

Acknowledgments:

these Definitions sourced largely from:

City of Seattle Department of Planning and Development:

<http://www.seattle.gov/dpd/GreenBuilding/OurProgram/Resources/Greenbuildingglossary/default.asp>

and the Greater Vancouver Regional District Buildsmart program:

<http://www.gvrd.bc.ca/BuildSmart/glossary.htm>

Additional sources for more definitions:

- 1: <http://www.epa.gov/OCEPAt/terms/aterms.html>
 - 2: http://antron.dupont.com/content/resources/green_glossary/ant06_04_01.shtml
 - 3: http://www.eia.doe.gov/cneaf/solar/renewables/page/real_data/gl.html
 - 4: <http://lightingdesignlab.com/library/glossary.htm>
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Definitions:

Adaptability: Design strategy that allows for multiple future uses in a space as needs evolve and change. Adaptable design is considered a sustainable building strategy as it reduces the need to resort to major renovations or tearing down a structure to meet future needs.

Adaptive Reuse: Renovation of a building or site to include elements that allow a particular use or uses to occupy a space that originally was intended for a different use.

Air Changes Per Hour (ACH): The movement of a volume of air in a given period of time; if a house has one air change per hour, it means that the air in the house will be replaced in a one-hour period.

Air Change Effectiveness: A measurement of the performance of a ventilation system, by measuring the age of air in a volume. Often accomplished by using a tracer gas decay technique.

Air Exchange Rate: The rate at which outside air replaces indoor air in a given space.

Albedo: A measure of surface light reflectance. Albedo is measured on a scale of 0 – 1.0 (0.75 is high).

Alternative Energy: Energy from a source other than the conventional fossil-fuel sources of oil, natural gas and coal (i.e., wind, running water, the sun). Also referred to as "alternative fuel."

Alternative Fuels: Substitutes for traditional liquid, oil-derived motor vehicle fuels like gasoline and diesel. Includes mixtures of alcohol-based fuels with gasoline, methanol, ethanol, compressed natural gas, and others.

Alternative Fueling Station: Location that provides the service of refueling an alternative fuel vehicle (e.g., electricity, compressed natural gas). Providing access to alternative fuels with a refueling station is considered a sustainable building strategy in that it encourages the use of alternative fuels and the vehicles that use them.

ASHRAE: American Society of Heating, Refrigeration and Air Conditioning Engineers.

ASHRAE 90.1: Standards describing energy performance.

Best Management Practice (BMP): Methods that have been determined to be the most effective, practical means of preventing or reducing pollution from non-point sources.

Bicycle Storage: Covered and/or secured storage for building occupants commuting by bicycle. This amenity is considered a sustainable building technique in that it encourages human-powered transportation options. Some local governments offer subsidies or incentives to include bicycle storage in an existing or proposed building project.

Biochemical Oxygen Demand (BOD): A measure of the amount of oxygen consumed in the biological processes that break down organic matter in water. The greater the BOD, the greater the degree of pollution.

Biological Contamination: Contamination of a building environment caused by bacteria, molds and their spores, pollen, viruses, and other biological materials. It is often linked to poorly designed and maintained HVAC systems. People exposed to biologically contaminated environments may display allergic-type responses or physical symptoms such as coughing, muscle aches and respiratory congestion.

Bioremediation: The cleanup of a contaminated site using biological methods, i.e., bacteria, fungi, plants, etc. Organisms are used to either break down contaminants in soil or water, or accumulate the contaminants in their tissue for disposal. Many bioremediation techniques are substantially less costly than traditional remediation methods using heat, chemical or mechanical means.

Bioswale: A technology that uses plants and soil and/or compost to retain and cleanse runoff from a site, roadway, or other source.

Blackwater: Water that contains animal, human, or food waste.

BOMA Go Green: Green retrofit program administered by Building Owners and Managers Association targeting resource consumption, water reduction and recycling, building materials, interior environment and tenant awareness.

Brownfields: Abandoned, idled, or under used industrial and commercial facilities/sites where expansion or redevelopment is complicated by real or perceived environmental contamination. They can be in urban, suburban, or rural areas.

Building Cooling Load: The hourly amount of heat that must be removed from a building to maintain indoor comfort (measured in British thermal units [Btu]).

Building Flush-Out: See Flush-Out.

