GLOSSARY OF TERMS

Activity Data	Measure of a level of activity that results in greenhouse gas (GHG) emissions (e.g., gallons of fuel or kWh of electricity consumed).
Anthropogenic Emissions	GHGs emitted into the atmosphere as a direct result of human activities (i.e., the burning of fossil fuels).
Base Year (or base period)	A benchmark against which an organization's current or future emissions are compared. A base period is referred to as a base year for simplicity.
Base Year Emissions	GHG emissions in the base year.
Biofuel	Fuel made from biomass, including wood and wood waste, sulphite lyes (black liquor), vegetal waste (straw, hay, grass, leaves, roots, bark, crops), animal materials/ waste (fish and food meal, manure, sewage sludge, fat, oil and tallow), turpentine, charcoal, landfill gas, sludge gas, and other biogas, bioethanol, biomethanol, bioETBE, bioMTBE, biodiesel, biodimethylether, fischer tropsch, bio oil, and all other liquid biofuels which are added to, blended with, or used straight as transportation diesel fuel. Biomass also includes the plant or animal fraction of flotsam from water body management, mixed residues from food and beverage production, composites containing wood, textile wastes, paper, cardboard and pasteboard, municipal and industrial waste, and processed municipal and industrial wastes.
Biogenic Emissions	Carbon dioxide (CO_2) generated during the combustion or decomposition of biologically-based material.
Biomass	Non-fossilized and biodegradable organic material originating from plants, animals, and micro-organisms, including products, byproducts, residues and waste from agriculture, forestry and related industries as well as the non-fossilized and biodegradable organic fractions of industrial and municipal wastes, including gases and liquids recovered from the decomposition of non-fossilized and biodegradable organic material.
Calculation-Based	Emission quantification methods that involve the calculation of emissions based on emission factors and activity data such as input material flow, fuel consumption, or product output.
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 finance lease or financial lease. Leases other than capital or finance leases are operating leases. Consult an accountant for further detail as definitions of lease types differ between various accepted financial standards.
Carbon Dioxide Equivalent	(CO_2e) The universal unit for comparing emissions of different GHGs expressed in terms of the global warming potential (GWP) of one unit of carbon dioxide.
Combined Heat and Power	An energy conversion process in which more than one useful product (e.g., electricity and heat or steam) is generated from the same energy input stream.

Consumed Energy	Purchased or acquired electricity, steam, heating, or cooling.
Continuous Emission Monitoring System (CEMS)	Monitors installed in energy and industrial operations to continuously collect, record and report emissions data.
Contractual Instrument	Any type of contract between two parties for the sale and purchase of energy bundled with energy generation attributes, or for unbundled attribute claims. Contractual instruments applied to an inventory must meet the TCR Eligibility Criteria.
Control Approach	An emissions accounting approach for defining organizational boundaries in which an organization reports the GHG emissions from operations under its financial or operational control.
Direct Emissions	Emissions from sources within the reporting organization's organizational boundaries that are owned or controlled by the reporting organization, including stationary combustion emissions, mobile combustion emissions, process emissions, and fugitive emissions.
Direct Line	Energy purchased and received directly from a generation source, with no grid transfers.
Emission Factor	GHG emissions expressed on a per unit activity basis (e.g., metric tons of CO_2 emitted per million Btus of coal combusted, or metric tons of CO_2 emitted per kWh of electricity consumed).
Energy Attribute Certificate	A category of contractual instruments that conveys information about energy generation to organizations involved in the sale, distribution, consumption, or regulation of electricity (e.g., renewable energy certificates).
Equity Share Approach	An emissions accounting approach for defining organizational boundaries that reflects activities that are wholly owned and partially owned according to the organization's equity share in each.
Finance Lease	Same as capital lease.
Financial Control	The ability to direct the financial and operating policies of an operation with an interest in gaining economic benefits from its activities. Financial control is one of two ways to define the control approach.
Fugitive Emissions	Intentional or unintentional releases from the production, processing, transmission, storage, and use of fuels and other substances, that do not pass through a stack, chimney, vent, exhaust pipe or other functionally equivalent opening (such as releases of sulfur hexafluoride from electrical equipment; hydrofluorocarbon releases during the use of refrigeration and air conditioning equipment; landfill gas emissions; and CH_4 leakage from natural gas transport).
Geography	A physical parameter that is used to define the reporting boundary.

