Glossary

Absolute target	A target defined by reduction in absolute emissions over time e.g., reduces CO_2 emissions by 25% below 1994 levels by 2010. (Chapter 11)
Additionality	A criterion for assessing whether a project has resulted in GHG emission reductions or removals in addition to what would have occurred in its absence. This is an important criterion when the goal of the project is to offset emissions elsewhere. (Chapter 8)
Allowance	A commodity giving its holder the right to emit a certain quantity of GHG. (Chapter 11)
Annex 1 countries	Defined in the International Climate Change Convention as those countries taking on emissions reduction obligations: Australia; Austria; Belgium; Belarus; Bulgaria; Canada; Croatia; Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Iceland; Ireland; Italy; Japan; Latvia; Liechtenstein; Lithuania; Luxembourg; Monaco; Netherlands; New Zealand; Norway; Poland; Portugal; Romania; Russian Federation; Slovakia; Slovenia; Spain; Sweden; Switzerland; Ukraine; United Kingdom; USA.
Associated/affiliated company	The parent company has significant influence over the operating and financial policies of the associated/affiliated company, but not financial control. (Chapter 3)
Audit Trail	Well organized and transparent historical records documenting how an inventory was compiled.
Baseline	A hypothetical scenario for what GHG emissions, removals or storage would have been in the absence of the GHG project or project activity. (Chapter 8)
Base year	A historic datum (a specific year or an average over multiple years) against which a company's emissions are tracked over time. (Chapter 5)
Base year emissions	GHG emissions in the base year. (Chapter 5)
Base year emissions recalculation	Recalculation of emissions in the base year to reflect a change in the structure of the company, or to reflect a change in the accounting methodology used. This ensures data consistency over time, i.e., comparisons of like with like over time. (Chapter 5, 11)
Biofuels	Fuel made from plant material, e.g. wood, straw and ethanol from plant matter (Chapter 4, 9, Appendix B)
Boundaries	GHG accounting and reporting boundaries can have several dimensions, i.e. organizational, operational, geographic, business unit, and target boundaries. The inventory boundary determines which emissions are accounted and reported by the company. (Chapter 3, 4, 11)
Cap and trade system	A system that sets an overall emissions limit, allocates emissions allowances to participants, and allows them to trade allowances and emission credits with each other. (Chapter 2, 8, 11)
Capital Lease	A lease which transfers substantially all the risks and rewards of ownership to the lessee and is accounted for as an asset on the balance sheet of the lessee. Also known as a Financial or Finance Lease. Leases other than Capital/Financial/Finance leases are Operating leases. Consult an accountant for further detail as definitions of lease types differ between various accepted financial standards. (Chapter 4)
Carbon sequestration	The uptake of CO_2 and storage of carbon in biological sinks.
Clean Development Mechanism (CDM)	A mechanism established by Article 12 of the Kyoto Protocol for project-based emission reduction activities in developing countries. The CDM is designed to meet two main objectives: to address the sustainability needs of the host country and to increase the opportunities available to Annex 1 Parties to meet their GHG reduction commitments. The CDM allows for the creation, acquisition and transfer of CERs from climate change mitigation projects undertaken in non-Annex 1 countries.

