



Core SDG Indicators for Entity Reporting:
TUTORIAL SESSIONS

Economic indicators





Economic Indicators

Module A

Core SDG Indicators for Entity Reporting Training Manual



Learning Objectives



Learning Objectives

By the end of the module you will:

a) Be able to define and calculate the following core indicators in the economic area:

- ✓ 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.

b) Be able to critically assess existing potential sources of information to calculate economic indicators in your company

c) Understand if your information systems already collect the information required to calculate economic indicators

d) Refer to examples of companies already using and disclosing economic indicators

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

A.1.1. Revenue

A.1.2. Value added

A.1.3. Net value added



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

A.1.1. Revenue

A.1.2. Value added

A.1.3. Net value added



A.1.1. Revenue: Definition

Revenue is the **value generated from sale of goods or services, or any other use of capital or assets, recognized by an entity in a given reporting period.**

Revenue (also known as Sales or Turnover) is shown usually as the top item in an income (profit and loss) statement. That is why it is considered the “top line” of a business.



A.1.1. Revenue: Measurement methodology

Revenues should be preferably defined and measured according to the “**IFRS 15 Revenue from Contracts with Customers**”. 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.

In case of an entity that is not applying IFRS 15 and using IFRS for SMEs, it should be clearly stated and explained.



A.1.1. Revenue: Measurement methodology

IFRS 15 replaces the existing IAS 18 Revenue Recognition effective for annual periods beginning on or after 1 January 2018.

For straightforward contracts, such as retail transactions, IFRS 15 will have little effect on the amount and timing of revenue recognition. On the contrary, for more complex contracts, such as long-term service contracts and multiple-element arrangements, IFRS 15 could result in some changes either to the amount or timing of the revenue recognized by a company.

The five key steps proposed to apply the new standard are the following:

Step 1: Identify the contract(s) with a customer.

Step 2: Identify the performance obligations in the contract.

Step 3: Determine the transaction price.

Step 4: Allocate the transaction price to the performance obligations in the contract.

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.



A.1.1. Revenue: Measurement methodology

Step 1: Identify the contract(s) with a customer.

IFRS 15 describes a contract as an agreement between two or more parties that creates enforceable rights and obligations and sets out the criteria for every contract that must be met.



A.1.1. Revenue: Measurement methodology

Step 1: Identify the contract(s) with a customer.

IFRS 15 describes a contract as an agreement between two or more parties that creates enforceable rights and obligations and sets out the criteria for every contract that must be met.

Step 2: Identify the performance obligations in the contract.

A performance obligation is a promise in a contract with a customer to transfer a good or service to the customer. Identifying performance obligations is crucial for the measurement and timing of revenue recognition. The distinctiveness of the good or service, or a bundle of goods or services, is the fundamental factor in identifying a separate performance obligation. A good or service is distinct if the customer can benefit from the good or service on its own (or with other readily available resources) and is distinguishable from other elements of the contract. However, IFRS 15 demands a series of distinct goods or services that are substantially the same with the same pattern of transfer to be considered as a single performance obligation. A good or service which has been delivered may not be distinct if it cannot be utilized without another good or service that has not yet been delivered. So, goods or services that are not distinct should be combined with other goods or services until the company can recognize a bundle of goods or services that is distinct.



A.1.1. Revenue: Measurement methodology

Step 3: Determine the transaction price.

The transaction price is the amount of consideration (e.g., payment) to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (e.g., government taxes). This should include an estimate of elements of variable consideration that can arise, for example, as a result of discounts, rebates, refunds, performance bonuses, penalties.



A.1.1. Revenue: Measurement methodology

Step 3: Determine the transaction price.

The transaction price is the amount of consideration (e.g., payment) to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (e.g., government taxes). This should include an estimate of elements of variable consideration that can arise, for example, as a result of discounts, rebates, refunds, performance bonuses, penalties.

Step 4: Allocate the transaction price to the performance obligations in the contract.

For a contract that has more than one performance obligation, an entity should allocate the transaction price to each performance obligation in an amount that depicts the amount of consideration to which the entity expects to be entitled in exchange for satisfying each performance obligation. In other words, the allocation is based on the relative standalone selling price of the goods or services promised, defined based on the observable price of the good or service when the entity sells that good or service separately. If such evidence is not available, the price is mainly estimated based on an expected cost plus an appropriate margin or based on the assessment of market prices for similar goods or services adjusted for entity-specific costs and margins. Discounts and variable consideration will typically be allocated proportionately to all of the performance obligations in the contract or, if certain conditions are met, they can be allocated to one or more separate performance obligations.