Building Related Illness: Diagnosable illness whose cause and symptoms can be directly attributed to a specific pollutant source within a building (e.g., Legionnaire's disease, hypersensitivity, pneumonitis). (See: sick building syndrome; biological contamination).

CaGBC: Canada Green Building Council. www.cagbc.org. Licensee and administrator of the LEED Canada Green Building Rating System.

CBIP - Commercial Buildings Incentive Program : Commercial Buildings Incentive Program (Formerly known as C2000) was developed by NRCan. Provides compensation for creating energy efficiency features in new commercial/institutional buildings. Based on MNECB and CBIP Technical Guide.

CFCs - Chlorofluorocarbons: A family of inert, nontoxic, and easily liquefied chemicals used in refrigeration, air conditioning, packaging, insulation, or as solvents and aerosol propellants. Because CFCs are not destroyed in the lower atmosphere they drift into the upper atmosphere where their chlorine components destroy ozone.

CO₂ - Carbon Dioxide Monitoring: A method for determining indoor air quality by using the concentration of carbon dioxide as an indicator. Although the level of CO₂ is a good general indicator of air quality, it is reliant on the presence of certain conditions and must be applied accordingly.

CO₂ - Carbon Dioxide Sensor: Device for monitoring the amount of carbon dioxide in an air volume.

CO - Carbon Monoxide (CO): A colorless, odorless, poisonous gas produced by incomplete fossil fuel combustion.

Certified Lumber: General shorthand term for lumber that has been certified sustainable harvest by an independent certification authority. See Forest Stewardship Council.

Charrette: A meeting held early in the design phase of a project, in which the design team, contractors, end users, community stakeholders, and technical experts are brought together to develop goals, strategies, and ideas for maximizing the environmental performance of the project. Research and many projects' experience has indicated that early involvement of all interested parties increases the likelihood that sustainable building will be incorporated as a serious objective of the project, and reduces the soft costs sometimes associated with a green design project.

Commissioning (Building): The process of ensuring installed systems function as specified, performed by a third party Commissioning Authority. Elements to be commissioned are

identified, installation is observed, sampling is conducted, test procedures are devised and executed, staff training is verified, and operations and maintenance manuals are reviewed.

Computational Fluid Dynamics (CFD): CFD is a detailed airflow modeling technique which “solves the governing equations of air motion” to give predictions of pressure, velocity and temperature. CFD allows engineers to reconsider passive or natural ventilation rather than mechanical ventilation and air conditioning

Construction and Demolition Waste: Waste building materials, dredging materials, tree stumps, and rubble resulting from construction, remodeling, repair, and demolition of homes, commercial buildings and other structures and pavements. May contain lead, asbestos, or other hazardous substances.

Construction Indoor Air Quality Management Plan: A systematic plan for addressing construction practices that can impact air quality during construction and continuing on to occupation.

Construction Site Recycling: See Construction Waste Management

Construction Waste Management: General term for strategies employed during construction and demolition to reduce the amount of waste and maximize reuse and recycling. Construction waste management is a sustainable building strategy in that it reduces the disposal of valuable resources, provides materials for reuse and recycling, and can promote community industries.

Cradle-to-Cradle: A term used in life-cycle analysis to describe a material or product that is recycled into a new product at the end of its defined life.

Cradle-to-Grave: A term used in life-cycle analysis to describe the entire life of a material or product up to the point of disposal. Also refers to a system that handles a product from creation through disposal.

CFM - Cubic Feet Per Minute: A measure of the volume of a substance flowing through air within a fixed period of time. With regard to indoor air, refers to the amount of air, in cubic feet, that is exchanged with outdoor air in a minute's time; i.e., the air exchange rate.

Cut-Off Luminaires: A cut-off luminaire provides shielding of emitted light to reduce light pollution. Best practice standards set by IESNA. (see IESNA)

Daylight Factor (DF%): DF is a ratio of exterior illumination to interior illumination.

Daylighting: Using natural light in an interior space to substitute for artificial light. Daylighting is considered a sustainable building strategy in that it can reduce reliance on artificial light (and reduce energy use in the process) and when well designed, contributes to occupant comfort and performance.

Degree-Day: A rough measure used to estimate the amount of heating required in a given area; is defined as the difference between the mean daily temperature and 65 degrees Fahrenheit. Degree-days are also calculated to estimate cooling requirements.

