

# Glossary

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E

**E85:** A fuel containing a mixture of 85 percent ethanol and 15 percent gasoline. See [Motor gasoline \(finished\)](#).

**E95:** A fuel containing a mixture of 95 percent ethanol and 5 percent gasoline

**EAR:** [Estimated Additional Resources](#)

**Economy of scale:** The principle that larger production facilities have lower unit costs than smaller facilities.

**Effective full-power days:** The number of effective full-power days produced by a unit is a measure of the unit's energy generation. It is determined using the following ratio Heat generation (planned or actual) in megawatt days thermal (MWdt) (divided by) Licensed thermal power in megawatts thermal (MWt).

**EIA:** The Energy Information Administration. An independent agency within the U.S. Department of Energy that develops surveys, collects energy data, and analyzes and models energy issues. The Agency must meet the requests of Congress, other elements within the Department of Energy, Federal Energy Regulatory Commission, the Executive Branch, its own independent needs, and assist the general public, or other interest groups, without taking a policy position. See more information about EIA at <http://www.eia.gov/about/>

**EIS:** Environmental Impact Statement

**Electric baseboard:** An individual space heater with electric resistance coils mounted behind shallow panels along baseboards. Electric baseboards rely on passive convection to distribute heated air to the space.

**Electric current:** The flow of electric charge. The preferred unit of measure is the ampere.

**Electric energy:** The ability of an electric current to produce work, heat, light, or other forms of energy. It is measured in kilowatthours.

**Electric expenses:** The cost of labor, material, and expenses incurred in operating a facility's prime movers, generators, auxiliary apparatus, switching gear, and other electric equipment for each of the points where electricity enters the transmission or distribution grid.

**Electric generation:** See [Gross generation](#) and [Net generation](#).

**Electric generation industry:** Stationary and mobile generating units that are connected to the electric power grid and can generate electricity. The electric generation industry includes the "electric power sector" (utility generators and independent power producers) and industrial and commercial power generators, including combined-heat-and-power producers, but excludes units at single-family dwellings.

**Electric generator:** A facility that produces only electricity, commonly expressed in kilowatthours (kWh) or megawatthours (MWh). Electric generators include electric utilities and independent power producers.

**Electric hybrid vehicle:** An electric vehicle that either (1) operates solely on electricity, but contains an internal combustion motor that generates additional electricity (series hybrid); or (2) contains an electric system and an internal combustion system and is capable of operating on either system (parallel hybrid).

**Electric industry reregulation:** The design and implementation of regulatory practices to be applied to the remaining traditional utilities after the electric power industry has been restructured. Reregulation applies to those entities that continue to exhibit characteristics of a natural monopoly. Reregulation could employ the same or different regulatory practices as those used before restructuring.

**Electric industry restructuring:** The process of replacing a monopolistic system of electric utility suppliers with competing sellers, allowing individual retail customers to choose their supplier but still receive delivery over the power lines of the local utility. It includes the reconfiguration of vertically-integrated electric utilities.

**Electric motor vehicle:** A motor vehicle powered by an electric motor that draws current from rechargeable storage batteries, fuel cells, photovoltaic arrays, or other sources of electric current.

**Electric non-utility:** Any entity that generates, transmits, or sells electricity, or sells or trades electricity services and products, where costs are not established and recovered by regulatory authority. Examples of these entities include, but are not limited to, independent power producers, power marketers and aggregators (both wholesale and retail), merchant transmission service providers, self-generation entities, and cogeneration firms with Qualifying Facility Status.

**Electric operating expenses:** Summation of electric operation-related expenses, such as operation expenses, maintenance expenses, depreciation expenses, amortization, taxes other than income taxes, Federal income taxes, other income taxes, provision for deferred income taxes, provision for deferred income-credit, and investment tax credit adjustment.

**Electric plant (physical):** A facility containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

**Electric plant acquisition adjustment:** The difference between (a) the cost to the respondent utility of an electric plant acquired as an operating unit or system by purchase and (b) the depreciated original cost, estimated if not known, of such property.

**Electric power:** The rate at which electric energy is transferred. Electric power is measured by capacity and is commonly expressed in megawatts (MW).