Certified Emission Reductions (CERs)	A unit of emission reduction generated by a CDM project. CERs are tradable commodities that can be used by Annex 1 countries to meet their commitments under the Kyoto Protocol.
Co-generation unit/Combined heat and power (CHP)	A facility producing both electricity and steam/heat using the same fuel supply. (Chapter 3)
Consolidation	Combination of GHG emissions data from separate operations that form part of one company or group of companies. (Chapter 3, 4)
Control	The ability of a company to direct the policies of another operation. More specifically, it is defined as either operational control (the organization or one of its subsidiaries has the full authority to introduce and implement its operating policies at the operation) or financial control (the organization has the ability to direct the financial and operating policies of the operation with a view to gaining economic benefits from its activities). (Chapter 3)
Corporate inventory program	A program to produce annual corporate inventories that are in keeping with the principles, standards, and guidance of the *GHG Protocol Corporate Standard*. This includes all institutional, managerial and technical arrangements made for the collection of data, preparation of a GHG inventory, and implementation of the steps taken to manage the quality of their emission inventory.
CO_2 equivalent (CO_2-e)	The universal unit of measurement to indicate the global warming potential (GWP) of each of the six greenhouse gases, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis.
Cross-sector calculation tool	A GHG Protocol calculation tool that addresses GHG sources common to various sectors, e.g. emissions from stationary or mobile combustion. See also GHG Protocol calculation tools (www.ghgprotocol.org).
Direct GHG emissions	Emissions from sources that are owned or controlled by the reporting company. (Chapter 4)
Direct monitoring	Direct monitoring of exhaust stream contents in the form of continuous emissions monitoring (CEM) or periodic sampling. (Chapter 6)
Double counting	Two or more reporting companies take ownership of the same emissions or reductions. (Chapter 3, 4, 8, 11)
Emissions	The release of GHG into the atmosphere.
Emission factor	A factor allowing GHG emissions to be estimated from a unit of available activity data (e.g. tonnes of fuel consumed, tonnes of product produced) and absolute GHG emissions. (Chapter 6)
Emission Reduction Unit (ERU)	A unit of emission reduction generated by a Joint Implementation (JI) project. ERUs are tradable commodities which can be used by Annex 1 countries to help them meet their commitment under the Kyoto Protocol.
Equity share	The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation. Typically, the share of economic risks and rewards in an operation is aligned with the company's percentage ownership of that operation, and equity share will normally be the same as the ownership percentage. (Chapter 3)
Estimation uncertainty	Uncertainty that arises whenever GHG emissions are quantified, due to uncertainty in data inputs and calculation methodologies used to quantify GHG emissions. (Chapter 7)
Finance lease	A lease which transfers substantially all the risks and rewards of ownership to the lessee and is accounted for as an asset on the balance sheet of the lessee. Also known as a Capital or Financial Lease. Leases other than Capital/Financial/Finance leases are Operating leases. Consult an accountant for further detail as definitions of lease types differ between various accepted accounting principles. (Chapter 4)

Glossary

Fixed asset investment	Equipment, land, stocks, property, incorporated and non-incorporated joint ventures, and partnerships over which the parent company has neither significant influence nor control. (Chapter 3)
Fugitive emissions	Emissions that are not physically controlled but result from the intentional or unintentional releases of GHGs. They commonly arise from the production, processing transmission storage and use of fuels and other chemicals, often through joints, seals, packing, gaskets, etc. (Chapter 4, 6)
Green power	A generic term for renewable energy sources and specific clean energy technologies that emit fewer GHG emissions relative to other sources of energy that supply the electric grid. Includes solar photovoltaic panels, solar thermal energy, geothermal energy, landfill gas, low-impact hydropower, and wind turbines. (Chapter 4)
Greenhouse gases (GHG)	For the purposes of this standard, GHGs are the six gases listed in the Kyoto Protocol: carbon dioxide (CO_2); methane (CH_4); nitrous oxide (N_2O); hydrofluorocarbons (HFCs); perfluorocarbons (PFCs); and sulphur hexafluoride (SF_6).
GHG capture	Collection of GHG emissions from a GHG source for storage in a sink.
GHG credit	GHG offsets can be converted into GHG credits when used to meet an externally imposed target. A GHG credit is a convertible and transferable instrument usually bestowed by a GHG program. (Chapter 8, 11)
GHG offset	Offsets are discrete GHG reductions used to compensate for (i.e., offset) GHG emissions elsewhere, for example to meet a voluntary or mandatory GHG target or cap. Offsets are calculated relative to a baseline that represents a hypothetical scenario for what emissions would have been in the absence of the mitigation project that generates the offsets. To avoid double counting, the reduction giving rise to the offset must occur at sources or sinks not included in the target or cap for which it is used.
GHG program	A generic term used to refer to any voluntary or mandatory international, national, sub-national, government or non-governmental authority that registers, certifies, or regulates GHG emissions or removals outside the company. e.g. CDM, EU ETS, CCX, and CCAR.
GHG project	A specific project or activity designed to achieve GHG emission reductions, storage of carbon, or enhancement of GHG removals from the atmosphere. GHG projects may be stand-alone projects, or specific activities or elements within a larger non-GHG related project. (Chapter 8, 11)
GHG Protocol calculation tools	A number of cross-sector and sector-specific tools that calculate GHG emissions on the basis of activity data and emission factors (available at www.ghgprotocol.org).
GHG Protocol Initiative	A multi-stakeholder collaboration convened by the World Resources Institute and World Business Council for Sustainable Development to design, develop and promote the use of accounting and reporting standards for business. It comprises of two separate but linked standards—the *GHG Protocol Corporate Accounting and Reporting Standard* and the *GHG Protocol Project Quantification Standard.*
GHG Protocol Project Quantification Standard	An additional module of the GHG Protocol Initiative addressing the quantification of GHG reduction projects. This includes projects that will be used to offset emissions elsewhere and/or generate credits. More information available at www.ghgprotocol.org. (Chapter 8, 11)
GHG Protocol sector specific calculation tools	A GHG calculation tool that addresses GHG sources that are unique to certain sectors, e.g., process emissions from aluminum production. (see also GHG Protocol Calculation tools)
GHG public report	Provides, among other details, the reporting company's physical emissions for its chosen inventory boundary. (Chapter 9)