Global Warming Potential (GWP)	The ratio of radiative forcing (degree of warming to the atmosphere) that would result from the emission of one unit of a given GHG compared to one unit of carbon dioxide (CO_2).
Greenhouse Gases	(GHG) For the purposes of TCR, GHGs are the internationally recognized gases identified in the Kyoto Protocol: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6) and nitrogen trifluoride (NF_3).
Hydrofluorocarbons	(HFC) A group of manmade chemicals with various commercial uses (e.g., refrigerants) composed of one or two carbon atoms and varying numbers of hydrogen and fluorine atoms. Most HFCs are highly potent GHGs with 100-year GWPs in the thousands.
Indirect Emissions	Emissions that are a consequence of activities that take place within the organizational boundaries of the reporting organization, but that occur at sources owned or controlled by another organization. For example, emissions of electricity used by a manufacturing company that occur at a power plant represent the manufacturer's indirect emissions.
Industry Best Practice	Existing international or industry best practice methods, which are published, peer reviewed calculation and measurement methods or emission factors.
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 comprehensive, quantified list of an organization's GHG emissions and sources.
Inventory Report	The summary of emissions and related information reported as part of an inventory.
Location-Based Method	Scope 2 method that quantifies the average emissions from energy generated and consumed in an organization's geographic region(s) of operations within the organization's defined boundaries, primarily using grid average emission factors.
Market-Based Method	Scope 2 method that quantifies emissions from energy generated and consumed within the organization's defined boundaries, that the organization has purposefully purchased, using emission factors conveyed through contractual instruments between the organization and the electricity or product provider.
Measurement-Based	Emission quantification methods that involve the determination of emissions by means of direct measurement of the flue gas flow, as well as the concentration of the relevant GHG(s) in the flue gas.
Member	An organization that submits an emissions inventory based on the requirements in the General Reporting Protocol to TCR.

Miniscule Sources	Emissions sources listed on TCR's Exclude Miniscule Sources Form which TCR has deemed may be excluded from an inventory without: » Compromising the relevance of the reported inventory; » Significantly reducing the combined quantity of Scope 1, Scope 2, and biogenic CO_2e emissions reported; » Impacting ability to identify the member's viable opportunities for emissions reductions projects; » Impacting the ability to ascertain whether the member has achieved a reduction (of five percent or greater) in total entity-wide emissions from one year to the next; » Impacting ability to assess the member's climate change related risk exposure; or, » Impacting the decision-making needs of users.
Mobile Emissions	Emissions from the combustion of fuels in transportation sources (e.g., cars, trucks, buses, trains, airplanes, and marine vessels), emissions from non-road equipment such as equipment used in construction, agriculture, and forestry and other mobile sources.
Mobile Source	Emissions sources designed and capable of emitting GHGs while moving from one location to another. An emissions source is not a mobile source if it is a piece of equipment that is designed and capable of being moved from one location to another but does not combust fuel while it is being moved (e.g., an emergency generator).
Nitrogen Trifluoride	NF_3 is used as a replacement for PFCs (mostly C_2F_6) and SF_6 in the electronics industry. It is typically used in plasma etching and chamber cleaning during the manufacture of semi-conductors and LCD panels (Liquid Crystal Display). NF_3 is broken down into nitrogen and fluorine gases in situ, and the resulting fluorine radicals are the active cleaning agents that attack the poly-silicon. NF_3 is also used in the photovoltaic industry (thin-film solar cells) for "texturing, phosphorus silicate glass (PSG) removal, edge isolation and reactor cleaning after deposition of silicon nitrate or film silicon." NF_3 is further used in hydrogen fluoride and deuterium fluoride lasers, which are types of chemical lasers.
Non-Electric Energy Use	Consumption of energy other than electricity (i.e., steam, heat, cooling).
Offsets	Represent the reduction, removal, or avoidance of GHG emissions from a specific project that is used to compensate for (i.e., offset) GHG emissions occurring elsewhere.
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, finance, or financial leases.
Operational Control	Full authority to introduce and implement operating policies at an operation. Operational control is one of two ways to define the control approach.

