- c) direct costs of social programs (e.g., arts and educational events) or of provision of emergency relief in times of natural disaster.

70. For what concerns the support of community infrastructures (b), in case the entity buys an existing infrastructure, the calculation should refer to the amount of expenditures sustained, in case the entity contributes to building the facility, the costs of materials, labour, and all construction costs specific to the facility need to be included in the calculation. If the entity is funding the daily operations of a community facility, the reported amount should include the related operating costs.

### Relevance to the SDGs

This indicator is relevant to SDG indicator 17.17.1. Amount of United States dollars committed to public-private and civil society partnerships.

Guidance on indicator 17.17.1 has been prepared by the Public Private Partnership Unit of the World Bank.

Researchers are expected to gather data from public and commercial sources with a standardized template, which is then validated and disseminated by the World Bank.

71. Regarding the support of social programs (c), the amount to calculate the indicator should be referred to the specific operating costs related to the programs financed by the entity.

72. The calculation of this indicator should also include non-monetary contributions by entities, for instance in the context of an entity whose workers “lend” their time and capabilities to build infrastructure for a community project, as well as in-kind donations (at fair value).

73. It would be useful to calculate ratios expressing a firm’s community investments amount in period t as a percentage of the entity’s period t total assets and/or revenue. These indicators would be expressed in percentage (%) terms.

74. Similar to what is recommended for other economic indicators included in this guidance, multinational entities are encouraged to disclose community investments by country.

#### Potential sources of information:

75. Donations or charitable contributions are generally recorded in an entity’s general ledger in a separate account. This is necessary for tax purposes: entities should use a dedicated account for tax-deductible contributions. Information to compute this indicator is thus found there and is usually recorded by the finance, treasury, or accounting departments.

76. In case there is a community investment manager, she/he should be the owner of all the relevant information for calculating this indicator.

### **A.3.3. Total expenditures on research and development**

#### Definition

77. Total expenditures on research and development include all costs related to original and planned research undertaken with the prospect of gaining new scientific or technical knowledge and understanding (i.e., expenditures for research activities) and related to the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use (i.e., expenditures for development activities). This indicator requires disclosure, in monetary units, on the expenditure on research and development (R&D) by the reporting entity during the reporting period. Examples of such activities may be the following: research to discover new knowledge; modification of formulas, products, or processes; design of tools that involve new technology; design and test of prototypes, new products and processes.

#### Measurement methodology

78. There are different accounting treatments of research and development expenses. Under US GAAP, all R&D costs are expensed as incurred (i.e., they are written off to the income statement as an expense when incurred). Under IFRS (IAS 38), research costs are expensed, while development expenditures need to be capitalized (i.e., treated as an intangible asset, amortized and reported in the balance sheet). An example of research expense could be the expenditures for tests aimed at obtaining new knowledge to develop a new vaccine by an entity in the pharmaceutical industry. An example of development expense could be the design, construction, and testing of a pre-production car model by an automotive entity. So according to IFRS, distinguishing development activities from research activities is crucial and the most important criterion to decide between expensing or capitalizing R&D expenditure is represented by the technical feasibility of completing the intangible asset so that it will be available for use or sale.

79. To calculate this indicator all R&D expenditures incurred in a certain reporting period should be considered, independently from their accounting treatment.<sup>27</sup>

---

<sup>27</sup> On this indicator see also Guidance on Corporate Responsibility Indicators in Annual Reports, published by UNCTAD in 2008 (UNCTAD/CRI). United Nations publication, UNCTAD/ITE/TEB/2007/6, available at: [http://unctad.org/en/Docs/iteteb20076\\_en.pdf](http://unctad.org/en/Docs/iteteb20076_en.pdf), (indicator 9).

Figure 4: An illustrative example of total expenditures on research and development in financial statements

PROFIT AND LOSS (INCOME STATEMENT) - ILLUSTRATIVE EXAMPLE		BALANCE SHEET - ILLUSTRATIVE EXAMPLE	
	<b>A.3.3. Total expenditures on research and development</b>		<b>A.3.3. Total expenditures on research and development</b>
<b>REVENUE</b>		<b>CURRENT ASSETS:</b>	
<b>COST OF SALES</b>		CASH	
<b>GROSS PROFIT</b>		ACCOUNTS RECEIVABLE	
<b>OPERATING EXPENSES</b>		INVENTORIES	
Selling, general and administrative expense		OTHER ASSETS	
<b>OPERATING INCOME (LOSS)</b>		<b>NON-CURRENT ASSETS:</b>	
<b>OTHER INCOME</b>		PROPERTY, PLANT AND EQUIPMENT	
Investment income, other gain and losses		INTANGIBLE ASSETS	
<b>EBIT (earnings before interest and taxes)</b>		FINANCIAL ASSETS	
<b>INTEREST EXPENSE/FINANCE COSTS</b>		OTHER ASSETS	
<b>EBT (earnings before taxes)</b>		<b>TOTAL ASSETS</b>	
<b>INCOME TAXES</b>			
<b>NET INCOME</b>			

80. In addition to the total R&D expenditure amount (expressed in monetary terms) it is suggested to calculate also the ratio of total R&D expenditures over total revenues and/or assets in the reporting period. These indicators would be expressed in percentage (%) terms.

81. Similar to what is recommended for other economic indicators included in this guidance, multinational entities are encouraged to disclose R&D expenditures by country. Furthermore, a multinational enterprise could have research and development projects and arrangements with academic institutions that might not necessarily be legal entities in the sense of corporate law.

### Potential sources of information:

82. As represented in Figure 4, information to calculate this indicator can be found in financial statements/financial accounting systems, either in the Profit & Loss statement or in the Balance Sheet depending on whether R&D costs incurred in a certain reporting period are expensed (there is a specific line in the P&L for R&D expenses, included as part of the operating costs) or capitalized (as intangible assets).

83. Management accounting systems and internal management reports can be consulted for the country-specific data.

## **A.4. Local supplier/purchasing programmes**

### **A.4.1. Percentage of local procurement**

#### Definition

84. Percentage of local procurement is the proportion of spending of a reporting entity at local suppliers. Costs of local procurement are a general indicator of the extent of an entity's linkages with the local economy.

#### Measurement methodology

85. The indicator can be calculated based on invoices or commitments made during the reporting period based on the accrual accounting principle. Invoices or commitments to local suppliers are those towards organizations or people that provide products or services to the organization and that are based in the same geographical market as the reporting organization.

86. The 'same geographical market' definition, i.e., the definition of 'local', may refer to the community surrounding operations (within a certain reach defined in terms of kilometres or miles), a region within a country or a country<sup>28</sup>.

## **Relevance to the SDGs**

This indicator is relevant to SDG indicator 9.5.1. Research and development expenditure as a proportion of GDP.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) is the custodian agency for indicator 9.5.1. Its metadata guidance states that the total expenditure on research and development should be divided by the total output of the economy (GDP). UNESCO uses the OECD Frascati Manual from 2015 to define R&D as a "creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge."

<sup>28</sup> See also GRIG4-Part2-Implementation-Manual, p.83 and p. 250. It is acknowledged that the definition of "local" for this indicator may require refining, although such refinement may be challenging to implement in practice. In particular, a criterion based on the location of the supplier may disregard the fact that local suppliers may themselves be buyers of non-local goods. At the same time, focus on the geographic origin of suppliers could raise concerns related to

Therefore, as there could be considerable variation in how organizations define ‘local’ and as tracking local purchases requires systems, staff time, and specific skills that are not part of the procurement operations of many entities, it is suggested to consider the country as a distinguishing criterion. In line with the UNCTAD/CRI guidance, purchasing is defined as ‘local’ when it concerns products or services produced in the same country as the reporting entity or provided by an entity that is incorporated in the same country as the reporting entity, or otherwise meet the local content or entity requirements as defined by the Government of that country. Following this line of reasoning, as a starting point to decide whether or not to include a certain amount of purchases in the calculation of this indicator, it could be useful to check whether trans-national payments to the suppliers have been made. In this way, looking at invoices, reporting entities can identify the items of local purchasing included in the reporting period, and calculate the costs on the accruals basis.

87. It is suggested that the total amount of local purchasing is presented both as an absolute figure (in monetary terms) and as a percentage of total purchasing of the reporting entity.

88. This measurement approach also allows multinational entities to calculate the amount of local purchasing by country, both in absolute and in percentage terms. This can be done by cumulating all the amounts of local purchasing of the reporting entities located in a certain country, i.e., the amount of purchases by entities located in a certain country from suppliers located in that same country.

89. When possible, it is also suggested to split the amount of local purchases by considering the size of the suppliers. As there is no international consensus on the requirements to be classified as a ‘small’ entity, reporting should follow the practice of the country of operation of the business entity. When no such practice exists, it could be possible to make a reference to the following threshold figures (and to specify which criterion has been used to split the amount of local procurement): a) based on the number of employees: small businesses are usually defined as organizations

## Relevance to the SDGs

This indicator is relevant to SDG indicator 9.3.1.

Proportion of small-scale industries in total industry value added.

As the custodian of indicator 9.3.1, UNIDO indicates that there is no international consensus on the requirements to be classified as “small” enterprise. UNIDO has proposed to establish a task force to give an internationally agreed statistical definition of “small” for the purpose of SDG monitoring.

---

protectionism and anti-competitive practice. So, this guidance opts for an established and baseline approach on this matter.

with fewer than 100 employees; midsize entities are those organizations with 100 to 999 employees; b) based on the amount of annual revenue: small business is usually defined as organizations with less than \$50 million in annual revenue; a midsize entity is defined as organizations that make more than \$50 million, but less than \$1 billion in annual revenue.<sup>29</sup>

Potential sources of information:

90. Information about local procurement can be found by looking at the bills of the entity's suppliers (accounts payable) and, if applicable, at the internal reporting system, in particular the operational information system for recording supplier master data<sup>30</sup>.

## **B. Environmental indicators**

91. In the environmental area, the following core indicators are selected:

- Water recycling and reuse;
- Water use efficiency;
- Water stress;
- Reduction of waste generation;
- Waste reused, re-manufactured and recycled;
- Hazardous waste;
- Greenhouse gas emissions (scope 1);
- Greenhouse gas emissions (scope 2);
- Ozone-depleting substances and chemicals;
- Renewable energy; and
- Energy efficiency.

### **B.1. Sustainable use of water<sup>31</sup>**

#### **B.1.1. Water recycling and reuse**

---

<sup>29</sup> <https://www.gartner.com/it-glossary/smbs-small-and-midsize-businesses>.

<sup>30</sup> This is a reference to the enterprise resource planning system that records information on the entity's suppliers, including records of payments and other transactions.

<sup>31</sup> Useful sources of information regarding sustainable water use can be found at <https://ceowatermandate.org/disclosure/resources/assessing/>. This indicator is in line with UNCTAD/EEI (III.B), GRI 303-3, UN Environment report: Raising the Bar - Advancing Environmental Disclosure in Sustainability Reporting, published in 2015. United Nations

### Definition

92. Water recycling and reuse<sup>32</sup> refers to the total volume of water that a reporting entity recycles and/or reuses during the reporting period.

### Measurement methodology

93. It is suggested that the entity reports the total volume of water recycled and reused (total cubic meters) as well as the total volume of water recycled and reused as a percentage of the total water withdrawal plus total water received from third party (where total water withdrawal is calculated as the sum of all water drawn into the boundaries of the organization from all sources for any use over the course of the reporting period. Sources of water withdrawal can include fresh surface water + groundwater + seawater/brackish water<sup>33</sup> + produced/process water). The total volume withdrawn and received from third party is a proxy for the organization's relative size and importance as a user of water, as well as a baseline figure for other calculations relating to efficiency and use.

94. The indicator is thus expressed in both cubic meters (m<sup>3</sup>) and percentage terms (%).

95. To calculate the amount of water recycled and reused, the following example could be used: if a business site has a production cycle that requires 10 cubic meters of water per cycle, the organization withdraws 10 cubic meters of water for one production process cycle and reuses it for an additional four cycles, then the total volume of water recycled for that process is 40 cubic meters. This information needs to be collected with reference to a relevant time unit (e.g., day, week) so that it can be cumulated with reference to the total reporting period and

---

publication, available at: <http://web.unep.org/ourplanet/december-2015/unep-publications/raising-bar-advancing-environmental-disclosure-sustainability>.

