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Looking for a term that’s missing?

Please email [insights@refed.com](mailto:insights@refed.com) if you see a term that you think should be defined in this glossary.

# GENERAL

**Consumer-Facing Businesses (CFB)** - Category of food businesses that includes retail grocers, restaurants, foodservice providers, healthcare, assisted living, military, and correctional facilities.

**Diversion Rate** - The fraction of the specified waste stream that can be diverted from “food waste” to a higher value, such as prevention, recovery, animal feed, or composting. In ReFED’s analysis, diversion rates are only applied to the portions of food waste where a solution could logically be applied, not all food.

**Donated Food** - Unsold food that is donated to people via food banks or pantries, food distribution services, etc.; includes food captured through “Strengthen Food Rescue” solutions and Gleaning

**Eaten Food** - Food that is produced and consumed by people as intended or consumed as a donation.

**GHG Footprint (Food Disposal)** - The greenhouse gas emissions associated with the disposal process of food, such as fugitive landfill emissions, measured in carbon dioxide equivalent (CO<sub>2</sub>e); greenhouse gas emission varies by the destination and can be negative or positive depending on if the disposal process creates or absorbs greenhouse gases. See environmental methodology for full description.

**GHG Footprint (Supply Chain Activities)** - The cumulative greenhouse gas (GHG) emissions generated and released into the atmosphere by the food as it travels along the supply chain, measured in carbon dioxide equivalent (CO<sub>2</sub>e); includes emissions from the production, transportation, cooling, and cooking. See environmental methodology for full description.

**Meal Equivalent** - A standardized unit (approximately 1.2 lbs of food) that reflects the potential meals created from surplus, edible, fresh or preserved food.

**Produce Packhouse** - A facility where fruits and vegetables are cleaned, graded, wrapped, and packaged for transit or storage.

**Recovered Meals** - A standardized unit of 1.2 lbs that quantifies volume of surplus food that our model estimates can be rescued for donation on an annual basis.

**Recycled Food** - Food that is not consumed by people but sent to be used for either industrial uses, animal feed, anaerobic digestion, or compost.

**Remaining Opportunity** - The amount of food surplus and related impacts that ReFED estimates could be addressed by additional solutions after all proposed solutions have been implemented.

**Solution** - Tech-enabled tools and infrastructure, procedural changes, collaborative relationships, and other practices that can lead to a reduction in food waste.

**Solution Provider** - A vendor, service provider, or value-added reseller who provides solutions to food waste to businesses or consumers.