GHG registry	A public database of organizational GHG emissions and/or project reductions. For example, the US Department of Energy 1605b Voluntary GHG Reporting Program, CCAR, World Economic Forum's Global GHG Registry. Each registry has its own rules regarding what and how information is reported. (Introduction, Chapter 2, 5, 8, 10)
GHG removal	Absorbtion or sequestration of GHGs from the atmosphere.
GHG sink	Any physical unit or process that stores GHGs; usually refers to forests and underground/deep sea reservoirs of CO_2.
GHG source	Any physical unit or process which releases GHG into the atmosphere.
GHG trades	All purchases or sales of GHG emission allowances, offsets, and credits.
Global Warming Potential (GWP)	A factor describing the radiative forcing impact (degree of harm to the atmosphere) of one unit of a given GHG relative to one unit of CO_2.
Group company/subsidiary	The parent company has the ability to direct the financial and operating policies of a group company/subsidiary with a view to gaining economic benefits from its activities. (Chapter 3)
Heating value	The amount of energy released when a fuel is burned completely. Care must be taken not to confuse higher heating values (HHVs), used in the US and Canada, and lower heating values, used in all other countries (for further details refer to the calculation tool for stationary combustion available at www.ghgprotocol.org).
Indirect GHG emissions	Emissions that are a consequence of the operations of the reporting company, but occur at sources owned or controlled by another company. (Chapter 4)
Insourcing	The administration of ancillary business activities, formally performed outside of the company, using resources within a company. (Chapter 3, 4, 5, 9)
Intensity ratios	Ratios that express GHG impact per unit of physical activity or unit of economic value (e.g. tonnes of CO_2 emissions per unit of electricity generated). Intensity ratios are the inverse of productivity/efficiency ratios. (Chapter 9, 11)
Intensity target	A target defined by reduction in the ratio of emissions and a business metric over time e.g., reduce CO_2 per tonne of cement by 12% between 2000 and 2008. (Chapter 11)
Intergovernmental Panel on Climate Change (IPCC)	International body of climate change scientists. The role of the IPCC is to assess the scientific, technical and socio-economic information relevant to the understanding of the risk of human-induced climate change (www.ipcc.ch).
Inventory	A quantified list of an organization's GHG emissions and sources.
Inventory boundary	An imaginary line that encompasses the direct and indirect emissions that are included in the inventory. It results from the chosen organizational and operational boundaries. (Chapter 3, 4)
Inventory quality	The extent to which an inventory provides a faithful, true and fair account of an organization's GHG emissions. (Chapter 7)
Joint Implementation (JI)	The JI mechanism was established in Article 6 of the Kyoto Protocol and refers to climate change mitigation projects implemented between two Annex 1 countries. JI allows for the creation, acquisition and transfer of "emission reduction units" (ERUs).
Kyoto Protocol	A protocol to the United Nations Framework Convention on Climate Change (UNFCCC). Once entered into force it will require countries listed in its Annex B (developed nations) to meet reduction targets of GHG emissions relative to their 1990 levels during the period of 2008–12.

