



This glossary contains all the vocabulary words used in the lessons, as well as a few other terms used throughout the Rethinking Recycling materials.



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- acid:** a chemical substance capable of reacting with and dissolving certain metals to form salts, turning litmus indicators red, of reacting with and bases or alkalis to form salts, or having a sour taste
- activism:** a method of accomplishing an objective through a concentrated action(s) by a group or an individual
- advertising:** making known or praising publicly, usually in order to sell something
- aerobic:** the state of having oxygen, for example, for healthy composting, aerobic conditions are necessary
- alternative(s):** the choice(s) between two or more things
- aluminum:** a type of metal produced from bauxite ore. It is used in making hard, lightweight, corrosion-resistant materials
- anaerobic:** the state of being without oxygen, for example, anaerobic conditions are not desirable in healthy composting processes and typically lead to foul odors
- aquifer:** a porous layer of underground rock that holds water (see also groundwater)
- ash:** the solid residue formed after something is burned or incinerated
- ash monofill:** a specially constructed landfill for burying the ash created when waste is incinerated
- audit:** a careful review of a collection of items or data for the purposes of analysis or conclusion, such as a waste audit of the trash generated by an individual or group
- bacteria:** the tiny microorganisms or “bugs” that are useful in composting because they break down organic matter. However, bacteria can also be unhealthy such as the kind that grow on garbage and litter
- bill:** a proposed law offered to a legislative group
- bioaccumulation:** process in which certain substances (like pesticides or heavy metals) move up the food chain. For example, they are ingested by aquatic organisms, which in turn are eaten by birds, mammals or humans, with the result that the substances become more and more concentrated in our bodies as they move up the chain
- biodegradable:** capable of being broken down into simple substances or basic elements by microorganisms
- Bottle Bill:** the Oregon law (the first in the U.S.) that requires a 5 cent deposit on certain types of drink packages such as glass and aluminum. The deposit is paid by the consumer and is refunded upon the return of the container. The bill acts as an incentive to keep containers from being littered or thrown away and instead recycled

buying in bulk - consume

buying in bulk: the act of purchasing a product in a large quantity, this usually implies that the product has less packaging and costs less per unit weight of the product when =compared with buying a “single-use” quantity

by-products: waste or leftover resources that are produced from the manufacture of products (not the intended product)

CFCs or chlorofluorocarbons: a type of chemical compound composed of carbon, chlorine and fluorine that is nonflammable, nontoxic and easily liquefied. Historically used in refrigeration, air conditioning, and aerosol propellants. Many countries, including the U.S. signed the 1987 Montreal Protocol calling for a 50% reduction in the use of CFCs by the year 2000 after scientists discovered that CFCs would rise to the upper atmosphere and contribute to the destruction of the ozone layer. (See also HCFCs and Ozone)

cardboard or corrugated cardboard: a very strong thick paper that is made into shipping containers and commonly contains recycled fibers. It can be distinguished by the corrugated (wavy) layer in the center (see also corrugated and grayboard)

caustic: capable of corroding, burning, dissolving, or eating away by chemical action

caution: a warning word on labels for moderately toxic substances (lethal dose: an ounce to a pint)

climate: the average course of condition of the weather based on temperature and precipitation over many years

climate change: the current scientific theory that too much carbon dioxide and other man-made gases are now occurring in large quantities in the atmosphere. The presence of these gases is believed to be causing a rising global temperature

closing the loop: a term for the third chasing arrow in the recycling symbol that reflects the act of a person “buying recycled” i.e., buying items with recycled-content

commingling: a recycling term describing the collection of materials such as newspaper, cardboard, plastic bottles and cans all in the same container

compost: v. to facilitate the decay or decomposition of organic matter (grass, leaves, food, etc.); n. humus-like organic product generated from the act of composting

consequences: the result or outcome that logically or naturally follows from an action or decision

conserve: to preserve and protect natural resources from loss or waste

consumable: a product designed to be used or eaten up, used or expended

consume: to waste, squander, or destroy totally; absorb or use up, as in a purchase



consumer: a person who acquires goods or services for his or her own use and not for resale or production of other goods or services; a buyer

consumer choice: the idea that a person affects how companies behave through their purchasing preferences, for example, by choosing a recycled product over a disposable one, more companies will manufacture recyclable products

consumerism: the theory that progressively greater consumption of goods is economically beneficial

container: a thing in which material is held or carried; receptacle

contamination: the process by which something is made impure; in recycling contamination occurs when people do not properly sort materials from one another

convenience: being suited or favorable to one's comfort, purpose, or needs; increases comfort or makes work less difficult

corrosive: a chemical agent that reacts with or attacks the surface of a material causing it to deteriorate or wear away. A corrosive has a pH level below 2 or above 12.5

corrugated: the shape in folds or parallel and alternating ridges or grooves, in this case the middle wavy layer of a cardboard box (see cardboard)

crush: to press or squeeze to force out of shape

culture: accepted traditional customs and usage of a given social group; moral attitudes; ways of behaving

cycle: a process where the various stages end up at the beginning step again and repeats itself over and over again