A.1.1. Revenue: Measurement methodology

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.

Step five requires revenue to be recognized as each performance obligation is satisfied. Differently from IAS 18, an entity satisfies a performance obligation by transferring control of a promised good or service to the customer. Control is defined as the ability to prevent others from directing the use of and obtaining the benefits from the asset. The transfer of the control could occur at a point in time or over time. In this case, the company recognizes revenue based on the pattern of transfer to the customer. Whether an entity recognizes revenue over the period during which it manufactures a product or on delivery to the customer will depend on the specific terms of the contract.



A.1.1. Revenue: Measurement methodology



**CALCULATION
EXAMPLE**

Let us assume the following example:

Peter enters into a 12-month telecom plan with the local mobile operator ABC. The terms of plan are:

- Peter's monthly fixed fee is CU 100.
- Peter receives a free handset at the inception of the plan.

The company ABC sells the same handsets for CU 300 and the same monthly prepayment plans without handset for CU 80/month.

How will ABC calculate revenues from this contract?

With IAS 18:

Revenue from monthly plan is recognized on a monthly basis. The journal entry is to debit receivables or cash and credit revenues with **CU 100**.

With IFRS 15:

ABC needs to identify all performance obligations from the contract with Johnny (**step 2** in the 5-step model):

- Obligation to deliver a handset
- Obligation to deliver network services over 1 year

A.1.1. Revenue: Measurement methodology



CALCULATION EXAMPLE

The transaction price (**step 3**) is CU 1200, calculated as monthly fee of CU 100 times 12 months.

ABC needs to allocate that transaction price of CU 1,200 to individual performance obligations under the contract based on their relative stand-alone selling prices (or their estimates) (this is **step 4**).

Performance obligation	Stand-alone selling price	% on total	Revenue (=relative selling price = 1200*%)
Handset	300.00	23.8%	285.60
Network services	960.00 (=80*12)	76.2%	914.40
Total	1,260.00	100.0%	1,200.00

A.1.1. Revenue: Measurement methodology



CALCULATION EXAMPLE

The **step 5** is to recognize the revenue when ABC satisfies the performance obligations. Therefore:

- When ABC gives a handset to Peter, it needs to recognize the revenue of CU 285.60;
- When ABC provides network services to Peter, it needs to recognize the total revenue of CU 914.40 (it is practical to do it once per month as the billing happens).

Performance obligation	Under IAS 18 (6 months)	Under IFRS 15 (6 months)
Handset	0.00	285.60
Network services	600.00 (=1,200/2)	457.20 (=914.4/2)
Total	600.00	742.80



A.1.1. Revenue: Potential sources of information

- 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 receivable, 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.
- 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. Revenue and/or (net) value added

A.1.1. Revenue

A.1.2. Value added

A.1.3. Net value added



A.1.2. Value added: 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).



A.1.2. Value added: Measurement methodology

Value added can be calculated as part of the preparation of a **Value Added Statement**, that is a financial statement reporting the wealth created by an entity and how it is distributed among different stakeholders (e.g., the employees, shareholders, government, creditors) and retained in the business.

The Value Added Statement is based on the following equation:

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



A.1.2. Value added: Measurement methodology

Specifically:

- **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).



A.1.2. Value added: Measurement methodology

Specifically:

- **Economic value distributed** is calculated considering:
 - Operating costs
 - Employee wages and benefits
 - Payments to providers of capital
 - Payments to government
 - Community investments



A.1.2. Value added: Measurement methodology

Specifically:

➤ **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 additional examples of operating costs are: 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 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 (e.g., pensions, insurance, fleet, and private health), other employee support (e.g., housing, interest-free loans, public transport assistance, educational grants).
- **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 indicator A.2.1. Taxes and other payments to the Government).
- **Community investments**, i.e., voluntary donations plus investment of funds in the broader community where the target beneficiaries are external to the organization, e.g., 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 indicator A.3.2. Community investment).



A.1.2. Value added: Measurement methodology

Value added is calculated as:

Direct economic value generated, i.e., revenues and other income

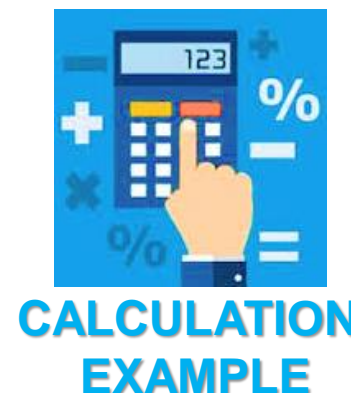
MINUS

Operating costs, i.e., the costs of bought-in goods and services purchased from external suppliers (not made within the organization)

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

A.1.2. Value added: Measurement methodology

<i>Generation of Value Added</i>	
Revenue	1,000
Less: Cost of bought in goods and services	300
Value Added (GVA)	700
<i>Application of Value Added</i>	
To employees (wages and benefits)	250
To capital providers (interest expenses and dividends)	100
To the Government (taxes)	100
To the Entity	250
Value Added (GVA)	700



An example of calculation of GVA using the format of the Value added statement is shown in the Table.