<sup>32</sup> Water recycling and reuse is defined as the “act of processing used water and wastewater (treated or untreated) through another cycle before discharge to surface water, groundwater, or third party (in the same process, in a different process but within the same facility, or at another of the organization's facilities” <https://www.globalreporting.org/standards/media/1775/revised-exposure-draft-gri-303-water-and-effluents-20dec17-18feb18.pdf> (p. 29). It has to be noted that according to the System of Environmental and Economic Accounting (SEEA), “reused water is wastewater supplied to another user for further use with or without prior treatment. This excludes recycling of water within the same economic unit. Information on these flows, although potentially useful for analysis of water-use efficiency, is not generally available. Reused water is considered a product when payment is made by the receiving unit” ([https://seea.un.org/sites/seea.un.org/files/water\\_note\\_final\\_27-10-17\\_clean\\_0.pdf](https://seea.un.org/sites/seea.un.org/files/water_note_final_27-10-17_clean_0.pdf), p. 10). Therefore, when possible, reused water should be reported separately from recycle water.

<sup>33</sup> Brackish water is water that has more salinity than fresh water, but not as much as seawater (e.g., a mix of seawater with fresh water as in estuaries, or it may occur in brackish fossil aquifers).



compared to the amount of total water withdrawal for the same time unit (e.g., day, week) to calculate the percentage indicator.

96. It is suggested that the indicator is calculated at facility-level/individual business site level where appropriate documentation and reporting should exist based on water or flow meters. Calculating such indicator at facility-level/business site level allows data consolidation within certain geographic and operational boundaries at a later stage.

97. As entities should be striving to improve the amount of water recycling and reuse, it is suggested that this indicator is disclosed also in terms of change with reference to the previous reporting period (i.e., water recycling at time t MINUS water recycling at time t-1) to monitor and communicate the progress made in this area.<sup>34</sup>

#### Potential sources of information

98. Determining water use and recycling involves water withdrawal, delivery, release, and return-flow data collected at each business unit/facility through direct measurement (through water meters). Water should be metered and measured in litres or cubic meters. If such information is collected, it can be found in internal reporting system (operational information system tracking physical units and recording water flows) and/or environmental accounting systems/environmental management systems especially for what concerns the resource recycling quantities and costs.

99. Reporting entities would need to disclose if these instruments are not used at their facilities and thus estimation is required. Estimates are based on coefficients (area statistics) relating water use to another characteristic usually representing a proxy of the volume of business activity, such as number of employees or production values and volume and applying it to a site-specific amount of that characteristic.

100. Also, information collected in accounts payable based on water suppliers' bills can be used to calculate this indicator. It is also possible to find information

## Relevance to the SDGs

This indicator is relevant to SDG indicator 6.3.1.

Proportion of wastewater safely treated.

Indicator 6.3.1, developed by the World Health Organization (WHO) and the United Nations Human Settlements Programme, addresses the generation of wastewater by both households and productive activities. This indicator requires reporting on the proportion of wastewater treated safely before disposal or reuse, as a percentage of total wastewater.

<sup>34</sup> Recycled and withdrawn water should be recognized in the period in which the flows occur. If water is temporarily stored on-site the stock should be recognized at the beginning and at the end of the reporting period. This excludes water in closed systems, which are not used as reserves (e.g. water in tubes, small boilers used to catch an overshoot of water, etc.).

to calculate this indicator in accounts receivable when reused water is considered a product and when payment is made by the receiving unit.

### **B.1.2. Water use efficiency**

#### Definition

101. Water use efficiency refers to the water use per net value added in the reporting period as well as to the change of water use per net value added between two reporting periods.<sup>35</sup> Water use is defined in this indicator as water withdrawal plus total water received from a third party.

#### Measurement methodology

102. The indicator is expressed in both cubic meters (m<sup>3</sup>) (un-normalized, in absolute terms) and in percentage terms (%) of the net value added of the reporting period.

103. Water should be metered at each facility/business site and the indicator calculated at facility-level/individual business site level where appropriate documentation and reporting should exist based on water or flow meters. Calculating such indicator at facility-level/business site level allows data consolidation within certain geographic and operational boundaries at a later stage.

104. As entities should be striving to improve the amount of water use, it is suggested that this indicator is disclosed also in terms of change with reference to the previous reporting period (i.e., water use at time t MINUS water use at time t-1) to monitor and communicate the progress made in this area.

#### Potential sources of information:

105. Determining water use requires data collected at each business unit/facility through direct measurement (through water meters). Water should be metered and measured in litres or cubic meters. If such information is collected, it can be

#### Relevance to the SDGs

This indicator is relevant to SDG indicator 6.4.1. Change in water-use efficiency over time.

According to the Food and Agriculture Organization (FAO), its metadata guidance on indicator 6.4.1 is expected to consider the output over time of a given sector (gross value added rather than net has been chosen here) per unit of industrial net water withdrawn (water withdrawn minus return flow) and is expressed in USD per cubic metre.

<sup>35</sup> This indicator is in line with the UNCTAD/EEI (III.B), UN Environment UN Environment report: Raising the Bar - Advancing Environmental Disclosure in Sustainability Reporting, CDP water questionnaire <https://www.cdp.net/en/water>, GRI 303-1. It is also in line with the definition of the SEEA. Note that the terms “use” and “consumption” are sometimes employed with different specific meanings in different frameworks.

found in internal reporting system (operational information system tracking physical units and recording water flows) and/or environmental accounting systems/environmental management systems especially for what concerns the resource recycling quantities and costs.

106. Reporting entities would need to disclose if these instruments are not used at their facilities and thus estimation is required. Estimates are based on coefficients (area statistics) relating water use to another characteristic usually representing a proxy of the volume of business activity, such as number of employees or production values and volume and applying it to a site-specific amount of that characteristic.

107. Also, information collected in accounts payable based on water suppliers' bills can be used as a rough proxy to calculate this indicator.

### **B.1.3. Water stress**

#### Definition

108. Water stress is defined as total water withdrawn with a breakdown by sources (surface, ground, rainwater, waste water) and with reference to water-stressed or water-scarce areas (expressed as a percentage of total withdrawals).

#### Measurement methodology

109. The total volume of water withdrawn is calculated as the sum of all water drawn into the boundaries of the organization from all sources for any use over the course of the reporting period. Sources of water withdrawal can include fresh surface water + groundwater + seawater/brackish water + produced/process water. It should be reported with a breakdown by the following sources<sup>36</sup>:

- Surface water, including, for example water from wetlands, rivers and lakes
- Ground water;
- Rainwater collected directly and stored by the organization; and
- Waste water from another organization.

110. This indicator is expressed in cubic meters (total m<sup>3</sup> of water withdrawn from different sources) and in percentage terms (%) as it is necessary to express

---

<sup>36</sup> This indicator is in line with the UNCTAD/EEI (III.B) (although in the context of the UNCTAD/EEI guidance, this category does not cover water withdrawal by public water suppliers), UN Environment UN Environment report: Raising the Bar - Advancing Environmental Disclosure in Sustainability Reporting, CDP water questionnaire <https://www.cdp.net/en/water>, GRI 303-1.

the amount of water withdrawn from water-stressed or water-scarce areas over the total amount of water withdrawn.

111. In order to contextualize how an entity manages water use and stress, it is important to take into account its operations and its water resource context. It is thus suggested that the reporting entity discloses its water use policy and, in particular, the objectives and targets regarding water use and all additional qualitative information about the interrelations between the entity's water use and the public wastewater system, especially in contexts of water scarcity.<sup>37</sup>

#### Potential sources of information:

112. When information to calculate this indicator is not sourced from direct measurement, entities can rely on databases that contain typical data on water withdrawals for various types of manufacturing processes and/or per industrial sector (for example, sugar refineries, textile mills, paper mills and so on).<sup>38</sup>

113. Regarding the assessment of basins where water challenges are pronounced, many entities use their own internal knowledge of the basins where they operate. There are also a number of external datasets that can assist entities in this process and there are also free web-based tools that use these datasets to conduct calculations, such as:

- WBCSD Global Water Tool
- WRI Aqueduct Water Risk Atlas
- WWF-DEG Water Risk Filter (Quick View)
- WFN Water Footprint Assessment Tool

## Relevance to the SDGs

This indicator is relevant to SDG indicator 6.4.2. Level of water stress: freshwater withdrawal as a proportion of available freshwater resources.

The FAO is the United Nations custodian agency for indicator 6.4.2. The indicator is computed as water withdrawn divided by the difference between the available renewable freshwater resources and the environmental water requirements, multiplied by 100 and expressed in cubic kilometres per year. Please see indicator B.1.2 for information about how the SNA and the SEEA address issues in water resources for statistical purposes.

<sup>37</sup>This is in line with the UN Global Compact's CEO Water Mandate requiring entities to disclose qualitative information, such as the reporting entity's water profile, its relationship with the water resource context, as well as implications and responses.

<sup>38</sup> As suggested in [http://waterfootprint.org/media/downloads/TheWaterFootprintAssessmentManual\\_2.pdf](http://waterfootprint.org/media/downloads/TheWaterFootprintAssessmentManual_2.pdf), entities can consult proprietary databases such as Ecoinvent: <https://www.ecoinvent.org/>

114. Additional sources of information to gather data for the calculation of this indicator are the bills of water suppliers as well as the information that can be derived from water withdrawal licenses and permits that are required by entities if they want to use ground or surface water.

## **B.2. Waste management**

### **B.2.1. Reduction of waste generation**

#### Definition

115. This indicator measures the change in the entity's waste generation per net value added. Specifically, waste is intended as a non-product output with a negative or zero market value. Water and air-polluting emissions – although they are non-product output – are not regarded as waste.<sup>39</sup>

#### Measurement methodology

116. Total waste generated during a reporting period is defined as the sum of the amounts of all mineral, non-mineral and/or hazardous waste treated by any waste treatment technology.<sup>40</sup> As shown in Figure 5, this excludes the amount that is treated either on-site or off-site through closed-loop recycling, reuse or remanufacturing processes, i.e., the recycled, reused or remanufactured waste materials returned to the processes of the reporting entity.

117. Waste should be weighed or metered. As waste can be solid, liquid or have a paste-like consistency, it can be measured in kilograms and tons, litres or cubic metres. However, for the purpose of this indicator, waste should be reported according to weight (kg, t) and not volume (litres, m<sup>3</sup>). Country-based Environment Agencies usually provide conversion tools to assist organizations in calculating tonnages (e.g. conversion factors based on the waste density and volume, mass balances, or similar information).<sup>41</sup>

118. Waste generated should be presented in absolute amounts (in terms of kilos or tons of waste) and also normalized. In order to normalize data on waste generation figures, total waste generated should be divided by the amount of net

---

<sup>39</sup> Definition III.F.3.a. General Definition of Waste from UNCTAD/EEI “A Manual for the Preparers and Users of Eco-efficiency Indicators”, p. 91  
[http://unctad.org/en/Docs/iteipc20037\\_en.pdf](http://unctad.org/en/Docs/iteipc20037_en.pdf)

<sup>40</sup> Waste treatment technologies are processes applied to waste to permanently alter their condition through chemical, biological or physical means, and intend to reduce or eliminate their danger to people and the environment. For a complete description of these technologies refer to UNCTAD/EEI “A Manual for the Preparers and Users of Eco-efficiency Indicators”, [http://unctad.org/en/Docs/iteipc20037\\_en.pdf](http://unctad.org/en/Docs/iteipc20037_en.pdf), p. 93, section III.F.3.d.

<sup>41</sup> See for example,  
[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/519078/LIT\\_10134.xls](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/519078/LIT_10134.xls), [https://www.epa.gov/sites/production/files/2016-04/documents/volume\\_to\\_weight\\_conversion\\_factors\\_memorandum\\_04192016\\_508fnl.pdf](https://www.epa.gov/sites/production/files/2016-04/documents/volume_to_weight_conversion_factors_memorandum_04192016_508fnl.pdf)

value added (expressed in €, \$, £, etc.) generated in the same reporting period (see indicator *A.1.3. Net Value added*). So, in the end, the unit of measure of this indicator is kilos or tons of waste per €, per \$ etc.

119. The difference between year t and year t-1 should be computed so that it is possible to monitor the level of progress the organization has made toward waste reduction efforts (i.e., the change in the entity's waste generation). For the entity, such difference may also signal improvements in process efficiency and productivity and, from a financial perspective, some cost savings regarding materials processing and disposal.

Potential sources of information:

120. Waste should be weighed or metered at each specific business site.

121. However, some entities might find it difficult to meter the quantity of waste produced. Therefore, as waste is normally collected from an organization by a third party, it is possible to calculate the amount of waste generated in a reporting period via bills from the waste management company (information provided by the waste disposal contractor usually includes, along with the type of waste, also the amount of waste managed (in kilos or tons)).

122. The data required for the calculation of these indicators and the related information flows are normally managed by a Facility manager or a General services administrator. When such positions are not present in an entity, the related information is to be found in the accounts payable as part of the waste management costs calculation of the reporting period.