DEQ (Oregon Department of Environmental Quality): a state agency, created in 1969, that is responsible for protecting and enhancing Oregon's water and air quality, for cleaning up spills and releases of hazardous materials, and for managing the proper disposal of hazardous and solid wastes

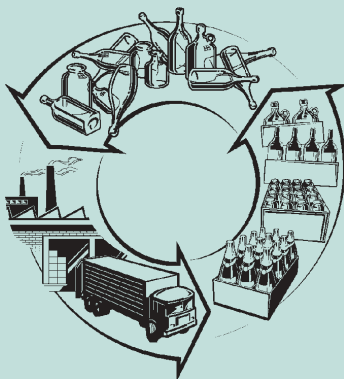
danger: a warning word on labels for substances that are extremely toxic or hazardous (lethal dose is a drop to a teaspoon)

decay: to decompose or rot

decompose: to decay or rot; come apart; change form; break down into simpler components

deposit: the money paid by a consumer to a retailer for returnable beverage containers, refunded to consumer when the container is returned to the store

depot or recycling depot: a place where recyclable materials can be delivered and are collected for further processing



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dioxin - energy recovery

dioxin: a general term that describes a group of hundreds of chemicals that are highly persistent in the environment. The most toxic compound is 2,3,7,8-tetrachlorodibenzo-p-dioxin or TCDD. The toxicity of other dioxins and chemicals like PCBs are measured in relation to TCDD. Dioxin is formed as an unintentional by-product of many industrial processes involving chlorine such as waste incineration, chemical and pesticide manufacturing and pulp and paper bleaching

disposable: designed to be thrown away after use, usually short term such as paper plates at a picnic

disposal: the act of discharging, depositing, injecting, dumping, incinerating, leaking or placing of any waste into or on any land, air or water

dump: n. a place where garbage is disposed openly on the ground or is buried in a hole, but has no construction or management for environmental or health protection like a sanitary landfill v. the act of disposing garbage or unwanted things, often has a negative meaning referring to “illegal dumping”

dumpster: a large metal container for collecting garbage, but may also be marked for the collection of recyclable materials

durable: an object that is made to last for a long time such as furniture, a car, or appliances and also generally describes high quality goods such as clothes or other personal items that will last if cared for properly

EPA (U.S. Environmental Protection Agency): a federal agency created in 1970 by President Nixon. Sets laws and regulations that protect natural habitat, wildlife and human health

Earth Day: a national day of celebration, started in 1970, where people engage in various environmental activities such as tree planting and stream restoration

ecology: the study of organisms and their relationships with the environment, often used as a synonym for the word “environment”

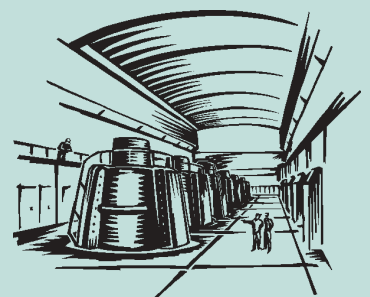
ecomangement: using ecological criteria (relationships between organisms and their environment) to make decisions or choices when planning activities, processes, or purchases

ecosystem: a term used to describe the environment or a specific habitat. For example, the entire planet is an ecosystem of air, water and land, but a wetland ecosystem describes particular conditions that exist where certain types of plants, animals and water coexist in a specific balance

energy: the capacity to perform work (i.e., to cause change by pushing, pulling, heating, etc.) (see energy recovery)

energy intensive: requiring a great deal of energy

energy recovery: the production of energy from one form to another, such as the burning of garbage (incineration) to provide electrical energy for homes or businesses





environment/environmental: a term usually referring to the earth, animals, plants, air, land and water; the habitat or make up of the world in which we live

environmental impact: the effect a particular action or practice has on the environment or its components (land, air, or water)

environmental management: the act of consciously planning and making choices to preserve or protect the environment and/or its components

ethical: acting in accordance with the accepted principles of right and wrong that govern the conduct of a society or profession

finite resources: things of value, such as oil, with a fixed or limited amount or availability

flammable: a substance that is easily set on fire; capable of burning rapidly

food chain: the transfer of food energy from one organism or animal to another, such as grass being eaten by a cow and then humans eating the cow

garbage: anything considered worthless that is thrown away

generator: the source of production, in this case of waste or recyclable material

global impact: the effect a decision or action will have on the world or people worldwide

groundwater: water that is below the earth's surface and is at risk from being polluted by chemicals leaking into the ground from landfills and other sources

grayboard: a type of thick paper similar to cardboard that is made from newsprint and other recycled fibers and is commonly used for packaging, for example cereal boxes