Two things should be underlined:

- ✓ GVA can be calculated as the difference between revenue and cost of bought-in materials and services for a specific entity (\$1,000 MINUS \$300). This is the first part of the statement, i.e., the Generation of Value Added.
- ✓ GVA can be calculated also the sum of: \$250 referred to employee wages and benefits, \$100 given as interest of loans and dividends to shareholders, \$100 contributed to the government in the form of taxes and \$250 kept aside for depreciation and for expansion of the business. This is the second part of the statement reporting the distribution of the value added by the entity across its various stakeholders, i.e., the Application of Value Added.



A.1.2. Value added: Potential sources of information

- Information to calculate the Gross Value Added (GVA) can be derived directly from the Value Added Statement. 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.
- 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.
- If an entity would like to calculate the GVA and prepare also 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 in 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; 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. Revenue and/or (net) value added

A.1.1. Revenue

A.1.2. Value added

A.1.3. Net value added



A.1.3. Net value added: Definition

Net value added consists of **value added (GVA as described at point A.1.3) from which depreciation has been subtracted**. In other terms, NVA is the sum of the value added to employees, to providers of loan capital, to Government and to owners.



A.1.3. Net value added: Measurement methodology

Net value added is calculated by **considering indicator A.1.2 on value added (GVA), and by subtracting depreciation.**

A.1.3. Net value added: Measurement methodology

<i>Generation of Value Added</i>	
Revenue	1,000
Less: Cost of bought in goods and services	300
Less: Depreciation	100
Value Added (NVA)	600
<i>Application of Value Added</i>	
To employees (wages and benefits)	250
To capital providers (interest expenses and dividends)	100
To the Government (taxes)	100
To the Entity	150
Value Added (GVA)	600



CALCULATION EXAMPLE

Referring back to the example reported for indicator A.1.2., let us assume that depreciation is equal to \$100. NVA will be equal to \$ 600.

A.1.3. Net value added: Measurement methodology

	A.1.1 Revenue	A.1.2. and A.1.3. Value Added
REVENUE		
COST OF SALES		Costs of goods and services from external suppliers Depreciation Other costs
GROSS PROFIT		
OPERATING EXPENSES Selling, general and administrative expense		Costs of goods and services from external suppliers Depreciation Other costs
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		

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

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

This figure presents a **comparative example for indicators A.1.1. Revenue, A.1.2. Value added and A.1.3. Net value Added** (where 2a and 3a indicate where it is possible to find the Cost of bought-in goods and services and Depreciation starting from the traditional Profit and loss (Income) statement).



A.1.3. Net value added: 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

A.2.1. Taxes and other payments to the Government: Definition

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.**

It is important to underline that taxes provide a means to fairly distribute wealth, as well as social costs, and there is a fundamental obligation for entities to comply with tax legislation and to be responsible in their tax practices.



A.2.1. Taxes and other payments to the Government: Measurement methodology

In practice, the calculation of this indicator is very much impacted by the specific rules at the country level, at the industry level (e.g., oil and extraction), and by the specific nature of the entity (e.g., public-interest entity).

In general terms, an entity can compute this indicator by summing up all of its taxes and payments to the Government, which can include:

- ✓ income taxes,
- ✓ property taxes,
- ✓ excise duties ,
- ✓ value added tax (VAT),
- ✓ local rates and other levies and taxes that may be industry/country specific ,
- ✓ royalties, license fees, and other payments to Government.

This figure does not include:

- ✓ deferred taxes* (*see next slide*) as they may not be paid;
- ✓ 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).



A.2.1. Taxes and other payments to the Government: Measurement methodology

*It is important to recall that **tax payable** and **deferred taxes*** appear as liabilities on an entity's balance sheet.*

Although they both represent taxes to be paid in the future, they originate in different ways:

- The item “tax payable” refers to taxes that the entity has incurred but has not had to pay because tax time has not arrived yet.*
- The second item, “deferred taxes”, originates because tax laws and accounting rules may differ due, for example, to different treatments of fixed assets depreciation, revenues recognition and valuation of inventories. Because of these differences, an entity's earnings before taxes on the income statement, i.e., the ‘accounting income’, can be higher than its ‘taxable income’ hence the amount of tax due according to tax rules is lower than that according to accounting rules. Because this imbalance is temporary, and an entity expects to settle its tax liability in the future, it records a deferred tax liability. In other words, a deferred tax liability is recognized in the current period for the taxes payable in future periods.*



A.2.1. Taxes and other payments to the Government: Measurement methodology

In case an entity receives subsidies and other payments from the Government, it is suggested to indicate them separately.