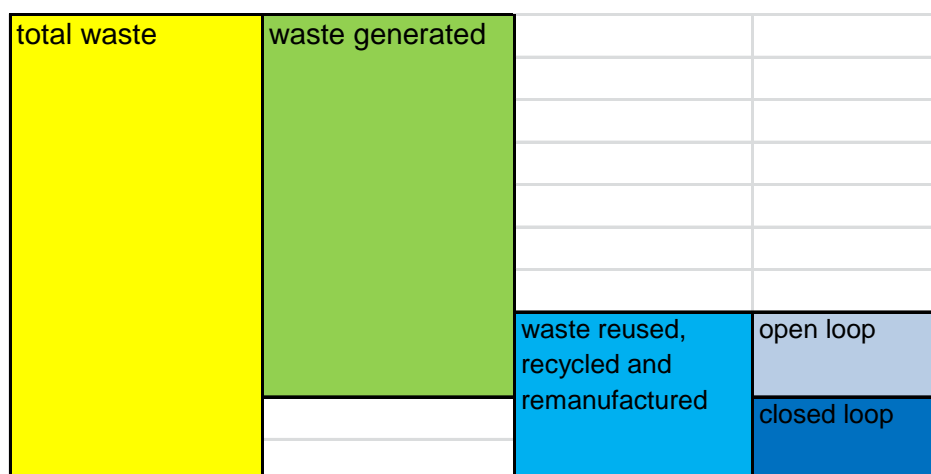
*Figure 5: A note on the definitions of waste*<sup>42</sup>

## Relevance to the SDGs

This indicator is relevant to SDG target 12.5. By 2030 substantially reduce waste generation through prevention, reduction, recycling and reuse.

The United Nations Statistical Division (UNSD) and UN Environment, in their metadata guidance for indicator 12.5.1. national recycling rate, have prepared a questionnaire on recycling and waste. The questionnaire requires data, among others, on “materials that are not prime products for which the generator has no further use for his own purpose of production, transformation or consumption, and which he discards, or intends or is required to discard. It excludes material directly recycled or reused at the place of generation (i.e. establishment) and waste materials that are directly discharged into ambient water or air as wastewater or air pollution.” Total waste generation is obtained, according to the guidance, after aggregation of waste by economic sectors.

<sup>42</sup> All the items represented in Figure 5 include hazardous and non-hazardous waste and are expressed in tons. The definitions are taken from UNCTAD/ITE/IPC/2003/7.



### B.2.2. Waste reused, re-manufactured and recycled

#### Definition

123. Among the options for waste treatment, one is reuse, re-manufacturing, and recycling.<sup>43</sup>

124. Reuse consists in the further use of a component, part or product after it has been removed from a clearly defined service cycle. Reuse does not involve a manufacturing process; however, cleaning, repair or refurbishing may be performed between uses.

125. Re-manufacturing is the further use of a component, part or product after it has been removed from a clearly defined service cycle in a new manufacturing process that goes beyond cleaning, repair or refurbishing.

126. Recycling is recovery and reuse of materials from scrap or other waste materials for the production of new goods. Energy recovery (called "thermal recycling") is not regarded as recycling but as incineration. Pre-treatment processes that condition the waste for recycling are regarded as part of the recycling path.

127. It is possible to further distinguish between open- and closed-loop reuse, re-manufacturing and recycling, where open-loop means that the recycled, reused or re-manufactured material is returned to the market, not to the processes of the reporting entity; while closed-loop means that the recycled, reused or remanufactured material is returned to the processes of the reporting entity.

<sup>43</sup> UNCTAD/EEI "A Manual for the Preparers and Users of Eco-efficiency Indicators", p. 93, [http://unctad.org/en/Docs/iteipc20037\\_en.pdf](http://unctad.org/en/Docs/iteipc20037_en.pdf). This indicator is also consistent with the spirit of GRI 301-2 on recycled input materials used.

### Measurement methodology

128. The amount of reused, re-manufactured, and recycled waste should be recognized in the period in which it is treated and should be measured in kilos and tons (see on this point indicator *B.2.1. Reduction of waste generation*). When possible, it would be preferably to distinguish among the three options, and specifically, between reuse and recycling versus remanufacturing.

129. Reused, remanufactured and recycled waste should be presented in absolute amounts (in terms of kilos or tons of waste) and also normalized. In order to normalize data on waste generation figures and to be consistent with the way in which indicator *B.2.1. Reduction of waste generation* is calculated, reused, re-manufactured and recycled waste should be divided by the amount of net value added (expressed in €, \$, £, etc.) generated in the same reporting period (see indicator *A.1.3. Net Value added*). So, in the end, the unit of measure of this indicator is kilos or tons of waste per €, per \$ etc.

130. The difference between year t and year t-1 should be also computed so that it is possible to monitor the level of progress the organization has made toward waste reuse, re-manufacture, and recycle efforts in line with the idea of circular economy.

### Potential sources of information

131. In many countries various forms of waste treatment are required by law, and, normally, a waste disposal contractor is involved in open-loop recycling. Therefore, relevant information for a specific reporting period can be found on the bills from the waste management company (information provided by the waste disposal contractor usually includes, along with the type of waste, also the amount of waste managed (in kilos or tons)). When the waste generated by an entity can be sold (e.g., because it represents a suitable raw material for another manufacturing company), relevant information can be found on the invoice issued by the entity selling waste materials (accounts receivable).

132. When the recycled, reused or remanufactured material is returned to the processes of the reporting entity (closed-loop), the related figures should be collected at each business site and reported through operational reporting.

### Relevance to the SDGs

This indicator is relevant to SDG indicator 12.5.1. National recycling rate, tons of material.

In indicator 12.5.1, data about waste recycling is collected by UNSD and UN Environment by using the municipal recycling rate as a proxy. The UNSD-UN Environment questionnaire defines recycling as “any reprocessing of waste material in a production process that diverts it from the waste stream, except reuse as fuel. Both reprocessing as the same type of product, and for different purposes should be included. Recycling within industrial plants (i.e. at the place of generation) should be excluded.”



133. The data required for the calculation of these indicators and the related information flows are normally managed by a Facility manager or a General services administrator or by a plant manager. The related information can also be found in the accounts receivable, when waste materials is sold to other entities, or in the bills of materials if waste is reused in the reporting entity processes.

### **B.2.3. Hazardous waste**

#### Definition

134. This indicator refers to the total amount of hazardous waste, in absolute terms, as well as to the proportion of hazardous waste treated, given total waste reported by the reporting entity.

135. Waste can be classified according to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)<sup>44</sup> that has defined the following list of hazardous characteristics:

- 1 H1 Explosive: An explosive substance or waste is a solid or liquid substance or waste (or mixture of substances or wastes) which is in itself capable by chemical reaction of producing gas at such a temperature and pressure and at such speed as to cause damage to the surroundings.
- 3 H3 Flammable liquids: The word "flammable" has the same meaning as "inflammable." Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example, paints, varnishes, lacquers, etc., but not including substances or wastes otherwise classified on account of their dangerous characteristics) which give off a flammable vapour at temperatures of not more than 60.5° C, closed-cup test, or not more than 65.6° C, open-cup test. (Since the results of open-cup tests and of closed-cup tests are not strictly comparable and even individual results by the same test are often variable, regulations varying from the above figures to make allowance for such differences would be within the spirit of this definition.)
- 4.1 H4.1 Flammable solids: Solids, or waste solids, other than those classed as explosives, which under conditions encountered in transport are readily combustible, or may cause or contribute to fire through friction.
- 4.2 H4.2 Substances or wastes liable to spontaneous combustion: Substances or wastes which are liable to spontaneous heating under normal conditions encountered in transport, or to heating up on contact with air, and being then liable to catch fire.

---

<sup>44</sup> See Annex III, <http://www.basel.int/Portals/4/Basel%20Convention/docs/text/BaselConventionText-e.pdf>. See also Annex I of the Basel Convention. This indicator is also in line with UNCTAD/EEI (III.F), and with GRI disclosure 306-2 indicating that hazardous waste should be understood in the context of the national legislation definition.

- 
- 4.3 H4.3 Substances or wastes which, in contact with water, emit flammable gases: Substances or wastes which, by interaction with water, are liable to become spontaneously flammable or to give off flammable gases in dangerous quantities.
  - 5.1 H5.1 Oxidizing: Substances or wastes which, while in themselves not necessarily combustible, may, generally by yielding oxygen, cause, or contribute to, the combustion of other materials.
  - 5.2 H5.2 Organic Peroxides: Organic substances or wastes which contain the bivalent-OO-structure are thermally unstable substances which may undergo exothermic self-accelerating decomposition.
  - 6.1 H6.1 Poisonous (Acute): Substances or wastes liable either to cause death or serious injury or to harm health if swallowed or inhaled or by skin contact.
  - 6.2 H6.2 Infectious substances: Substances or wastes containing viable micro-organisms or their toxins which are known or suspected to cause disease in animals or humans.
  - 8 H8 Corrosives: Substances or wastes which, by chemical action, will cause severe damage when in contact with living tissue, or, in the case of leakage, will materially damage, or even destroy, other goods or the means of transport; they may also cause other hazards.
  - 9 H10 Liberation of toxic gases in contact with air or water: Substances or wastes which, by interaction with air or water, are liable to give off toxic gases in dangerous quantities.
  - 9 H11 Toxic (Delayed or chronic): Substances or wastes which, if they are inhaled or ingested or if they penetrate the skin, may involve delayed or chronic effects, including carcinogenicity.
  - 9 H12 Ecotoxic: Substances or wastes which if released present or may present immediate or delayed adverse impacts to the environment by means of bioaccumulation and/or toxic effects upon biotic systems.
  - 9 H13 Capable, by any means, after disposal, of yielding another material, e.g., leachate, which possesses any of the characteristics listed above.

Waste is classified as hazardous also when, as a result of being radioactive, is subject to other national or international control systems or when it is defined as, or considered to be, hazardous waste by the domestic legislation in the country where the waste is generated by the reporting entity.

#### Measurement methodology

136. Total hazardous waste generated during a reporting period is defined as the sum of the amounts of all types of hazardous waste listed in the above definition and should be measured in kilos and tons (see on this point indicator *B.2.1. Reduction of waste generation*).

137. Hazardous waste should be presented in absolute amounts (in terms of kilos or tons of waste) and also normalized. In order to normalize data on hazardous waste generation figures and to be consistent with the way in which indicator *B.2.1. Reduction of waste generation* is calculated, hazardous waste should be divided by the amount of net value added (expressed in €, \$, £, etc.) generated in the same reporting period (see indicator *A.1.3. Net Value added*). So, in the end, the unit of measure of this indicator is kilos or tons of waste per €, per \$ etc.

138. The difference between year t and year t-1 should be also computed so that it is possible to monitor the level of progress the organization has made throughout the years.

139. An entity should also disclose the proportion of hazardous waste treated to reduce or eliminate their danger to people and the environment compared to the total waste reported by the reporting entity (indicator expressed in % terms).

140. Where applicable, total weight of hazardous waste should be broken down by disposal methods, i.e.: Reuse, Recycling, Composting, Recovery, including energy recovery, Incineration (mass burn), Deep well injection, Landfill, On-site storage, Other (to be specified by the organization).

141. Information about the disposal destination reveals the extent to which an organization has managed the balance between disposal options and uneven environmental impacts.

#### Potential sources of information:

142. Hazardous waste should be weighed or metered at each specific business site.

143. However, some entities might find it difficult to meter the quantity of hazardous waste produced. So, in line with what is advised for other indicators on waste management included in this guidance, it is suggested to use the bills from the waste management company to reconstruct the relevant information required to calculate this indicator. Information provided by the waste disposal contractor usually includes, along with the type of waste, also the amount of waste managed (in kilos or tons) and the disposal method. Usually, consignment

## Relevance to the SDGs

These indicator is relevant to SDG indicator 12.4.2.

Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment.

UNSD and UN Environment in their work plan for indicator 12.4.2 state that the states parties to the Basel Convention must report annually on: (a) the amount of hazardous wastes generated; and (b) the amount of hazardous imported and exported and other wastes destined for reuse, recycling or recovery operations or final disposal.

notes to move hazardous waste are required and businesses need to keep records (known as a ‘register’) for a specific number of years at the premises that produced or stored the waste.

144. The related information flows are normally managed by a Facility manager or a General services administrator. When such positions are not present in an entity, such information is to be found in the accounts payable as part of the waste management costs calculation of the reporting period.

