

Air barrier	A barrier usually consists of a membrane to prevent the uncontrolled flow of air through the building envelope.
Ambient temperature	Temperature (usually of the air) surrounding operating equipment.
Ammonia (NH₃)	One of the earliest compounds used as a refrigerant.
Ampere (A)	The unit of measurement of electric current.
Atmospheric Pressure	Pressure exerted because air has weight. Under normal conditions this pressure is 14.7 lb./sq. in. (101.2 kPa).
Basic monthly charge	A fixed monthly amount that covers the cost of billing, meter reading, account administration and the cost of supplying the customer with electricity or natural gas service.
Btu (British thermal unit)	Amount of heat energy required to raise the temperature of one pound of water one degree Fahrenheit. It is approximately the amount of heat generated by burning a common match.
Btu/h (British thermal unit per hour)	See definition for Btu. Air conditioners are rated in Btu/h capacity.
Building envelope	The building exterior—including walls, roof, windows, doors, foundation, floor, insulation, Vapor retarder, and air barrier— that acts as a unit to provide shelter and an indoor space.
Calorie	Amount of heat energy required to raise the temperature of one gram of water through a change of one degree Celsius. (8,604 kilo calories = 1 kWh).
Capacitor	Functions primarily to accumulate and store electrical charges. Used for power factor correction.
Capital cost	Initial cost of equipment and systems; purchase price, also known as first cost.
Coefficient of Performance	COP is the ratio of cooling or heating to energy consumption
Compressor	Takes a refrigerant Vapor at a low temperature and pressure and raises it to higher temperature and pressure.
Condensation	Process by which a Vapor is changed into a liquid without changing temperature.
Condenser (general)	That part of the refrigeration system in which the refrigerant condenses and in so doing gives off heat.
Conduction	A method by which heat energy is transferred by actual collision of the molecules.
Convection	A method of transferring heat by the actual movement of heated molecules.

Cubic meter (m³)	Unit of measurement for natural gas distribution and billing in Saskatchewan.
Dew point	The temperature at which the air (space) becomes saturated. When air is cooled to the dew point, water Vapor condenses into liquid form (provided its latent heat is removed).
Demand	Demand is the rate at which electric energy is delivered to a load. It is expressed in either kilowatts (kW) or kilovolt-amperes (kVA). Demand is the peak amount of power drawn through the meter during a specific billing period.
Efficacy	The ratio of total lumens produced by a lamp to the watts consumed by the lamp, expressed in lumens per watt.
Energy Efficiency Ratio (EER)	An indication of the efficiency of a unit such as an air conditioner. The higher the EER, the more energy efficient the unit.
Enthalpy	Total heat energy in a substance. The sum of sensible and latent heat.
Evaporation	The process by which a liquid changes into a Vapor as a result of absorbing heat.
Evaporator	Device in the low-pressure side of a refrigeration system through which the unwanted heat flows; absorbs the heat into the system in order that it may be moved or transferred to the condenser.
First cost	See Capital cost.
Foot candle	A unit of measurement of usable light (illumination) that reaches any given surface. It is defined as one lumen falling uniformly over an area of one square foot.
Gas main	The high pressure portion of an underground natural gas distribution system.
Gauge pressure	Pressure above or below atmospheric pressure.
Gigajoule (GJ)	Equals one billion joules. A joule is a unit of energy used to measure energy content. One gigajoule equals 948,200 Btu or 277.8 kilowatt-hours.
Heat of vaporization	The heat required to change a liquid into its Vapor or gaseous form without changing temperature.
Heat transfer	The movement of heat energy from one place to another.
Inverted roof	Roofing system with water-proofing membrane under exterior grade insulation and ballast (gravel or paving stones).