A.2.1. Taxes and other payments to the Government: Measurement methodology



CALCULATION EXAMPLE

For example:

Let us assume that the entity XYZ is an oil and gas company that has registered the following amounts during a certain reporting period:

- Royalties for the rights to extract oil and gas resource = € 130,000
- Licence fees and rental fees for gaining access to an area where exploration, development and production activities are performed = € 80,000
- Income taxes = € 250,000
- Corporation tax penalty = € 45,000

The indicator should be calculated as the sum of all the previous amounts, i.e., as:

$$130,000 + 80,000 + 250,000 + 45,000 = \text{€ } 505,000$$



A.2.1. Taxes and other payments to the Government: Potential sources of information

- ❑ Taxes and other payments to the Government can be found either in the income statement or in the balance sheet. For example: income tax expense is an income-statement item, a line that comes immediately after 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, aviation, banking, insurance, dairy, energy and natural resources, etc.
- ❑ 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

A.3.2 Community investment

A.3.3 Total expenditures on research and development



A.3. New investment/expenditures

A.3.1 Green investment

A.3.2 Community investment

A.3.3 Total expenditures on research and development



A.3.1 Green investment: Definition

Green investment refers to investment that can be considered positive for the environment in a direct or indirect manner.

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.**

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.



A.3.1 Green investment: Measurement methodology

In order to calculate this indicator in the correct way, it is important to start from understanding what ‘green investments’ are.

There are a number of **different synonyms** that are employed by entities to denote this kind of investment:

- ✓ environmental,
- ✓ ecological,
- ✓ eco-friendly.

There are **different classifications** (see next slides) that can be used in practice to identify green investments and to decide which investments can be incorporated in the calculations.



A.3.1 Green investment: Measurement methodology

1. One classification is based on the idea that, typically, green investments comprise different technologies which contribute to solving particular environmental problems and which include:
 - ✓ low carbon power generation and vehicles,
 - ✓ smart grids,
 - ✓ energy efficiency,
 - ✓ pollution controls,
 - ✓ recycling,
 - ✓ waste management and waste of energy.



A.3.1 Green investment: Measurement methodology

2. Another check-list classifies green investments based on the function of the underlying technologies:
- ✓ General environmental management (including waste management, air and water pollution abatement, soil remediation);
 - ✓ Renewable energy (including biofuels);
 - ✓ 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);
 - ✓ Buildings (energy efficiency).



A.3.1 Green investment: Measurement methodology

3. 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, i.e., investments, by purpose:
- ✓ climate change mitigation (avoided emissions or increased sequestration),
 - ✓ 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).



A.3.1 Green investment: Measurement methodology

4. The European Union Classification of Environmental Protection Activities (CEPA) also includes in the expenditures for environmental protection, i.e., that can be considered as part of green investments, outlays and other transactions related to:
- ✓ Capital formation and the purchase of land for environmental protection activities;
 - ✓ The purchase of environmental protection products, i.e., goods which directly contribute to preservation efforts (e.g. septic tanks, rubbish containers, compost containers); and
 - ✓ Investment in adapted goods, which are goods that have been specifically modified to be greener (i.e., mercury free batteries, Chlorofluorocarbon (CFC) free products). Only the extra costs paid in excess of the cost of the “normal” product is counted.



A.3.1 Green investment: Measurement methodology

Starting from these classifications, two indicators can be calculated:

- 1) **Total amount of green investments over a certain reporting period;**
- 2) **Ratio expressing a firm's green investments in period t as a percentage of the entity's period t total assets (and/or revenue).**



A.3.1 Green investment: Measurement methodology

Starting from these classifications, two indicators can be calculated:

- 1) Total amount of green investments over a certain reporting period;**
- 2) Ratio expressing a firm's green investments in period t as a percentage of the entity's period t total assets (and/or revenue).

The first 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 in the reporting period under consideration.



