

uneven-aged management—the broad category under which selective cutting and shelter-wood cutting fall; selective deforestation.

PTER 7: ENERGY

active collection—the use of devices, such as solar panels, to collect, focus, transport, or store solar energy.

anthracite—the cleanest-burning coal; almost pure carbon.

barrels—the unit used to describe the volume of fossil fuels.

bituminous—the second-purest form of coal.

boiler residue—a waste product produced by the burning of coal.

crude oil—the form petroleum takes when in the ground

energy—the capacity to do work.

exploratory wells—wells that are drilled to search for fossil fuel reserves.

fission—a nuclear reaction in which an atomic nucleus, especially a heavy nucleus such as an isotope of uranium, splits into fragments, usually two fragments of comparable mass, releasing from 100 million to several hundred million electron volts of energy.

fossil fuel—a hydrocarbon deposit, such as petroleum, coal, or natural gas, derived from living matter of a previous geologic time and used for fuel.

First Law of Thermodynamics—says that energy can neither be created nor destroyed; it can only be transferred and transformed.

fly ash—a waste product produced by the burning of coal.

half-life—the amount of time it takes for half of a radioactive sample to disappear.

Hubbert peak (peak oil)—an influential theory that concerns the long-term rate of conventional oil (and other fossil fuel) extraction and depletion. It predicts that future world oil production will soon reach a peak and then rapidly decline.

hydroelectric power—power generated using water.

kinetic energy—the energy of motion.

lignite—the least pure coal.

maturation—when the organic material in petroleum sediments are chemically transformed into petroleum.

nuclear fusion—the process of fusing two nuclei.

overburden—the rocks and Earth that is removed when mining for a commercially valuable mineral resource.

passive solar energy collection—the use of building materials, building placement, and design to passively collect solar energy that can be used to keep a building warm or cool.