



Understanding ESG and CSR

IMAGE SOURCE: ChatGPT

ESG-CSR-GHG Reporting & Guidance

8 June 2026 by LECTURA GmbH

The adoption of sustainability and environmental practices is vital for today's industries, including **agriculture** and **construction**. Yet it brings demands on the stakeholders to get familiar with new frameworks and strategies developed for these purposes.

While **CSR** involves voluntary actions and commitments to improve stakeholder relations, **ESG**, evaluating companies on their environmental impact, social, and governance dimension, focuses on measurable outcomes tied to specific metrics and reporting standards.

ESG

- >> **ESG Investing - What is ESG investing and why is it important?**
- >> **ESG Reporting Guide - What is ESG reporting and why is it important?**
- >> **Understanding ESG Score and Its Impact - ESG scores for companies**
- >> **ESG Strategy: Building a Sustainable Business Future**

CSR

- >> **Understanding CSR Benefits - What are the benefits of corporate social responsibility?**
- >> **The Pyramid of Corporate Social Responsibility Guide**
- >> **CSR Initiatives: Examples of corporate CSR initiatives**

An essential component of ESG is also managing greenhouse gas (GHG) emissions, categorised into **Scope 1, Scope 2, and Scope 3 emissions**.

- >> **Understanding GHG Emissions: Key Facts & Impacts**

These practices are increasingly regulated, with frameworks like the **GHG Protocol** providing standards for measuring, managing, and reporting emissions. For agriculture and construction industries, integrating these practices can enhance sustainability, attract investment, and foster positive community relationships.

- >> **Sustainable Business Practices: Guide for Companies**

☒ Interested in ESG reporting? Let's Talk!

Discover how tracking your heavy equipment emissions can drive a huge impact on your business. Contact LECTURA at info@lectura.de to connect with our experts and explore the best solutions for your sustainability goals

Understanding ESG and CSR

What is ESG?

ESG is a framework that evaluates how companies perform in three critical areas: their environmental impact, social responsibilities, and governance practices.

This is crucial for industries to ensure they operate sustainably and ethically.

What does ESG stand for?

ESG stands for Environmental, Social, and Governance, three key dimensions of the framework.

• Environmental

- Environmental dimension focuses on a company's impact on the natural environment.
- It evaluates how the company minimises its negative impact on the environment, thus considers, for example, carbon footprint, pollution levels, resource management, dependence on fossil fuels, and efforts to address climate change.

• Social

- Social dimension looks at how the company manages relationships with employees, suppliers, customers, and communities, focusing on aspects like labour practices and community engagement.
- It focuses on, for example, whether employees of different demographics are treated equally, fair wages, and safe working conditions.

• Governance

- Governance dimension is about how the company is governed, including leadership, executive pay, audits, internal controls, and shareholder rights
- It evaluates whether a company uses transparent accounting methods, maintains integrity and diversity in selecting management, and whether it is responsible to shareholders.

What is ESG investing?

ESG investing involves choosing investments based on ESG criteria to promote responsible and sustainable business practices. In this process the investors apply non-financial factors as part of their analysis process to identify material risks and growth opportunities.

The reasons for ESG investing might be:

- Investors want their money to support companies that are good for the planet, treat people well, and have honest management.
- Companies that do well on ESG criteria might perform better financially over the time. They tend to be more sustainable and less risky.
- As regulations and public opinion shift towards more sustainable and ethical practices, companies with strong ESG policies are better positioned for the future.
- Companies with good ESG scores are often viewed more favourably by consumers, employees, and investors, enhancing their reputation and brand value.

How is ESG measured (evaluated)?

ESG is measured through metrics evaluating how a company is doing in the three key dimensions.

Environmental metrics

- Metrics that are used to evaluate a company's impact on the environment. Examples of environmental metrics are: greenhouse gas emissions, energy usage, water consumption, or amount of waste

Social metrics

- Social metrics revolve around society, communities, and individuals. Examples of social metrics are: community engagement, workforce diversity, rate of recordable incidents, or gender pay gap

Governance metrics

- The metrics report how well the company is managed and include factors of how businesses are operated. They refer to executive structure, policies or ethics. Examples of governance metrics: executive's pay ratio, quality of governing body, ethics and anti-corruption policy, or tax paid

Regardless of the dimension, the metrics can be either qualitative or quantitative.

Quantitative metrics are based on numbers (numerical data), can be directly measured, computed, and compared over time and between companies. Examples of quantitative metrics can be CO2 emissions, energy usage, or a number of reported violations.

Qualitative metrics refer to qualities, characteristics, or processes (for example, labour practices or commitments). Qualitative metrics are subjective, thus more challenging to interpret, yet they are useful to contextualise the quantitative data.

What is CSR (Corporate Social Responsibility)?