**Electric power grid:** A system of synchronized power providers and consumers connected by transmission and distribution lines and operated by one or more control centers. In the continental United States, the electric power grid consists of three systems the Eastern Interconnect, the Western Interconnect, and the Texas Interconnect. In Alaska and Hawaii, several systems encompass areas smaller than the State (e.g., the interconnect serving Anchorage, Fairbanks, and the Kenai Peninsula; individual islands).

**Electric power plant:** A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

**Electric power sector:** An energy-consuming sector that consists of electricity only and combined heat and power(CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public--i.e., North American Industry Classification System 22 plants. See also [Combined heat and power \(CHP\) plant](#) and [Electricity only plant](#).

**Electric power system:** An individual electric power entity--a company; an electric cooperative; a public electric supply corporation as the Tennessee Valley Authority; a similar Federal department or agency such as the Bonneville Power Administration; the Bureau of Reclamation or the Corps of Engineers; a municipally owned electric department offering service to the public; or an electric public utility district (a "PUD"); also a jointly owned electric supply project such as the Keystone.

**Electric pump for well water:** This pump forces the water from a well below ground level up into the water pipes that circulate through the house. When this pump is not working, there is a limited supply of running water in the house.

**Electric rate:** The price set for a specified amount and type of electricity by class of service in an electric rate schedule or sales contract.

**Electric rate schedule:** A statement of the electric rate and the terms and conditions governing its application, including attendant contract terms and conditions that have been accepted by a regulatory body with appropriate oversight authority.

**Electric system loss:** Total energy loss from all causes for an electric utility.

**Electric system reliability:** The degree to which the performance of the elements of the electrical system results in power being delivered to consumers within accepted standards and in the amount desired. Reliability encompasses two concepts, adequacy and security. Adequacy implies that there are sufficient generation and transmission resources installed and available to meet projected electrical demand plus reserves for contingencies. Security implies that the system will remain intact operationally (i.e., will have sufficient available operating capacity) even after outages or other equipment failure. The degree of reliability may be measured by the frequency, duration, and magnitude of adverse effects on consumer service.

**Electric utility:** A corporation, person, agency, authority, or other legal entity or instrumentality aligned with distribution facilities for delivery of electric energy for use primarily by the public.

Included are investor-owned electric utilities, municipal and State utilities, Federal electric utilities, and rural electric cooperatives. A few entities that are tariff based and corporately aligned with companies that own distribution facilities are also included.

**Electric utility company:** See [Electric utility](#).

**Electric utility divestiture:** The separation of one electric utility function from others through the selling of the management and ownership of the assets related to that function. It is most commonly associated with selling generation assets so they are no longer owned or controlled by the shareholders that own the company's transmission and distribution assets.

**Electric utility generator:** A generator that is owned by an electric utility, (see definition of [electric utility](#)) or a jointly owned generator with the greatest share of the generator being electric utility owned. Note: If two or more owners have equal shares of ownership in a generator, it is considered to be an electric utility generator if any one of the owners meets the definition of electric utility.

**Electric utility restructuring:** The introduction of competition into at least the generation phase of electricity production, with a corresponding decrease in regulatory control.

**Electric utility sector:** The electric utility sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and that meet the definition of an electric utility. Non utility power producers are not included in the electric sector.

**Electric zone:** A portion of the grid controlled by the independent system operator.

**Electrical system energy losses:** The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted for use.

**Electricity:** A form of energy characterized by the presence and motion of elementary charged particles generated by friction, induction, or chemical change.

**Electricity broker:** An entity that arranges the sale and purchase of electric energy, the transmission of electricity, and/or other related services between buyers and sellers but does not take title to any of the power sold.

**Electricity congestion:** A condition that occurs when insufficient transmission capacity is available to implement all of the desired transactions simultaneously.

**Electricity demand:** The rate at which energy is delivered to loads and scheduling points by generation, transmission, and distribution facilities.

**Electricity demand bid:** A bid into the power exchange indicating a quantity of energy or an ancillary service that an eligible customer is willing to purchase and, if relevant, the maximum price that the customer is willing to pay.

**Electricity generation:** The process of producing electric energy or the amount of electric energy produced by transforming other forms of energy, commonly expressed in kilowatthours(kWh) or megawatthours (MWh).

