

Chapter 9

Reporting Schemes



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Abstract This chapter gives an overview of different reporting schemes which can be used by companies to communicate their environmental, as well as their sustainability, performance. Connections between different reporting schemes, underlying data and the CapSEM Model are explained. The most common sustainability reporting schemes are described within the context of their intended use by the reporting organization. The chapter also addresses the content for writing a sustainability report together with the use of tools and performance indicators to present quantitative information.

9.1 Introduction

The term *sustainability reporting* is often used synonymously with *corporate sustainability reporting*, *triple bottom line reporting*, and *non-financial reporting*, and refers to the reporting of non-financial aspects alongside existing financial reporting (Paun 2018). These reports may include information about the company's use of natural resources and their impact on the environment, relevant social aspects, or corporate governance. Sustainability reporting should therefore:

- Enable any type of organization to measure, manage and communicate its performance
- Communicate information that is of interest to stakeholders about a company's activities
- Contribute to building trust and manage reputational risk

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- Work as a benchmarking tool, where performance comparisons can be conducted internally, externally and over time.

Integrated reporting, defined as “a single document that presents and explains a company’s financial and nonfinancial—environmental, social, and governance (ESG)—performance,” is increasingly adopted by companies (Eccles and Saltzman 2011). This is due to increasing requirements for ESG disclosure from governments and market regulators and the growing recognition of the connection between risk and ESG factors and a resulting appreciation for sustainability reporting from investors and stakeholders (Eccles and Saltzman 2011).

Over time, sustainability reporting has gradually evolved. In the beginning, reporting was confined to non-financial aspects promoting environmental work as a part of building positive reputation. The reports were often more informative than accurate and varied significantly between the different actors (Paun 2018; Stacchezzini et al. 2016). The need for standardisation became evident during this time and the Global Reporting Initiative (GRI) standard was established in 1997 to improve the quality of reporting (GRI 2022). Parallel with this voluntary development, regulatory requirements to describe the work on the environment, anti-corruption, work environment and human rights emerged in national and eventually supra-national regulations. Even though sustainability reporting became compulsory, the impact of sustainability information remained marginal compared to the financial content. This picture has changed. The need for accurate information about sustainability performance is growing and is actively used by investors, banks, and insurance companies to evaluate risks and potential development. In fact, a good ESG record is becoming a prerequisite for financial investments, as well as regulatory requirements and therefore actively governs the future of individual companies (Fatemi et al. 2018).

9.2 Approaches to Reporting

Sustainable development reporting does not work as a *one-size-fits-all* approach. Each company should determine their own situation and needs. This is an evolving field, and in an effort to provide *standardized* information on sustainable development performance, appropriate frameworks for sustainable development reports continue to be developed (Sardianou et al. 2021; Lyytimäki and Rosenström 2008). A framework should help to harmonize reporting practices, and should ideally address these four elements (Fet et al. 2009):

- Firstly, the underlying concept of sustainable development and its application in an organizational context. Sustainable development often means different things to different people (Redclift 2006).
- Secondly, the objective of sustainable development reports. Sustainable development reports may be described as showing a balanced and reasonable presentation of an organization’s economic, environmental and social performance.

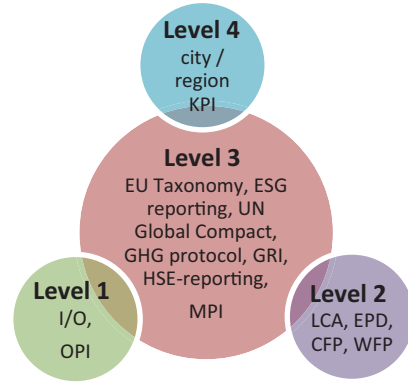
- Thirdly, the characteristics that determine the usefulness of the information in reports, especially relevance and reliability.
- Fourthly, a framework should define the basic information incorporated in sustainable development reports.

A company's sustainable development report should allow users to compare its sustainable development performance and position over time to identify trends. Likewise, these reports should allow users to benchmark different companies to evaluate their relative performance and position, both regionally and within the same business segment. The framework elements should measure and report on the impacts of similar activities and processes in a consistent manner over time, which presents another dilemma, i.e., a need to trade-off between flexibility and comparability. When a company starts to practice sustainability reporting, they should have the flexibility to identify those indicators most relevant to their own specific circumstances and operations. Reporting guidelines should strive not only to increase the volume and complexity of the information requested, but favour reliability and relevance. Only a limited number of indicators should be required, allowing users to compare corporate practice on a general level.