### **B.3. Greenhouse gas emissions**

#### **B.3.1. Greenhouse gas emissions (scope 1)**

##### Definition

145. Greenhouse gas emissions (scope 1) refer to direct greenhouse gas (GHG) emissions per unit of net value added.

146. Scope 1 covers emissions that occur inside an entity’s organizational boundary and are also referred to as Direct GHG. They are “emissions from sources that are owned or controlled by the organization”<sup>45</sup>, such as:

- Stationary Combustion: from the combustion of fossil fuels (e.g. natural gas, fuel oil, propane, etc.) for comfort heating or other industrial applications
- Mobile Combustion: from the combustion of fossil fuels (e.g. gasoline, diesel) used in the operation of vehicles or other forms of mobile transportation
- Process Emissions: emissions released during the manufacturing process in specific industry sectors (e.g. cement, iron and steel, ammonia)
- Fugitive Emissions: unintentional release of GHG from sources including refrigerant systems and natural gas distribution

##### Measurement methodology

147. For most entities, the stationary and mobile combustion sources of Scope 1 GHG are the most relevant.

---

<sup>45</sup> According to the GHG protocol, direct CO<sub>2</sub> emissions from the combustion of biomass shall not be included in scope 1 but reported separately. Also GHG emissions not covered by the Kyoto Protocol, e.g. CFCs, NO<sub>x</sub>, etc. shall not be included in scope 1 but may be reported separately.

148. The calculation of GHG (scope 1) is most commonly and easily done by means of an excel file (a tool) that can be downloaded from [www.ghgprotocol.org](http://www.ghgprotocol.org)<sup>46</sup>. The calculation methodology is based on the use of some emissions factors that are specific for each fuel/material type. In fact, in the excel sheets, it is possible to find some conversion coefficients, i.e., the so called Global Warming Potentials (GWPs), to translate different gases into emissions of carbon dioxide (CO<sub>2</sub>). GWPs were developed to allow comparisons of the global warming impacts of different gases. It is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of CO<sub>2</sub>. GWP values convert GHG emissions data for non-CO<sub>2</sub> gases into units of CO<sub>2</sub> equivalent. Therefore, they provide a common unit of measure, which allows adding up emissions estimates of different gases. Entities can choose which GWPs to use by selecting a specific IPCC (Intergovernmental Panel on Climate Change) protocol.

149. The calculation is automatically performed by the tool. For example, reporting entities need to insert the amount of fuels used during the reporting period, using the appropriate unit measures (e.g., natural gas, in cubic meters; lubricants in litres) and the tool automatically converts these amounts into GHG emissions.<sup>47</sup>

150. GHG scope 1 should be presented in absolute amounts and report the amounts of carbon dioxide equivalent. In order to normalize data on GHG, they should be divided by the amount of net value added (expressed in €, \$, £, etc.)

## Relevance to the SDGs

This indicator is relevant to SDG indicator 9.4.1. CO<sub>2</sub> emissions per unit of new value added.

UNIDO and the IEA metadata guidance on indicator 9.4.1 encompasses all types and sources of CO<sub>2</sub> emissions. The latter are expressed in kilogrammes per constant 2010 USD per unit of manufacturing value added.

<sup>46</sup> UN Environment indicates that GHG emissions are one of the most commonly reported environmental areas and refers to the GHG Protocol in discussing comprehensive reporting methodology for this indicator. Also, UNCTAD/EEI (In the Raising the Bar report) also discusses the importance of accounting for GHG emissions. In addition, CDP, formerly known as the Carbon Disclosure Project, has published extensive guidance on corporate accounting and reporting for GHG emissions (<https://www.cdp.net>). The use of the GHG protocol is also in line with the Recommendations of the Task Force on Climate-related Financial Disclosures (June 2017) at: <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf>

<sup>47</sup> There are other calculation tools that can be used for these purposes, such as <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>. As suggested in the GRI 305-1, entities should specify the source of the emission factors and the global warming potential (GWP) rates used or refer to the GWP source. The reporting organization should also apply emission factors and GWP rates consistently for the data disclosed.

generated in the same reporting period (see indicator *A.1.3. Net Value added*). So, in the end, the unit of measure of this indicator is tons of CO<sub>2</sub> per €, per \$ etc.

151. It is also suggested to provide a breakdown of the direct (Scope 1) GHG emissions by: business unit or facility; country; type of source (stationary combustion, process, fugitive); type of activity.

152. The difference between year t and year t-1 should be also computed so that it is possible to monitor the level of progress the organization has made.

Potential sources of information:

153. Data for the calculation of this indicator can be recovered from accounts payable, specifically from invoices of providers of fuels (where the unit of measure can be m<sup>3</sup> or litres).

154. The collection of these data needs to be done site by site, by a facility manager/general services administrator, by a quality manager or by an environmental/sustainability manager with the collaboration of the accounting department. Such data can then be cumulated both by legal entity and by country.

**B.3.2. Greenhouse gas emissions (scope 2)**

Definition

155. This indicator refers to indirect GHG emissions (from consumption of purchased electricity, heat or steam) per unit of net value added.

156. Scope 2 covers emissions arising from the generation of secondary energy forms, e.g. electricity, that are purchased by the entity for its own use. These emissions are considered ‘indirect’ because they are a consequence of activities of the reporting organization but actually occur at sources owned or controlled by another organization (i.e., owned or controlled by an electricity generator or utility). For many entities, the energy indirect (Scope 2) GHG emissions that result from the generation of purchased electricity can be much greater than their direct (Scope 1) GHG emissions. Scope 2 are also one of the largest sources of GHG emissions globally: the generation of electricity and heat accounts for a third of global GHG emissions<sup>48</sup>.

Measurement methodology

---

48

[http://www.ghgprotocol.org/sites/default/files/ghgp/standards/Scope%20%20Guidance\\_Final\\_0.pdf](http://www.ghgprotocol.org/sites/default/files/ghgp/standards/Scope%20%20Guidance_Final_0.pdf)

157. To calculate scope 2 emissions, the Corporate Standard<sup>49</sup> recommends multiplying activity data (MWhs of electricity consumption) by emission factors to arrive at the total GHG emissions impact of electricity use.

158. There are two methods that can be used:

- **Market-Based Method:** it is a method to quantify the scope 2 GHG emissions of a reporter based on GHG emissions emitted by the generators from which the reporter contractually purchases electricity bundled with contractual instruments, or contractual instruments on their own. In this case, the emission factors are derived from the GHG emission rate represented in the contractual instruments that meet Scope 2 Quality Criteria. The market-based method is based on supplier-specific emission factors.

- **Location-Based Method:** a method to quantify scope 2 GHG emissions based on average energy generation emission factors for defined geographic locations, including local, subnational, or national boundaries. Under this approach, emission factors represent average emissions from energy generation occurring within a defined geographic area and a defined time period. The location-based method is based on statistical emissions information and electricity output aggregated and averaged within a defined geographic boundary and during a defined time period.

159. Also, the calculation of GHG (scope 2) is most commonly and easily done by means of an excel file (a tool) that can be downloaded from [www.ghgprotocol.org](http://www.ghgprotocol.org) that converts activity data into emissions of carbon dioxide (CO<sub>2</sub>)<sup>50</sup>. Refer to indicator B.3.1. for more details on this approach.

160. GHG scope 2 should be presented in absolute amounts and report the amounts of carbon dioxide equivalent. In order to normalize data on GHG scope 2, they should be divided by the amount of net value added (expressed in €, \$, £, etc.) generated in the same reporting period (see indicator *A.1.3. Net Value added*). So, in the end, the unit of measure of this indicator is tons of CO<sub>2</sub> per €, per \$ etc.

## Relevance to the SDGs

This indicator is relevant to SDG indicator 9.4.1. CO<sub>2</sub> emissions per unit of new value added

As indicated above in indicator B.3.1, the metadata guidance on indicator 9.4.1 encompasses all types and sources of CO<sub>2</sub> emissions.

<sup>49</sup>

[http://www.ghgprotocol.org/sites/default/files/ghgp/standards/Scope%20%20Guidance\\_Final\\_0.pdf](http://www.ghgprotocol.org/sites/default/files/ghgp/standards/Scope%20%20Guidance_Final_0.pdf), p. 5.

<sup>50</sup> For country-based conversion factors see also: A Manual for the Preparers and Users of Eco-efficiency Indicators, UNCTAD/ITE/IPC/2003/7, from p.65.

161. The difference between year t and year t-1 should be also computed so that it is possible to monitor the level of progress the organization has made.

Potential information sources:

162. In order to obtain activity data (kWhs and MWhs), it is suggested to consult utility bills.

163. The collection of these data needs to be done site by site, by a facility manager/general services administrator, by a quality manager or by an environmental/sustainability manager with the collaboration of the accounting department. Such data can then be cumulated both by legal entity and by country.

## **B.4. Ozone-depleting substances and chemicals**

### **B.4.1. Ozone-depleting substances and chemicals**

Definition

164. This indicator aims at quantifying an entity's dependency on ozone-depleting substances (ODS) and chemicals, per net value added.

165. ODS are all bulk chemicals/substances, existing either as a pure substance or as a mixture. These are generally chemicals containing chlorine and/or bromine. The most important ozone-depleting substances and chemicals are controlled under the Montreal Protocol and are listed in Annex A, B, C or E of the Protocol.<sup>51</sup>

Measurement methodology

166. In the Annex of the Montreal Protocol every substance controlled is listed together with a value expressing the ozone depletion potential. An ozone depletion potential value indicates how much impact a certain substance has on the depletion of the ozone layer relative to a reference substance. The reference substance normally taken is CFC-11 with an ozone depletion potential of 1; therefore, ozone depletion potential values are expressed in kg CFC-11 equivalents per kg of the respective substance.

167. For example, if an entity uses 200 kg of the ozone-depleting substance Halon-1211 during a reporting period and Halon-1211 has an ozone depletion potential of 3, in order to understand the ozone-depleting contribution of this specific halon use an entity needs to multiply the amount of halon-1211 (200 kg) by the ozone depletion potential value of 3 (kg CFC-11 equivalent/kg halon-1211) to come to the ozone depletion contribution (ODC) of 600 kg CFC-11 equivalent.

---

<sup>51</sup> For a complete list see: <http://ozone.unep.org/en/handbook-montreal-protocol-substances-deplete-ozone-layer/5>



168. The dependency of an entity on ozone-depleting substances<sup>52</sup> is defined as:

Production of ODS + purchases of ODS + stocks of ODS

Where:

- Production of ODS means the amount of virgin (i.e., not recovered, reclaimed or recycled) ozone-depleting substances added by the reporting entity<sup>53</sup>.
- Purchases of ODS can assume different forms:
  - Ozone-depleting substances embodied in supplied goods
  - Ozone-depleting substances embodied in equipment for own use
  - Ozone-depleting substances embodied in traded goods
  - Ozone-depleting substances as substances for goods manufactured
  - Ozone-depleting substances as substances for own production process
  - Ozone-depleting substances as substances for own equipment
- Stocks of ODS are defined as any ozone-depleting substance stored or accumulated on the reporting entity's premises for use, reclaim, recovery, recycling or destruction in the future. They include ODS substances in containers, in goods, in own equipment and in use as process agents.

169. In order to normalize data on ODS, the amount of kg CFC-11 equivalent should be divided by the amount of net value added (expressed in €, \$, £, etc.) generated in the same reporting period (see indicator *A.1.3. Net Value added*). So, in the end, the unit of measure of this indicator is kg per €, \$ etc.

170. The difference between year t and year t-1 should be also computed so that it is possible to monitor the level of progress the organization has made.

Potential sources of information:

## Relevance to the SDGs

This indicator is relevant to SDG indicator 12.4.2.

Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment.

Please see indicator B.2.3. for more information on the metadata guidance suggested by UN Environment and UNSD for SDG indicator 12.4.2.

<sup>52</sup> Definitions of production, purchase and stocks of ODS can be found in UNCTAD/EEI (III.E). According to GRI Disclosure 305-6, the reporting organization should calculate the emissions of ODS, that can be derived by calculating the total dependency on ODS and subtracting the amount recovered, reclaimed, recycled, destroyed, used as feedstock, sold and in stock, from it.

<sup>53</sup> According to GRI standard 305-6, the production of ODS consists of the amount of ODS produced, minus the amount destroyed by approved technologies or used as feedstock in the manufacture of other chemicals.

171. ODS should be weighed or metered at each specific business site (ODS should be measured in kilograms, metric tons, litres and cubic metres). This is an area that is regulated in many countries and therefore the information regarding this indicator should be found:

- When ODS are produced, in the operating information systems of each specific plant (as part of amounts of outcomes produced in a specific reporting period – see also the bills of materials);
- When ODS are purchased/stocked
  - o if it is ODS for production processes, in the accounts payable and in the operating information systems of each specific plant. The owner of such information in this case should be the plant manager/the purchasing manager;
  - o if it is ODS embodied in equipment in use outside production processes and part of general services (e.g., air conditioning, firefighting equipment), it can be derived from the description of the specific equipment bought by the entity at each facility. The owner of such information in this case should be the facility manager/general services administrator.

## **B.5. Energy consumption**

### **B.5.1. Renewable energy**

#### Definition

172. This indicator is defined as the ratio of an entity's consumption of renewable energy to its total energy consumption during the reporting period. Types of renewable energy include, for example, solar energy, biomass, hydropower, geothermal energy, and ocean energy.