**Electricity generation, gross:** See [Gross generation](#).

**Electricity generation, net:** See [Net generation](#).

**Electricity only plant:** A plant designed to produce electricity only. See also Combined heat and power (CHP) plant.

**Electricity paid by household:** The household paid the electric utility company directly for all household uses of electricity (such as water heating, space heating, air-conditioning, cooking, lighting, and operating appliances.) Bills paid by a third party are not counted as paid by the household.

**Electricity sales:** The amount of kilowatthours sold in a given period of time; usually grouped by classes of service, such as residential, commercial, industrial, and other. "Other" sales include sales for public street and highway lighting and other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

**Electrochemical process:** The direct process end use in which electricity is used to cause a chemical transformation. Major uses of electrochemical process occur in the aluminum industry in which alumina is reduced to molten aluminum metal and oxygen, and in the alkalies and chlorine industry, in which brine is separated into caustic soda, chlorine, and hydrogen.

**Elution:** The process of using a solvent (eluent) to remove select ions (e.g., uranium) from an adsorbent such as ion-exchange resins.

**Emergency:** The failure of an electric power system to generate or deliver electric power as normally intended, resulting in the cut-off or curtailment of service.

**Emergency backup generation:** The use of electric generators only during interruptions of normal power supply.

**Emergency energy:** Electric energy provided for a limited duration, intended only for use during emergency conditions.

**Emissions:** Anthropogenic releases of gases to the atmosphere. In the context of global climate change, they consist of radiatively important greenhouse gases (e.g., the release of carbon dioxide during fuel combustion).

**Emissions coefficient:** A unique value for scaling emissions to activity data in terms of a standard rate of emissions per unit of activity (e.g., pounds of carbon dioxide emitted per Btu of fossil fuel consumed).

**End user:** A firm or individual that purchases products for its own consumption and not for resale (i.e., an ultimate consumer).

**Ending stocks:** Primary stocks of crude oil and petroleum products held in storage as of 12 midnight on the last day of the month. Primary stocks include crude oil or petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tank farms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary Stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

**Energy:** The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units (Btu).

**Energy assistance program:** See [Low Income Home Energy Assistance Program](#).

**Energy audit:** A program carried out by a utility company in which an auditor inspects a home and suggests ways energy can be saved.

**Energy broker system:** Introduced into Florida by the Public Service Commission, the energy broker system is a system for exchanging information that allows utilities to efficiently exchange hourly quotations of prices at which each is willing to buy and sell electric energy. For the broker system to operate, utility systems must have in place bilateral agreements between all potential parties, must have transmission arrangements between all potential parties, and must have transmission arrangements that allow the exchanges to take place.

**Energy charge:** That portion of the charge for electric service based upon the electric energy (kWh) consumed or billed.

**Energy conservation features:** This includes building shell conservation features, HVAC conservation features, lighting conservation features, any conservation features, and other conservation features incorporated by the building. However, this category does not include any demand-side management (DSM) program participation by the building. Any DSM program participation is included in the DSM Programs.

**Energy consumption:** The use of energy as a source of heat or power or as a raw material input to a manufacturing process.

**Energy deliveries:** Energy generated by one electric utility system and delivered to another system through one or more transmission lines.

**Energy demand:** The requirement for energy as an input to provide products and/or services.

**Energy effects:** The changes in aggregate electricity use (measured in megawatthours) for consumers that participate in a utility DSM (demand-side management) program. Energy effects represent changes at the consumer's meter (i.e., exclude transmission and distribution effects) and reflect only activities that are undertaken specifically in response to utility-administered programs, including those activities implemented by third parties under contract to the utility. To the extent possible, Energy effects should exclude non-program related effects such as changes in energy usage attributable to non participants, government-mandated energy-efficiency standards that legislate improvements in building and appliance energy usage, changes in consumer behavior that result in greater energy use after initiation in a DSM program, the natural operations of the marketplace, and weather and business-cycle adjustments.

**Energy Efficiency:** A ratio of service provided to energy input (e.g., [lumens](#) to [watts](#) in the case of light bulbs). Services provided can include buildings-sector end uses such as lighting, refrigeration, and heating; industrial processes; or vehicle transportation. Unlike conservation, which involves some reduction of service, energy efficiency provides energy reductions without sacrifice of service. May also refer to the use of technology to reduce the energy needed for a given purpose or service.

