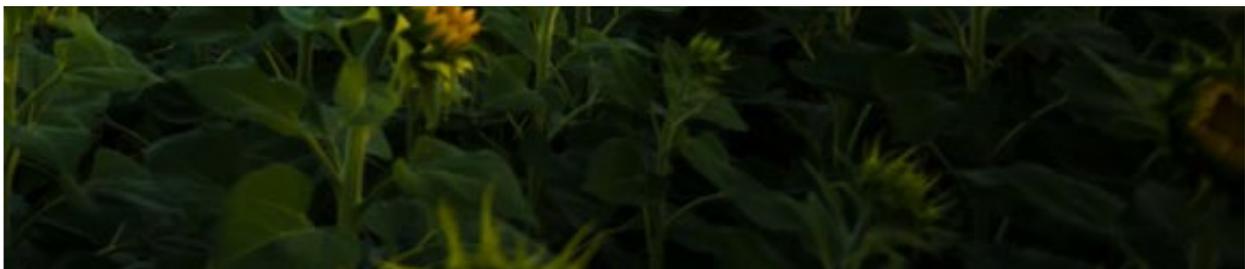




# ESG DICTIONARY





NTG Environmental is a sustainability and environmental consulting firm based in Houston, Texas. We specialize in providing the energy industry with solutions to meet an ever-changing landscape.

#### OUR PURPOSE

We help our clients be environmental stewards through customized, practical, and sustainable environmental solutions.

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# ESG TERMS AND DEFINITIONS

## Benchmarking

The practice of comparing environmental, social, and governance metrics with other companies with the same metrics.

## Blue Hydrogen

Hydrogen generation from fossil fuel coupled with capture and storage of the produced carbon. Although biomass, coal, and other hydrocarbon liquids can be gasified to generate H<sub>2</sub>, natural gas can be formed from H<sub>2</sub> using Steam-methane reforming (SMR) or autothermal reforming making capture of CO<sub>2</sub> simpler than other methane combustion applications and easier to sequester.

## Carbon Capture and Storage

Carbon capture and storage (CCS) is the process of capturing waste CO<sub>2</sub> and placing it into a geological storage site in such a way that it will not enter the atmosphere and contribute to further global warming. CCS uses several technologies including absorption, chemical looping, and membrane gas separation.

## Carbon Footprint

A measure of the total greenhouse gas emissions produced by an individual, group, or company over a set time period.

## Carbon Pricing

Carbon pricing is a price or tax applied to carbon pollution. It can be an effective way to encourage emitters to reduce their CO<sub>2</sub> emissions and thereby limit climate change. Carbon prices can be in the form of a carbon tax, or form part of carbon emissions trading, where 'allowances' are issued and traded.

## Carbon Sequestration

Carbon sequestration is a proposed way to slow the accumulation of greenhouse gases, mitigate climate change, and avoid climate change through long-term storage of CO<sub>2</sub> and other forms of carbon.

### **CDP - (formerly Carbon Disclosure Project)**

CDP, formerly known as the Carbon Disclosure Project, is an organization which supports companies and cities to voluntarily disclose their environmental impact. Investors are the primary audience. Disclosures are made via the CDP survey/database. It aims to make environmental reporting and risk management a business norm and drive disclosure, insight, and action towards a sustainable economy.

### **CDSB - Climate Disclosure Standards Board**

A voluntary reporting framework for disclosing material environmental information in mainstream financial reports and natural capital and climate change-related information.

### **Circular Economy**

A circular economy is a systematic approach to economic development with the goal of eliminating waste by focusing on a regenerative design and attempting to promote growth while reducing consumption of finite resources.

### **Climate Action Tracker**

The Climate Action Tracker is an independent scientific body that tracks decarbonization initiatives by governments and measures them against the goals of the Paris Agreement. This seeks to limit the rise in global temperatures to well below 2°C above pre-industrial levels, and to pursue efforts to keep the rise to 1.5°C by the end of this century.

The tracker is a collaboration between two German organizations, Climate Analytics and New Climate Institute, that was founded in 2009 and is based in Berlin. It tracks data from 36 countries plus the EU, covering about 80% of global greenhouse gas emissions and about 70% of the world's population.