Organization	A business, corporation, institution, organization, government agency, etc., recognized under national law. A reporting organization is comprised of all the facilities and emission sources delimited by the organizational boundary developed by the organization, taken in their entirety.
Organizational Boundaries	The boundaries that determine the operations owned or controlled by the reporting organization, depending on the consolidation approach taken (either the equity share or control approach).
Perfluorocarbons	(PFC) A group of man-made chemicals composed of one or two carbon atoms and four to six fluorine atoms, containing no chlorine. PFCs have no commercial uses and are emitted as a byproduct of aluminum smelting and semiconductor manufacturing. PFCs have very high GWPs and are very long-lived in the atmosphere.
Process Emissions	Emissions resulting from physical or chemical processes other than from fuel combustion. Examples include emissions from manufacturing cement, aluminum, adipic acid, ammonia, etc.
Purchase Power Agreement	(PPA) A type of contract that allows a consumer, typically a large industrial or commercial entity, to form an agreement with a specific energy generating unit. The contract itself specifies the commercial terms including delivery, price, payment, etc. In many markets, these contracts secure a long-term stream of revenue for an energy project. In order for the consumers to say they are buying the electricity of the specific generator, attributes must be contractually transferred to the consumer with the electricity.
Relevant GHG Sources	Categories of emission sources that must be included within the reporting boundary for TCR to consider the inventory "complete" for the purposes of reporting to TCR. Relevant emissions consist of Scope 1 and Scope 2 emissions, combustion-based direct biogenic emissions, and combustion-based indirect biogenic emissions associated with the consumption of energy. Approved miniscule sources, biogenic emissions other than those associated with the combustion of biomass, and emission sources identified as optional in the protocols are not considered relevant.
Renewable Energy Certificate	(REC) A type of energy attribute certificate. In the U.S. a REC represents the property rights to the environmental, social and other non-power qualities of renewable electricity generation.
Reporting Boundary	The boundary that determines the direct and indirect emissions associated with activities within the inventory.
Reporting Year	The year in which the emissions occurred. Members must report emissions on an annual basis (i.e., calendar year or fiscal year).
Residual Mix	Subnational or national emission factor that uses energy production data and factors out voluntary purchases.
Scope 1 Emissions	Direct anthropogenic GHG emissions.

Scope 2 Emissions	Indirect anthropogenic GHG emissions associated with the consumption of purchased or acquired electricity, steam, heating, or cooling (collectively referred to as consumed energy).
Scope 3 Emissions	All other (non-Scope 2) indirect anthropogenic GHG emissions that occur in the value chain. Examples include upstream and downstream emissions, emissions resulting from the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting organization, use of sold products and services, outsourced activities, recycling of used products, and waste disposal.
Simplified Estimation Methods	(SEMs) Rough, upper-bound methods for estimating emissions. Members may use SEMs for any combination of emission sources and/or gases, provided that corresponding emissions do not exceed 10% of the CO_2e sum of reported Scope 1, Scope 2, combustion-based direct biogenic emissions and combustion-based indirect biogenic emissions associated with consumed energy. The higher Scope 2 total must be used to total Scope 1, Scope 2, combustion-based direct biogenic emissions and combustion-based indirect biogenic emissions associated with consumed energy.
Special Power Product	(SPP) A consumer option offered by an energy supplier distinct from the standard offering. The electricity associated with SPPs is often derived from renewable or other low-carbon energy sources, demonstrated by energy attribute certificates or other contracts.
Stationary Combustion Emissions	Emissions from the combustion of fuels in any stationary equipment including boilers, furnaces, burners, turbines, heaters, incinerators, engines, flares, etc.
Stationary Source	An emissions source that is confined to a distinct geographic location and is not designed to operate while in motion.
Verification	The process used to ensure that an organization's greenhouse gas emissions inventory has met a minimum quality standard and complied with TCR's procedures and protocols for calculating and reporting GHG emissions.