A.3.1 Green investment: Measurement methodology

Starting from these classifications, two indicators can be calculated:

- 1) Total amount of green investments over a certain reporting period;
- 2) Ratio expressing a firm's green investments 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 and would be calculated as follows:

$$\frac{\text{Total amount of green investments}}{\text{Total assets}}$$

Total assets

OR

$$\frac{\text{Total amount of green investments}}{\text{Total revenue}}$$

Total revenue

A.3.1 Green investment: Measurement methodology

In order to calculate the first indicator and the numerator of the second indicator(s) the following table can be used in order to keep track of green investments over a certain reporting period:

Type of investments	Expenses	Amounts (monetary)
Pollution prevention investments	1) Expenses for preventing air pollution (including acid rain)	
	2) Expenses for preventing water pollution	
	3) Expenses for preventing ground contamination	
	4) Expenses for preventing noise pollution	
	5) Expenses for preventing vibration pollution	
	6) Expenses for preventing odor pollution	
	7) Expenses for preventing ground sinkage	
	8) Expenses for preventing other types of pollution	
Global environment conservation investments	1) Expenses for preventing global warming and energy conservation	
	2) Expenses for preventing the ozone depletion	
	3) Expenses for other global environmental conservation activities	
Resource circulation investments	1) Expenses for the efficient utilization of resources	
	2) Expenses for recycling waste	
	3) Expenses for disposal of waste	
	4) Expenses contributing to resource circulation	

A.3.1 Green investment: Measurement methodology

Type of investments	Expenses	Amounts (monetary)
Pollution prevention investments	1) Expenses for preventing air pollution (including acid rain) <ul style="list-style-type: none"> ▪ Low carbon vehicles 	32,000
	2) Expenses for preventing water pollution <ul style="list-style-type: none"> • Plant pollution controllers 	15,000
	3) Expenses for preventing ground contamination	
	4) Expenses for preventing noise pollution	
	5) Expenses for preventing vibration pollution	
	6) Expenses for preventing odor pollution	
	7) Expenses for preventing ground sinkage	
	8) Expenses for preventing other types of pollution	
Global environment conservation investments	1) Expenses for preventing global warming and energy conservation <ul style="list-style-type: none"> ▪ Smart grids 	80,000
	2) Expenses for preventing the ozone depletion <ul style="list-style-type: none"> ▪ CO2 sequestration technologies 	110,000
	3) Expenses for other global environmental conservation activities	
Resource circulation investments	1) Expenses for the efficient utilization of resources	
	2) Expenses for recycling waste <ul style="list-style-type: none"> ▪ New recycling equipment 	200,000
	3) Expenses for disposal of waste	
	4) Expenses contributing to resource circulation	



CALCULATION EXAMPLE

So, for example, let us assume that an entity has the records shown here in the table at the end of the reporting period.

Based on these records, **Indicator 1**

would be calculated as:

$$32,000 + 15,000 + 80,000 + 110,000 + 200,000 = \text{€ } 437,000$$

A.3.1 Green investment: Measurement methodology

Type of investments	Expenses	Amounts (monetary)
Pollution prevention investments	1) Expenses for preventing air pollution (including acid rain) <ul style="list-style-type: none"> ▪ Low carbon vehicles 	32,000
	2) Expenses for preventing water pollution <ul style="list-style-type: none"> • Plant pollution controllers 	15,000
	3) Expenses for preventing ground contamination	
	4) Expenses for preventing noise pollution	
	5) Expenses for preventing vibration pollution	
	6) Expenses for preventing odor pollution	
	7) Expenses for preventing ground sinkage	
	8) Expenses for preventing other types of pollution	
Global environment conservation investments	1) Expenses for preventing global warming and energy conservation <ul style="list-style-type: none"> ▪ Smart grids 	80,000
	2) Expenses for preventing the ozone depletion <ul style="list-style-type: none"> ▪ CO2 sequestration technologies 	110,000
	3) Expenses for other global environmental conservation activities	
Resource circulation investments	1) Expenses for the efficient utilization of resources	
	2) Expenses for recycling waste <ul style="list-style-type: none"> ▪ New recycling equipment 	200,000
	3) Expenses for disposal of waste	
	4) Expenses contributing to resource circulation	



CALCULATION EXAMPLE

Based on the table and assuming that the entity has recorded 10,000,000 € in revenue and has assets equal to 4,000,000 €, the ratios indicators (**Indicator 2**) would be calculated as:

- **Total amount of green investments / Total assets = 437,000 / 4,000,000 = 10.93%**
- **Total amount of green investments / Total revenue = 437,000 / 10,000,000 = 4.37%**

A.3.1 Green investment: Measurement methodology

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
CURRENT ASSETS:	
CASH	
ACCOUNTS RECEIVABLE	
INVENTORIES	
OTHER ASSETS	
NON-CURRENT ASSETS:	
PROPERTY, PLANT AND EQUIPMENT	
INTANGIBLE ASSETS	
FINANCIAL ASSETS	
OTHER ASSETS	
TOTAL ASSETS	

It is important to underline 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.