CSR is a business model in which companies integrate social and environmental concerns into their operations and interactions with stakeholders. It emphasises a company's commitment to contributing positively to society beyond profit-making.

The activities falling into corporate social responsibility might be for example:

- Environmental initiatives such as implementing eco-friendly production processes, reducing carbon footprints, using renewable energy, or establishing recycling and waste reduction programs within the company
- Philanthropy and community engagement - for example providing grants for research and educational programs, or sponsoring local cultural events or sport teams.
- Ethical work practices, including fair wages, benefits and compensation for employees and providing a safe and healthy work environment.

Integrating CSR practices brings companies a variety of benefits, such as better brand reputation and image, improvement of employee morale and engagement, competitive advantage, and engagement and relationships with stakeholders.

With CSR, companies create value for themselves and society while contributing to a more sustainable and equitable world.

What are the similarities between ESG and CSR?

ESG and CSR have in common they share a focus by considering similar aspects. They aim to make businesses more responsible and sustainable, benefiting society and the environment by emphasising the importance of these factors.

Both approaches consider the interests of stakeholders, including employees, customers, investors, communities, and the environment.

Moreover, the implementation of ESG and CSR practices often brings companies improved reputations and stronger brand values.

What are the differences between ESG and CSR?

Both ESG and CSR are crucial for modern businesses, but they serve different purposes and are implemented differently.

- **ESG** is more focused on measurable outcomes and is often tied to specific metrics and reporting standards. **CSR** is more about voluntary actions and commitments without strictly defined reporting requirements.
- **ESG** is assessed by investors to evaluate companies' sustainability and ethical practices for making investment decisions. **CSR** is generally more about the company's internal policies and community engagement.
- **ESG** is integrated into the core strategy and operations of a company, influencing decision-making at all levels. **CSR** often operates as a separate program or initiative within the company.

Country	GHG Emission Goals	Key Strategy
Germany	65% reduction from 1990 levels	Expansion of renewable energy sources
France	40% reduction from 1990 levels	Promotion of energy efficiency in buildings
Netherlands	49% reduction from 1990 levels	Investment in sustainable transport

GHG Emission goals

IMAGE SOURCE: LECTURA GmbH

Although there are differences by regions and industries towards ESG and CSR practices, CSR is generally voluntary. Companies choose to engage in CSR activities to improve their reputation and meet the expectations of stakeholders. But although the CSR itself is not bound by law, certain aspects may be covered by other laws and regulations (for example, labour practices and non-discrimination).

On the other hand, ESG is becoming increasingly regulated. Regulations can require companies to disclose certain ESG-related information. The examples of regulations used in some regions are as follows:

- European Union: The EU has introduced regulations like the Non-Financial Reporting Directive (NFRD) and the Sustainable Finance Disclosure Regulation (SFDR), which require certain companies to disclose information on their ESG activities.

- United States: The SEC has proposed rules that would require companies to disclose climate-related risks and greenhouse gas emissions.

GHG Protocol

What is the GHG Protocol?

The GHG Protocol (Greenhouse Gas Protocol) is an internationally recognised standard for measuring, managing, and reporting greenhouse gas emissions. It provides a comprehensive framework and guidelines for companies and other organisations to account for their emissions in a consistent and transparent manner.

GHG Protocol was established to serve the following purposes:

- Create a consistent framework for measuring and reporting GHG emissions globally.
- Enhance transparency in corporate GHG accounting and reporting.
- Help organisations identify emission reduction opportunities and support global efforts to reduce global warming.

What is defined in the GHG Protocol?

- Emissions calculation: Detailed methods for quantifying emissions from various sources.
- Emissions classification: Categorising emissions into Scope 1 (direct), Scope 2 (indirect from purchased energy), and Scope 3 (all other indirect emissions).
- Reporting Emissions: Guidelines for transparent and consistent reporting of emissions.
- Verification and Assurance: Standards for verifying and assuring the accuracy of GHG emissions reports.

Who does the GHG Protocol apply to?

Companies across various sectors may use GHG protocol to measure and manage their greenhouse gas emissions. Manufacturers can also use it to track emissions from their operations and supply chains.

However, the GHG Protocol is not limited to companies and businesses. It can be used by a wide range of entities:

- Governments
- Cities and municipalities
- Non-governmental organisations (NGOs)
- Suppliers
- Investors
- Financial institutions
- Academic and research institutions

What are the GHG Protocol standards?

The GHG Protocol offers several standards designed to help various needs of different organisations and sectors. The standards provide a framework for businesses, governments, and other entities to measure and report their greenhouse gas emissions in ways that support their missions and goals.