Glossary

Leakage (Secondary effect)	Leakage occurs when a project changes the availability or quantity of a product or service that results in changes in GHG emissions elsewhere. (Chapter 8)
Life Cycle Analysis	Assessment of the sum of a product's effects (e.g. GHG emissions) at each step in its life cycle, including resource extraction, production, use and waste disposal. (Chapter 4)
Material discrepancy	An error (for example from an oversight, omission, or miscalculation) that results in the reported quantity being significantly different to the true value to an extent that will influence performance or decisions. Also known as material misstatement.(Chapter 10)
Materiality threshold	A concept employed in the process of verification. It is often used to determine whether an error or omission is a material discrepancy or not. It should not be viewed as a de minimus for defining a complete inventory. (Chapter 10)
Mobile combustion	Burning of fuels by transportation devices such as cars, trucks, trains, airplanes, ships etc. (Chapter 6)
Model uncertainty	GHG quantification uncertainty associated with mathematical equations used to characterize the relationship between various parameters and emission processes. (Chapter 7)
Non-Annex 1 countries	Countries that have ratified or acceded to the UNFCC but are not listed under Annex 1 and are therefore not under any emission reduction obligation (see also Annex 1 countries).
Operation	A generic term used to denote any kind of business, irrespective of its organizational, governance, or legal structures. An operation can be a facility, subsidiary, affiliated company or other form of joint venture. (Chapter 3, 4)
Operating lease	A lease which does not transfer the risks and rewards of ownership to the lessee and is not recorded as an asset in the balance sheet of the lessee. Leases other than Operating leases are Capital/Financial/Finance leases. Consult an accountant for further detail as definitions of lease types differ between various accepted financial standards. (Chapter 4)
Operational boundaries	The boundaries that determine the direct and indirect emissions associated with operations owned or controlled by the reporting company. This assessment allows a company to establish which operations and sources cause direct and indirect emissions, and to decide which indirect emissions to include that are a consequence of its operations. (Chapter 4)
Organic growth/decline	Increases or decreases in GHG emissions as a result of changes in production output, product mix, plant closures and the opening of new plants. (Chapter 5)
Organizational boundaries	The boundaries that determine the operations owned or controlled by the reporting company, depending on the consolidation approach taken (equity or control approach). (Chapter 3)
Outsourcing	The contracting out of activities to other businesses. (Chapter 3, 4, 5)
Parameter uncertainty	GHG quantification uncertainty associated with quantifying the parameters used as inputs to estimation models. (Chapter 7)
Primary effects	The specific GHG reducing elements or activities (reducing GHG emissions, carbon storage, or enhancing GHG removals) that the project is intended to achieve. (Chapter 8)
Process emissions	Emissions generated from manufacturing processes, such as the CO_2 that is arises from the breakdown of calcium carbonate ($CaCO_3$) during cement manufacture. (Chapter 4, Appendix D)
Productivity/efficiency ratios	Ratios that express the value or achievement of a business divided by its GHG impact. Increasing efficiency ratios reflect a positive performance improvement. e.g. resource productivity(sales per tonne GHG). Productivity/efficiency ratios are the inverse of intensity ratios. (Chapter 9)
Ratio indicator	Indicators providing information on relative performance such as intensity ratios or productivity/efficiency ratios. (Chapter 9)