Reporting principles must support transparency, credibility and accountability as well as ensure that the information and data is relevant, reliable and clear. External reporting gives management an additional opportunity for improvement based on feedback through readers' reactions, criticisms, and suggestions. Considering stakeholder views also helps to shape strategy, goals and objectives. The reporting process should be an integral part of internal management procedures and a number of sources are available to assist in this process (Sahin and Çankaya 2020; Gbangbola and Lawler 2017; Searcy and Buslovich 2014).

As part of an overall management system, reporting should lead to an improved performance throughout the organization. In the CapSEM Model, reporting is placed at Level 3. However, reporting involves communicating the company's performance at all levels. At Level 1, this includes information about the quantities of materials and energy in and out of each production process, emissions, and wastes, summarized into an environmental account for the production site, and often communicated by means of operational performance indicators (OPIs). At Level 2, the commentary should address material flows along the entire value chain of the product (or service the company provides), most often calculated using life cycle assessment (LCA) and summarized in an environmental product declaration (EPDs), or other forms of product information, e.g., carbon footprint, (CFP) and water footprint (WFP), of products. Reporting management activity at Level 3 should encompass information from Levels 1 and 2 in addition to information about management and strategic matters (see Chap. 8 for management performance indicators (MPIs)). A company would also usually include information about its role and involvement on a societal Level: in the CapSEM Model this is represented by Level 4. For large corporates with production sites in different regions, for organization and communities, reporting should always include information about the impacts of related systems. The communication of performance on all levels should be carried out using

Fig. 9.1 Contributors to reporting content and practice (Level 3): relevant examples of tools and indicators. Levels 1, 2 & 4. (CapSEM Model)



performance indicators. Monitoring systems also need to be put into place. These can either be physical systems or procedures for tracking performance at each level. The objective of reporting schemes is to assist companies and organisations in their reporting. Figure 9.1 illustrates some of the reporting schemes most frequently used by an organisation.

A sustainability report can be compiled in various manners, based on a range of recommendations for what might be included (Gbangbola and Lawler 2017). The information to be presented in a report should be collected by using relevant tools, such as input-output (I/O) analyses on production processes, and value chain analyses tools for products. The information can be further communicated by means of operational performance indicators (OPIs), or by means of LCA-results summarised in product declarations and other label systems. The EU Taxonomy suggests a classification system aimed at establishing a list of environmentally sustainable economic activities at company level, but which can be seen as systemic, also connecting city regional key performance indicators (KPIs).

9.3 Sustainability Reporting Schemes

9.3.1 Environmental Reporting

Content for a sustainability report may overlap with other reporting obligations within a company. Thousands of companies worldwide hold a certificate on environmental management according to ISO 14001 or the European Environmental management and Audit scheme (EMAS). For ISO 14001-certified companies, drafting an environmental report is voluntary. However, EMAS-registered companies already have audited environmental statements as part of their verification in accordance with EMAS-regulation. The environmental aspects of a sustainability report should reflect the company's overall, real, conditions. This may involve information about environmental aspects in the form of:

- resource consumption: raw materials, materials and packaging, energy, water, land areas
- emissions: pollutants to water, air and soil, noise, dust/smoke, smell
- products: content of toxic substances, proportion of recycled materials, recoverable share
- waste: hazardous waste, for landfills, for recycling and for incineration

With regard to environmental aspects, the report should include quantified information, preferably in the form of performance indicators (Machado et al. 2021). Any numerical information should show the development over time, with graphic representations. Significant changes since the previous environmental report should be highlighted. If the company has had environmental accidents or unplanned discharges during the period covered by the report, this should be stated. Special emission permits that apply to the business, as well as any orders received from supervisory authorities during the reporting period, should be highlighted. If possible, the company should include information about any environmental impacts caused by significant environmental aspects together with any acute discharges caused. Environmental impacts can be grouped according to whether they are local, regional or global.