Displacement Ventilation: Ventilation that uses natural convection processes to move warm air up and out of a volume. Displacement ventilation tends to use less energy than conventional forced air ventilation, as it works with natural convection processes.

Drought Tolerance: The capacity of a landscape plant to function well in drought conditions.

Durability: A factor that affects the life cycle performance of a material or assembly. All other factors being equal, the more durable item is environmentally preferable, as it means less frequent replacement. However, durability is rendered moot as a factor if the material is replaced for aesthetic reasons prior to it actually wearing out.

EcoSmart™ Concrete: This concrete is produced by replacing cement with a maximum percentage of supplementary cementing materials (see SCMs) within the parameters of cost-effectiveness, constructability, and performance. www.ecosmart.ca **Embodied Energy:** The total amount of energy used to create a product, including energy expended in raw materials extraction, processing, manufacturing and transportation. Embodied energy is often used as a rough measure of the environmental impact of a product.

Energy Analysis: Analysis of the energy use of a structure.

Energy Management System: A control system capable of monitoring environmental and system loads and adjusting HVAC operations accordingly in order to conserve energy while maintaining comfort.

Energy Modeling: Process to determine the energy use of a building based on software analysis. Also called building energy simulation. Common simulation software are EE4, DOE-2 and Energy Plus.

Energy Star: Program administered by the Environmental Protection Agency that evaluates products based on energy efficiency.

Environmental Footprint: For an industrial setting, this is a company's environmental impact determined by the amount of depletable raw materials and nonrenewable resources it consumes to make its products, and the quantity of wastes and emissions that are generated in the process. Traditionally, for a company to grow, the footprint had to get larger. Today, finding ways to reduce the environmental footprint is a priority for leading companies. An environmental footprint can be determined for a building, city, or nation as well, and gives an indication of the sustainability of the unit.

Environmental Tobacco Smoke: Mixture of smoke from the burning end of a cigarette, pipe, or cigar and smoke exhaled by the smoker.

Fluorocarbons (FCs): Any of a number of organic compounds analogous to hydrocarbons in which one or more hydrogen atoms are replaced by fluorine. Once used in the United States as a propellant for domestic aerosols, they are now found mainly in coolants and some industrial processes. FCs containing chlorine are called chlorofluorocarbons (CFCs). They are believed to be modifying the ozone layer in the stratosphere, thereby allowing more harmful solar radiation to reach the Earth's surface. 1

Flush-Out: A period after finish work and prior to occupation that allows the building's materials to cure and release volatile compounds and other toxins. A building flush-out procedure is normally followed, with specified time periods, ventilation rate, and other criteria.

Fly Ash: A fine, glass-powder recovered from the gases of burning coal during the production of electricity. These micron-sized earth elements consist primarily of silica, alumina and iron. When mixed with lime and water the fly ash forms a cementitious compound with properties very similar to that of portland cement. Because of this similarity, fly ash can be used to replace a portion of cement in the concrete, providing some distinct quality advantages. The concrete is denser resulting in a tighter, smoother surface with less bleeding. Fly ash concrete offers a distinct architectural benefit with improved textural consistency and sharper detail. Fly ash with a low LOI (carbon content) is used as a substitute for portland cement in concrete. Regulations vary from state to state, however, ASTM suggests that fly ash must not contain more than 6% unburned carbon to be used for its cementitious qualities. Otherwise, concrete companies use it as a fine aggregate in concrete block. Others use it for filling old coal mines, seaside docking areas and as a lining for hazardous waste dumps.

Substitution of fly ash for portland cement in concrete is considered a sustainable building strategy, as it reduces the amount of energy-intensive (and CO₂-producing) cement in the mix, as well as providing the performance enhancements described above.

Footprint (Building): The area of a building formed by the perimeter of the foundation. Shrinking the footprint of a building allows for more open space and pervious surface on a site.

Footprint (Environmental): See Environmental Footprint

Forest Stewardship Council (FSC): A third-party certification organization, evaluating the sustainability of forest products. FSC-certified wood products have met specific criteria in areas such as forest management, labor conditions, and fair trade.

Formaldehyde: A colorless, pungent, and irritating gas, CH₂O, used chiefly as a disinfectant and preservative and in synthesizing other compounds like resins.

