

Aerosol—A suspension of fine solid or liquid particles in a gas.

Aggregate—A mixture of small solid particles (stones, glass, ceramics, metal) obtained in separation of MSW.

Air classifier—A device that uses a moving stream of air to separate light waste components (paper, plastic film, textiles, dust, leaves, foil, etc.) from heavy components (glass, metal, wood, bulk plastic, etc.).

Air knife—A device that uses a horizontal blast of air from a thin slit to separate light from heavy components of a falling solid waste stream.

Aluminum magnet—A device that uses eddy-current forces to separate aluminum and other light nonferrous metals from a solid waste stream.

Anaerobic digestion—Biological degradation of organic materials by micro-organisms in the absence of oxygen.

Back end recovery—Separation and recovery of materials from the residue of incinerated MSW.

Balance sheet costs—The direct costs of operating and owning a facility that reflect on the facility's accounts. Subsidies or externalities are excluded in this accounting.

Beverage delivery industries—all industries involved in the production and sale of beer and soft drinks—brewers, bottlers, wholesalers, distributors, and retailers.

Capacity utilization factor—The fraction of total plant capacity actually utilized over a period of time.

Capital gains tax—A tax levied on net income realized from the sale of a capital asset.

Capital stock—The undepreciated value of capital plant and equipment in place.

Centralized resource recovery—Centralized separation and recovery for use or recycling of materials and/or energy contained in mixed MSW. Facilities may range in capacity from 25 to 3,000 or more tons per day.

Char—A combustible, carbonaceous residue from the pyrolysis of MSW or other organic matter.

Cogeneration—Production of useful heat and electricity simultaneously in a single facility.

Coliforms—Relating to, resembling, or being colon bacillus.

Competitive—A market situation in which no producer or consumer alone is able to influence the prices at which goods and services are traded.

Compost—A mixture of decayed organic matter used for fertilizing land.

Conservation—Use of less resources (materials or energy) than would otherwise occur at the existing states of technology, prices, and institutions.

Cullet—Mixed, broken glass.

Decibel—A measure of the loudness of noise.

Depletion allowance—See percentage depletion allowance.

Deposit—A sum of money paid to a lender of a good by the borrower and refundable to the borrower upon return of the good.

Discard—An item that an owner no longer desires to possess, and which is made available for reuse, recycle, or disposal; also, the making available of such an item.

Discount—The assigning of a value in the present to the future value of an action or a good.

Disposal—The ultimate return of an item or product to the earth, through burial, dumping, combustion, or chemical reaction.

District heating—Provision of heat and/or cooling water to a number of users from a central source; usually, to several buildings in an urban area.

Economy of scale—A situation in which the average cost of producing a good or service declines as the rate of goods production or service delivery increases.

Eddy current—An electrical current induced in a material that is moving relative to a magnetic field.

Effectiveness—The degree to which a policy or program is expected to accomplish the objectives to which it is directed.

Effluents—Air or water pollutants emitted from a facility.

Elasticity of demand (or supply)—The percentage change in demand (or supply) that occurs if the price of a good or service changes by 1 percent.

Electrostatic precipitator—A device that uses an induced electrical charge and a magnetic field to recover fine particles from a flowing gas stream.

Epidemiology—The study of the relationships between the causes, occurrence, and control of disease in a population.

Equivalency (approach to ratemaking)—Setting equal rates to transport different batches of raw materials that are required to produce an equivalent amount of final product.

Ex parte—A legal proceeding approached from one side or one point of view only.

Externality—A cost or benefit of an economic activity not borne by a participant in the activity.

Extraction—Mining or other removal of a mineral resource from the earth.

Ferroalloy—Alloys of iron with certain other metals used in the production of steel.

Ferrous metals—Metals containing a high percentage of iron, including steels.

Fill—The provision of one container-full of beverage.

Filter cake—The solids collected in filtering a solid/liquid mixture.

Fire tube boiler—A boiler in which combustion gases pass through tubes immersed in water that becomes steam.

Float—The inventory of beverage containers and secondary packaging in circulation and storage that is required to support a refillable container system.

Flow control—Ordinances that require delivery of collected MSW to specific resource recovery or disposal facilities.

Frit—Partially fused materials of which glass is made; fused slag from pyrolysis.

Front end recovery—Separation and recovery of materials from mixed MSW prior to incineration or other thermal processing.

Froth flotation—Process of removing glass particles from a water slurry of mixed waste with chemicals that create a froth or foam in which the particles become entrapped and with which they can be skimmed off.