#### Measurement methodology

173. To calculate the numerator, the entity should consider only the amount of renewable energy consumed. Therefore, the numerator can be calculated as:

174. Renewable fuel sources (such as biofuels), solar energy, biomass, hydropower, geothermal energy, and ocean energy<sup>54</sup> including heat from renewable sources and electricity from renewable sources<sup>55</sup>

Total energy consumption within the organization can be calculated as:

---

<sup>54</sup> International Recommendations for Energy Statistics (IRES) can be used as a guide for this indicator as it provides a list of renewable energy sources (<https://unstats.un.org/unsd/energy/ires/IRES-web.pdf>). Also, UN/EEI (III.C) provides definitions on types of renewable energy.

<sup>55</sup> Renewable sources of electricity are comprised of: hydro, wind, solar (photovoltaic and solar thermal), geothermal, wave, tide and other marine energy, as well as the combustion of biofuels. Renewable sources of heat are: solar thermal, geothermal and the combustion of biofuels.

Non-renewable<sup>56</sup> fuel consumed + Renewable fuel consumed + Electricity, heating, cooling, and steam purchased for consumption + Self-generated electricity, heating, cooling, and steam, which are not consumed - Electricity, heating, cooling, and steam sold

175. This amount represents the denominator of the indicator.

176. In calculating this indicator, when computing the numerator, it is suggested to distinguish between different types of renewable energy resources, as these range from “infinite” renewable sources, such as solar power, to cyclical renewable resources, such as biomass.

177. Fuel consumption is expressed in joules or multiples. Electricity, heating, cooling, and steam consumptions are expressed in joules, watt-hours or multiples. However, both the numerator and the denominator should be expressed in joules. Therefore, conversion factors are needed. Different energy commodities have a different caloric content. To make them comparable they are converted into thermal equivalents using their respective net caloric content. If the energy commodity is used in a country for which specific values are listed (i.e., there are local conversion factors) then these values should be used. Otherwise the default value should be applied.<sup>57</sup>

178. It would be preferable to report this indicator by business unit or facility; country; type of source (see the above definitions for non-renewable sources and renewable sources); type of activity.

179. In order to normalize data on renewable energy and to be consistent with the way the other environmental indicators are calculated, it is suggested to normalize the amount of joules of renewable energy by the amount of net value added (expressed in €, \$, £, etc.) generated in the same reporting period (see

---

<sup>56</sup> According to the GRI, non-renewable fuel sources can include fuel for combustion in boilers, furnaces, heaters, turbines, flares, incinerators, generators and vehicles that are owned or controlled by the organization. Non-renewable fuel sources cover fuels purchased by the organization. They also include fuel generated by the organization’s activities – such as mined coal, or gas from oil and gas extraction. See also GRI standard 302-1.

<sup>57</sup> For factors see also: A Manual for the Preparers and Users of Eco-efficiency Indicators, UNCTAD/ITE/IPC/2003/7, from p.34.

indicator *A.1.3. Net Value added*). So, in the end, the unit of measure of this indicator is joules per €, \$ etc.

180. The difference between year t and year t-1 should be also computed so that it is possible to monitor the level of progress the organization has made.

#### Potential sources of information:

181. As the majority of entities purchase energy, the amount of energy consumed for a reporting period, subdivided into the different types, can be found by looking at the bills of the energy suppliers and of fuel providers.

182. In many countries, renewable energy certificates, or RECs, are used to claim to have purchased renewable energy. So specific information about renewable energy can also be derived from these certificates when present.

183. If the entity has an Energy manager, the collection of energy data is accomplished by this professional. Otherwise a facility manager/general services administrator can also be in charge of such information, with the collaboration of the accounting department (accounts payable for the energy bills). Such data should be collected at the level of each business unit/facility so that it can then be cumulated both by legal entity and by country.

### **B.5.2. Energy efficiency**

#### Definition

184. Energy efficiency is defined as an entity's energy consumption divided by net value added.

#### Measurement methodology

### **Relevance to the SDGs**

This indicator is relevant to SDG indicator 7.2.1. Renewable energy share in the total final energy consumption.

The IEA, UNSD and the International Renewable Energy Agency use indicator 7.2.1 to account for the share of renewable resources in the final consumption of energy at national level. They define renewable energy as all forms of energy which consumption does not deplete their availability in the future such as: hydro, solid biofuels, wind, solar, liquid biofuels, biogas, geothermal, marine and waste

Please see indicator B.2.3. for more information on the metadata guidance suggested by UN Environment and UNSD for SDG indicator 12.4.2.

185. To calculate the numerator, the entity should consider total energy consumption within the organization that can be calculated as<sup>58</sup>:

186. Non-renewable fuel consumed + Renewable fuel consumed + Electricity, heating, cooling, and steam purchased for consumption + Self-generated electricity, heating, cooling, and steam, which are not consumed - Electricity, heating, cooling, and steam sold.

187. Fuel consumption is expressed in joules or multiples. Electricity, heating, cooling, and steam consumptions are expressed in joules, watt-hours or multiples. Therefore, conversion factors are needed to express everything in joules. Different energy commodities all have a different caloric content. To make them comparable they are converted into thermal equivalents using their respective net caloric content. If the energy commodity is used in a country for which specific values are listed (i.e., there are local conversion factors) then these values should be used. Otherwise the default value should be applied.<sup>59</sup>

188. In order to normalize data on energy consumption and to be consistent with the way the other environmental indicators are calculated, the amount of joules of energy should be divided by the amount of net value added (expressed in €, \$, £, etc.) generated in the same reporting period (see indicator *A.1.3. Net Value added*). So, in the end, the unit of measure of this indicator is joules per €, \$ etc.

189. Also, for this indicator it is suggested that entities report information by business unit or facility; country; type of source (see the previous indicator for a definition of non-renewable and renewable energy); type of activity.

## Relevance to the SDGs

This indicator is relevant to SDG indicator 7.3.1. Energy intensity measured in terms of primary energy and GDP.

In their metadata guidance for indicator 7.3.1, UNSD and IEA define energy intensity as the energy supplied to the economy per unit value of economic output. The total energy supply is defined in International Recommendations for Energy Statistics, and GDP should be measured in constant terms at purchasing power parity.

<sup>58</sup> UNCTAD/EEI (III.C) provides guidance on the accounting treatment of energy use, considering various forms of energy used in entities' operations. For this calculation see also GRI standard 302-1. This indicator is also in line with GRI 302-3 requiring that the entity calculate the energy intensity ratio.

<sup>59</sup> For factors see also: A Manual for the Preparers and Users of Eco-efficiency Indicators, UNCTAD/ITE/IPC/2003/7, from p.34.

Potential sources of information:

190. As the majority of entities purchase energy, the amount of energy consumed for a reporting period, subdivided into the different types, can be found by looking at the bills of the energy suppliers. If the entity has an Energy manager, the collection of energy data is accomplished by this professional. Otherwise a facility manager/general services administrator can also be in charge of such information, with the collaboration of the accounting department (accounts payable for the energy bills). Such data should be collected at the level of each business unit/facility so that it can then be cumulated both by legal entity and by country.

**C. Social area**

191. In the social area, the following core indicators are selected:

- Proportion of women in managerial positions;
- Average hours of training per year per employee;
- Expenditure on employee training per year per employee;
- Employee wages and benefits, by employment type and gender;
- Expenditures on employee health and safety;
- Frequency/incident rates of occupational injuries; and
- Percentage of employees covered by collective agreements.

**C.1. Gender equality****C.1.1. Proportion of women in managerial positions**Definition

192. This indicator is expressed as the number of women in managerial positions divided by the total number of employees in a given reporting period.<sup>60</sup>

Measurement methodology

193. This indicator should be calculated by taking into consideration the employee numbers at the end of the reporting period. Employee numbers may

---

<sup>60</sup> See on this point the Guidance on Corporate Responsibility Indicators in annual Reports, UNCTAD/CRI (indicator 5). This indicator is also consistent with indicator number 45 “Women’s share of managerial positions” (ILO) in the EDGE (Evidence and Data for Gender Equality) project *Minimum set of gender indicators* (<https://genderstats.un.org/#/home>).

be expressed as head count or Full Time Equivalent (FTE)<sup>61</sup>. This latter choice is especially suggested when an entity employs a substantial number of part-time staff. In any case, the approach chosen should be applied consistently between periods.

194. As a first step, it is necessary to express the total workforce of the reporting entity at the end of the reporting period either in terms of headcount or FTE (denominator of the indicator).

195. Then it is required to identify those employees that occupy managerial positions. In order to do so, it is suggested to use internal job classifications as well as, as a check list, the occupational classification system of major, sub-major, minor and unit groups endorsed by the Meeting of Experts in Labour Statistics (the International Standard Classification of Occupations, 2008 (ISCO)). According to this list, jobs can be classified by occupation with respect to the type of work performed, and the criteria used to define the system of major, sub-major, minor and unit groups are the “skill level” and “skill specialization”. The following can be identified as “Managers”:

*11 Chief executives, senior officials and legislators*

111 Legislators and senior officials

1111 Legislators

1112 Senior government officials

1113 Traditional chiefs and heads of village

1114 Senior officials of special-interest organizations

112 Managing directors and chief executives

1120 Managing directors and chief executives

*12 Administrative and commercial managers*

121 Business services and administration managers

1211 Finance managers

1212 Human resource managers

1213 Policy and planning managers

1219 Business services and administration managers not elsewhere classified

122 Sales, marketing and development managers

1221 Sales and marketing managers

---

<sup>61</sup> The FTE is calculated by summing up all the hours worked in one reporting period by both part-time and full-time workers and dividing this number by the number of hours worked by a full-time worker.

- 
- 1222 Advertising and public relations managers
  - 1223 Research and development managers
  - 13 Production and specialized services managers*
  - 131 Production managers in agriculture, forestry and fisheries
  - 1311 Agricultural and forestry production managers
  - 1312 Aquaculture and fisheries production managers
  - 132 Manufacturing, mining, construction, and distribution managers
  - 1321 Manufacturing managers
  - 1322 Mining managers
  - 1323 Construction managers
  - 1324 Supply, distribution and related managers
  - 133 Information and communications technology service managers
  - 1330 Information and communications technology service managers
  - 134 Professional services managers
  - 1341 Child care services managers
  - 1342 Health services managers
  - 1343 Aged care services managers
  - 1344 Social welfare managers
  - 1345 Education managers
  - 1346 Financial and insurance services branch managers
  - 1349 Professional services managers not elsewhere classified
  - 14 Hospitality, retail and other services managers*
  - 141 Hotel and restaurant managers
  - 1411 Hotel managers
  - 1412 Restaurant managers
  - 142 Retail and wholesale trade managers
  - 1420 Retail and wholesale trade managers
  - 143 Other services managers
  - 1431 Sports, recreation and cultural centre managers
  - 1439 Services managers not elsewhere classified

196. In any case, as reporting entities may currently use different taxonomies to classify managerial positions, the use of narrative disclosure could help contextualizing this indicator. Entities are encouraged to use taxonomies that are



consistent with the Evidence and Data for Gender Equality (EDGE) project, a joint initiative of the United Nations Statistics Division and UN Women.<sup>62</sup>

197. Finally, after having expressed the employees occupying managerial positions in the reporting entity in terms of either headcounts or FTEs (consistently with the way in which the total workforce is quantified), it is required to identify and express the female employees occupying managerial positions in the reporting entity in terms of either headcounts or FTEs (numerator of the indicator).

198. When possible, it is suggested to report not only the breakdown of managerial positions by gender but also the breakdown of total workforce (either headcount or FTEs).<sup>63</sup>

199. In addition, the reporting entity is encouraged to also calculate the breakdown of total workforce according to the following categories<sup>64</sup>:

- employees and supervised workers<sup>65</sup>,
- type of employment contract (permanent<sup>66</sup> or temporary<sup>67</sup>),
- employment type (full-time or part-time)
- age group: under 30 years old, 30-50 years old, over 50 years old
- region

## Relevance to the SDGs

This indicator is relevant to SDG indicator 5.5.2.

Proportion of women in managerial positions.

As custodian of indicator 5.5.2 the ILO's metadata guidance defines middle and senior management position in line with the ISCO. Indicator 5.5.2 is computed by expressing the proportion of woman occupying a managerial position, as a percentage of all managerial positions.

<sup>62</sup> For further information on the project, please consult: <https://unstats.un.org/edge>.

<sup>63</sup> See on this point GRI indicator LA1 and the G4 10.

<sup>64</sup> Definitions on employment types and contracts based on the ILO's International Standard Classification of Occupations (ISCO) can be found at the following address: <http://www.ilo.org/public/english/bureau/stat/isco/docs/resol08.pdf>

<sup>65</sup> Supervised worker: Person who directly supplies work and services to the reporting organization but whose formal contract of employment is with another organization.