Geothermal/Ground Source Heat Pump: These heat pumps are underground coils to transfer heat from the ground to the inside of a building. (See: heat pump; water source heat pump) This type of heat pump can realize substantial energy savings over conventional heat pumps, by using the naturally more stable temperature of the earth as its heat source.

Global Warming: An increase in the near surface temperature of the earth. Global warming has occurred in the distant past as the result of natural influences, but the term is most often used to refer to the warming predicted to occur as a result of increased emissions of greenhouse gases. Scientists generally agree that the earth's surface has warmed by about 1 degree Fahrenheit in the past 140 years. The Intergovernmental Panel on Climate Change (IPCC) recently concluded that increased concentrations of greenhouse gases are causing an increase in the earth's surface temperature and that increased concentrations of sulfate aerosols have led to relative cooling in some regions, generally over and downwind of heavily industrialized areas.

Global Warming Potential: The ratio of the warming caused by a substance to the warming caused by a similar mass of carbon dioxide. CFC-12, for example, has a GWP of 8,500, while water has a GWP of zero.

Gray Water: Domestic wastewater composed of wash water from kitchen, bathroom, and laundry sinks, tubs, and washers.

Gray Water Reuse: A strategy for reducing wastewater outputs from a building, by diverting the gray water into productive uses such as subsurface irrigation, or on-site treatment and use for non-potable functions such as toilet flushing. Gray water reuse is restricted in many jurisdictions; check with local health and building officials.

Green Label: A certification program by the Carpet and Rug Institute for carpet and adhesives meeting specified criteria for release of volatile compounds.

Green Roof: Contained green space on, or integrated with, a building roof. Green roofs maintain living plants in a growing medium on top of a membrane and drainage system. Green roofs are considered a sustainable building strategy in that they have the capacity to reduce stormwater runoff from a site, they modulate temperatures in and around the building, have thermal insulating properties, can provide habitat for wildlife and open space for humans, and other benefits.

Greenhouse Effect: The warming of the Earth's atmosphere attributed to a buildup of carbon dioxide or other gases; some scientists think that this build-up allows the sun's rays to heat the Earth, while making the infra-red radiation atmosphere opaque to infra-red radiation, thereby preventing a counterbalancing loss of heat.

Greenhouse Gas: A gas, such as carbon dioxide or methane, which contributes to potential climate change.

Green Power: The term "green power" is used to define power generated from renewable energy sources, such as wind and solar power, geothermal, hydropower and various forms of biomass.

Greenwash: Disinformation disseminated by an organization so as to present an environmentally responsible public image.

Halon: Bromine-containing compounds with long atmospheric lifetimes whose breakdown in the stratosphere causes depletion of ozone. Halons are used in firefighting.

Heat Island Effect: A "dome" of elevated temperatures over an urban area caused by structural and pavement heat fluxes, and pollutant emissions.

High Performance Glazing: Generic term for glazing materials with increased thermal efficiency.

Human Health Risk: The likelihood that a given exposure or series of exposures may have damaged or will damage the health of individuals.

Hydrocarbons (HC): Chemical compounds that consist entirely of carbon and hydrogen.

HCFC - Hydrochlorofluorocarbon: HCFCs are generally less detrimental to depletion of stratospheric ozone than CFCs (chlorofluorocarbons). HCFCs are generally used to replace CFC's where mandates require CFC's to be eliminated. A total ban on all CFC's and HCFCs is scheduled, effective 2030.

IESNA: Illuminating Engineering Society of North America.

Impervious Surface: A surface that sheds the precipitation falling on it, rather than infiltrating. Impervious surfaces can lead to excessive stormwater runoff and limit the amount of stormwater that remains onsite or recharges local aquifers.

Indigenous Planting: Landscaping strategy that uses native plants. Provided the natives are placed in the proper growing conditions; such plantings can have low, or zero supplemental water needs.

Indoor Air Pollution: Chemical, physical, or biological contaminants in indoor air.

Indoor Air Quality (IAQ): ASHRAE defines acceptable indoor air quality as air in which there are no known contaminants at harmful concentrations as determined by cognizant authorities and with which 80% or more people exposed do not express dissatisfaction.