General obligation bonds—Municipal bonds whose principal and interest payments are met from and guaranteed by general revenues.

Glass aggregate—See aggregate.

Glass cullet—See cullet.

Heating value—The heat, or energy, released by combustion of a standard amount of fuel under specified conditions (higher and lower heating values refer to whether the water produced by combustion is available as liquid or vapor, respectively).

Heavy metal—Any of a class of metals of high atomic weight and density such as mercury, lead, zinc, and cadmium that are known to be toxic to living organisms.

Home scrap—Scrap material produced and reused within the same processing facility, such as a steel mill or copper smelter.

Humus—The organic portion of soil formed from partially decomposed plant or animal matter.

Hydrolysis—A reaction of an organic chemical with water to produce two or more chemical species that incorporate the elements of the water molecule.

Impact—Any outcome or result of an action, whether direct or indirect.

Incinerator bundle—Tin can scrap, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Processed through a recognized garbage incinerator. (ISIS specification)

Investment tax credit—A deduction from corporate income taxes otherwise due, allowed in proportion to the amount of investment in some specified types of capital goods.

Job gain—Total (but not net) number of new full-time job equivalents created by adoption of a policy.

Job loss—Total (but not net) number of existing full-time job equivalents lost due to adoption of a policy.

Job shift—Net number of jobs created or lost due to adoption of a policy (job shift= job gains minus job losses).

Leachate—Contaminated ground water resulting from the passage of rain or surface water through a waste landfill or dump.

Loan guarantees—A program of Government-funded insurance to protect lenders against failure of a project to obtain sufficient revenues to pay back the principal and interest on a loan.

Long run—A period, usually of several years, during which capital equipment expenditures significantly reflect changing prices, demands, and policies.

Low-interest loans—A Government subsidy to lenders to allow them to offer loans for specific purposes at below market interest rates.

Manifest—Written documentation accompanying specific batches of material or of waste that identifies their origin and composition.

Marginal cost—The cost of producing one additional unit of output from existing plant and equipment (short-run marginal cost) or from additional plant and equipment (long-run marginal cost).

Market failure—Any deviation from an ideal market economy in which all actors have perfect information, all costs are internalized, and perfect competition exists.

Market share—The percentage of total consumption of beverages sold in each container type (consumption measured in physical volume units such as ounces or barrels).

Materials system—An abstract model of the production, use, and disposal of materials in society.

Modular incinerators—Small-scale incinerators that recover heat or hot water, often used in groups of two or more to achieve a desired plant size.

Municipal solid waste (MSW)—regularly collected solid waste from households, institutions, and commercial establishments.

Nonferrous metals—Metals other than iron and steel that are found in MSW, such as aluminum, copper, zinc, lead, and their

alloys. (In analysis of MSW, aluminum is often treated as a separate component.)

Nonreturnable—Beverage containers designed to be used only one time.

Number 1 Bundle—New black steel sheet scrap, clippings, or skeleton scrap, compressed or hand bundled, to charging-box size, and weighing not less than 75 pounds per cubic foot. (Hand bundles are tightly secured for handling with a magnet.) May include Stanley balls or mandrelwound bundles or skeleton reels, tightly secured. May include a chemically detinned material. May not include old auto body or fender stock. Free of metal coated, limed, vitreous enameled, and electrical sheet containing over 0.5 percent silicon. (ISIS specification)

Number 2 Bundle—Old black and galvanized steel sheet scrap, hydraulically compressed to charging-box size and weighing not less than 75 pounds per cubic foot. May not include tin or lead-coated material or vitreous-enameled material. (ISIS specification)

Number 3 Bundle—Old sheet steel, compressed to charging-box size and weighing not less than 75 pounds per cubic foot. May include all coated ferrous scrap not suitable for inclusion in Number 2 bundles. (ISIS specification)

Obsolete scrap—Scrap recovered from used products including postconsumer scrap, demolition waste, railroad and other transportation scrap, etc.

Pathogens—A specific causative agent of disease such as a bacterium, virus, or fungus.

Percentage depletion allowance—A deduction from taxable income of a percentage of annual gross income arising from production and sale of certain minerals.

Pilot plant—A facility of size intermediate between a laboratory and a commercial plant used to test and evaluate a new product or process technology.

Postconsumer waste—Solid waste consisting of products used by final consumers (MSW, automobiles, but not industrial, demolition, or railroad waste).

Primary material—A bulk material of commerce produced from virgin raw materials.