HCFCs (hydrochlorofluorocarbons): The HCFCs include hydrogen atoms in addition to chlorine, fluorine, and carbon atoms. They are used as a substitute for CFCs, and although less destructive, they are still capable of ozone depletion

HDPE (high-density polyethylene): a plastic resin used to produce bottles like milk jugs or crates and products made from recycled HDPE such as plastic lumber or picnic tables

hierarchy: a group of people, ideas, objects, etc., arranged in a graded series (high to low, good to bad, etc.)

HFCs (hydrofluorocarbons): The HFCs are considered one of the best substitutes for reducing stratospheric ozone loss because of their short lifetime and lack of chlorine

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hazardous - leachate

hazardous: a warning word for substances which cause special problems because they are poisonous, explosive, corrosive of metal or skin, harbor disease-causing microorganisms, are radioactive, or are dangerous for any other reason

household hazardous waste: any type of waste product that exhibits one or more characteristics of hazardous waste (ignitability, corrosivity, reactivity, or toxicity) and describes items that should not be disposed of in a conventional trash can because of dangers to garbage collection workers and to the environment

human-made: items that are not naturally occurring; produced by human manufacturing processes

ignitable: a category of hazardous substances that catch fire readily (at temperatures less than 140 degrees) or explode easily (see also flammable)

humus: the rich organic earthy substance resembling soil that results from the process of composting

incinerate/incineration/incinerator: to reduce the volume of solid wastes by use of an enclosed device with controlled flame combustion; the furnace, boiler, kiln, etc., where wastes are burned under controlled conditions

industrial: of or pertaining to the commercial production of goods or services

ingredient: an element in a mixture or compound

inorganic: not composed of organic matter, especially mineral; any substance that is neither animal nor vegetable

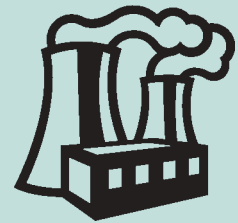
integrated waste management: an approach to managing waste that includes all methods including reducing waste at the source, reusing materials, recycling and remanufacturing products, recovering energy from incineration of wastes and disposing of any remaining waste, usually in a prioritized hierarchy as listed above

irritant: a warning word for a substance that causes soreness, burning or inflammation

LDPE (low-density polyethylene): a plastic resin used to make plastic film (wrap), diaper liners, grocery bags and some squeeze bottles. Today, this type of plastic is recycled in very small quantities

landfill: a disposal facility at which solid waste is placed on or in the land, usually in a controlled manner (see also sanitary landfill)

leachate: liquid that has percolated through solid waste and/or been generated by decomposition of solid waste - contains dissolved, extracted, or suspended materials that are usually toxic. May contaminate groundwater and is especially a problem in areas of high rainfall and porous, sandy-gravelly soil



lifecycle: the full lifetime of a resource or product--from its initial mining or manufacturing, through its usable life and the salvage or recycling for remanufacturing or as a new product, or until disposal

liner: a thick protective layer made of industrial strength plastic that is placed in landfills to keep leachate away from groundwater

litter: waste materials carelessly discarded in an inappropriate place

luxury: something that is not essential but is conducive to pleasure and/or comfort

manufacture: to make products, especially on a large scale and using automated processes

material recovery facility (MRF): a facility designed to remove usable products or resources from the waste stream where garbage is often taken before it goes to the landfill

materialism: the theory or belief that physical well-being and worldly possessions constitute the greatest good and highest value in life; a great or excessive regard for worldly concerns

methane or CH₄: a chemical by product created when organic materials are broken down under anaerobic conditions such as in a landfill. Methane is very flammable and ignitable and can create dangerous fires or explosions in landfills that are not properly managed

mixed paper: an industry term that refers to all recyclable paper that is collected in a recycling program except for newspapers, for example, mail, office paper, envelopes, etc.

natural resources: a material source of wealth occurring in nature such as timber, fresh water, wildlife or a mineral deposit

necessity/need: an item, feeling or belief that is absolutely essential to achieve a certain result or effect, in this case, to sustain life