Infiltration: a. The penetration of water through the ground surface into sub-surface soil or the penetration of water from the soil into sewer or other pipes through defective joints, connections, or manhole walls. b. The technique of applying large volumes of waste water to land to penetrate the surface and percolate through the underlying soil.

Infiltration Rate: The quantity of water that can enter the soil in a specified time interval.

Integrated Pest Management (IPM): A mixture of chemical and other, non-pesticide, methods to control pests.

Integrated Waste Management: The complementary use of a variety of practices to handle solid waste safely and effectively. Techniques include source reduction, recycling, composting, combustion and landfilling.

IDP - Integrated Design Process: An essential concept in sustainable building. Viewing a building as a system allows the discovery of synergies and potential tradeoffs or pitfalls with design choices. An integrated design approach helps maximize synergies and minimize unintended consequences.

LEED®: A self-assessing green building rating system developed by the U.S. Green Building Council. Adapted for Canada and administered in Canada under exclusive license by CaGBC, the Canada Green Building Council. LEED® stands for Leadership in Energy and Environmental Design, and evaluates a building from a systems perspective. By achieving points in different areas of environmental performance, a building achieves a level of "certification" under the system.

LEED® Accredited Professional (LAP): A professional who has successfully passed the LEED® Accreditation exam and is knowledgeable in green building design practices.

Life Cycle (of a Product): All stages of a product's development, from extraction of fuel for power to production, marketing, use, and disposal.

LCA - Life Cycle Analysis: The assessment of a product's full environmental costs, from raw material to final disposal, in terms of consumption of resources, energy and waste. Life cycle analysis is used as a tool for evaluating the relative performance of building materials, technologies, and systems.

LCC - Life Cycle Costing: Costing based on the amortized annual cost of a product, including capital costs, installation costs, operating costs, maintenance costs, and disposal costs discounted over the lifetime of a product.

Local/Regional Materials: Building products manufactured and/or extracted within a defined radius of the building site. For example, the US Green Building Council defines local materials as those that are manufactured, processed and/or extracted within a 500-mile radius of the site. Use of regional materials is considered a sustainable building strategy due to the fact that these materials require less transport, reducing transportation-related environmental impacts. Additionally, regional materials support local economies, supporting the community goal of sustainable building.

Low Emissivity (low-E) Windows: Window technology that lowers the amount of energy loss through windows by inhibiting the transmission of radiant heat while still allowing sufficient light to pass through.

Low VOC: Building materials and finishes that exhibit low levels of "offgassing," the process by which VOCs (Volatile Organic Compounds) are released from the material, impacting health and comfort indoors and producing smog outdoors. Low (or zero) VOC is an attribute to look for in an environmentally preferable building material or finish. See "Volatile Organic Compound (VOC)" for more information.

MSDS - Material Safety Data Sheet: A compilation of information required under the OSHA Communication Standard on the identity of hazardous chemicals, health, and physical hazards, exposure limits, and precautions. Section 311 of SARA requires facilities to submit MSDSs under certain circumstances. 1

MDF - Medium Density Fiberboard: A composite wood fiberboard, used for cabinetry and other interior applications. MDF containing urea formaldehyde can contribute to poor indoor air quality.

MNECB: Model National Energy Code of Canada for Buildings.

Montreal Protocol: Treaty, signed in 1987, governs stratospheric ozone protection and research, and the production and use of ozone-depleting substances. It provides for the end of production of ozone-depleting substances such as CFCs. Under the Protocol, various research groups continue to assess the ozone layer. The Multilateral Fund provides resources to developing nations to promote the transition to ozone-safe technologies.

Natural Ventilation: Ventilation design that uses existing air currents on a site and natural convection to move and distribute air through a structure or space. Strategies include placement and operability of windows and doors, thermal chimneys, landscape berms to direct airflow on a site, and operable skylights.

Night Flushing: The process of removing hot air from a building during the cool evening hours, to cool elements with thermal mass within the building and flush stale air.

Nonrenewable Energy: Energy derived from depletable fuels (oil, gas, coal) created through lengthy geological processes and existing in limited quantities on the earth.

Occupancy Sensor: A sensing device, commonly connected to a room's lighting but also occasionally to heating or ventilation, that shuts down these services when the space is unoccupied.