Results from environmental audits and environmental reviews, which have been carried out on the company's own initiative during the reporting period, should be described. Progress and results regarding measures from the company's environmental programme, environmental audits and environmental reviews as described in previous environmental reports, should also be reported. If the company has been subject to supervision by government agencies, the results of these inspections and audits should also appear in the report.

As an environmental management system should consider processes, products and services, the report should also include information about environmental aspects of products seen from a life cycle perspective. More specifically, this means incorporating information about the impacts of the use phase, maintenance and end-of life phase. The information can be achieved from LCA, from EPDs or other documentation simulating the life cycle of the product.

Finally, the company should report on its environmental management programme for improving health, safety and environment (HSE) whilst both quantifying, and providing deadlines, for each individual environmental objective. The description of these environmental goals should include planned investments in connection with the measures to be implemented to achieve the goals. Expected cost savings and earnings opportunities should be reported as a result of reduced raw material consumption, new processes, increased market access, gains by avoiding regulations, reduced absence costs, etc.. If any of the conditions are significant environmental aspects, and are not included in the environmental programme, the rationale for excluding them, and ideally when the company will include them, should be explained in its plans for environmental improvement.

Information about the work environment should include human resources, work environment factors (ergonomics, indoor climate, psychosocial conditions, etc.),

absence, stress disorders, other health damage (solvent damage, etc.). Safety aspects should include significant risk factors, risk prevention measures, emergency measures, damage to people, property and the environment.

9.3.2 *Measuring Environmental, Social and Governance (ESG) Factors*

Environmental, social and governance (ESG) factors can be used as a framework for reporting on a firm's sustainability performance. Environmental criteria consider how a company performs as a steward of nature. Social criteria examine how it manages relationships with employees, suppliers, customers, and the communities where it operates. Governance ensures that the company uses accounting methods with transparency and accuracy, pursues a leadership with integrity and diversity, and is accountable to shareholders.

ESG reporting can help a company communicate its contribution to sustainability through key performance indicators (KPIs) to reach environmental, social and governance objectives within the firm. KIPs can be structured according to the ESG-criteria by means of environmental performance indicators (EPIs), operational performance indicators (OPIs), management performance indicators (MPIs) as described in Chap. 8. Reporting on ESG factors is also important for external communication to customers and investors. Reporting on ESG factors is also important for external communication to customers and investors. Many investment banks have set their own ESG guidelines to mandate the compliance and screen their investments, and to distinguish those with the best sustainability performance. Performing well in terms of ESG principles, can therefore attract or maintain outside investment. Many financial actors now offer products that employ ESG criteria in the analysis and presentation of the financial instruments (Escrig-Olmedo et al. 2019).

9.3.3 *Corporate Annual Reporting*

There are different national rules for mandatory reporting for business. In their annual reports, businesses should report on their activities, and especially on their financial performance. The need for transparency has become stronger, and the Transparency Act of 2021 (Gullhagen-Revling et al. 2021) aims to provide a common standard and further tighten the legal obligations for companies to comply with both the UN Guiding Principles on Business and Human Rights and the OECD's Guidelines for Multinational Enterprises as well as the UN's sustainable development goals (SDGs). The Transparency Act is a part of a development in which obligations related to what has historically been considered *soft law* or obligations that

should be fulfilled, are now legal obligations for companies. In this context, it is also interesting to note that the European Commission is steadily working on directives on sustainable corporate governance, with respect to enhancing the liability of board members. Assessments must be carried out regularly and be in proportion to the size of the company, the nature of the company, the context in which the company takes place and the severity of and the probability of negative consequences for basic human rights and decent working conditions.

9.3.4 Reporting for Cities

Sustainability reporting can also be adapted to cities. Cities are growing, and it is estimated that by 2050, cities will contain 70% of the world's population (Steinert et al. 2011). Challenges connected to use of resources, food supply, energy supply, wastes and emissions must be addressed beyond the individual corporate boundaries. While cities plan ways to meet sustainability challenges, indicators to measure the progress over time are developed accordingly alongside mechanisms to measure and track the indicators relying on digital (ICT)-solutions and artificial intelligence (AI-techniques).