This is an illustrative example of where to generally find items related to green investments in financial statements.



A.3.1 Green investment: Potential sources of information

- 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 statement 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)).



A.3. New investment/expenditures

A.3.1 Green investment

A.3.2 Community investment

A.3.3 Total expenditures on research and development



A.3.2 Community investment: Definition

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.



A.3.2 Community investment: Measurement methodology

Two indicators can be calculated:

- 1) **Total amount of community investments over a certain reporting period;**
- 2) **Ratio expressing a firm's community investments in period t as a percentage of the entity's period t total assets (and/or revenue).**



A.3.2 Community investment: Measurement methodology

Two indicators can be calculated:

- 1) **Total amount of community investments over a certain reporting period;**
- 2) Ratio expressing a firm's community investments in period t as a percentage of the entity's period t total assets (and/or revenue).

In order to calculate the first indicator and the numerator of the second indicator(s) the following classification can be used in order to keep track of community investments over a certain reporting period:

- 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.



A.3.2 Community investment: Measurement methodology

Two indicators can be calculated:

- 1) **Total amount of community investments over a certain reporting period;**
- 2) Ratio expressing a firm's community investments in period t as a percentage of the entity's period t total assets (and/or revenue).

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 incurred, 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.



A.3.2 Community investment: Measurement methodology

Two indicators can be calculated:

- 1) **Total amount of community investments over a certain reporting period;**
- 2) Ratio expressing a firm's community investments in period t as a percentage of the entity's period t total assets (and/or revenue).

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



A.3.2 Community investment: Measurement methodology

Two indicators can be calculated:

- 1) Total amount of community investments over a certain reporting period;**
- 2) Ratio expressing a firm's community investments in period t as a percentage of the entity's period t total assets (and/or revenue).

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).



A.3.2 Community investment: Measurement methodology

Two indicators can be calculated:

- 1) Total amount of community investments over a certain reporting period;
- 2) Ratio expressing a firm's community investments in period t as a percentage of the entity's period t total assets (and/or revenue).

The ratio indicators would be expressed in percentage (%) terms and would be calculated as follows:

$$\frac{\text{Total amount of community investments}}{\text{Total assets}}$$

Or

$$\frac{\text{Total amount of community investments}}{\text{Total revenue}}$$



A.3.2 Community investment: Measurement methodology



CALCULATION EXAMPLE

Let us assume that an entity has recorded the following activities over a certain reporting period:

- charitable contribution = 50,000 \$
- donation to the cancer foundation = 10,000 \$
- funding of the refurbishment of the local community elementary school = 30,000 \$
- workplace giving (the entity has matched the time workers have dedicated to a non-profit as volunteers with monetary support: 100 workers for 5 working days at 8 \$ per hour) = $100 \times 5 \times 8 = 4,000$ \$
- product donations (100,000 units at fair value) = 50,000 \$

The total amount of community investments during a certain reporting period is calculated as:

$$50,000 + 10,000 + 30,000 + 4,000 + 50,000 = 144,000 \$$$

Assuming that the entity has recorded 10,000,000 € in revenue and has assets equal to 4,000,000 €, the ratios indicators would be calculated as:

$$\text{Total amount of community investments} / \text{Total assets} = 144,000 / 4,000,000 = 3.6\%$$

$$\text{Total amount of community investments} / \text{Total revenue} = 144,000 / 10,000,000 = 1.44\%$$



A.3.2 Community investment: Potential sources of information

- 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.
- 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. New investment/expenditures

A.3.1 Green investment

A.3.2 Community investment

A.3.3 Total expenditures on research and development



A.3.3 Total expenditures on research and development: Definition

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.

Specifically

- ✓ 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).



A.3.3 Total expenditures on research and development: Measurement methodology

Two indicators can be calculated:

- 1) Total R&D expenditure amount over a certain reporting period;**
- 2) Ratio expressing a firm's total R&D expenditures in period t as a percentage of the entity's period t total assets (and/or revenue).**



A.3.3 Total expenditures on research and development: Measurement methodology

Two indicators can be calculated:

- 1) Total R&D expenditure amount over a certain reporting period;**
- 2) Ratio expressing a firm's total R&D expenditures in period t as a percentage of the entity's period t total assets (and/or revenue).

The first indicator should be measured in monetary units and it should be calculated as the total amount of R&D expenditures referred to in the reporting period under consideration.