<sup>66</sup> Indefinite or permanent contract is a permanent contract of employment with an employee for full-time or part-time work for an indeterminate period.

<sup>67</sup> Fixed term or temporary contract is a contract of employment as defined above that ends when a specific time period expires, or when a specific task that has a time estimate attached is completed. A temporary contract of employment is of limited duration and terminated by a specific event, including the end of a project or work phase, return of replaced personnel, etc.

200. Such level of detail regarding the composition of the workforce would help in assessing which issues may be of particular relevance to certain segments of the workforce.

201. Entities are also encouraged to take into consideration broader measures of diversity, in particular with regard to the inclusion of people with disabilities into the workplace (e.g., number of workers with disabilities compared to the total number of workers). Nevertheless, indicators should take into account potential legal restrictions on the collection of employee personal data.

Potential sources of information:

202. Information to calculate this indicator is typically found in HR information systems (employee records, payroll information available at the national or site level). Many entities use specialized software (Human Resource software<sup>68</sup>) for collecting and elaborating information regarding employees, including the other data that are necessary to calculate this indicator. The software and the related information flows are normally managed by the HR function.

203. If an equal opportunity committee exists, important information could also be found in the minutes of this committee's meetings.

## **C.2. Human capital**

### **C.2.1. Average hours of training per year per employee**

#### **Definition**

204. This indicator suggests the scale of an entity's investment in employee training (i.e., in human capital) and the degree to which this investment is made across the entire employee base, in terms of hours of training.

#### Measurement methodology

205. The first step for calculating the number of hours is to identify all the training programs undertaken by an entity in a reporting period so that the related hours can be cumulated. These may include: internal training courses; external training or education (supported by the entity); the provision of sabbatical periods with guaranteed return to employment (supported by the entity, e.g. paid educational leave provided by the reporting entity for its employees); training on specific topics such as health and safety.

206. The denominator should be expressed as either head count or FTE, and apply the approach consistently in the period, and between periods. The data

---

<sup>68</sup> For an overview of some examples: <https://www.capterra.com/human-resource-software/>

should be presented with breakdown by employment category and possibly by gender. On these points, refer to what already described for indicator C.1.1.

- Average training hours per employee = total number of training hours provided to employees/total number of employees

207. When possible, these indicators should be broken down by category<sup>69</sup> in the following way:

- Average training hours per employee category = total number of training hours provided to each category of employees/total number of employees in category

208. Similar to what is recommended for other economic indicators included in this guidance, multinational entities are encouraged to disclose hours of training by country<sup>70</sup> and possibly by gender.

#### Potential sources of information:

209. Information to calculate these indicators is typically found in HR information systems (employee records available at the national or site level). Many entities use specialized software (Human Resource software<sup>71</sup>) for collecting and elaborating information regarding employees, including the other data that are necessary to calculate this indicator. The software and the related information flows are normally managed by the HR function that is also usually in charge of defining a training budget.

210. Training expenses can be found also in the P&L as a specific line item part of the operating costs (general expenses). Entities usually employ a specific account to record training costs that can be called Employee Training Expenses (in the accounts payable).

211. Management accounting systems/internal management reports can be also used for the hour specific, category specific and country-specific data (if an

## Relevance to the SDGs

This indicator is relevant to SDG indicator 4.3.1.

Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex.

The UNESCO Institute for Statistics' metadata guidance uses the number of people in selected age groups participating in training or education activities expressed as a percentage of the population of the same age.

<sup>69</sup> For categories, see indicator C.1.1.

<sup>70</sup> This approach is in line with UNCTAD/CRI (indicators 10 and 11) and with the GRI Guidance G4-EC1 and GRI 404-1 and 404-2.

<sup>71</sup> For an overview of some examples: <https://www.capterra.com/human-resource-software/>

entity has a balanced scorecard these indicators are often included as key performance indicators in the Learning and growth perspective).

## C.2.2 Expenditure on employee training per year per employee

### Definition

212. This indicator suggests the scale of an entity's investment in employee training (i.e., in human capital) and the degree to which this investment is made across the entire employee base, in terms of hours of expenditures.

### Measurement methodology

213. In order to calculate the expenditure referred to training programs, it is suggested to consider direct and indirect costs of training, such as course fees, trainers' fees, training facilities, training equipment, and related travel costs.

214. The denominator should be expressed as either head count or FTE, and apply the approach consistently in the period, and between periods. The data should be presented with breakdown by employment category. On these points, refer to what already described for indicator C.1.1.

- Average training expenditures per employee = total amount of training expenses/total number of employees

When possible, these indicators should be broken down by category<sup>72</sup> in the following way:

- Average training expenditures per employee category = total amount of training expenses for each category of employees/total number of employees in category

Similar to what is recommended for other economic indicators included in this guidance, multinational entities are encouraged to disclose training expenditures and hours of training by country, and possibly by gender.

### Potential sources of information

### Relevance to the SDGs

This indicator is relevant to SDG indicator 4.3.1.

Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex.

The UNESCO Institute for Statistics' metadata guidance uses the number of people in selected age groups participating in training or education activities expressed as a percentage of the population of the same age.

<sup>72</sup> For categories, see indicator C.1.1.

215. For information on the different sources of information within the entity, please consult indicator C.2.1.

### **C.2.3. Employee wages and benefits with breakdown by employment type and gender**

#### Definition

216. This indicator should reflect the total costs of the employee workforce for the entity in the reporting period segmented by employee type and gender.<sup>73</sup>

#### Measurement methodology

217. The first step to calculate this indicator is to compute total payroll, including employee salaries and amounts paid to government institutions on behalf of employees, plus total benefits (excluding training, costs of protective equipment, or other cost items directly related to the employee's job function). Payments to the government, in this context, can include contributions pensions, employment taxes, levies and employment funds, among others.

218. If an entity prepares a Value-Added income statement, the total amount of employee wages and benefits is already disclosed there (among the items included in the Economic value distributed).

219. The total amount of employee wages and benefits needs to be broken down according to the following categories<sup>74</sup>:

- Employees and supervised workers<sup>75</sup>,
- Type of employment contract (permanent<sup>76</sup> or temporary<sup>77</sup>),
- Employment type (full-time or part-time)

---

<sup>73</sup> This is in line with UNCTAD-CRI (indicator 6), IAS 19, GRI 201-1.

<sup>74</sup> Definitions on employment types and contracts based on the ILO's International Standard Classification of Occupations (ISCO) can be found at the following link: <http://www.ilo.org/public/english/bureau/stat/isco/docs/resol08.pdf>.

<sup>75</sup> Supervised worker: Person who directly supplies work and services to the reporting organization but whose formal contract of employment is with another organization.

<sup>76</sup> Indefinite or permanent contract is a permanent contract of employment with an employee for full-time or part-time work for an indeterminate period.

<sup>77</sup> Fixed term or temporary contract is a contract of employment as defined above that ends when a specific time period expires, or when a specific task that has a time estimate attached is completed. A temporary contract of employment is of limited duration and terminated by a specific event, including the end of a project or work phase, return of replaced personnel, etc.

- Age group: under 30 years old<sup>78</sup>, 30-50 years old, over 50 years old
- Region
- Gender<sup>79</sup>

#### Potential sources of information:

220. Information to calculate these indicators is typically found in HR information systems (employee records available at the national or site level). Many entities use specialized software (Human Resource software<sup>80</sup>) for collecting and elaborating information regarding employees, including the other data that are necessary to calculate this indicator. The software and the related information flows on wages and benefits are normally managed by the HR function in a specific module that is usually labelled Payroll accounting. Many firms also have a payroll accounting specialist in the accounting department who is the owner of this information.

### **C.3. Employee health and safety**

#### **C.3.1. Expenditures on employee health and safety**

#### **Relevance to the SDGs**

This indicator is relevant to SDG indicators 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities, and 10.4.1 Labour share of GDP, comprising wages and social protection transfers.

Indicator 8.5.1, prepared by the ILO, requires information on hourly earnings, disaggregated by gender but also of persons with disabilities. The ILO is also the custodian agency of indicator 10.4.1, whose metadata guidance states that "social protection transfers" include social insurance contributions payable by employers, but not payroll-related taxes.

<sup>78</sup> In some countries, it would be important to give details in this category to highlight issues related to child and forced labor.

<sup>79</sup> Reporting on gender pay gap is becoming more common in some jurisdictions and could be incorporated into this indicator. Such indicator should highlight the differences in job categories among genders, focusing on actual job descriptions rather than titles. In order to calculate the mean gender pay gap in hourly pay, to obtain the mean hourly pay rate for men, it is necessary to add together the hourly pay rates of all male full-pay relevant employees and divide this figure by the number of male full-pay employees. Then, to obtain the mean hourly pay rate for women, it is necessary to add together the hourly pay rates of all female full-pay relevant employees and divide this figure by the number of female full-pay employees. To get the mean gender pay gap in hourly pay as a percentage of men's pay, it is necessary to subtract the mean hourly pay rate for women from the mean hourly pay rate for men, divide the result by the mean hourly pay rate for men and multiply the result by 100. This is also consistent with the indicator number 13) Gender gap in wages (ILO) in the EDGE project's minimum set of gender indicators.

<sup>80</sup> For an overview of some examples: <https://www.capterra.com/human-resource-software/>

### Definition

221. This indicator refers to the total expenses incurred by an entity to guarantee employees' health and safety. It is related to one of the most important corporate responsibility issues confronting organizations as occupational accidents not only lower productivity and divert management attention, but also undermine human capital development, and could be indicative of poor management quality and practices.<sup>81</sup>

### Measurement methodology

222. This indicator is expressed in monetary units and is calculated by adding up the expenses for occupational safety and health-related insurance programmes, for health care activities financed directly by the entity, and all expenses sustained for working environment issues related to occupational safety and health incurred during a reporting period.

223. More specifically, in order to calculate this indicator, it is suggested to start from the following check-list of elements that are related to employee health and safety to understand which expenses should be considered in the computation<sup>82</sup>:

- (a) Design, siting, structural features, installation, maintenance, repair and alteration of workplaces and means of access thereto and egress therefrom;
- (b) Lighting, ventilation, order and cleanliness of workplaces;
- (c) Temperature, humidity and movement of air in the workplace;
- (d) Design, construction, use, maintenance, testing and inspection of machinery and equipment liable to present hazards and, as appropriate, their approval and transfer;
- (e) Prevention of harmful physical or mental stress due to conditions of work;
- (f) Handling, stacking and storage of loads and materials, manually or mechanically;
- (g) Use of electricity;
- (h) Manufacture, packing, labelling, transport, storage and use of dangerous substances and agents, disposal of their wastes and residues, and, as appropriate, their replacement by other substances or agents which are not dangerous, or which are less dangerous;
- (i) Radiation protection;

---

<sup>81</sup> This indicator is in line with UNCTAD/CRI (indicator 12), ILO R164.

<sup>82</sup> This categorization is in line with UNCTAD/CRI and is based on the ILO's Occupational Safety and Health Recommendation, ILO R164, II, 3.

(j) Prevention and control of, and protection against, occupational hazards due to noise and vibration;

(k) Control of the atmosphere and other ambient factors of workplaces;

(l) Prevention and control of hazards due to high and low barometric pressures;

(m) Prevention of fires and explosions and measures to be taken in case of fire or explosion;

(n) Design, manufacture, supply, use, maintenance and testing of personal protective equipment and protective clothing;

(o) Sanitary installations, washing facilities, facilities for changing and storing clothes, supply of drinking water, and any other welfare facilities connected with occupational safety and health;

(p) First-aid treatment;

(q) Establishment of emergency plans;

(r) Supervision of the health of workers.

224. Given the increasing importance of the services sectors and its intrinsic characteristics, this indicator should also reflect reporting on mental health and stress.

225. Some of these elements are related to operating costs, e.g., the entity's cost of health care activities financed directly by the entity as such, either through self-insurance or in operating the entity's own health care facilities or any other expense related to the supervision of the health of workers; some other elements are capital expenditures, e.g., investments in radiation protection equipment or in fire prevention kits.

226. It is important not to include in the calculation of this indicator:

- costs related to employee health insurance programmes that are part of employee benefits (already included in the calculation of indicator C.3.3.),
- costs of training on health and safety procedures (already included in the calculation of indicator C.3.2.).

227. In addition to the total expenditure amount (expressed in monetary terms) entities should calculate also the ratio of total health and safety expenditures over total revenues and/or assets in period t. These indicators would be expressed in percentage (%) terms.

## Relevance to the SDGs

This indicator is relevant to SDG target 3.8. Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

The WHO is the custodian agency for indicators 3.8.1 Coverage of essential health services and 3.8.2 Number of people covered by health insurance or a public health system per 1,000 population. The available metadata guidance for these indicators suggests household surveys to collect this information.