Offgassing: Release of volatile chemicals from a product or assembly. Many chemicals released from materials impact indoor air quality and occupant health and comfort. Offgassing can be reduced by specifying materials that are low- or no-VOC and by avoiding certain chemicals (e.g., urea formaldehyde) entirely. Controlling indoor moisture, and specifying pre-finished materials, can also reduce offgas potential.

On-Site Stormwater Management: Building and landscape strategies to control and limit stormwater pollution and runoff. Usually an integrated package of strategies, elements can include vegetated roofs, compost-amended soils, pervious paving, tree planting, drainage swales, and more.

Organic Compound: Vast array of substances typically characterized as principally carbon and hydrogen, but that may also contain oxygen, nitrogen and a variety of other elements as structural building blocks.

Ozone Depletion: Destruction of the earth's ozone layer, which can be caused by the photolytic breakdown of certain chlorine- and/or bromine-containing compounds (e.g., chlorofluorocarbons), which catalytically decompose ozone molecules.

Passive ventilation: Passive ventilation relies typically on using both convective air flows that result from the tendency of warm air to rise and cool air to sink and taking advantage of prevailing winds. Many passive ventilation systems rely on the building users to control window and vents as indicated by site conditions and conditions within the building.

Porous Paving: Paving surfaces designed to allow stormwater infiltration to ground and reduce runoff. Also known as Pervious Paving.

Post-Consumer Recycling: Use of materials generated from residential and consumer waste for new or similar purposes; e.g. converting wastepaper from offices into corrugated boxes or newsprint.

Post-Consumer Recycle Content: A product composition that contains some percentage of material that has been reclaimed from the same or another end use at the end of its former, useful life.

Post-Industrial Material: Industrial manufacturing scrap or waste; also called pre-consumer material.

Post-Industrial Recycle Content: A product composition that contains some percentage of manufacturing waste material that has been reclaimed from a process generating the same or a similar product. Also called pre-consumer recycle content.

Precautionary Principle: When information about potential risks is incomplete, basing decisions about the best ways to manage or reduce risks on a preference for avoiding unnecessary health risks instead of on unnecessary economic expenditures.

Pre-Consumer Materials/Waste: Materials generated in manufacturing and converting processes such as manufacturing scrap and trimmings and cuttings. Includes print overruns, overissue publications, and obsolete inventories.

Radon: A colorless naturally occurring, radioactive, inert gas formed by radioactive decay of radium atoms in soil or rocks. Design strategies help reduce the amount of radon infiltration into a building and remove the gas that does infiltrate.

Rainwater Catchment/Harvest: On-site rainwater harvest and storage systems used to offset potable water needs for a building and/or landscape. Systems can take a variety of forms, but usually consist of a surface for collecting precipitation (roof or other impervious surface) and a storage system. Depending on the end use, a variety of filtration and purification systems may also be employed.

Reclamation: Restoration of materials found in the waste stream to a beneficial use that may be other than the original use.

Recycled Content: The content in a material or product derived from recycled materials versus virgin materials. Recycled content can be materials from recycling programs ("post-consumer") or waste materials from the production process or an industrial/agricultural source ("pre-consumer" or "post-industrial").

Recycling Areas: Space dedicated to recycling activities is essential to a successful recycling program, both on the construction site and in the building after occupation. For strategies related to determining recycling area configuration and placement, see the Business and Industry Resource Venture site.

Regional Manufacture: Goods produced within a certain radius of the project site. Using regionally produced goods is considered a sustainable building strategy in that it reduces the transportation impacts associated with the product, it often allows for a better understanding of the production process and increases the likelihood that the product was manufactured in accordance with environmental laws, and it supports regional economies.

Renewable Resources: A resource that can be replenished at a rate equal to or greater than its rate of depletion; e.g., solar, wind, geothermal and biomass resources.

Respirable: Particles or aerosols capable of being inhaled into the deep lung, less than 3 microns in diameter.

Reuse: Using a product or component of municipal solid waste in its original form more than once; e.g., refilling a glass bottle that has been returned or using a coffee can to hold nuts and bolts. 1 Reuse is a sustainable building strategy in that it reduces the strain on both renewable and nonrenewable resources, and when materials are reused on or near the site of salvage, they reduce transportation-related environmental impacts.

Risk: A measure of the probability of an adverse effect on a population under a well-defined exposure scenario.