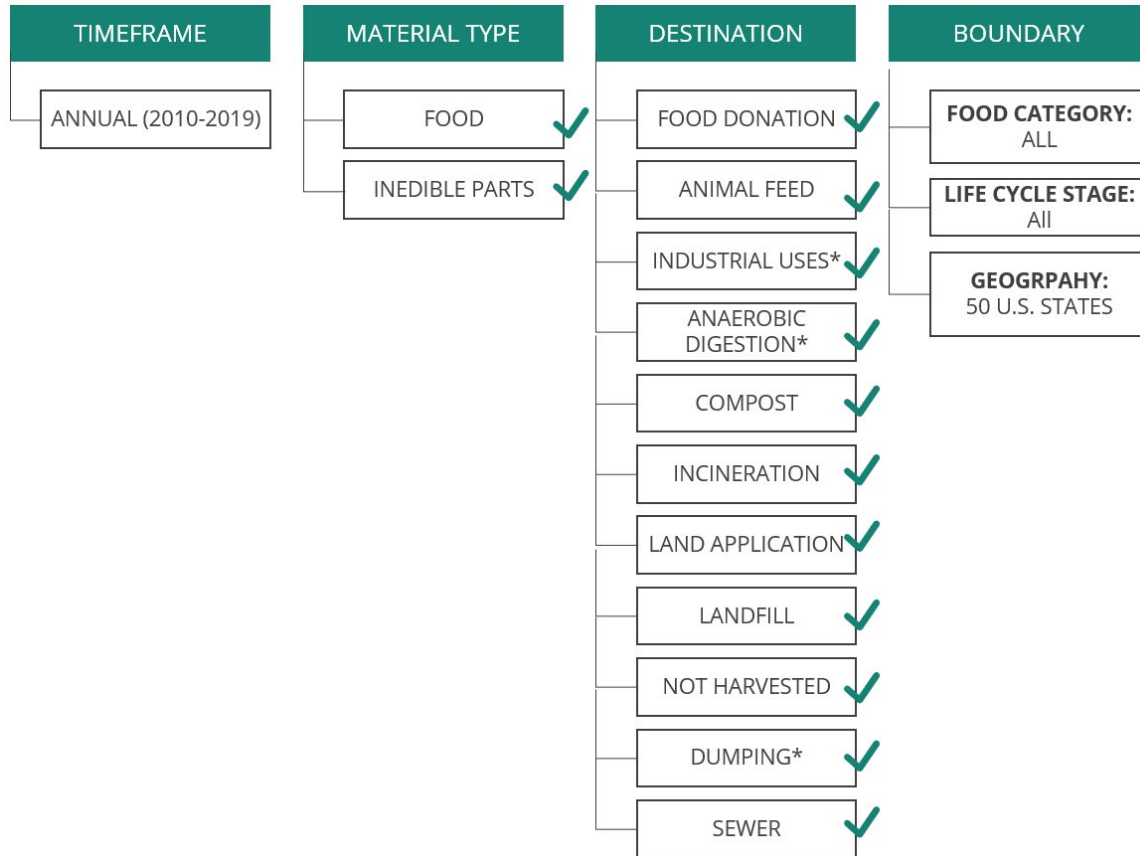
**Stakeholder** - An individual, group, or organization who has interest in the business or industry and can either affect or be affected by changes.

**Surplus Food** - All food that goes unsold or unused by a business or that goes uneaten at home – including food and inedible parts (e.g., peels, pits, bones) that are donated, fed to animals, repurposed to produce other products, composted, anaerobically digested, or wasted.

**Uneaten Food** - Food that is produced but never eaten by people; includes food that is wasted or recycled

**Wasted Food** - Uneaten food and inedible parts that end up being landfilled, incinerated, disposed of down the sewer, dumped, spread onto land, or simply not harvested.

## Scope Boundary



### \*NOTES

- "Food Donation" has been added as a Destination
- "Biomaterial Processing is referred to as "Industrial Uses" in our model
- "Co/anaerobic digestion" is referred to as "Anaerobic digestion" in our model
- "Controlled Combustion" is referred to as "Incineration" in our model
- "Refuse/discards" is referred to as "Dumping" in our model

## Descriptions of Destinations

SURPLUS TYPE		DESTINATION TYPE		DESCRIPTION
Food consumed as intended	Eaten	Prevention	Prevention	Food that is eaten at home or sold or used by a business (includes secondary resell) that might otherwise have gone to waste
		Rescue	Donations	Food donated to people via food banks or pantries, food distribution services, etc.
Surplus Food	Uneaten	Recycling	Animal feed	Food and inedible parts fed to livestock or insects (before or after processing)
			Industrial uses	Food or byproducts repurposed to produce other non-edible products
			Anaerobic digestion	Onsite or centralized offsite anaerobic digesters and co-digestion facilities at wastewater treatment plants that break down material via bacteria in the absence of oxygen, generating biogas and nutrient-rich matter
			Composting	Food decomposition process in which material is broken down via bacteria in oxygen-rich environments, producing an organic material that can be used as a soil amendment
		Food Waste	Not harvested	Leaving crops that were ready for harvest in the field or tilling them into the soil
			Land application	Spreading, spraying, injecting, or incorporating food waste onto land to enhance soil quality
			Incineration	Sending material to a facility that is specifically designed for combustion, which may include some form of energy recovery
			Landfill	Sending material to an area of land or excavated site designed and built to receive wastes
			Dumping	Burning or abandoning material on land or disposing of it in the sea (e.g., open dumps, open burns)
			Sewer	Disposed down the drain to the sewer (with or without pretreatment or grinding)

# CAUSES

Causes of food loss and waste are defined and grouped into the categories listed on the ReFED Insights Engine.