A.3.3 Total expenditures on research and development: Measurement methodology

Two indicators can be calculated:

- 1) Total R&D expenditure amount over a certain reporting period;
- 2) Ratio expressing a firm's total R&D expenditures in period t as a percentage of the entity's period t total assets (and/or revenue).

The ratio indicators would be expressed in percentage (%) terms and would be calculated as follows:

$$\frac{\text{Total R\&D expenditures}}{\text{Total assets}}$$

Or

$$\frac{\text{Total R\&D expenditures}}{\text{Total revenue}}$$



A.3.3 Total expenditures on research and development: Measurement methodology

It is important to acknowledge that there are **different accounting treatments of research and development expenses**.

- ✓ ***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.

- ✓ ***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). The R&D costs are included in the operating expenses and are usually reflected in an entity's income statement.

A.3.3 Total expenditures on research and development: Measurement methodology

<i>PROFIT AND LOSS (INCOME STATEMENT) - ILLUSTRATIVE EXAMPLE</i>	
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	
<i>BALANCE SHEET - ILLUSTRATIVE EXAMPLE</i>	
CURRENT ASSETS:	
CASH	
ACCOUNTS RECEIVABLE	
INVENTORIES	
OTHER ASSETS	
NON-CURRENT ASSETS:	
PROPERTY, PLANT AND EQUIPMENT	
INTANGIBLE ASSETS	
FINANCIAL ASSETS	
OTHER ASSETS	
TOTAL ASSETS	

A.3.3. Total expenditures on research and development

A.3.3. Total expenditures on research and development

This is an illustrative example of where to find items related to total expenditures on research and development in financial statements.

A.3.3 Total expenditures on research and development: Measurement methodology

Option 1: Expense all costs

	Profit and loss account extract	Balance sheet extract
Expenses: R&D	750,000	

Option 2: Expense research and capitalise development costs

	Profit and loss account extract	Balance sheet extract
Expenses: Research	250,000	
Intangible asset: Development costs		500,000



CALCULATION EXAMPLE

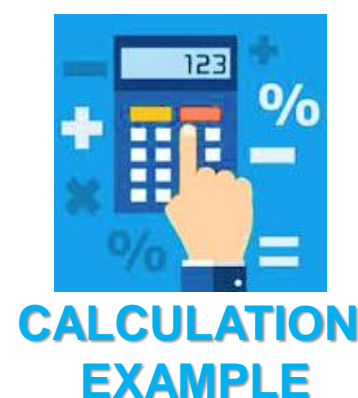
Let us assume that the pharmaceutical company Alpha incurs costs, during one reporting period, equal to \$250,000 to develop new knowledge on a new vaccine, and costs of \$500,000 to test a new drug.

These amounts could be treated as shown in the two Tables

A.3.3 Total expenditures on research and development: Measurement methodology

Option 1: Expense all costs

	Profit and loss account extract	Balance sheet extract
Expenses: R&D	750,000	



To calculate the abovementioned indicators, all R&D expenditures incurred in a certain reporting period should be considered, independently from their accounting treatment.

So **total R&D expenditures** to be taken into account would be **750,000 \$**.

Option 2: Expense research and capitalise development costs

	Profit and loss account extract	Balance sheet extract
Expenses: Research	250,000	
Intangible asset: Development costs		500,000

Assuming that the entity has recorded 10,000,000 € in revenue and has assets equal to 4,000,000 €, the ratios indicators would be calculated as:

Total R&D expenditures / Total assets = 750,000 / 4,000,000 = 18.75%

Total R&D expenditures / Total revenue = 750,000 / 10,000,000 = 7.5%



A.3.3 Total expenditures on research and development: Potential sources of information

- 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).
- 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



A.4.1. Percentage of local procurement: Definition

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.



A.4.1. Percentage of local procurement: Measurement methodology

This indicator denotes the percentage of products or services purchased locally and is calculated as follows:

$$\frac{\text{Local suppliers' procurement costs}}{\text{Total procurement costs}}$$

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.



A.4.1. Percentage of local procurement: Measurement methodology

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 kilometers or miles),
- ✓ a region within a country,
- ✓ a country.

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.



A.4.1. Percentage of local procurement: Measurement methodology



CALCULATION EXAMPLE

So let us assume that a company incorporated in country A buys products and services from four different suppliers and has recorded the following purchasing costs:

- Supplier 1, located in country A = 15,000 €
- Supplier 2, located in country B = 40,000 €
- Supplier 3, located in country C = 30,000 €
- Supplier 4, located in country A = 15,000 €

The amount of local procurement costs is equal to 30,000 € (15,000 of supplier 1 and 15,000 of supplier 4) and in percentage terms it is calculated as:

$$\text{Local suppliers' procurement costs} / \text{Total procurement costs} \\ = 30,000 / (30,000 + 40,000 + 30,000) = 30\%$$



A.4.1. Percentage of local procurement: Measurement methodology

When possible, it is also suggested to categorize the amount of **local purchases by size of the suppliers**.