NIMBY: an acronym for “not in my backyard”; an attitude taken by citizens who want a particular service or function to take place, but not in the immediate vicinity in which they live and/or work, such as the siting of a new landfill, for example

non-durable: an object that is not made to last, either it has a onetime use such as a disposable camera or it is poorly made and does not have a long life (see also durable)

non-point source: a term describing air, water, or soil pollution that stems from multiple sources such as streets, lawns, agricultural practices, etc. particularly from water runoff created by rain or street and driveway rinsing or washing. This type of pollution is not regulated because of the difficulty identifying any particular source

non-toxic: a labeling term for “not poisonous or dangerous to life”



nonrenewable - pesticide

nonrenewable: natural materials, which, for one reason or another (scarcity, length of time required for formation, rapid depletion rate, etc.) are considered to be finite and exhaustible (see also finite resources)

opinion survey: a formalized collection of responses regarding individual attitudes, feelings or beliefs about a topic

organic material: living or once living substances such as food, leaves, grass, etc.; scientifically refers to matter that contains carbon, hydrogen and oxygen

organic food: food that has been certifiably grown without the use of pesticides and fertilizers

organic waste: garbage that is comprised of natural materials such as yard debris or food scraps

organisms: living individuals, plants, and animals

PET (polyethylene terephthalate): a plastic resin used to manufacture products like soda bottles and other transparent containers and is the most commonly recycled plastic besides HDPE (milk jugs). The recycled products made from PET include: T-shirts, carpet and fleece coats

PP (polypropylene): a light, highly heat resistant and strong plastic resin used in packaging, coating, pipes, car bumpers and battery casing. It is difficult to recycle because it is mostly used in commercial products which makes it more challenging to collect in any significant quantity

PS (polystyrene): a plastic resin often referred to as Styrafoam (a trademark name of Du Pont) that is used in coffee cups, egg cartons, and almost all packaging pellets. There are negative environmental impacts associated with PS because of the ozone depleting by-products made in its production. Recycling PS has been unsuccessful because of high shipping costs. Shipping companies have begun reusing the packing materials to keep them out of the waste stream. There is a biodegradable packaging material made from a corn base that is becoming more common

PVC (vinyl/polyvinyl chloride): a plastic resin commonly used to produce pipe, packaging and some toys. The by-products of producing PVC are known carcinogens and are very dangerous when released into the environment

packaging: the wrappings, container or sealing of a commodity

paint: a liquid mixture used as a decorative or protective coating that may contain hazardous substances

personal commitment: individual decisions or choices that are strongly supported by actions or behaviors

pesticide: any substance used to kill nuisance organisms





plastic: a substance made of various organic compounds that are derived from petroleum or natural gas and produced by polymerization (the binding process). The plastic manufacturers developed a numbering system for containers from 1-7 to identify one type from another. The various types are PET, HDPE, vinyl, LDPE, PP, PS and Other, respectively. Each number represents a type of plastic with differing physical and chemical properties which currently makes recycling plastics very difficult and economically unfeasible

poison: a substance that causes illness, injury or death, particularly by chemical means

point source: a term to describe air, water or soil pollution occurring from a particular source such as wastewater from a factory that is released in a river or stream. This type of pollution is usually regulated by the city, county, state and or federal government

post-consumer content: refers to paper that is recycled back into a new paper product such as stationary or cardboard packaging (see grayboard). The percentage that a product contains is usually reflected on the label

pre-consumer content: refers to scrap paper that is generated during the manufacturing process and is recycled back into the manufacturing process rather than being treated as waste. The percentage that a product contains is usually reflected on the label

precycle/precycling: the act of making choices prior to purchase to reduce the amount of waste generated from the purchase—includes buying in bulk, buying recyclable packaging, using reusable bags, buying products with little or no packaging, etc.

private: a business or enterprise not regulated by state ownership or control

problem: a question or situation that presents difficulty, uncertainty, or perplexity

product: something produced by human or mechanical effort or a natural process

pulp: a mixture of fibrous material such as wood, rags and paper that is ground up and moistened to be used in the paper making process

quality: the degree or grade of excellence of something

quantity: an amount or number

raw materials: resources in their naturally occurring, unrefined or unprocessed state

reactive: a warning word for a substance that undergoes an unwanted reaction when exposed to other substances such as air or water

rebates: a deduction from the amount to be paid or a return of part of an amount given in payment