**Energy efficiency, Electricity:** Refers to programs that are aimed at reducing the energy used by specific end-use devices and systems, typically without affecting the services provided. These programs reduce overall electricity consumption (reported in megawatt-hours), often without explicit consideration for the timing of program-induced savings. Such savings are generally achieved by substituting technologically more advanced equipment to produce the same level of end-use services (e.g. lighting, heating, motor drive) with less electricity. Examples include high-efficiency appliances, efficient lighting programs, high-efficiency heating, ventilating and air conditioning (HVAC) systems or control modifications, efficient building design, advanced electric motor drives, and heat recovery systems.

**Energy efficient motors:** Are also known as "high-efficiency motors" and "premium motors." They are virtually interchangeable with standard motors, but differences in construction make them more energy efficient.

**Energy exchange:** Any transaction in which quantities of energy are received or given up in return for similar energy products. See [exchange, electricity](#); [exchange, petroleum](#); and [exchange, natural gas](#).

**Energy expenditures:** The money directly spent by consumers to purchase energy. Expenditures equal the amount of energy used by the consumer multiplied by the price per unit paid by the consumer.

**Energy information:** Includes (A) all information in whatever form on fuel reserves, extraction, and energy resources (including petrochemical feedstocks) wherever located; production, distribution, and consumption of energy and fuels wherever carried on; and (B) matters relating to energy and fuels, such as corporate structure and proprietary relationships, costs, prices, capital investment, and assets, and other matters directly related there to, wherever they exist.

**Energy Information Administration (EIA):** An independent agency within the U.S. Department of Energy that develops surveys, collects energy data, and does analytical and modeling analyses of energy issues. The Agency must satisfy the requests of Congress, other elements within the Department of Energy, Federal Energy Regulatory Commission, the Executive Branch, its own independent needs, and assist the general public, or other interest groups, without taking a policy position.

**Energy Intensity:** A ratio of energy consumption to another metric, typically national gross domestic product in the case of a country's energy intensity. Sector-specific intensities may refer to energy consumption per household, per unit of commercial floorspace, per dollar value industrial shipment, or another metric indicative of a sector. Improvements in energy intensity

include energy efficiency and conservation as well as structural factors not related to technology or behavior.

**Energy intensity (Commercial Buildings Energy Consumption Survey):** The ratio of consumption to floor space.

**Energy loss:** Deleted because there is no need for a general term to encompass all forms of energy loss. Terms referring to losses specific to particular energy sources are defined separately.

**Energy loss (power):** See [Power loss](#).

**Energy management and control system(EMCS):** An energy conservation feature that uses mini/microcomputers, instrumentation, control equipment, and software to manage a building's use of energy for heating, ventilation, air conditioning, lighting, and/or business-related processes. These systems can also manage fire control, safety, and security. Not included as EMCS are time-clock thermostats.

**Energy management practices:** Involvement, as a part of the building's normal operations, in energy efficiency programs that are designed to reduce the energy used by specific end-use systems. This includes the following EMCS, DSM Program Participation, Energy Audit, and a Building Energy Manager.

**Energy Policy Act of 1992 (EPACT):** This legislation creates a new class of power generators, exempt wholesale generators, that are exempt from the provisions of the Public Holding Company Act of 1935 and grants the authority to the Federal Energy Regulatory Commission to order and condition access by eligible parties to the interconnected transmission grid.

**Energy production:** See production terms associated with specific energy types.

**Energy receipts:** Energy brought into a site from another location.

**Energy reserves:** Estimated quantities of energy sources that are demonstrated to exist with reasonable certainty on the basis of geologic and engineering data (proved reserves) or that can reasonably be expected to exist on the basis of geologic evidence that supports projections from proved reserves (probable/indicated reserves). Knowledge of the location, quantity, and grade of probable/indicated reserves is generally incomplete or much less certain than it is for proved energy reserves. Note: This term is equivalent to "Demonstrated Reserves" as defined in the resource/reserve classification contained in the U.S. Geological Survey Circular 831,1980. Demonstrated reserves include measured and indicated reserves but exclude inferred reserves.

**Energy sale(s):** The transfer of title to an energy commodity from a seller to a buyer for a price or the quantity transferred during a specified period.