### **Climate Change**

Climate change is a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates.

### **Climate Clock**

A climate clock is a means of demonstrating how much carbon can still be released into the atmosphere without breaching the Paris Agreement. Two of the best known are the MCC Carbon Clock run by German scientists and a grassroots Climate Clock launched by a network of activists.

## Climate funds

Climate funds are investment portfolios that seek to buy the equities or bonds of companies that are aligned with the goals of the Paris Agreement. They can also target the sovereign bonds of governments that are cutting greenhouse gas emissions, thereby reducing their contribution to global warming.

## Corporate Citizenship

The concept that corporations have both rights and obligations to the societies and jurisdictions in which they operate and are themselves stakeholders within society.

## Corporate Governance

The set of rules, practices and processes by which a company is managed (governed) and management is supervised.

## Corporate Responsibility

The responsibility of corporations to generate profit in an ethical way. Taking responsibility for a company's impact on the environment and society.

## CSR - Corporate Social Responsibility

The responsibility of corporations to contribute positively to society. A corporation's self-regulation that aims to contribute to societal goals of a philanthropic, activist, or charitable nature by engaging in or supporting volunteering or ethically-oriented practices.

## CSR Report

A CSR report is a periodic (usually annual) report published by companies with the goal of sharing their corporate social responsibility actions and results.

## Decarbonization

Decarbonization is the reduction in the carbon intensity of worldwide energy use. In line with this development, investment portfolios can also be decarbonized.

## Engagement

A long-term active dialogue between investors and companies on environmental, social, and governance factors.

## Environmental Factors

Issues relating to the quality and functioning of the natural environment and natural systems, identified or assessed in responsible investment processes.

## ESG - Environmental, Social, Governance

Three central factors in measuring the sustainability and societal impact of an investment in a company or business. These criteria help to better determine the future financial performance of companies.

## ESG Funds

ESG funds are portfolios of equities and/or bonds for which environmental, social and governance factors have been integrated into the investment process. This means the equities and bonds contained in the fund have passed stringent tests over how sustainable the company or government is regarding its ESG criteria.

## ESG Integration

The structural integration of information on Environmental, Social and Governance (ESG) factors into the investment decision making process.

## Fair Trade

Fair trade is a methodology with the goal of helping ensure that producers in developing countries are provided sustainable and equitable trade relationships.

## Global Warming

Scientists define global warming as the human-produced temperature increase since the early 20<sup>th</sup> century due to fossil fuel burning, which increase heat-trapping greenhouse gas levels in Earth's atmosphere, raising the average surface temperature.

## Grey Hydrogen

The use of fossil fuel for H<sub>2</sub> production. Current methods for making ammonia for fertilizers, refine metals, and produce methanol for plastics. The resulting CO<sub>2</sub> emissions are simply vented, increasing greenhouse gas emissions.

## GHG - Greenhouse Gases

GHG is any gas that absorbs infrared radiation in the atmosphere, thereby trapping heat and contributing to the greenhouse effect. Greenhouse gases include, but are not limited to, water vapor, carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs), ozone (O<sub>3</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

## GIIN - Global Impact Investing Network

A nonprofit organization dedicated to increasing the scale and effectiveness of impact investing which are investments made to generate a social & environmental impact alongside a financial return.

## Governance Factors

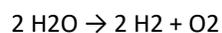
Issues relating to the governance of companies and other investee entities, identified or assessed in responsible investment processes.

## Green Bonds

A green bond is a bond specifically earmarked to be used for environmental and climate-related projects. These debt securities are typically asset-linked and backed by the issuer's balance sheet. Climate bonds are a subset of green bonds.

## Green Hydrogen

The production of H<sub>2</sub> using an electrolysis method where water is split and electrical power (fuel source) has zero GHG emissions (i.e. - nuclear, solar, wind).



## Greenhouse Gas Protocol

The most widely used international accounting tool for government and business to understand, quantify, and manage greenhouse gas emissions.

## Greenwashing

Promoting a product, service, or company as more environmentally-friendly than it truly is by falsely advertising environmental benefits.

