

Glossary of Energy Modeling Terms

Term	Definition
Annual Energy Cost	The total cost of electricity, natural gas, and other energy sources consumed by a building over the course of a year.
ASHRAE 90.1	A building code adopted by many states and municipalities in the US that provides minimum requirements for energy efficient design for buildings (except for low-rise residential buildings).
Carbon Dioxide Equivalent (CO ₂ e)	A metric that converts the emissions from various greenhouse gases to the equivalent amount of carbon dioxide based on global warming potential.
Climate Zone	Zones defined by temperature and moisture conditions in a region. Zone numbers range from hottest (1) to coldest (8). The three main moisture divisions are moist (A), dry (B), and marine (C).
Fenestration	Refers to the arrangement and design of windows and doors. Typically refers to windows in Sketchbox.
International Energy Conservation Code (IECC)	A building code adopted by many states and municipalities in the US for establishing minimum design and construction requirements for energy efficiency in buildings.
Kilowatt-hour (kWh)	A unit of energy used to measure electricity consumption. Equal to the energy expended by one kilowatt of power over one hour.
Lighting Power Density (LPD)	The total lighting power in a defined area, measured in watts per square foot.
Peak Cooling/Heating	Represents the amount of heat that must be removed/added to maintain temperature setpoints on the hottest/coldest days of the year, respectively.
Peak Electric Demand	The highest electric power demanded by the building throughout the year. Higher peak demands require more robust electricity infrastructure to keep the electric grid up and running.

Site Energy Use Intensity (EUI)	Represents the total energy consumed by the building, per square foot. Calculated by dividing the total annual energy use by the total gross floor area.
Source Energy Use Intensity (EUI)	Like Site EUI, but also factors in the losses incurred in producing and transporting energy to the building. Represents the total amount of raw fuel consumed by the building, per square foot.
Solar Heat Gain Coefficient (SHGC)	The ratio of solar heat entering the space through the window assembly. Lower numbers indicate less heat entering the space.
Task Tuning	Decreases the maximum output of light fixtures to avoid over-lit spaces and save electricity. Also known as high-end trim.
Therm	A unit of energy used to measure natural gas consumption. Equal to 100,000 British thermal units.
U-Value	Measures how much heat can pass through a building component or material. Lower numbers indicate better insulation performance.