As part of the 'United for Smart Sustainable Cities' (U4SSC) programme (Estevez et al. 2021; Sang and Li 2019), a set of 97 key performance indicators (KPIs) were developed. In addition, cross-country initiatives were put in place to benchmark cities against these KPIs. Similar KPIs exist for regions with the intention to measure progress both by municipalities and by businesses operating in the municipality. The same methodologies presented at each Level of the CapSEM Model can be used to aggregate quantitative information at the city level, which is represented by Level 4 in the CapSEM Model. Reporting on city levels is an ongoing process: it is expected this will grow in the future.

9.3.5 Examples of Reporting on Sustainability

A variety of reporting options for sustainability are available, each with a specific focus on different aspects of sustainable development. These include GRI reporting, reporting on greenhouse gas (GHG) emissions, the UN Global Compact, and the EU taxonomy.

9.3.5.1 GRI Reporting

GRI is the first global framework for comprehensive sustainability reporting, encompassing the *triple bottom line* of economic, environmental, and social issues. It has become the generally accepted, broadly adopted framework for preparing,

communicating, and requesting information about corporate performance. Furthermore, it provides guidance to reporters on selecting generally applicable and organisation specific indicators, as well as integrated sustainability indicators (Dissanayake 2021; Machado et al. 2021; Roca & Searcy 2012). It also includes forward-looking indicators and targets for future years (Halkos & Nomikos 2021; Szennay et al. 2019).

9.3.5.2 GHG Protocol

The GHG protocol (WRI/WBCSD 2011) has established the most widely used standard for reporting on emissions of greenhouse gas emissions related to productivity. The standard divides emissions into three distinct classes depending on the source of the emissions. The GHG Protocol scopes emission across the value chain. Scope 1 emissions are direct emissions from owned or controlled sources emitting GHG. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 emissions are all indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions. Reporting on scope 1 and 2 are compulsory when using the protocol whereas scope 3 is voluntary.

All reporting is based on information aggregated at a product level (CapSEM Level 2) including all supply of services and products necessary for the company activities, the emissions for internal production process and the impacts foreseen for the downstream activities of the products or services produced. This life cycle perspective may be important for subsequent reporting by the company and for use in environmental management systems to mitigate impacts correctly in the value chain. Production companies with large emissions occurring from their own production may primarily address actions mitigating their own emissions and energy consumption based on assessment using the protocol. Consumers or service producers may, on the other hand, direct more effort towards green procurement to reduce the emissions on all products and services purchased (Fig. 9.2).

9.3.5.3 UN Global Compact

The United Nations Global Compact (UN 2021) is a strategic initiative that supports companies that want to demonstrate their compliance regarding awareness about sustainability. This is the most globally recognized framework for organizations. The initiative promotes activities that contribute to sustainable development goals and to align their strategies and operations with ten universal principles related to human rights, labour, environment, and anti-corruption, presented in Table 9.1. Companies that have signed the GC are obliged to submit annual reports. All such reports can be accessed through the UN GC website.

By incorporating the ten principles of the UN Global Compact into strategies, policies and procedures, and establishing a culture of integrity, companies are not