## GRESB - Global Real Estate Sustainability Benchmark

GRESB is an investor-led and mission-driven initiative to provide ESG data on real asset investments to investors, managers and the wider industry. GRESB Assessments provide a consistent framework to measure ESG performance based on self-reported data that is validated, scored and peer benchmarked. Their approach allows investors to analyze their portfolios for ESG risks, opportunities and impacts and engage with managers on their performance.

## GRI - Global Reporting Initiative

A voluntary global reporting framework used by thousands of companies and governments worldwide. It is an independent organization that lays out a set of international standards to help business and government entities understand and communicate their impact on issues like climate change and human rights. Disclosures are typically made in sustainability reports.

## IIRC - International Integrated Reporting Council

An international cross section of leaders from the corporate, investment, accounting, securities, regulatory, academic and standard-setting sectors and civil society. Promotes communication about value creation as the next step in the evolution of corporate reporting.

## International Integrated Reporting Framework

Created IIRC, the International Integrated Reporting Framework is used to accelerate the adoption of integrated reporting across the world. An integrated report is a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term.

## ILO - International Labour Organization

A United Nations agency that sets international labour standards and promotes social protection and work opportunities for all. ILO brings together governments, employers and workers of 187 member States to set labour standards, develop policies, and devise programs promoting decent work for all women and men.

## Impact Investing

Impact investing refers to investments made with the intention to generate a measurable, beneficial social or environmental impact alongside a financial return. Impact investments provide private capital to address social and/or environmental issues.

## Integrated Reporting

Communicating both sustainability and financial targets and results in one report, linking them to each other.

## Investment Stewardship

Investment stewardship involves engaging public companies as a way to advocate for corporate governance policies and practices that promote long-term stakeholder value creation.

## IPCC - Intergovernmental Panel on Climate Change

The IPCC was established jointly by the United Nations Environment Programme and the World Meteorological Organization in 1988. The purpose of the IPCC is to assess information related to all significant components of the issue of climate change by drawing upon hundreds of the world's expert scientists as authors and thousands more as expert reviewers.

IPCC releases periodic assessments of the scientific underpinnings for understanding global climate change and its consequences. The IPCC is looked to as the official advisory body to the world's governments on the state of the science on climate change.

The IPCC's Fifth Assessment Report was a critical scientific input into the UNFCCC's Paris Agreement in 2015. IPCC input also played a major part in the Business Roundtable's Statement on the Purpose of a Corporation, signed by 181 CEOs who commit to lead their companies for the benefit of all stakeholders – customers, employees, suppliers, communities and shareholders.

## Materiality

Materiality is a measure of the importance of specific topics and information during the investment process. The more significant a topic is, the more material it is, and vice versa.

## Millennium Development Goals (MDGs)

The Millennium Development Goals (MDGs) were eight goals to improve human society launched by the United Nations in 2000. They were mainly aimed at helping the world's poorest people, led by the starvation that was seen in many developing countries. They were succeeded by the Sustainable Developments Goals (SDGs) launched in 2015.

The eight Millennium Development Goals were:

1. Eradicate extreme poverty and hunger;
2. Achieve universal primary education;
3. Promote gender equality and empower women;
4. Reduce child mortality;
5. Improve maternal health;
6. Combat HIV/AIDS, malaria, and other diseases;
7. Ensure environmental sustainability
8. Develop a global partnership for development.

## Net Zero

Net zero refers to buildings with zero net energy consumption, meaning the amount of energy used at the property is equal to the amount of renewable energy created on-site.

## Paris Agreement

The Paris Agreement is an international accord that aims to limit the rise in global average temperatures to below 2 degrees Celsius above pre-industrial levels by the end of this century, and to pursue efforts to limit it to 1.5 degrees.

## Physical Risk

Physical risks are outcomes from disruptive events like extreme weather that have a direct impact on society and the economy.

## Principles for Responsible Investment - PRI

Principles for Responsible Investment is a United Nations-supported international network of investors working together to implement its six aspirational principles, often referenced as "the Principles" or UN PRI.

