

Appendix A:

Glossary of Terms

Active Transportation

Modes of transportation that are human-powered (e.g. walking, cycling), that may required the use of a device for support (e.g. mobility aids, e-bikes).

Carbon Emissions

Equivalent greenhouse gas emissions expressed in metric tonnes of equivalent carbon dioxide (tCO₂e).

Carbon Footprint

Total amount of greenhouse gases that are generated by a given action.

Circularity

Also known as circular economy, refers to a model that emphasizes the reuse, sharing, and repurposing of goods, to discourage and delay disposal in the landfill, and create new economies for sharing and recycling.

Demand Based Control Logic

Control logic that reduces varies supply based on variable demand requirements over time.

Detailed Design Phase

The phase of planning that identifies the functional requirements and the arrangement of space at a detailed level, both within and between departments. Work in this phase will establish the layout for the buildings, confirm the assumptions in the functional program and establish the supporting building systems.

Electrification

Process of converting on-site fossil fuel driven energy loads to supply from electrical grid.

Embodied Carbon

The carbon emissions associated with the materials and construction processes throughout the lifecycle of a building or infrastructure, distinct from operational emissions.

Energy

Electrical and thermal energy used within, by or for the Facility, including electrical and thermal energy used within, by or for exterior elements connected to the Facility's electrical and thermal systems.

Energy Conservation Measure (ECM)

A single initiative undertaken to reduce the energy consumption of a particular piece of equipment or a certain aspect of essential building services. The main purpose of energy conservation measures is to reduce the need of primary energy.

Energy Use Intensity (EUI)

An indicator of the energy efficiency of a buildings design, with energy use relative to building floor area.

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Global Warming Potential (GWP)

The heat absorbed by any greenhouse gas in the atmosphere, as a multiple of the heat that would be absorbed by the same mass of carbon dioxide.

Heat Reclaim

Capturing excess or waste heat and reusing for another purpose.

Life Cycle Assessment

A cradle to grave analysis of the environmental impacts within all stages of a product's life.

Low Carbon

The use of energy sources that have a minimal or reduced output of carbon emissions.

Measurement and Verification (M&V)

Process of planning, measuring, collecting and analyzing data for the purpose of verifying and reporting on energy savings.

Modular Construction

A subset of lean manufacturing that allows both mass customization and process standardization, thus reducing material waste and build time compared to traditional onsite construction techniques.

Multi-modal Transportation

Transportation planning that designs for a diverse range of transportation options, as well as the connections between those options.

Net Zero Emissions

Reducing emissions from operations to as close to zero as possible and balancing out any remaining emissions with an equivalent amount of carbon removal.

New Construction

New buildings and structures including constructed additions to existing buildings. Not including the reconstruction of existing buildings.

Once-through cooling

When water passes through condensers and then to drain, for the purpose of removing waste heat. The process is known to waste large amounts of water.

Ozone Depletion Potential (ODP)

Measure of how much damage a chemical can cause to the ozone layer.

Peak loads

The highest amount of energy that is consumed over a period.

Recovered Thermal Energy

Any passive form of recovering heat for the purpose of reuse in the building environment.

Renewable Energy

On-site generation of energy from renewable sources which results in zero greenhouse gas emissions.

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Renewable Natural Gas (RNG)

Alternative to conventional natural gas that is interchangeable and supplied by FortisBC as a low carbon option.

Solar Gain

Increase in thermal energy as it absorbs incident solar radiation.

Thermal Bridging

When a material in the building envelope transfers heat at a greater rate than surrounding components.

Thermal Energy Demand Intensity (TEDI)

The annual heating energy demand for space conditioning and conditioning of ventilation air. This is the amount of heating energy that is output from any and all types of heating equipment, per floor area.

Waste Diversion

The percentage of waste materials that is not disposed of in the landfill or by incineration.

Water Reuse

Method of recycling treated wastewater for use in other processes like irrigation or toilet flushing.

Variable Speed Drives

Devices that vary the speed of a normally fixed speed motor.

Zero Emissions Vehicle (ZEV)

A vehicle that produces no or low carbon emissions including battery electric vehicles (EV), plug-in hybrids (PHEV) and Hydrogen fuel cell vehicles.