Renewable energy	Energy taken from sources that are inexhaustible, e.g. wind, water, solar, geothermal energy, and biofuels.
Reporting	Presenting data to internal management and external users such as regulators, shareholders, the general public or specific stakeholder groups. (Chapter 9)
Reversibility of reductions	This occurs when reductions are temporary, or where removed or stored carbon may be returned to the atmosphere at some point in the future. (Chapter 8)
Rolling base year	The process of shifting or rolling the base year forward by a certain number of years at regular intervals of time. (Chapter 5, 11)
Scientific Uncertainty	Uncertainty that arises when the science of the actual emission and/or removal process is not completely understood. (Chapter 7)
Scope	Defines the operational boundaries in relation to indirect and direct GHG emissions. (Chapter 4)
Scope 1 inventory	A reporting organization's direct GHG emissions. (Chapter 4)
Scope 2 inventory	A reporting organization's emissions associated with the generation of electricity, heating/cooling, or steam purchased for own consumption. (Chapter 4)
Scope 3 inventory	A reporting organization's indirect emissions other than those covered in scope 2. (Chapter 4)
Scope of works	An up-front specification that indicates the type of verification to be undertaken and the level of assurance to be provided between the reporting company and the verifier during the verification process. (Chapter 10)
Secondary effects (Leakage)	GHG emissions changes resulting from the project not captured by the primary effect(s). These are typically the small, unintended GHG consequences of a project. (Chapter 8)
Sequestered atmospheric carbon	Carbon removed from the atmosphere by biological sinks and stored in plant tissue. Sequestered atmospheric carbon does not include GHGs captured through carbon capture and storage.
Significance threshold	A qualitative or quantitative criteria used to define a significant structural change. It is the responsibility of the company/verifier to determine the "significance threshold" for considering base year emissions recalculation. In most cases the "significance threshold" depends on the use of the information, the characteristics of the company, and the features of structural changes. (Chapter 5)
Stationary Combustion	Burning of fuels to generate electricity, steam, heat, or power in stationary equipment such as boilers, furnaces etc.
Structural change	A change in the organizational or operational boundaries of a company that result in the transfer of ownership or control of emissions from one company to another. Structural changes usually result from a transfer of ownership of emissions, such as mergers, acquisitions, divestitures, but can also include outsourcing/insourcing. (Chapter 5)
Target base year	The base year used for defining a GHG target, e.g. to reduce CO_2 emissions 25% below the target base year levels by the target base year 2000 by the year 2010. (Chapter 11)
Target boundary	The boundary that defines which GHG's, geographic operations, sources and activities are covered by the target. (Chapter 11)
Target commitment period	The period of time during which emissions performance is actually measured against the target. It ends with the target completion date. (Chapter 11)
Target completion date	The date that defines the end of the target commitment period and determines whether the target is relatively short- or long-term. (Chapter 11)

Target double counting policy	A policy that determines how double counting of GHG reductions or other instruments, such as allowances issued by external trading programs, is dealt with under a GHG target. It applies only to companies that engage in trading (sale or purchase) of offsets or whose corporate target boundaries interface with other companies' targets or external programs. (Chapter 11)
Uncertainty	1. Statistical definition: A parameter associated with the result of a measurement that characterizes the dispersion of the values that could be reasonably attributed to the measured quantity. (e.g., the sample variance or coefficient of variation). (Chapter 7) 2. Inventory definition: A general and imprecise term which refers to the lack of certainty in emissions-related data resulting from any causal factor, such as the application of non-representative factors or methods, incomplete data on sources and sinks, lack of transparency etc. Reported uncertainty information typically specifies a quantitative estimates of the likely or perceived difference between a reported value and a qualitative description of the likely causes of the difference. (Chapter 7).
United Nations Framework Convention on Climate Change (UNFCCC)	Signed in 1992 at the Rio Earth Summit, the UNFCCC is a milestone Convention on Climate Change treaty that provides an overall framework for international efforts to (UNFCCC) mitigate climate change. The Kyoto Protocol is a protocol to the UNFCCC.
Value chain emissions	Emissions from the upstream and downstream activities associated with the operations of the reporting company. (Chapter 4)
Verification	An independent assessment of the reliability (considering completeness and accuracy) of a GHG inventory. (Chapter 10)