**Energy savings:** A reduction in the amount of electricity used by end users as a result of participation in energy efficiency programs and load management programs.

**Energy service provider:** An energy entity that provides service to a retail or end-use customer.

**Energy source:** Any substance or natural phenomenon that can be consumed or transformed to supply heat or power. Examples include petroleum, coal, natural gas, nuclear, biomass, electricity, wind, sunlight, geothermal, water movement, and hydrogen in fuel cells.

**Energy supplier:** Fuel companies supplying electricity, natural gas, fuel oil, kerosene, or LPG (liquefied petroleum gas) to the household.

**Energy supply:** Energy made available for future disposition. Supply can be considered and measured from the point of view of the energy provider or the receiver.

**Energy used in the home:** For electricity or natural gas, the quantity is the amount used by the household during the 365- or 366-day period. For fuel oil, kerosene, and liquefied petroleum gas (LPG), the quantity consists of fuel purchased, not fuel consumed. If the level of fuel in the storage tank was the same at the beginning and end of the annual period, then the quantity consumed would be the same as the quantity purchased.

**Energy-use sectors:** A group of major energy-consuming components of U.S. society developed to measure and analyze energy use. The sectors most commonly referred to in EIA are: residential, commercial, industrial, transportation, and electric power.

**Energy-weighted industrial output:** The weighted sum of real output for all two-digit Standard Industrial Classification (SIC) manufacturing industries plus agriculture, construction, and mining. The weight for each industry is the ratio between the quantity of end-use energy consumption to the value of real output.

**Engine size:** The total volume within all cylinders of an engine when pistons are at their lowest positions. The engine is usually measured in "liters" or "cubic inches of displacement (CID)." Generally, larger engines result in greater engine power, but less fuel efficiency. There are 61.024 cubic inches in a liter.

**Enriched uranium:** Uranium in which the U-235 isotope concentration has been increased to greater than the 0.711 percent U-235 (by weight) present in natural uranium.

**Enrichment feed deliveries:** Uranium that is shipped under contract to a supplier of enrichment services for use in preparing enriched uranium product to a specified U-235 concentration and that ultimately will be used as fuel in a nuclear reactor.

**Enrichment tails assay:** A measure of the amount of fissile uranium (U-235) remaining in the waste stream from the uranium enrichment process. The natural uranium "feed" that enters the enrichment process generally contains 0.711 percent (by weight) U-235. The "product stream" contains enriched uranium (more than 0.711 percent U-235) and the "waste" or "tails" stream contains depleted uranium (less than 0.711 percent U-235). At the historical enrichment tails assay of 0.2 percent, the waste stream would contain 0.2 percent U-235. A higher enrichment tails assay requires more uranium feed (thus permitting natural uranium stockpiles to be decreased), while increasing the output of enriched material for the same energy expenditure.

**Environmental impact statement:** A report that documents the information required to evaluate the environmental impact of a project. It informs decision makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the environment.

**Environmental protection agency (EPA) certification files:** Computer files produced by EPA for analysis purposes. For each vehicle make, model and year, the files contain the EPA test

MPGs (city, highway, and 55/45 composite). These MPG's are associated with various combinations of engine and drive-train technologies (e.g., number of cylinders, engine size, gasoline or diesel fuel, and automatic or manual transmission). These files also contain information similar to that in the DOE/EPA Gas Mileage Guide, although the MPGs in that publication are adjusted for shortfall.

**Environmental restoration:** Although usually described as "cleanup," this function encompasses a wide range of activities, such as stabilizing contaminated soil; treating groundwater; decommissioning process buildings, nuclear reactors, chemical separations plants, and many other facilities; and exhuming sludge and buried drums of waste.

**Environmental restrictions:** In reference to coal accessibility, land-use restrictions that constrain, postpone, or prohibit mining in order to protect environmental resources of an area; for example, surface- or ground water quality, air quality affected by mining, or plants or animals or their habitats.

**EOR:** Enhanced Oil Recovery

**EPA:** Environmental Protection Agency

**EPA certification:** A permanent label on fireplace inserts and freestanding wood stoves manufactured after July 1, 1988, indicating that the equipment meets EPA standards for clean burning.