## Renewable Energy Certificates - RECs

Renewable Energy Certificates (also known as green tags, renewable energy credits, renewable electricity certificates, or tradable renewable certificates) are non-tangible energy commodities in the U.S. that represent proof of 1 megawatt-hour of electricity being generated from an eligible renewable energy source and used in a shared system of power lines.

## Renewable Energy

Energy attained from perpetual, unending sources, such as collection of energy with solar panels or wind turbines.

## Resilience

Resilience is a measure of how well a building is prepared for potentially disruptive events and changing conditions, such as earthquake-proofing or features designed to combat negative effects from long-term risks like climate change.

## Resource sustainability

Resource sustainability refers to the long-term availability of a raw material that is either renewable (it can naturally replenish itself) or non-renewable (it will eventually run out). It is an important metric for sustainable investors in understanding how quickly humans are using the Earth's dwindling resources, how much can be replaced or recycled, and how long other materials have left before they are exhausted.

## Responsible Investing

A philosophy that includes ESG factors during the investment selection, portfolio construction, and monitoring processes, with the goal of maximizing opportunities, ensuring high performance, and mitigating risks.

## SASB - Sustainability Accounting Standards Board

Sustainability Accounting Standards Board (SASB) is a voluntary sustainability reporting framework for U.S. publicly listed companies with a unique sector-based materiality approach. It is an investor-driven and business focused framework. SASB encourages integrated disclosure in a company's financial filings.

SASB's Chair Emeritus is Michael Bloomberg (he also chairs TCFD). Their primary chair is Robert Steele, and former SEC chair Mary Schapiro and former FASB chair Robert Herz also hold seats on the SASB board.

## SBTs - Science Based Targets

Targets adopted by companies to reduce greenhouse gas (GHG) emissions are considered “science-based” if they are in line with the level of decarbonization required to keep global temperature increase below 2 degrees Celsius compared to pre-industrial temperatures, as described in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5). The Science Based Targets initiative (SBTi) is a collaboration between CDP, the United Nations Global Compact (UNGC), World Resources Institute (WRI), and the World Wide Fund for Nature (WWF) and one of the We Mean Business Coalition commitments, to champion science-based target setting as a powerful way of boosting companies' competitive advantage in the transition to a low carbon economy.

## Scope I Emissions

Scope I emissions are greenhouse gas emissions that your company is directly responsible for, such as emissions from on-site burning of fossil fuels or emissions from fleet vehicles.

## Scope II Emissions

Scope II emissions are greenhouse gas emissions from sources that your company owns or controls, such as the generation of electricity, heat, or steam purchased from a utility provider.

## Scope III Emissions

Scope III emissions are greenhouse gas emissions from sources your company doesn't own or control but are related to your operations, such as employee commuting or contracted solid waste and wastewater disposal.

## SDG Alignment

Aligning business strategies and operations with the 17 Sustainable Development Goals created by the United Nations Global Compact.

## SEC Climate & ESG Task Force

The U.S. Securities and Exchange Commission (SEC) recently announced the formation of a Climate and ESG Task Force within their Division of Enforcement. This new task force will work to develop initiatives that will proactively identify ESG-related misconduct.

## Sustainable Finance Disclosure Regulations - SFDR

The Sustainable Finance Disclosure Regulations introduced various disclosure-related requirements for financial market participants and financial advisors at entity, service, and product level.

## Social Factors

The "S" in ESG, social factors relate to how a company treats employees and the community, and includes things like employee engagement programs, human rights policies, health and wellbeing initiatives, and employee and consumer protection.

## Social Risks

Social risks are related to actions a business takes that affect the surrounding community, such as labor and human rights issues or violations and corruption.

## Socially Responsible Investing

Socially responsible investing is the practice of investing money in companies and funds that have positive social impacts. It is an investment strategy that seeks to consider both financial return and social/environmental good.

## Socially Responsible Investing - SRI

Socially responsible investing involves investments considered socially responsible through the nature of the business conducted, which includes factors like socially conscious investing, human rights policies, and emphasis on positive social impacts.

## Stakeholder

A group with an interest in a company that can affect or be affected by business performance. Historically defined as groups like investors, employees, and customers, but the definition has also expanded to include local and global communities, governments, and more.