Kilovolt (kV)	The unit of electrical pressure, or force, equivalent to 1000 volts (V).
Kilowatt (kW)	The unit of electrical power equivalent to 1000 watts (W).
Kilowatt-hour (kWh)	The unit by which electrical energy is measured. For example, 10, 100 watt light bulbs switched on for one hour would use one kilowatt-hour (1000 watts for one hour).
Latent heat	That heat energy which causes a change of state without any change of temperature.
Latent heat of vaporization	Amount of heat to be added to (or subtracted from) one pound of the refrigerant to cause it to vaporize (or condense).
Lamp	An electric source of light consisting of a filament or arc tube, supporting hardware, enclosing envelope and base.
Liquid line	Runs from condenser to expansion valve, providing liquid refrigerant to the cooling process on the high pressure, high temperature side.
Lumen	A unit of measurement of light emitted by a lamp at the light source. A unit of luminous flux.
Luminaire	Complete lighting unit – lamp, reflectors, ballast, power supply and necessary parts.
LUX	A unit of measurement of usable light (illumination) that reaches any given surface. It is defined as one lumen falling uniformly upon an area of one square meter. (metric equivalent of foot candle).
MBH	1000 British thermal units per hour. A unit of power normally used for heating equipment.
Megawatt (MW)	The unit of electrical power equal to one million watts or 1000 kilowatts.
Mercaptan	The odourant added to natural gas to make it smell like rotten eggs.
Natural gas	A fossil fuel found deep in the earth. Its main component is methane (CH ₄). It is colourless, odourless, and lighter than air. When burned it produces carbon dioxide and water.
Ohm	The unit of measurement of electrical resistance against the flow of electric current.
Peak load	Record of maximum amount of electricity used in a given time period.
Power	The rate of using electrical energy, usually measured in watts, kilowatts, or megawatts.
Power factor	The ratio of real usable power measured in kilowatts to the total power (real and reactive power) measured in kilovolt-amperes.

Primary gas	Natural gas received from Western Canada. It can be purchased on an unregulated basis from a natural gas marketer, or from SaskEnergy.
Radiation	A method of transferring heat which uses energy waves that move freely through space; these energy waves may be reflected and/or absorbed.
Receiver	A container for storing liquid refrigerant.
Reflectance	The ratio of light emitted from a surface to the light falling on that surface.
Reflectivity	Ability of a material to reflect radiant heat energy.
Refrigerant	Substance which is circulated in a refrigeration system to transfer heat.
Regulator	An adjustable mechanical device that measures, restricts, and maintains a constant downstream pressure of a gas or liquid.
Relative humidity	A ratio, expressed as a percent, of the amount of water Vapor in an air space compared to the amount of water Vapor that the air space could hold at a given temperature.
Saturation	The condition that exists when the space occupied by a Vapor is holding as much of the Vapor as it can at a particular temperature.
Seasonal Energy Efficiency Ratio (SEER)	It is the ratio of the total cooling provided during the season in Btu divided by the total energy used by the system in watt-hours. The higher the SEER, the more energy efficient the unit. Also the EER of a unit averaged out over the heating or cooling season.
Sensible heat	The portion of heat energy used to warm or cool dry air from one temperature to another. Sensible heat plus latent heat equals the total heat energy required to change the temperature of air (excluding phase changes).
Sublimation	A change of state from solid to gas without going through the liquid state.
Subcooling	Drop in temperature resulting from the removal of sensible heat from a liquid.
Suction line	Runs from evaporator to compressor; returns the heat-laden gases from the evaporator to the compressor.
Superheating	A process resulting in a rise in temperature due to the addition of heat to the refrigerant Vapor, either in the evaporator or the suction line.

Supplemental gas	Natural gas that SaskEnergy purchases to ensure supply is available when demand is higher than normal. This usually represents about 5 per cent of a customer's annual natural gas use. Supplemental gas costs fluctuate during warmer or colder-than-normal years.
Thermostatic expansion valve	Control valve which maintains constant superheat in the evaporator; also used for temperature control. Operates on increased pressure resulting from a rise in temperature.
Ton of cooling	An old-fashioned term used to describe the cooling effect felt by melting one ton of ice in a 24-hour period. One ton of cooling equals 12,000 Btu/h.
Torque	Twisting force; usually expressed in foot-pounds or inch-pounds or Newton-meter; computed by multiplying a force over the distance it is exerted.
Transportation charge	Cost of transporting natural gas to SaskEnergy customers, including pipeline charges and the cost of storage facilities where SaskEnergy stores natural gas purchased in the summer for use in the winter.
Vapor retarder	Previously and commonly referred to as the Vapor barrier. Prevents the movement of water Vapor through the building envelope.
Volt (V)	The unit of measurement of electrical pressure, or force, which causes electric current to flow.
Volt-amp	Unit used to measure apparent power. 1000 Volt Amps = 1 kVA.
Volt-amp resistance	Unit used to measure reactive power. 1000 VAR = 1 kVAR
Watt	Unit used to measure real or useable power. 1000 watts = 1kW