228. Similar to what is recommended for other economic indicators included in this guidance, multinational entities are encouraged to disclose health and safety expenditures by country.

Potential sources of information:

229. Some entities have occupational safety and health management and reporting system (OSHM&RS) that are used to collect all the relevant information for calculating this indicator. The related information flows are owned by the occupational safety and health manager/program administrator/committee when present. As part of this information system, depending on the specific legislation of the country where the entity operates, entities also keep specific registers, such as the Register of medical visits.

230. For those expenses that are material and can thus be capitalized by the entity, it is possible to use capital budgets in order to find the relevant amounts. On the contrary, when the amount spent on health and safety is immediately expensed in the reporting period, the related costs are to be found in the P&L as part of the operating costs of an entity (depending on the nature of the expenses they can be found as part of the production overheads or as part of the selling expenses, etc.)

### **C.3.2. Frequency/incident rates of occupational injuries**

Definition

231. This indicator is related to the number of work days lost due to occupational accidents, injuries and diseases<sup>83</sup> during the reporting period. It suggests the effectiveness of an entity's employee health and safety policy and its ability to building a healthy, safe and productive work environment.

Measurement methodology

232. In calculating this indicator, lost days should be intended as time off work by workers affected by occupational accidents, injuries and diseases. In other words, these are days that could not be worked, and are thus lost, as a

### **Relevance to the SDGs**

This indicator is relevant to SDG indicator 8.8.1.

Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status.

The ILO's metadata guidance for indicator 8.8.1 requires information on the frequency rate of fatal and non-fatal occupational injuries, considering the number of such injuries divided by the hours worked by the concerned population during the reference period.

<sup>83</sup> Occupational accidents and injuries are non-fatal or fatal injuries arising out of or in the course of work; occupational diseases are those arising from the work situation or activity (e.g. stress or regular exposure to harmful chemicals), or from a work-related injury.

consequence of workers being unable to perform their usual job because of an occupational accident, injury or disease.

The frequency rate is calculated in the following way:

Number of new injury cases / Total Number of hours worked by workers in the reporting period

The incident rate is calculated in the following way<sup>84</sup>:

Total Number of lost days expressed in terms of number of hours / Total Number of hours worked by workers in the reporting period

233. When calculating lost days, the entity needs to specify whether ‘days’ means ‘calendar days’ or ‘scheduled work days’ and at what point the ‘lost days’ count begins (for example, the day immediately after the accident or three days after the accident).

234. Given the increasing importance of the services sectors and its intrinsic characteristics, this indicator should also reflect reporting on mental health and stress. Similar to what is recommended for other indicators in this guidance, multinational entities are encouraged to disclose this indicator by gender.

#### Potential sources of information

235. Entities need to set up arrangements, in accordance with national laws or regulations, to record occupational accidents, occupational diseases, commuting accidents, dangerous occurrences and incidents, including the identification of a competent person to prepare and keep records of all these occurrences. Organizations should prepare appropriate records for inspection purposes and as information for workers’ representatives and health services. These accidents are typically recorded within a Register of accidents, in accordance with national laws or regulations. The records usually contains these information: (a) entity, establishment and employer: (i) name and address of the employer, and his or her telephone and fax numbers (if available); (ii) name and address of the entity; (iii) name and address of the establishment (if different); (iv) economic activity of the establishment; and (v) number of workers (size of the establishment); (b) injured person: (i) name, address, sex and age; (ii) employment status; (iii) occupation; (c) injury: (i) fatal accident; (ii) non-fatal accident; (iii) nature of the injury (e.g. fracture, etc.); (iv) location of the injury (e.g. leg, etc.); (d) accident and its sequence: (i) geographical location of the place of the accident (usual workplace, another workplace within the establishment or outside the establishment); (ii) date and time; (iii) action leading to injury – type of accident (e.g. fall, etc.); (iv) agency related to the accident (e.g. ladder, etc.).<sup>85</sup>

<sup>84</sup> This indicator can be calculated also as: Number of cases / Number of workers.

<sup>85</sup>For more detailed information, please refer to “Recording and notification of occupational accidents and diseases”, An ILO code of practice Geneva, International Labour Office, 1996.

236. Generally, the information and the operating information system that is used to track and report on health and safety accidents is owned by the HR function.

237. Many entities use specialized software (Human Resource software<sup>86</sup>) for collecting and elaborating health and safety information and all the other information regarding workers, including the other data that are necessary to calculate this indicator (e.g. hours worked during the reporting period, attendance records). The software and the related information flows are normally managed by the HR function.

238. When health and safety issues are material, entities also have an occupational safety and health manager/program administrator and a specific occupational safety and health reporting system. In this latter case, information to calculate this indicator can be also retrieved from this operating system.

#### **C.4. Coverage of collective agreements**

##### **C.4.1. Percentage of employees covered by collective agreements**

###### Definition

239. This indicator is the ratio of employees covered by collective agreements to the total number of employees of the reporting entity.<sup>87</sup>

###### Measurement methodology

240. Collective bargaining refers to all negotiations which take place between one or more employers or employers' organizations, on the one hand, and one or more workers' organizations (trade

#### **Relevance to the SDGs**

This indicator is relevant to SDG indicator 8.8.2 Increase in national compliance of labour rights (freedom of association and collective bargaining) based on International Labour Organization textual sources and national legislation, by sex and migrant status. It is also relevant to SDG target 8.7. Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all forms.

Indicator 8.8.2, reviewed at the 5th IAEG-SDG meeting, still needs to be approved. It aims at eradicating unfair labour practices, especially the one affecting women, and therefore it is suggested to disaggregate the employee category by not only gender but also migrant status.

Available at [http://www.ilo.org/wcmsp5/groups/public/---ed\\_protect/---protrav/---safework/documents/normativeinstrument/wcms\\_107800.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---safework/documents/normativeinstrument/wcms_107800.pdf)

<sup>86</sup> For an overview of some examples: <https://www.capterra.com/human-resource-software/>

<sup>87</sup> This indicator is in line with GRI standard 102-41 and with UNCTAD/CRI (indicator 8).

unions), on the other, for determining working conditions and terms of employment or for regulating relations between employers and workers.

241. Negotiations can take place at various levels. Collective agreements could comprise agreements at the sectoral, national, regional, organizational or workplace level. This standard is based on the Collective Bargaining Convention, 1981 (No. 154) by the International Labour Organization (ILO)<sup>88</sup>.

242. This indicator should be calculated by taking into consideration the employee numbers at the end of the reporting period. Employee numbers may be expressed as head count or Full Time Equivalent (FTE) as already suggested for indicator C.1.1. In any case, the approach chosen should be applied consistently between periods.

243. As a first step, it is necessary to express the total workforce of the reporting entity at the end of the reporting period either in terms of headcount or FTE (denominator of the indicator).

244. Then it is required to identify those employees who are covered by collective agreements and express them either in terms of headcount or FTE, consistently with the denominator.

245. Beyond the percentage figure, narrative information would be essential to illuminate the entity context, since in some instances agreements are not allowed by regulators, requested by employees, or reached among relevant stakeholders.

#### Potential sources of information:

246. Entities need to set up arrangements, in accordance with national laws or regulations, to define collective employment agreements/contracts. These are usually negotiated "collectively" between management (on behalf of the entity) and the union representatives. Information relevant for calculating this indicator can be found in these contracts (number of employees covered by collective agreements). Such information can be found also in HR information systems. When involved, also the Legal affairs department can be one of the owner of such information.

### **D. Institutional area**

247. In the institutional area, the following core indicators are selected:

---

<sup>88</sup>

[http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\\_INSTRUMENT\\_ID:312299](http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312299)

- Corporate governance disclosures (including information on number of board meetings and attendance rate, number and percentage of female board members, board members by age range, number of meetings of audit committee meetings and attendance rate, and total compensation of board members and executives); and
- Anti-corruption practices (including amount of fines paid or payable due to settlements, and average number of training hours on anti-corruption issues per year per employee).

## Relevance to the SDGs

This indicator is relevant to SDG target 16.6. Develop effective, accountable and transparent institutions at all levels, which at the entity level can encompass the governance practices of the board.

### D.1. Corporate governance disclosures<sup>89</sup>

#### D.1.1. Number of Board meetings and attendance rate

##### Definition

248. This indicator is about the number of board meetings and their attendance rate.

##### Measurement methodology

249. In order to calculate this indicator, entities need to:

- Count the Board meetings during the reporting period (number),
- Add up the number of Board members who participate at each Board meeting during the reporting period and divide this by the total number of directors sitting on the Board multiplied by the number of Board meetings during the reporting period (attendance rate (%)).

##### Potential sources of information:

<sup>89</sup> Reporting on corporate governance is already a legal requirement in many jurisdictions for large, listed entities. With regard to SMEs, it is important to clarify that such entities would have the possibility of indicating the absence of mechanisms such as boards, without affecting their ability to report on the core indicators. When reliable information exists, the following indicators could be also disclosed with reference to the corporate governance area: number of external or independent board members over total number of board members; CEO duality (an indicator on the separation of roles between CEO and Chairperson); the number of times when sustainability issues in general and the adherence with SDGs were discussed as part of the board agenda.

250. As the amount of these meetings per reporting period is quite small (e.g., one per month), it is easy to keep track of the number of Board meetings. Furthermore, Board meetings are usually scheduled in advance (there is a Board meeting calendar that is communicated at the beginning of the reporting period) therefore locating this information is not difficult. Also, the number of Directors sitting on a Board is usually small and Directors need to communicate before the meeting whether they will participate or not. Therefore, tracing these figures is also unproblematic.

251. The relevant information on this aspect is usually recorded by the Corporate Legal affairs, and/or by the Investor relator, and/or by the assistant to the CEO.

## Relevance to the SDGs

This indicator is relevant to SDG indicator 5.5.2 Proportion of women in managerial positions.

As custodian of indicator 5.5.2, the ILO's metadata guidance defines middle and senior management position using the ISCO. Indicator 5.5.2 is computed by expressing the proportion of woman occupying a managerial position, as a percentage of all managerial positions.

### **D.1.2. Number and percentage of female board members**

#### Definition

252. This indicator is related to the number and percentage of female board members.<sup>90</sup>

#### Measurement methodology

253. In order to calculate this indicator, entities need to:

- Count the female Board members (number),
- Divide the number of female Board members by the total number of directors sitting on the Board.

<sup>90</sup> This indicator is consistent with the GRI G4-LA12 (composition of Governance bodies) and provides a quantitative measure of gender diversity within an organization.

This indicator is thus expressed in percentage terms (%).

Potential sources of information:

254. As the number of Directors sitting on a Board is usually small, tracing these figures is unproblematic.

255. The relevant information on this aspect is usually recorded by the Corporate Legal affairs, and/or by the Investor relator, and/or by the assistant to the CEO, and/or by the HR function (Directors are paid by the entity and therefore their personal information is included in the employees' records).

**D.1.3. Board members by age range**

256. This indicator consists of the board members, by age range.<sup>91</sup> This indicator provides a quantitative measure of diversity within an organization conducive to inclusivity and responsiveness of decision-making.

Measurement methodology

257. In order to calculate this indicator, entities need to define the age ranges that they want to map.

In line with the other indicators, the following groups are suggested:

- under 30 years old,
- 30-50 years old,
- over 50 years old

258. The indicators then are calculated as the number of Board members of one specific age group divided by the total number of directors sitting on the Board (%).

**Relevance to the SDGs**

This indicator is relevant to SDG indicator 16.7.1: Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions.

Although this indicator does not explicitly refer to private organizations, such as entities, there could be positive spill-over effects between the public and private sectors.

Furthermore, including the private sector is relevant with target 16.7, which encourages countries to ensure responsive, inclusive, participatory and representative decision-making at all levels.

<sup>91</sup> This indicator is in line with the International <IR> Framework, 2013, available at: <http://integratedreporting.org/wp-content/uploads/2015/03/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf> It is also consistent with the GRI G4-LA12 (composition of Governance bodies) and GRI 405-1. It

Potential sources of information:

259. As the number of Directors sitting on a Board is usually small, tracing these figures is unproblematic.

260. The relevant information on this aspect is /can be recorded by the Corporate Legal affairs, by the Investor relator, by the assistant to the CEO, by the HR function (Directors are paid by the entity and therefore their personal information is included in the employee records).

**Relevance to the SDGs**

This indicator is relevant to SDG target 16.6. Develop effective, accountable and transparent institutions at all levels, which at the entity level can encompass the governance practices of the board.

**D.1.4. Number of meetings of audit committee and attendance rate**

261. This indicator consists of the number of meetings of the audit committee, and their attendance rate. It provides a quantitative measure of whether the entity has developed effective, accountable and transparent governance mechanisms.