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recyclable - sanitary landfill

recyclable: a product made of materials that can be reused as material for the same product or for new products

recycle: the collection and reprocessing of manufactured materials for reuse either in the same form or as part of a different product

recycled-content: a term that refers to a product made from materials that were collected for recycling, rather than from virgin materials from nature

recycling loop: the symbol of three chasing arrows; the first represents collection and processing, the second represents the manufacture of recycled-content products and the third represents the purchase of recycled-content products

reduce: to lessen the amount, degree, extent, number or price, in this case, amount of waste

regulatory agency: a government agency with the assignment to enforce regulations passed by legislative process

renewable resource: a natural resource, which can be renewed or regenerated by natural ecological cycles or sound management, practices, such as trees and water (see also nonrenewable resource)

resource recovery: a term used to describe the recapturing of materials from the waste stream either by recycling, composting, or waste-to-energy facilities

resources: a supply of something that has value and can be used or drawn on

responsibility: a duty, obligation, or burden

responsible: to be legally or ethically accountable for the care or welfare of something

returnable: a beverage container on which a deposit is paid at the time of purchase for which the deposit is refunded when the container is taken back to the point of purchase

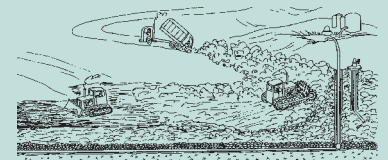
reuse: to extend the life of an item by repairing or modifying it or by creating new uses for it, generally in its original form

risk: the possibility of suffering harm or loss; danger

role-play: to play the part of; act out

sanitary: clean, safe; of or pertaining to health

sanitary landfill: a site designated for the burial of wastes in which the waste is spread out, compacted and covered with a layer of dirt. The site is constructed to reduce hazards to public health and safety, and under federal law must include an impermeable lower liner to block the movement of leachate into ground water, a leachate collection system, gravel layers to control methane, and other features



simulation: the act or process of imitating or acting like something, in this case acting out a planning and decision-making process using a credible scenario

soil texture or soil type: characteristic of the ground that determines various properties (sandy, clay, etc.)

solution: the method or process of solving a problem

source reduction: the process of reducing the amount of waste generated before it is created (see also waste prevention)

source separation: the sorting of recyclable materials into specific types (such as paper, aluminum, steel, and glass) before collection for recycling; opposite of commingling

stewardship: the responsibility for management and use of a resource or place

subsidy: the monetary assistance granted by government to a person or private enterprise

survey: to examine or look at in a comprehensive way

sustainable: referring to a process that can continue indefinitely without becoming depleted, for example, the harvesting of trees for paper, then replanting enough trees to sustain future harvests, as well as recycling existing paper in order to sustain the natural habitat of the forests

swap: to trade one thing for another

symbol: something that represents something else by association, resemblance or convention

tipping fee: the amount a solid waste collector pays to the landfill for the right to place garbage in that facility, usually in dollars/ton

toxic: a warning word for hazardous materials that are poisonous, harmful, destructive or deadly

toxicity: the degree to which a substance is toxic

transfer station: a holding facility for garbage where waste is reloaded into large trucks for more cost-efficient transportation to landfills, recycling dealers, and resource recovery sites

trash: worthless or discarded material; synonym: refuse, garbage, rubbish, waste

unregulated: an activity or entity that is not governed by legislative requirements

value: the principle, standard or quality considered worthwhile or desirable

vermicomposting or vermiculture: the process of using worms to break down organic waste material for use as a soil additive, which is, called vermicompost



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virgin materials - yard waste

virgin materials: materials that are taken from their natural state such as tree harvesting or mineral and oil extraction, as opposed to being remade from existing materials

volume: the capacity of a container; amount

warning: a type of label for a substance that is very toxic (lethal dose is a teaspoon to a tablespoon)

waste: materials determined to be of no value and thrown away

waste hierarchy: the management plan for solid waste that treats waste prevention as the highest priority, then reuse, then recycling, then composting, then waste-to-energy recovery, and finally disposal as a last alternative

waste management: process of dealing with waste

waste prevention: the act of not creating waste in the first place; for example, repairing something rather than buying a new one, doing without something you don't really need, using e-mail instead of paper, etc. (see also source reduction)

waste reduction: reducing the amount of waste produced by careful buying, less wasteful practices, or reuse of materials

waste stream: all materials being thrown away, including items which could be recycled or burned for energy recovery

waste stream composition: components of the waste stream by kind of material (paper, plastic, wood, food, etc.)

waste-to-energy: the process of burning waste and harvesting the energy from the burning process for power

weight: a measure of heaviness or mass of an object

yard waste: any organic material from a home or business, for example, grass clippings, shrub prunings, etc.