**EPA composite MPG:** The harmonic mean of the EPA city and highway MPG (miles per gallon), weighted under the assumption of 55 percent city driving and 45 percent highway driving.

**EPACT:** [Energy Policy Act of 1992](#)

**Equilibrium cycle:** An analytical term that refers to fuel cycles that occur after the initial one or two cycles of a reactor's operation. For a given type of reactor, equilibrium cycles have similar fuel characteristics.

**Equity (financial):** Ownership of shareholders in a corporation represented by stock.

**Equity capital:** The sum of capital from retained earnings and the issuance of stock.

**Equity crude oil:** The proportion of production that a concession owner has the legal and contractual right to retain.

**Equity in earnings of unconsolidated affiliates:** A company's proportional share (based on ownership) of the net earnings or losses of an unconsolidated affiliate.

**Establishment:** An economic unit, generally, at a single physical location where business is conducted or where services or industrial operations are performed. However, "establishment" is not synonymous with "building."

**Estimated additional resources (EAR):** The uranium in addition to reasonable assured resources (RAR) that is expected to occur, mostly on the basis of direct geological evidence, in extensions of well-explored deposits, little-explored deposits, and undiscovered deposits believed to exist along a well-defined geologic trend with known deposits, such that the uranium

can subsequently be recovered within the given cost ranges. Estimates of tonnage and grade are based on available sampling data and on knowledge of the deposit characteristics as determined in the best known parts of the deposit or in similar deposits. EAR correspond to DOE's Probable Potential Resource Category.

**Estimated Recoverable Reserves (coal):** An estimate of coal reserves, based on a demonstrated reserve base, adjusted for assumed accessibility and recovery factors, and does not include any specific economic feasibility criteria.

**ETBE:** ethyl tertiary butyl ether

**ETBE (ethyl tertiary butyl ether):**  $(\text{CH}_3)_3\text{COC}_2\text{H}$ : An oxygenate blend stock formed by the catalytic etherification of isobutylene with ethanol.

**Ethane ( $\text{C}_2\text{H}_6$ ):** A straight-chain saturated (paraffinic) hydrocarbon extracted predominantly from the natural gas stream, which is gaseous at standard temperature and pressure. It is a colorless gas that boils at a temperature of -127 degrees Fahrenheit.

**Ethanol ( $\text{C}_2\text{H}_5\text{OH}$ ):** A clear, colorless, flammable alcohol. Ethanol is typically produced biologically from biomass feedstocks such as agricultural crops and cellulosic residues from agricultural crops or wood. Ethanol can also be produced chemically from ethylene. See [Biomass](#), [Fuel Ethanol](#), and [Fuel Ethanol Minus Denaturant](#).

**Ether:** A generic term applied to a group of organic chemical compounds composed of carbon, hydrogen, and oxygen, characterized by an oxygen atom attached to two carbon atoms (e.g., methyl tertiary butyl ether).

**Ethylene ( $\text{C}_2\text{H}_4$ ):** An olefinic hydrocarbon recovered from refinery or petrochemical processes, which is gaseous at standard temperature and pressure. Ethylene is used as a petrochemical feedstock for many chemical applications and the production of consumer goods.

**Ethylene dichloride:** A colorless, oily liquid used as a solvent and fumigant for organic synthesis, and for ore flotation.

**EU:** European Union

**Eurasia:** The physical land mass containing the continents of Europe and Asia. For Energy Information Administration reporting, it includes the former parts of the [Union of Soviet Socialist Republics \(U.S.S.R\)](#): Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

**Evacuated-tube collector:** A collector in which solar thermal heat is captured by use of a collector fluid that flows through an absorber tube contained inside an evacuated glass tube.

**Evaporation pond:** A containment pond (that preferably has an impermeable lining of clay or synthetic material such as hypalon) to hold liquid wastes and to concentrate the waste through evaporation.

**Evaporative cooler (swamp cooler):** An air-cooling unit that turns air into moist, cool air by saturating the air with water vapor. It does not cool air by use of a refrigeration unit.

**EWG:** [Exempt Wholesale Generator](#)

**Excess statutory depletion:** The excess of estimated statutory depletion allowable as an income tax deduction over the amount of cost depletion otherwise allowable as a tax deduction, determined on a total enterprise basis.