## Buyer Rejections

**Buyer Rejections** - Product delivered and rejected by buyer

## Date Label Concerns

**Date Label Concerns** - Product that is not consumed by people because it is nearing or past the labeled date (e.g., Sell-By, Best if Used By/Before, or Use-By date).

## Excess

**Catering Overproduction** - Excess food not served at catering events (e.g., over ordering, lower than expected event attendance).

**Didn't Taste Good** - Prepared food that is edible and properly prepared but disliked and uneaten.

**Didn't Want Leftovers** - Leftover prepared food that is edible but left uneaten and is not stored for later consumption.

**Overproduction** - Excess prepared foods that are discarded due to lack of customer demand or storage constraints.

**Packhouse Losses (Not Marketable)** - Product culled to meet appearance quality standards.

**Plate Waste** - Food served to customers on-site in foodservice settings that is not fully consumed and not taken off-site by the customer (includes on-site and catering plate waste).

**Too Little to Save** - Leftover prepared food that is edible but left uneaten and is not stored for later consumption based on the amount of food not seen as worth saving.

**Unshipped Finished Product** - Finished product in food manufacturing or processing settings that does not get shipped to a buyer for any reason.

## Food Safety

**Food Safety Recall** - Product pulled due to a food safety recall

**Left Out Too Long** - Food that is discarded due to safety concerns because it was left out or unrefrigerated for too long.

## Mistakes & Malfunctions

**Cooking Issues** - Food pulled due to the assumption that it does not meet customer expectations even though it is still fit for human consumption.

**Equipment Issues** - Food that has diminished in quality due to equipment malfunctions or power outages (e.g., offline refrigerators or heaters).

**Handling Errors** - Food that has diminished in quality due to mishandling during production (e.g., crushed pallets, shattered jars, burned or dropped food)

## Not Harvested

**Fields Never Harvested (Bad Weather)** - Agricultural produce fields that reached maturity but were not harvested because the produce was not fit for human consumption due to damage from weather events.

**Fields Never Harvested (Food Safety)** - Agricultural produce fields that reached maturity but were not harvested because the produce was not fit for human consumption due to food safety concerns.

**Fields Never Harvested (Market Dynamics)** - Agricultural produce fields that reached maturity but were not harvested because it was not profitable for any reason (e.g., due to market variability, insufficient labor, etc.).

**Fields Never Harvested (Other)** - Agricultural produce fields that reached maturity but were not harvested due to other reasons (e.g., equipment failures).

**Fields Never Harvested (Pests/Disease)** - Agricultural produce fields that reached maturity but were not harvested because the produce was not fit for human consumption due to insects, pests, or disease.

**Left Behind After Harvest (Inedible)** - Agricultural produce left in the field by harvest crews because it was determined to be not fit for human consumption due to bruising, cracking, decay, or other physical damage.

**Left Behind After Harvest (Marketable)** - Agricultural produce that met marketable quality standards but was left in the field by harvest crews for other reasons (e.g., insufficient labor, accidental misses during harvesting, etc.).

**Left Behind After Harvest (Not Marketable)** - Agricultural produce that was fit for human consumption but was left in the field by harvest crews because it did not meet appearance standards for sale.

## Other

**Other** - Anything else not listed

**Theft** - Employee, customer, or vendor theft

## Spoiled

**Packhouse Losses (Inedible)** - Product that was culled in a produce packhouse because it was determined not suitable for human consumption (e.g., due to bruising, cracking, decay, disease, deterioration or other physical damage).

**Spoiled** - Product that was pulled because it was determined unfit for human consumption due to decay or deterioration.

## Trimmings & Byproducts

**Byproducts & Production Line Waste** - Manufacturing cause; unused or unsold byproducts generated during the processing or manufacturing of a food product (e.g., potato skins, egg shells, whey from yogurt production, food particles flushed away in wash water)

**Considered Inedible** - Residential cause; kitchen trim and leftover parts from food preparation that the consumer considers inedible, but could in fact be eaten.

