



Glossary of Terms:

- **Benchmarking**-Compares a facilities energy use to similar facilities in order to asses opportunities for improvement and quantifying/verifying energy savings.
- **Building Envelope**-Exterior components of a house that provide protection from colder (and warmer) outdoor temperatures and precipitation; includes the house foundation, framed exterior walls, roof or ceiling, and insulation, and air sealing materials.
- **Demand-Side Energy Management**-Major element of Energy Management dealing with energy efficiency and control. Demand-Side EM deals with all cost savings opportunities inside of the building.
- **Energy Audit**- An evaluation of energy consumption, as in a home or business, to determine ways in which energy can be conserved.
- **Energy Conservation**-Achieved through efficient energy use, in which case energy use is decreased while achieving a similar outcome. This may come from simply using less energy (i.e. turning off lights) or from implementing more energy efficient practices and policies.
- **Energy Management Software (EMS)**- A class of software that deals specifically with reducing energy costs and consumption for buildings or communities.
- **Energy Modeling**-Using computer-based tools to simulate the energy use of a building throughout an entire year of operation. This is commonly referred to as “annual energy use simulation.” The U.S. Green Building Council’s Leadership in Energy and Environmental Design Rating System (LEED™) requires energy modeling to assess the energy use of a building and to quantify the savings attributable to the proposed design.
- **Energy Monitoring**-Refers to the process of monitoring the energy use in your home or business. This is beneficial when determining the value of energy efficiency projects. There are many different ways to monitor energy in your business or home, for example, using computer software that tracks energy use in the building and displays real-time information on a dashboard.
- **Energy Profile**-The basic building block of information needed to begin evaluating a property’s potential for energy savings. This information also helps determine baseline energy performance and can be used to benchmark a building’s performance against comparable properties. It includes: Annual energy use and cost, as given in utility bills from the previous year, Year of construction, General location, Total floor space, and Facility Type.
- **Energy Star Program**-A joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices. ENERGY STAR partnership offers a proven energy management strategy that helps in measuring current energy performance, setting goals, tracking savings, and rewarding improvements for businesses.
- **HVAC System**- the equipment, distribution network, and terminals that provide the processes of heating, ventilating and/or air conditioning to a building.
- **R-Value**- a measurement of a material’s ability to resist heat transfer. Insulation products are rated according to their R-value. The higher the R-value, the better a product will be able to resist heat flow. Learn more about R-value.
- **Target Setting**- Consists in defining the levels of energy consumption desirable for management. Based on previous information acquired during monitoring as well as intimate knowledge of the business.
- **Supply-Side Energy Management**-Major element of Energy Management dealing with the cost of the energy based on regulated tariffs or the cost of the ‘commodity’ in deregulated States. Supply-Side EM deals with the utility meter and everything outside of the building.
- **Return On Investment**-One of several approaches to evaluating and comparing investments. With ROI, decision makers evaluate investments by comparing the magnitude and timing of expected gains to the magnitude and timing of investment costs. A good ROI means that investment returns compare favorably to investment costs. In terms of energy, ROI compares the initial investment for a renewable energy system, with the overall savings over the systems lifetime.
- For a more in depth list of terms related to energy measurement and monitoring visit the [glossary](#) section of Apple Blossom Insulators [website](#).



Helpful Websites for Reference

Online Resources for Energy Management and Measurement

- Energy Star Products Information (<http://www.energystar.gov>)- Home page of the Energy Star program, provides information on measuring current energy performance, setting goals, tracking savings, and rewarding improvements.
- Database of State Incentives for Renewables & Energy (DSIRE) (www.dsireusa.org) DSIRE is comprehensive source of information on state, local, utility and federal incentives and policies that promote renewable energy and energy efficiency.
- ECU's Center For Sustainable Tourism (www.sustainabletourism.org)- Provides resources and links for businesses. Links to many online resources, tip sheets, industry partners, and much more.
- Environmental Protection Agency (EPA) Clean Energy (www.epa.gov/cleanenergy/)- This website contains information on clean energy technologies, partnerships, government programs, Energy Star, and clean energy resources.
- Proximity Hotel, Greensboro, NC-First hotel with LEED Platinum Rating (www.proximityhotel.com)
- Calculate Energy Savings from Energy Star (<http://www.business.gov/manage/green-business/energy-efficiency/calculate-savings/>) Features information on calculating potential energy savings from renewable energy and energy efficiency projects.
- The US Department of Energy, Energy Basics Website (<http://www.eere.energy.gov/basics/>) Contains The basics about renewable energy and energy efficiency technologies: learn how they work, what they're used for, and how they can improve our lives, homes, businesses, and industries.
- The US Department of Energy, Energy Savers Website (<http://www.energysavers.gov/>) Learn ways to save energy , and use clean renewable technologies at home, while driving, and at work.
- More energy calculators (www1.eere.energy.gov/calculators/buildings.html) An extensive list of energy calculators from the US Dept of Energy.
- RETI website (www.sustainabletourism.org/RETI/About.cfm) The home page for the Renewable Energy in Tourism Initiative.