Measurement methodology

262. In order to calculate this indicator, entities need to:

- Count the Audit committee meetings during the reporting period (number),
- Add up the number of Audit committee members who participate at each Audit committee meeting during the reporting period and divide this by the total number of members sitting on the Audit committee multiplied by the number of Audit committee meetings during the reporting period (attendance rate (%)).

Potential sources of information:

263. As the amount of these meetings per reporting period is quite small (e.g., one per month), it is easy to keep track of the number of Audit committee meetings. Furthermore, Audit committee meetings are usually scheduled in advance (there is an Audit committee meeting calendar that is communicated at the beginning of the reporting period) therefore locating this information is not difficult. Also, the number of people sitting on an Audit committee is usually small and members of the Audit committee need to communicate before the meeting whether they will participate or not. Therefore, tracing these figures is also unproblematic.

264. The relevant information on this aspect is /can be recorded by the Corporate Legal affairs, by the Investor relator, by the assistant to the CEO, by the Internal Audit function.



### **D.1.5. Compensation: total compensation per board member (both executive and non-executive directors)**

#### Definition

265. This indicator refers to total remuneration awarded to each board member, encompassing both executive and non-executive directors.<sup>92</sup>

#### Measurement methodology

266. In order to calculate this indicator, entities need to compute the amount of total compensation referred to a specific reporting period summing up the following elements of the compensation package:

- fixed pay (base salary)
- variable pay (including performance-based pay, equity-based pay, bonuses, and deferred or vested shares)
- sign-on bonuses or recruitment incentive payments
- termination payments (i.e., all payments made and benefits given to a departing executive or member of the highest governance body whose appointment is terminated)
- clawbacks (i.e., repayment of previously received compensation required to be made by an executive to his or her employer in the event certain conditions of employment or goals are not met)
- retirement benefits.

267. Total annual compensation is calculated for each executive director and each non-executive director, where the former is a member of the Board of a firm who also has management responsibilities, while the latter is a Board member without responsibilities for an entity's daily management or operations.

#### Potential sources of information:

268. The data required for the calculation of these indicators and the related information flows are normally managed by the HR function, typically within a Compensation & Payroll management information system. Many entities use specialized software for collecting and elaborating this type of information.

269. Another source of information is the Remuneration report where the compensation of Board members, both executives and non-executives, is

### **Relevance to the SDGs**

This indicator is relevant to SDG target 16.6. Develop effective, accountable and transparent institutions at all levels, which at the entity level can encompass the governance practices of the board.

<sup>92</sup> It is consistent with the GRI Disclosure 102-35.

described. The underlying information is owned by the Remuneration committee that, when present, is in charge of defining the compensation strategy and policy.

## **D.2. Anti-corruption practices**

### **D.2.1. Amount of fines paid or payable due to settlements**

#### Definition

270. This indicator refers to the total monetary value of paid and payable corruption-related fines imposed by regulators and courts in the reporting period.

271. Corruption<sup>93</sup> includes practices such as: bribery, facilitation payments, fraud, extortion, collusion, and money laundering; the offer or receipt of gifts, loans, fees, rewards, or other advantages as an inducement to do something that is dishonest, illegal, or represents a breach of trust. It can also include practices such as embezzlement, trading in influence, abuse of function, illicit enrichment, concealment, and obstructing justice.

272. Corruption is broadly linked to several negative effects, such as poverty in transition economies, damage to the environment, abuse of human rights, abuse of democracy, misallocation of investments, and undermining the rule of law.

#### Measurement methodology

273. The steps underlying the computation of this indicator are the following:

- identify all convictions and other settlements for violations of corruption related laws or regulations,
- identify the amount of fines paid/payable for each of the convictions,
- sum up all the amounts identified with reference to the reporting period.

The total number of convictions relevant to the reporting entity should be presented together with the total amount of fines paid and or payable.

## **Relevance to the SDGs**

This indicator is relevant to SDG indicator 16.5.2. Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official or were asked for a bribe by those public officials during the previous 12 months.

Developed by the World Bank, the metadata guidance for indicator 16.5.2 is calculated in the United Nations metadata guidance for each country from the World Bank Enterprise Surveys that are conducted every 4-5 years by private contractors with strict confidentiality.

<sup>93</sup> This definition is consistent with the GRI 205 and with UNCTAD/CRI (indicator 16).

Potential sources of information:

274. The amount of fines paid is to be found among the expenses included in the income statement during the reporting period. Such costs would be charged to the income statement immediately. They are often recorded in a separate expense account that can be called Fines and penalties.

275. When an obligation might likely arise to pay fines or penalties under the legislation because the obligating event has occurred, the entity should set a provision account (the recording of the liability in the balance sheet is matched to an appropriate expense account in the entity's income statement).

276. The owners of this information are usually, on the one hand, the Legal affairs department and, on the other hand, the Finance and Accounting department.

## **D.2.2 Average hours of training on anti-corruption issues per year per employee**

Definition

277. This indicator refers to the average number of training hours that employees receive in the area of anti-corruption issues. For further information on the definition and context of corruption, please see indicator D.2.1.

Measurement methodology

278. The methodology for measurement of this indicator draws on the methodology for indicator C.2.1 on the average hours of training per employee. In this case, the computation of hours of training should only take into account those hours of training related to anti-corruption issues. This classification could be undertaken either by the entity's overall training department (e.g. human resources), or by the legal department or other office dedicated to advancing anti-corruption efforts.

### **Relevance to the SDGs**

This indicator is relevant to SDG indicator 16.5.2.

Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official or were asked for a bribe by those public officials during the previous 12 months.

Developed by the World Bank, the metadata guidance for indicator 16.5.2 is calculated in the United Nations metadata guidance for each country from the World Bank Enterprise Surveys that are conducted every 4-5 years by private contractors with strict confidentiality.

279. It is suggested that this indicator on anti-corruption could also cover the issue of codes of conduct used to remedy convictions and, more in general, that the reporting entity provide information about any actions taken in response to incidents of corruption, for example new or revised entity policies, training and initiatives to prevent such incidents.

Potential sources of information:

280. Please see indicators C.2.1 and D.2.1 for the sources of information for the measurement of this indicator.

## Annex I: Table of selected core SDG indicators

A.	Economic area	Indicators	Measurement	Relevant SDG indicator
A.1.	Revenue and/or (net) value added	A.1.1. Revenue	IFRS 15	8.2.1
		A.1.2. Value added	Revenue minus costs of bought-in materials, goods and services (Gross Value Added, GVA)	8.2.1; 9. b. 9.4.1
		A.1.3. Net value added	Revenue minus costs of bought-in materials, goods and services and minus depreciation on tangible assets (Net Value Added, NVA)	8.2.1; 9.b.
A.2.	Payments to the Government	A.2.1. Taxes and other payments to the Government	Total amount of taxes paid and payable (encompassing not only income taxes, but also other levies and taxes, such as property taxes or value added taxes) plus related penalties paid, plus all royalties, license fees, and other payments to Government for a given period	17.1.2
A.3.	New investment/expenditures	A.3.1 Green investment	Total amount of expenditures for those investments whose primary purpose is the prevention, reduction and elimination of pollution and other forms of degradation to the environment in absolute amount and in % terms	7.b.1
		A.3.2. Community investment	Total amount of charitable/voluntary donations and investments of funds (both capital expenditure and operating ones) in the broader community where the target beneficiaries are external to the enterprise incurred in the reporting period in absolute amount and in % terms	17.17.1
		A.3.3. Total expenditures on Research and Development	Total amount of expenditures on research and development (R&D) by the reporting entity during the reporting period in absolute amount and in % terms	9.5.1.
A.4.	Total local supplier/purchasing programmes	A.4.1. Percentage of local procurement	Proportion of procurement spending of a reporting entity at local suppliers (based on invoices or commitments made during the reporting period) in % terms and in absolute amount	9.3.1.
B	Environmental area			
B.1.	Sustainable use of water	B.1.1. Water recycling and reuse	Total volume of water recycled and/or reused by a reporting entity during the reporting period in absolute amount and in % terms	6.3.1.
		B.1.2. Water use efficiency	Water use per net value added in the reporting period as well as change of water use per net value added between two reporting periods (where water use is defined as water withdrawal plus total water received from third party) in % terms, in terms of change and in absolute amount	6.4.1.
		B.1.3. Water stress	Water withdrawn with a breakdown by sources (surface, ground, rainwater, waste water) and with reference to water-stressed or water-scarce areas (expressed as a percentage of total withdrawals) in absolute amount and in % terms	6.4.2.
B.2.	Waste management	B. 2.1. Reduction of waste generation	Change in the entity's waste generation per net value added in % terms, in terms of change and in absolute amount	12.5.
		B.2.2. Waste reused, re-manufactured and recycled	Total amount of waste reused, re-manufactured and recycled in absolute amount, in % terms and in terms of change	12.5.1.
		B.2.3. Hazardous waste	Total amount of hazardous waste, in absolute terms, as well as proportion of hazardous waste treated, given total waste reported by the reporting entity (in absolute amount, in % terms and in terms of change)	12.4.2.
B.3.	Greenhouse gas emissions	B.3.1. Greenhouse gas emissions (scope 1)	Scope 1 contribution in absolute amount, in % terms and in terms of change	9.4.1.
		B.3.2. Greenhouse gas emissions (scopes 2)	Scope 2 contribution in absolute amount, in % terms and in terms of change	9.4.1.
B.4.	Ozone-depleting substances and chemicals	B.4.1. Ozone-depleting substances and chemicals	Total amount of ozone-depleting substances (ODS) (bulk chemicals/substances existing either as a pure substance or as a mixture) per net value added.	12.4.2.
B.5.	Energy consumption	B.5.1. Renewable energy	Renewable energy consumption as percentage of total energy consumption in the reporting period	7.2.1.
		B.5.2. Energy efficiency	Energy consumption per net value added	7.3.1.
C	Social area			
C.1.	Gender equality	C.1.1. Proportion of women in managerial positions	Number of women in managerial positions to total number of employees (in terms of headcount or FTE)	5.5.2.
C.2.	Human capital	C.2.1. Average hours of training per year per employee	Average number of hours of training per employee per year (as total hours of training per year divided by total employees) possibly broken down by employee category	4.3.1.
		C.2.2. Expenditure on employee training per year per employee	Direct and indirect costs of training (including costs such as trainers' fees, training facilities, training equipment, related travel costs etc.) per employee per year possibly broken down by employee category	4.3.1.
		C.2.3. Employee wages and benefits with breakdown by employment type and gender	Total costs of employee workforce (wages and benefits)	8.5.1; 10.4.1
C.3.	Employee health and safety	C.3.1. Expenditures on employee health and safety	Total expenses for occupational safety and health-related insurance programmes, for health care activities financed directly by the company, and all expenses sustained for working environment issues related to occupational safety and health incurred during a reporting period	3.8.
		C.3.2. Frequency rates/incident rates of occupational injuries or	Frequency rates: number of new injury cases divided by total number of hours worked by workers in the reporting period; incident rates: total number of lost days expressed in terms of number of hours divided by total number of hours worked by workers in the reporting period	8.8.1.
C.4.	Collective agreements	C.4.1. Percentage of employees covered by collective agreements	Number of employees covered by collective agreements to total employees (in terms of headcount or FTE)	8.8.2.
D	Institutional area			
D.1.	Corporate governance disclosures <sup>94</sup>	D.1.1. Number of board meetings and attendance rate	Number of board meetings during the reporting period and number of Board members who participate at each Board meeting during the reporting period divided by the total number of directors sitting on the Board multiplied by the number of Board meetings during the reporting period	16.6.

<sup>94</sup> These indicators are not universal, but relevant to publicly listed companies responsible for the use of a highest proportion of natural and human resources, and therefore are included as core indicators for that reason

		D.1.2. Number/percentage of female board members	Female board members to total board members	5.5.2.
		D.1.3. Board members by age range	Number of Board members by age range (e.g., under 30 years old, between 30 and 50, over 50)	16.7.1.
		D.1.4. Number of meetings of audit committee and attendance rate	Number of board meetings during the reporting period and number of Audit committee members who participate at each Audit committee meeting during the reporting period divided by the total number of members sitting on the Audit committee multiplied by the number of Audit committee meetings during the reporting period	16.6.
		D.1.5. Compensation: total and compensation per board member and executive	Total annual compensation (including base salary and variable compensation) for each executive and non-executive director	16.6.
D.2.	Anti-corruption practices	D.2.1. Amount of fines paid or payable due to convictions	Total monetary value of paid and payable corruption-related fines imposed by regulators and courts in the reporting period	16.5.2.
		D.2.2. Average number of hours of training on anti-corruption issues, per year per employee	Average number of hours of training in anti-corruption issues per employee per year (as total hours of training in anti-corruption issues per year divided by total employees)	16.5.2.