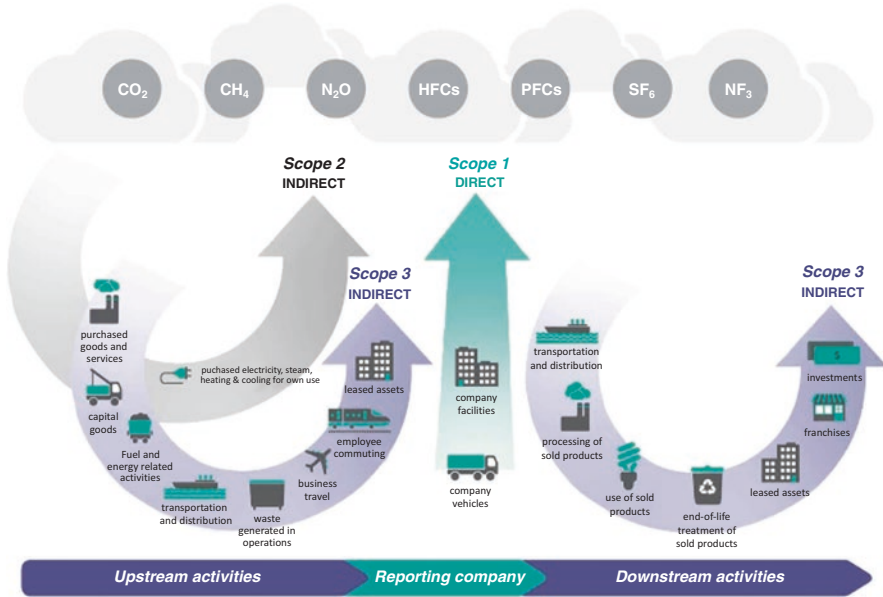


Fig. 9.2 Model of reporting according to GHG protocol. (WRI/WBCSD 2011)

Table 9.1 UN Global Compact ten principles (2021)

<p>Human rights</p> <ol style="list-style-type: none"> 1. Businesses should support and respect the protection of internationally proclaimed human rights; and 2. Make sure that they are not complicit in human rights abuses.
<p>Labour</p> <ol style="list-style-type: none"> 3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; 4. The elimination of all forms of forced and compulsory labour; 5. The effective abolition of child labour; and 6. The elimination of discrimination in respect of employment and occupation.
<p>Environment</p> <ol style="list-style-type: none"> 7. Businesses should support a precautionary approach to environmental challenges; 8. Undertake initiatives to promote greater environmental responsibility; and 9. Encourage the development and diffusion of environmentally friendly technologies.
<p>Anti-corruption</p> <ol style="list-style-type: none"> 10. Businesses should work against corruption in all its forms, including extortion and bribery.

only upholding their basic responsibilities to people and planet, but also setting the stage for long-term success. There is no simple reporting template that covers all 10 principles of the Global Compact, however an annual Communication on Progress (CoP) report should be executed including the following minimum requirements:

- A statement by the Chief Executive expressing continued support for the UN Global Compact and renewing the participant’s ongoing commitment to the initiative

- A description of practical actions the company has taken or plans to take to implement the Ten Principles in each of the four areas (human rights, labour, environment, anti-corruption)
- A measurement of outcomes

9.3.5.4 EU Taxonomy

On 18 June 2020, the EU Parliament and the Council adopted the EU Regulation 2020/852 on the establishment of a framework to facilitate sustainable investment. The EU Taxonomy emerged from the EU Green Deal initiative and is the first standardised and comprehensive classification system for sustainable economic activities that are responsible for up to 80 percent of EU greenhouse gas emissions. The intention is to help investors to make informed decisions by channelling investments into low-carbon technologies (Dusík & Bond 2022; Schütze & Stede 2020).

The regulation on the establishment of a framework to facilitate sustainable investment identifies six environmental objectives for the purposes of the taxonomy: Climate change mitigation; climate change adaptation; sustainable use and protection of water and marine resources; transition to a circular economy, waste prevention and recycling; pollution prevention and control; and protection of healthy ecosystems (Alessi et al. 2019). It also sets out four conditions that an economic activity must meet to be recognised as aligned with the taxonomy (Alessi et al. 2019: 4), which are:

- making a substantial contribution to one environmental objective (minimum)
- doing no significant harm to any other environmental objective
- complying with minimum social safeguards
- complying with the technical screening criteria

These are further cascaded into technical screening criteria and described in technical guidelines for each activity sector and objective (Canfora et al. 2021). The screening criteria set detailed threshold values at process, product, and company level for the environmental performance in the definition of ‘substantial contribution to the objective’ and ‘in doing no significant harm’ respectively.

9.4 Conclusion

Sustainable development reporting is not a one-size-fits-all activity. Each company should determine their own situation and needs to communicate their corporate situation. Some reporting is mandated, others, voluntary. Some reporting targets the global community, others are aimed at selected audiences. Regardless of the situation, there is a cornucopia of reporting schemes and associated guidelines to support most needs. Firms must choose carefully to reveal the appropriate information at the appropriate time. Moreover, transparency in reporting as defined in transparency

regulations (Transparency Act, 2022) will be important regardless of the reporting scheme selected, to ensure the general public have access to sustainability performance and for the avoidance of any potential adverse impacts of the organisation's activity.

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