**Inedible Parts** - Residential cause; inedible components of food preparation (e.g., bones, egg shells, grape stems)

**Trimmings & Byproducts** - Foodservice and retail cause; trimmings from food preparation (e.g., meat trimmings, produce trimmings for prepared foods)

# FINANCING

## General

**Cost** - Upfront and operating costs associated with solution implementation; costs can be held by individual stakeholders or all combined

**Catalytic Capital** -Tends to be first money-in, thereby having a multiplier effect that stimulates larger amounts of future funding and helps overcome system-level barriers. According to The MacArthur Foundation, catalytic capital is “investment capital that is patient, risk-tolerant, concessionary, and flexible in ways that differ from conventional investment” and “is an essential tool to bridge capital gaps and achieve breadth and depth of impact, while complementing conventional investing.”

**Gross Financial Benefit** - Cost savings and additional revenue generation associated with solutions; stakeholder (individual or combined) may receive benefit with or without paying for the costs associated for implementation

**Impact-First Investors or Impact Investors** -Investments that seek some sort of financial return, but are willing to accept more risk or potentially lower returns in pursuit of measurable social or environmental impact. Examples include low- or no-interest loans, loan guarantees, variable payment options, program-related investments (PRIs), etc.

**Net Financial Benefit** - Gross Financial Benefit minus cost; when assessed in the “All Stakeholders” view, the net financial benefit is listed regardless of who pays the solution costs

**Net Present Value** - Represents the sum of all costs and benefits for each solution over 10 years discounted to the current year using a standard social discount rate of 4%

## Maturity Cycle

**Emerging** - First stage in the cycle; new products or services are nascent, mostly in R&D phase, and pre-revenue (for-profit businesses); in general, these organizations are still searching for the appropriate market fit

**Growth** - Second stage of cycle; consumers in the market understand the value of the product or service and demand is growing rapidly; organization is scaling

**Mature** - Third stage of the cycle; the marketplace consolidates, growth is less important than market share, profitability, and cash flow; nonprofits maintain a sustainable level of operational capacity

## FOOD TYPES

**Produce** - Includes fresh fruits and vegetables, packaged salads, cut fruit, value added fruits and vegetables, fruit or veggie trays, dipped fruit, pumpkins and gourds, and herbs. Does not include floral as floral products are out of scope and not considered "food".

**Fresh Meat & Seafood** - Includes fresh meat, sausages, lunchmeat, seafood, and meat alternatives. Does not include frozen or canned foods. Note that some specialty meats are categorized as Prepared Foods if they are sold in the deli department for grocery retailers.

**Dairy & Eggs** - Includes refrigerated, non-frozen, fresh dairy products (e.g., milk, yogurt, creamers, sour cream, butter and margarine, buttermilk, etc.) as well as eggs. Also includes plant-based dairy alternatives (e.g., almond milk, soy milk) and refrigerated doughs. Note that some specialty cheeses are categorized as Prepared Foods if they are sold in the deli department for grocery retailers.

**Breads & Bakery** - Includes perishable bread, bakery, and dessert items (e.g., fresh muffins, sweet breads, doughnuts, fresh-made cookies, cupcakes, cakes, cheesecakes, puddings, etc.). Also includes loaf bread, artisan bread, buns, rolls, tortillas, and flatbreads. Does not include long shelf-life cookies, crackers, brownies, or snack cakes which are considered to be Dry Goods.

**Dry Goods** - Any shelf stable items not listed under other food types

**Frozen** - Any frozen food

**Prepared Foods** - All food served to clients in the foodservice sector. Also includes items sold in the deli department for grocery retailers (e.g., specialty meats and cheeses, pasta salads, sushi, hummus, dips and spreads, rotisserie chicken, pre-made meals, fresh sandwiches, soups, meal kits, etc.). Note that specialty meats and cheese sold in the deli department for grocery retailers are included here, rather than in the Fresh Meat & Seafood or Dairy & Eggs food types.

