FOSS Solar Energy Module
Glossary
2005 Edition

Absorb: To take up, soak in, or capture. (TG)

Acrylic: A glassy, synthetic plastic. (SS)

Active solar energy system: A system that provides space heating (or cooling) by the action of sunshine falling on collectors and the assistance of mechanical or electrical devices to move heat around. (TG)

Air pressure: The pressure exerted by the atmosphere that surrounds Earth. (SS)

Asteroid: Any of the small, solid planets that orbit the Sun. Most of the asteroids in the Solar System are located between Mars and Jupiter. (SS)

Comet: A small frozen mass of ice and dust orbiting the Sun. (SS)

Compass: An instrument used to determine direction. The needle in a compass always points to magnetic north. (TG)

Corona: The Sun's outer atmosphere. The corona is visible during a total eclipse of the Sun as a pearly white crown surrounding the Sun. (SS)

Cyclone: A storm or strong winds circulating around and toward a traveling center of low pressure. Cyclones move counterclockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere. (SS)

Desiccant: A material that removes moisture. (SS)

Direction: The course or line along which something moves, lies, or points. (TG)

Earth material: A nonliving substance that makes up or comes from the earth. (TG)

Elapsed time: The difference between a starting time and an ending time. (TG)

Elasticity: The property of a stretched material to return to its original shape and size. (SS)

Energy transfer: The change of energy from one form to another (such as light to heat), or the movement of energy from one object to another (such as heat moving from air to soil or water). (TG)

Fossil fuel: A general term for hydrocarbon-based fuel extracted from the earth, such as petroleum, natural gas, or coal. (SS)

Gas giant: Any of the second four planets from the Sun, which are made of gas. (SS)

Gravity: The force that causes objects to move toward one another. (SS)

Greenhouse effect: The heating of a closed space when light energy enters, is transformed into heat, which is unable to disperse, resulting in heat buildup. (TG)

Heat sink: A material, such as water, that can absorb a large amount of heat for its volume and release the energy slowly. (TG)

High-pressure zone: A region where colder, denser air is falling, causing increased atmospheric pressure. (SS)

Hurricane: The name for a severe tropical cyclone with a wind velocity of 117 kilometers (70 miles) or more an hour in the northwestern Atlantic Ocean, Caribbean Sea, Gulf of Mexico, and eastern Pacific Ocean. (SS)

Low-pressure zone: A region where warmer, less dense air is rising, causing decreased atmospheric pressure. (SS)

Magnetic field: The area around a magnet where the magnet's force has influence. (SS)

Mass: The amount of material in something. (SS)

Matter: Anything that takes up space and has mass. It can be a solid, liquid, or gas. (SS)

Melanin: A dark brown or black pigment that is responsible for skin, hair, and eye color. (SS)

Membrane: A thin, soft, flexible sheet or layer. (SS)

Meteorologist: A scientist who studies the weather. (SS)

Milky Way Galaxy: One of the many collections of stars that make up the universe. Our sun is one of the billions of stars in the Milky Way Galaxy. (SS)

Molecule: The smallest particle of a substance or a compound. A molecule is usually made of two or more atoms. (SS)

Orbit: To travel in a curved path around the Sun or a planet. (SS)

Orientation: A position or arrangement in relation to another position or location. (TG)

Passive solar energy system: A system that provides space heating (or cooling) by the action of sunshine falling on the building without assistance of mechanical or electrical devices. (TG)

Penumbra: The lighter area around the edges of a shadow. (SS)

Precipitation: Rain, snow, sleet, or hail that falls to the ground. (SS)

Radiation: The process of giving off energy in the form of rays or waves. (SS)

Reflect: To bounce back. (TG)

Regulator: A device that controls a function such as heating. (SS)

Rotation: One complete turn on an axis. (SS)

Satellite: A moon that orbits a planet. (SS)

Shadow: The dark area created by an object that stops light. (TG)

Silicon: A common, nonmetallic element found only combined with other elements such as oxygen in the Earth's crust. (SS)

Solar cell: A silicon cell that converts sunlight into electric energy and is used as a power source. (SS)

Solar collector: A material used to capture solar energy in a water heater or other device. (TG)

Solar energy: Energy from the Sun. This energy takes several forms, including visible light and infrared light that can be felt as heat. (TG)

Solar panel: A group of solar cells on a flat surface. (SS)

Solar thermal unit: A device used to measure heat from the Sun. (SS)

Solar wind: A constant stream of particles given off by the Sun's corona. It moves at about 400 kilometers (250 miles) per second. (SS)

Space heating: The transfer of heat energy to air in an enclosed space. (TG)

Sun: A star around which Earth and other planets revolve. It furnishes heat, light, and energy. (TG)

Surface area: The total surface of an object; for a rectangle or square surface it equals length times width. (TG)

Temperate: Mild. (SS)

Terrestrial: Relating to land. (SS)

Thermometer: A tool that is used to measure temperature. (TG)

Thermonuclear reaction: The creation of new elementary materials from other elementary materials, caused by extreme heat and pressure. The result is the release of large amounts of energy. (SS)

Tornado: A violent, destructive windstorm occurring over land. (SS)

Typhoon: The name for a severe tropical cyclone in the northwestern Pacific Ocean. (SS)

Ultraviolet radiation: High-energy, invisible radiation with wavelengths shorter than violet light and longer than X-rays. (SS)

Umbra: The darker area in the middle of a shadow. (SS)