**Exchange:** See [energy exchange](#).

**Exchange agreement:** A contractual agreement in which quantities of crude oil, petroleum products, natural gas, or electricity are delivered, either directly or through intermediaries, from one company to another company, in exchange for the delivery by the second company to the first company of an equivalent volume or heat content. The exchange may take place at the same time and location or at different times and/or locations. Such agreements may also involve the payment of cash. Note: EIA excludes volumes sold through exchange agreements to avoid double counting of data. See [energy exchange](#).

**Exchange energy:** See [exchange, electricity](#).

**Exchange, electricity:** A type of energy exchange in which one electric utility agrees to supply electricity to another. Electricity received is returned in kind at a later time or is accumulated as an energy balance until the end of a specified period, after which settlement may be made by monetary payment. Note: This term is also referred to as [exchange energy](#).

**Exchange, natural gas:** A type of energy exchange in which one company agrees to deliver gas, either directly or through intermediaries, to another company at one location or in one time period in exchange for the delivery by the second company to the first company of an equivalent volume or heat content at a different location or time period. Note: Such agreements may or may not include the payment of fees in dollar or volumetric amounts.

**Exchange, petroleum:** A type of energy exchange in which quantities of crude oil or any petroleum product(s) are received or given up in return for other crude oil or petroleum products. It includes reciprocal sales and purchases.

**Exchange, power:** Delete in favor of the already-defined term exchange energy, which should be renamed exchange electricity or exchange, electricity.

**Exempt wholesale generator (EWG):** Wholesale generators created under the 1992 Energy Policy Act that are exempt from certain financial and legal restrictions stipulated in the Public Utilities Holding Company Act of 1935.

**Exhaust fan:** Small fans located in the wall or ceiling that exhaust air, odors, and moisture from the bathroom, kitchen, or basement to the outside.

**Expenditure:** The incurrence of a liability to obtain an asset or service.

**Expenditures per million Btu:** The aggregate ratio of a group of buildings' total expenditures for a given fuel to the total consumption of that fuel.

**Expenditures per square foot:** The aggregate ration of a group of buildings' total expenditures for a given fuel to the total floor space in those buildings.

**Exploration drilling:** Drilling done in search of new mineral deposits, on extensions of known ore deposits, or at the location of a discovery up to the time when the company decides that sufficient ore reserves are present to justify commercial exploration. Assessment drilling is reported as exploration drilling.

**Exploratory well:** A hole drilled a) to find and produce oil or gas in an area previously considered unproductive area; b) to find a new reservoir in a known field, i.e., one previously producing oil and gas from another reservoir, or c) to extend the limit of a known oil or gas reservoir.

**Exports:** Shipments of goods from within the 50 States and the District of Columbia to U.S. possessions and territories or to foreign countries.

**Extensions:** Any new reserves credited to a previously producing reservoir because of enlargement of its proved area. This enlargement in proved area is usually due to new well drilling outside of the previously known productive limits of the reservoir.

**Extensions, discoveries, and other additions:** Additions to an enterprise's proved reserves that result from(1) extension of the proved acreage of previously discovered (old) reserves through additional drilling in periods subsequent to discovery and (2) discovery of new fields with proved reserves or of new reservoirs of proved reserves in old fields.

**Externalities:** Benefits or costs, generated as a byproduct of an economic activity, that do not accrue to the parties involved in the activity. Environmental externalities are benefits or costs that manifest themselves through changes in the physical or biological environment.

**Extraction loss:** See [Natural gas plant liquids \(NGPL\) production](#).

**Extractive industries:** Industries involved in the activities of (1) prospecting and exploring for wasting (non-regenerative) natural resources, (2) acquiring them, (3) further exploring them, (4) developing them, and (5) producing (extracting) them from the earth. The term does not encompass the industries of forestry, fishing, agriculture, animal husbandry, or any others that might be involved with resources of a regenerative nature.

**Extraordinary income deductions (electric utility):** Those items related to transactions of a nonrecurring nature that are not typical or customary business activities of the utility and that would significantly distort the current year's net income if reported other than as extraordinary items.

**A B C D E F G H I J K L M N O P Q R S T U  
V W XYZ**

**Thank You.** We welcome your comments or suggestions (*optional*).

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