## Stewardship code

The stewardship code is a code requiring institutional investors to be transparent about their investment processes, engage with investee companies and vote at shareholders' meetings.

## Stranded Asset

Stranded assets are physical assets recorded on a corporate balance sheet whose investment value cannot be recouped and must be written off. Their loss of value can be due to regulatory rulings that mean they cannot be exploited, changing trends in the market that renders them redundant, or obsolescence caused by superior technology.

## Sustainable Investing

Sustainable investing is broadly defined as the practice of using environmental, social and governance (ESG) factors when making investment decisions about which stocks or bonds to buy.

## Sustainability

Sustainability focuses on meeting the needs of the present without compromising the ability of future generations to meet their needs. The concept of sustainability is composed of three pillars: economic, environmental, and social —also known informally as profit, planet, and people.

## Sustainability Reporting

Sustainability reporting is the act of disclosing the environmental, social and governance (ESG) policies of an organization, and the impact these policies have on both internal performance and on wider society.

## TCFD - Task Force on Climate-related Financial Disclosures

TCFD is a powerful organization tasked by the global Financial Stability Board with bringing uniformity to climate-related corporate risk disclosure. It released a voluntary reporting framework for companies in G20 countries in financial and four non-financial industry groups.

The four other industry groups are energy, transportation, materials and buildings, and agriculture (both food and forest products.) Investors, lenders and underwriters are the primary audience. TCFD emphasizes the use of climate risk scenario analysis to assess the resiliency of business strategies. TCFD prefers integrated disclosure in financial filings but leaves the option to companies as to where to disclose. The other frameworks, including GRI, SASB, CDP, and CDSB aligned their reporting frameworks to the TCFD recommendations.

## Transition Risks

Transition risks relate to major societal and economic shifts, such as moving towards a less polluting, green economy. These paradigm shifts can have major impacts on various industries and sectors of the economy.

## Triple Bottom Line

The triple bottom line embraces the notion of focusing on 'people, planet, profit' when making business and investment decisions, and not just on the profit motive. The term was first introduced to expand the traditional definition of a 'bottom line', which is the net profit made by a company after all its costs have been accounted for. It is also known as the 'three Ps' and provided an early framework for sustainable investing.

## UNGC - United Nations Global Compact

UNGC is a non-binding United Nations agreement to encourage businesses worldwide to adopt sustainable and socially responsible policies grounded in 10 principles on human rights, labor, environment, and anti-corruption.

## UNPRB - United Nations Principles of Responsible Banking

These are six principles that shape a framework for a sustainable banking system and will help the industry to demonstrate how it makes a positive contribution to society. The areas of strategy covered by these principles are alignment, impact & target setting, clients & customers, stakeholders, governance and culture, and transparency & accountability. The Principles for Responsible Banking were launched by 130 banks from 49 countries, representing more than USD \$47 trillion in assets.

## UNPRI - United Nations Principles of Responsible Investment

A set of six principles that provide a global standard for responsible investing as it relates to environmental, social and corporate governance (ESG) factors. Organizations follow these principles to meet commitments to beneficiary's while aligning investment activities with the broader interests of society. There are 2372 signatories with a combined USD \$86 trillion in asset under management in 2019.

- Principle 1: We will incorporate ESG issues into investment analysis and decision-making processes.
- Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices.
- Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- Principle 4: We will promote acceptance and implementation of the Principles within the investment industry.
- Principle 5: We will work together to enhance our effectiveness in implementing the Principles.
- Principle 6: We will each report on our activities and progress towards implementing the Principles.

## UN SDG - United Nations Sustainable Development Goals

The Sustainable Development Goals (SDGs) are 17 objectives for improving human society, ecological sustainability and the quality of life published by the United Nations in 2015. They cover a broad spectrum of sustainability topics, ranging from eliminating hunger and combating climate change to promoting responsible consumption and making cities more sustainable. The SDGs are the successor to the Millennium Development Goals (MDGs), eight objectives launched in 2000. The goals recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth.

## Zero Waste

A set of principles that focus on preventing the generation of waste by redesigning products, rethinking how products are used, and reusing products with the goal that no waste is sent to landfills.



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