**Ready-to-drink Beverages** - Includes fruit and vegetable juices, ready-to-drink tea and coffee drinks, shakes and smoothies, and sparkling juice. Does not include dry tea or coffee - these items are considered Dry Goods. Also does not include cows milk or plant-based dairy alternatives - these items categorized as Dairy & Eggs. Also does not include bottled water, soft drinks, or alcoholic beverages - these items are out of scope and not considered "food".



# WASTE & RECYCLING TERMINOLOGY

**Biogas** - A mixture of methane and carbon dioxide gases produced during the anaerobic digestion process; can be used for heat and electricity or converted into vehicle fuel.

**Biosolids** - Properly treated and processed sewage sludge; often used as a soil amendment

**Digestate** - Material left after anaerobic digestion is completed; can be processed into compost

**Industrial Uses** - Recycling of food waste or inedible parts into innovative materials to be used for meat rendering, product packaging, household goods, medical applications, and many other applications

**Tipping Fee** - The fee paid by haulers for waste disposal at landfills or recycling facilities

# CAPITAL TRACKER TERMINOLOGY

## Classifications

**Direct Food Waste Funding** - Funding that, based on ReFED's analysis, is explicitly funding food waste initiatives. ReFED's rule of thumb is that if the operations of an organization that are devoted to food waste account for more than about 50%, the funding would be classified as direct. Where we are unable to classify on strictly an organizational basis, the same logic is applied to individual investments.

**General Solution Type** - Activity that is not able to be classified within prevention, rescue, or recycling. For instance, general research on food waste would not fall into any single category.

**Indirect Food Waste Funding** - Companies that receive funding may be classified as "indirect" if the funding they receive is not primarily dedicated to food waste initiatives. For example, funding that goes to food banks that supplement donations with purchased food or food waste solutions that are part of much larger diversified companies would be classified as "indirect." ReFED's general rule is that if the operations of an organization that are devoted to food waste account for more than 20% but less than about 50%, the funding would be classified as indirect. Where we are unable to classify on strictly an organizational basis, the same logic is applied to individual investments.

## Terms Related to the List View

**\$ Deals Involved In** (visible in the Funders Concentration chart and Funders List View) - Sum of the volume of all funding transactions that a funder has participated in. ReFED has chosen to calculate "\$ Deals Involved In" since PitchBook is unable to determine the specific dollar allocation between investors for venture and debt deals, which typically have multiple funders. For example, if a venture funder contributed \$1 million to five \$10 million deals, the PitchBook data does not have enough granularity to identify these specific contributions. In the preceding example, "\$ Deals Involved In" for this venture funder would be \$50 million.

**All Deals (Incl. Non-Food Waste)** (visible in the Funders List View) - All time transactions across all sectors that the funder has been involved in, as per PitchBook. This field does not change as you change the filter to the right of the screen. It represents the total number of deals that a capital provider has closed, and a comparison of this number to the funder's food waste-specific deal count (the "Deal Count" column in the List view) can provide context around the degree to which a particular funder is focusing on the food waste space.

**Assets Under Management (\$M)** (visible in the Funders List View) - Represents the amount of capital available to a fund management team for investments. It equates to the total dollar value of capital resources and assets, both invested and un-invested in the firm's fund and portfolio.

**Capital Type** - ReFED maintains a hierarchical classification of capital types. This includes higher level groups of philanthropic, government, and private capital.

**Funding Group** (visible in the Investments List View) - Further segmentation of Capital Type to the following groups - tax incentives, government grants, non-government grants, impact-first investments, venture capital, private equity, corporate finance and spending, commercial project finance, government project finance. These groups are described in detail in the Solution Database Methodology.

**Investment Type** (visible in the Investments List View) - Provides further detail as to the nature of the private or public capital being deployed.

**Funder City, State, and Country** (visible in the Funders List View) - Refers to the location of headquarters not the location of operations.

**Recipient City, State, and Country** (visible in the Recipients List View) - Refers to the location of headquarters not the location of operations.

**Valuation** (visible in the Recipients List View) - Defined as the value of a company or asset immediately after a round of equity financing. It is also commonly referred to as "post valuation". Valuation shown would be as of the most recent equity transaction where information is publicly available