- **Corporate Standard (Corporate Accounting and Reporting Standard):** Provides guidance for companies and other organisations that are preparing a corporate-level GHG emissions inventory. It covers all scope 1, scope 2, and scope 3 emissions.
- **GHG Protocol for Cities (Global Protocol for Community-Scale Greenhouse Gas Emission Inventories):** The so-called GPC provides a framework to cities and communities to account and report city-wide greenhouse gas emissions.
- **Mitigation Goal Standard:** A guidance to countries and cities to design (sub)national goals. It also includes guidance to develop an approach for assessing and reporting progress toward climate goals at all levels.

- **Corporate Value Chain (Scope 3) Standard:** Enables companies and organisations to assess their entire value chain emissions impact and identify where to focus efforts to reduce carbon emissions.
- **Policy and Action Standard:** Best suited for countries and cities provides an approach to estimate the greenhouse gas effect of policies and actions.
- **Product Standard:** Helps to understand the full life cycle emissions of a product, enabling to allocate the efforts towards the greatest GHG reduction opportunities.
- **Project Protocol (GHG Protocol for Project Accounting):** The most comprehensive, policy-neutral accounting tool used by various stakeholders of climate change to quantify the greenhouse gas benefits of climate change mitigation projects.

Scope 1, Scope 2, and Scope 3 emissions

What are Scope 1, Scope 2, and Scope 3 emissions?

To identify and manage total greenhouse gas emissions, the GHG Protocol defines three categories of emissions based on their source. These are so-called scope 1, scope 2, and scope 3 emissions.

- Scope 1: Direct emissions from owned or controlled sources
- Scope 2: Indirect emissions from the generation of purchased energy
- Scope 3: All other indirect emissions from activities in the value chain, both upstream and downstream.

The unified classification helps report emissions consistently, transparently and enables comparability across organisations and sectors.

Measurement method	Description	Use cases
Direct Measurement	Collects real-time emissions data through atmospheric observations using towers, aircraft, and satellites.	Urban emissions studies, regulatory compliance
Emission Factors	Calculates total emissions based on activity levels and corresponding emission factors.	Corporate GHG assessments, household carbon footprint analysis
Bottom-Up Approach	Estimates national emissions by aggregating activity-level data across sectors.	National climate pledges, policy formulation

Measurement method

IMAGE SOURCE: LECTURA GmbH

What are Scope 1 emissions?

Scope 1 emissions originate from sources that are owned or controlled by the company. To calculate Scope 1 emissions, it is necessary to know and measure all direct emissions sources.

Examples of Scope 1 emissions:

- Emissions from company-owned or vehicles
- Emissions from chemical production in factories
- Gas burned in boilers, furnaces, or heaters

- Diesel used in generators

What are Scope 2 emissions?

Scope 2 emissions are indirect emissions from the consumption of purchased energy, such as electricity, steam, heat, or cooling. For Scope 2 emissions calculation, a company needs to determine the amount of purchased energy and use the right emission factors provided by the supplier.

Examples of Scope 2 emissions:

- Electricity used in buildings, manufacturing plants, or data centres
- Steam purchased for heating or used in industrial processes
- Heating and cooling services provided by a third party

What are Scope 3 emissions?

Scope 3 emissions are all other indirect emissions that occur in a company's value chain (upstream and downstream). There might be a wide range of sources of the emissions making the calculation more complex, and requiring gathering data from various parts of the value chain, including suppliers and end-users.

Examples of Scope 3 emissions:

- Emissions from raw materials production and components purchased.
- Emissions from the extraction, production, and transportation of fuels used by the company.
- Emissions from the treatment and disposal of waste generated by the company.
- Emissions from the disposal and recycling of products sold by the company.

Sustainability consulting services

What is sustainability consulting?

Sustainability consulting involves providing expert advice to organisations on how to operate in an environmentally, socially, and economically sustainable manner, including analyses, definition of strategic directions and non-financial reporting.

What does a sustainable consultant do?

Sustainability consultants help companies develop strategies to minimise their environmental impact, improve their social responsibility, and enhance their overall sustainability performance. They work closely with the clients assessing criteria such as materials used and the waste produced, and management of energy, water, air and land.

What kind of activities fall under sustainability consulting services?

- Development of strategy: creating long-term plans to integrate sustainability into the core business strategy.
- Assessment of environmental impact: evaluating the environmental footprint of operations, products, and services.
- Measuring and analysing emissions.
- Audit of energy efficiency: Identifying areas where to reduce energy consumption.
- Evaluation of the supply chain sustainability: Ensuring that suppliers and partners act in accordance with sustainability standards.
- Reporting and Disclosure: Assisting with sustainability reporting and presentation of the figures (including ESG and CSR).
- Engaging with stakeholders to understand their sustainability expectations and concerns.

✉ Interested in ESG reporting? Let's Talk!

Discover how tracking your heavy equipment emissions can drive a huge impact on your business. Contact LECTURA at info@lectura.de to connect with our experts and explore the best solutions for your sustainability goals.

Source: LECTURA GmbH