Risk Assessment: Qualitative and quantitative evaluation of the risk posed to human health and/or the environment by the actual or potential presence and/or use of specific pollutants.

Sick Building Syndrome: Building whose occupants experience acute health and/or comfort effects that appear to be linked to time spent therein, but where no specific illness or cause can be identified. Complaints may be localized in a particular room or zone, or may spread throughout the building.

Shower Facilities: In buildings that house workers, shower facilities are considered a green building feature in that they allow occupants that elect to travel by bicycle and other human powered modes of transportation to exercise this option.

Smart Growth: Comprehensive use of alternative development standards and strategies that reduce the impact of urban growth on the natural environment, integrate infrastructure into ecosystems and promote mixed use, higher density, more livable communities. Promoted in Canada by the *Smart Growth Canada Network* http://www.smartgrowth.ca/home_e.html. Smart Growth principles are incorporated in the LEED for Neighbourhood Developments rating system.

Source Reduction: The design, manufacture, purchase or use of materials to reduce the amount or toxicity of waste in an effort to reduce pollution and conserve resources (i.e., reusing items, minimizing the use of products containing hazardous compounds, extending the useful life of a product and reducing unneeded packaging).

SCMs - Supplementary Cementitious Materials: Material such as fly ash, ground granulated blast furnace slag, and silica fume used in concrete production, intended to reduce the Portland cement content in concrete, and reduce the resultant greenhouse gases.

Stack Effect: Air, as in a chimney, that moves upward because it is warmer than the ambient atmosphere.

Tipping Fee: Charge for the unloading or dumping of waste at a recycling facility, composting facility, landfill, transfer station or waste-to-energy facility.

TVOC - Total Volatile Organic Compounds: The total mass, typically in milligrams per cubic meter, of the organic compounds collected in air.

Transportation Demand Management (TDM): a series of transportation initiatives that will be implemented to encourage a shift to alternative modes of transportation. The goal is to ultimately decrease the number of vehicular trips to the campus and reduce both traffic and the amount of land resources required to accommodate parking associated with growth. TDM initiatives could include car pool programs, reviewing parking pricing, daily packets, telecommuting, class scheduling, transit coordination and bicycle support.

Truck Tire Wash Down Area: A strategy for removing dirt and other contaminants from construction vehicles in order to prevent stormwater contamination related to transport of contaminants offsite on vehicle tires. A specified area is created for wash down, with structural controls in place to prevent wash down waters from entering the storm system or the larger environment.

Ventilation Control (by Occupants): The ability of building occupants to control ventilation rates. A strategy for giving control of comfort back to occupants, this can be achieved through access to individual electronic controls or by operable windows in workspaces. Studies show that giving increased control to occupants over their environment results in greater occupant tolerance for variability in the indoor environment.

Ventilation Rate: The rate at which indoor air enters and leaves a building. Expressed as the number of changes of outdoor air per unit of time: air changes per hour (ACH), or the rate at which a volume of outdoor air enters in cubic feet per minute (CFM).

Visual DOE: See Energy Modeling

VOC - Volatile Organic Compound: Organic substances capable of entering the gas phase from either a liquid or solid form. VOCs are volatile enough to evaporate from material surfaces into indoor air at normal room temperatures (referred to as off-gassing).

Walk-off Mat: Design strategy for reducing the amount of contaminants introduced into an interior space by providing grating or other material to remove contaminants from shoes. A significant portion of contaminants in a building are brought in this way, impacting indoor environmental quality.

Wastewater: The spent or used water from a home, community, farm, or industry that contains dissolved or suspended matter.

Waste Management Plan: See Construction Waste Management

Waterless Urinal: Urinal with no water line. Most designs use a specialized material that allows fluid to drain one-way into the sewer system.

Watts per Square Foot: A shorthand measure of the energy use of a building, often applied to indoor lighting. Energy codes often limit the watts per square foot based on building type and function.

Wetlands: An area that is saturated by surface or ground water with vegetation adapted for life under those soil conditions, as swamps, bogs, fens, marshes, and estuaries. 1

Xeriscape: Water efficient landscape design and implementation. Deriving from the Greek word Xeros meaning dry. Xeriscape calls for the use of native or naturalized plants which are drought, heat and cold tolerant.