As there is no international consensus on the requirements to be classified as a “small” entity and “size” depends on the particular economy of a country or a region, 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 **internationally recognized threshold figures** (and to specify which criterion has been used to categorize the amount of local procurement), for example, the following threshold figures could be used in some countries:

- a) **based on the number of employees:** small businesses are usually defined as organizations 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.



A.4.1. Percentage of local procurement: Measurement methodology



CALCULATION EXAMPLE

So let us assume that a company incorporated in country A buys products and services from four different suppliers and has recorded the following purchasing costs:

- Supplier 1, located in country A = 15,000 €
- Supplier 2, located in country B = 40,000 €
- Supplier 3, located in country C = 30,000 €
- Supplier 4, located in country A = 15,000 €

Let us also assume that:

- Supplier 1, located in country A has 80 employees
- Supplier 4, also located in country A has 1,500 employees

The percentage of local procurement from small suppliers is calculated as follows:

$$15,000 / (30,000 + 40,000 + 30,000) = 15\%$$



A.4.1. Percentage of local procurement: Potential sources of information

- 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.



Self-assessment questions with solutions





1. 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 receivable, revenue cycle).

- True
- False



1. 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 receivable, revenue cycle).

- True
- False



2. Assuming that a reporting entity has revenue equal to \$2,000, cost of bought in goods and services equal to \$450, and depreciation equal to \$250, the gross value added (GVA) is:

- \$2,000
- \$1,550
- \$1,750
- None of the above



2. Assuming that a reporting entity has revenue equal to \$2,000, cost of bought in goods and services equal to \$450, and depreciation equal to \$250, the gross value added (GVA) is:

- \$2,000
- \$1,550**
- \$1,750
- None of the above

$$2,000 - 450 = 1,550\$$$



3. Assuming that a reporting entity has revenue equal to \$2,000, cost of bought in goods and services equal to \$450, and depreciation equal to \$250, the net value added (NVA) is:

- \$2,000
- \$1,550
- \$1,750
- \$1,300



3. Assuming that a reporting entity has revenue equal to \$2,000, cost of bought in goods and services equal to \$450, and depreciation equal to \$250, the net value added (NVA) is:

- \$2,000
- \$1,550
- \$1,750
- \$1,300**

$$2,000 - 450 - 250 = 1,300\$$$



4. The indicator “Taxes and other payments to the Government” 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.

- True
- False



4. The indicator “Taxes and other payments to the Government” 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.

- True
- False



5. Indicate which one of the following expenses would not be included in the calculation of green investments

- Expenses for preventing air pollution
- Expenses for preventing ground contamination
- Expenses for the development of a new prototype
- Expenses for recycling waste



5. Indicate which one of the following expenses would not be included in the calculation of green investments

- Expenses for preventing air pollution
- Expenses for preventing ground contamination
- Expenses for the development of a new prototype**
- Expenses for recycling waste



6. Indicate which one of the following expenses would not be included in the calculation of community investments

- Expenses for the disposal of waste
- Contributions to charities
- Funding of a local community recreational facility
- Funding of emergency relief



6. Indicate which one of the following expenses would not be included in the calculation of community investments

- Expenses for the disposal of waste**
- Contributions to charities
- Funding of a local community recreational facility
- Funding of emergency relief



7. All research and development (R&D) costs are always expensed as incurred

- True
- False



7. All research and development (R&D) costs are always expensed as incurred

- True
- False**



8. If a company incorporated in country 1 buys products and services from three different suppliers and has recorded the following purchasing costs: Supplier A, located in country 1 = 5,000 €; Supplier B, located in country 1 = 3,000 €; Supplier C, located in country 2 = 8,000 €, the percentage of local procurement is:

- 100%
- 0%
- 50%
- None of the above



8. If a company incorporated in country 1 buys products and services from three different suppliers and has recorded the following purchasing costs: Supplier A, located in country 1 = 5,000 €; Supplier B, located in country 1 = 3,000 €; Supplier C, located in country 2 = 8,000 €, the percentage of local procurement is:

- 100%
- 0%
- 50%
- None of the above

$$(5000 + 3,000) / (5000 + 3,000 + 8,000) = 50\%$$