Product charge—A tax or charge levied on bulk materials or final products designed to add the cost of their disposal to the purchase price.

Prompt industrial scrap—Scrap returned from fabricators of products directly to producers of materials, usually with a known composition and level of contamination.

Property tax abatement—A reduction in or exemption from payment of property taxes on specified classes of property over a specified time period.

Pyrolysis—Partial decomposition of organic material to gas and/or liquid in insufficient oxygen to support combustion.

Quad—1 quadrillion or 10^{15} Btu or 1.055 exajoule of energy.

Recyclable—A solid waste material or product capable of being recycled.

Recycle rate—In connection with beverage containers, the fraction of containers distributed that is actually recycled into new metal or glass.

Recycling—Reprocessing of used products into new basic materials of commerce, in which the identity and utility of the original product are lost.

Recycling allowance—A direct grant or tax incentive from the Government to producers or users of recycled materials in proportion to some measure of the amount or value of recycled materials used.

Refractory particle—a ceramic particle or stone that does not melt at glass-making temperatures.

Refuse-derived fuel (RDF)—A solid fuel produced from MSW by removal of recyclable metals and glass and of refractory solids such as stones, ceramics, and metal particles.

Reliability—The anticipated fraction of time or fraction of capacity at which an item of equipment or plant is expected to operate successfully.

Resource recovery—Procedures and processes for recovery of useful energy and/or recyclable materials from mixed or segregated MSW. (Often restricted to centralized recovery from mixed waste, but more properly ap-

plied to all types of recovery for the purpose stated.)

Return rate—The fraction of all refillable beverage containers distributed that are actually refilled and redistributed.

Refillable—A container designed to be filled and distributed more than once.

Reuse—The use of a product two or more times without substantial change in form or function and without substantial repair or renovation.

Revenue bonds—Bonds sold to help pay for a project whose principal and interest payments are met from revenues of that project.

Sanitary landfill—A landfill operation that meets established standards for ground water quality; air pollution; site quality; vermin, pathogen, and disease vector control; and site renovation.

Scenario—A coherent depiction of one possible future development of trends and events.

Secondary material—A bulk material of commerce produced by processing postconsumer or other obsolete scrap.

Secondary packaging—A package designed for storage and transport of a number of individual beverage containers.

Severance tax—A tax on virgin materials levied at the point of mining or harvest in proportion to some measure of the amount or the value extracted.

Shelf price—The actual price paid by consumers for beverages, not including any refundable deposit or sales taxes.

Short run—A period of time of economic adjustment within which plant and equipment are not substantially modified or expanded.

Side effects—The unintended, indirect, or delayed effects of an action or policy.

Slag—A solid, heterogeneous inorganic mass formed from melting of materials in an incinerator or other thermal waste processor.

Source separation—Collection of waste products that are segregated according to material type by waste generators (a mis-

nomer in that separation of mixed waste is not required—only maintenance of the original unmixed state).

Subsidence—A drop in the surface level of a covered landfill or dump that occurs as the contained waste decomposes and is compacted.

Subsidy—A direct or indirect payment from the Government to specific classes of citizens or institutions for the purpose of encouraging some activity which has been deemed to be necessary or desirable for the accomplishment of some policy objective.

Substitution—In an economic sense, the replacement of one factor of production with another to produce the same output at no change in total cost; often used more generally to denote the replacement of one raw material by another, at higher or lower total cost depending on the circumstances.

Tipping fee—the price charged for dumping MSW at a landfill or resource recovery plant.

Transfer station—A facility at which MSW is transferred from collection vehicles to large trucks or rail cars for long distance shipment.

Trip—One cycle in the utilization and return of a refillable beverage container.

Trippage—The average number of trips made by a refillable beverage container during its useful life.

Trommel—Rotating screen used in RDF systems to remove abrasive fine sand, glass, and frit from MSW; sometimes has larger holes to allow removal of containers and other objects of similar size.

Value-of-service—Basis for setting railroad freight rates in proportion to the value of the good shipped rather than the cost of providing the transportation service.

Virgin material—A raw material acquired directly from natural sources.

White ledger—Mixed, high quality waste paper typically acquired from offices.

Wet pulping—Separation of mixed MSW by intensive agitation of waste in a water slurry: organic fiber remains in suspension, heavy solids sink, and plastic film, string, etc. float and are skimmed off.

Waterwall incineration—Direct combustion of raw MSW, generally without preprocessing. The primary product is steam.