Term

**Accidental Emission** 

Definition: An unintended environmental release.

Allocation

Definition: Partitioning the input or output flows of a unit process to the product of interest.

Attributional Life Cycle Assessment

Definition: An LCA that accounts for flows/impacts of pollutants, resources, and exchanges among processes within a chosen

temporal window.

Acronym: Attributional LCA

**Background Data** 

Definition: The background data include energy and materials that are delivered to the foreground system as aggregated data sets in which individual plants and operations are not identified.

Brines (oilfield)

Definition: Wastewater produced along with crude oil and natural gas from oilfield operations.

**By-Products** 

Definition: An incidental product deriving from a manufacturing process or chemical reaction, and not the primary product or service

#### Term

being produced. A by-product can be useful and marketable, or it can have negative ecological consequences.

Characterization

Definition: Characterization is the second step of an impact assessment and characterizes the magnitude of the potential impacts of each inventory flow to its corresponding environmental impact.

Characterization Factor

Definition: Factor derived from a characterization model which is applied to convert the assigned LCI results to the common unit of the category indicator.

Classification

Definition: Classification if the first step of an impact assessment and is the process of assigning inventory outputs into specific environmental impact categories.

Co-Product

Definition: A product produced together with another product.

Composite Data

Definition: Data from multiple facilities performing the same operation that have been combined or averaged in some manner.

Consequential Life Cycle Assessment

### Term

Definition: An LCA that attempts to account for flows/impacts that are caused beyond the immediate system in response to a change to the system.

Acronym: Consequential LCA

**Environmental Aspects** 

Definition: Elements of a business' products, actions, or activities that may interact with the environment.

**Environmental Loadings** 

Definition: Releases of pollutants to the environment, such as atmospheric and waterborne emissions and solid wastes.

**Equivalency Factor** 

Definition: An indicator of the potential of each chemical to impact the given environmental impact category in comparison to the referenced chemical used.

**Equivalent Usage Ratio** 

Definition: A basis for comparing two or more products that fulfill the same function. For example, comparing two containers based on a set volume of beverage to be delivered to the customer.

Facility-Specific Data

Definition: Data from a particular operation within a given facility that are not combined in any way.

**Foreground Data** 

#### Term

Definition: Data from the foreground system that is the system of primary concern to the analyst.

Fuel Processing and Delivery

Definition: Activities involved in the processing and delivery of fuel used to run a process; also Precombustion Energy.

Acronym: Fuel P&D

**Functional Unit** 

Definition: The unit of comparison that assures that the products being compared provide an equivalent level of function or service.

Green Technology

Definition: A technology that offers a more environmentally benign approach compared to an existing technology.

Impact Assessment

Definition: The assessment of the environmental consequences of energy and natural resource consumption and waste releases associated with an actual or proposed action.

**Impact Categories** 

Definition: Classifications of human health and environmental effects caused by a product throughout its life cycle.

**Impact Indicators** 

#### Term

Definition: Impact indicators measure the potential for an impact to occur rather than directly quantifying the actual impact.

**Industrial System** 

Definition: A collection of operations that together perform some defined function.

Interpretation

Definition: The evaluation of the results of the inventory analysis and impact assessment to reduce environmental releases and resource use with a clear understanding of the uncertainty and the assumptions used to generate the results.

**Inventory Analysis** 

Definition: The identification and quantification of energy, resource usage, and environmental emissions for a particular product, process, or activity.

Life Cycle Assessment

Definition: A cradle-to-grave approach for assessing industrial systems that evaluates all stages of a product's life. It provides a comprehensive view of the environmental aspects of the product or process.

Material Processing and Delivery

Definition: Activities involved in the processing and delivery of materials to a process.

Acronym: Material P&D

Normalization

#### Term

Definition: Normalization is a technique for changing impact indicator values with differing units into a common, unitless format by dividing the value(s) by a selected reference quantity. This process increases the comparability of data among various impact categories.

**Precombustion Energy** 

Definition: The extraction, transportation, and processing of fuels used for power generation, including adjusting for inefficiencies in power generation and transmission losses.

Product Life Cycle

Definition: The life cycle of a product system begins with the acquisition of raw materials and includes bulk material processing, engineered materials production, manufacture and assembly, use, retirement, and disposal of residuals produced in each stage.

Routine emissions

Definition: Those releases that normally occur from a process, as opposed to accidental releases that proceed from abnormal process conditions.

Sensitivity Analysis

Definition: A systematic evaluation process for describing the effect of variations of inputs to a system on the output.

Specific data

#### Term

Definition: Data that are characteristic of a particular subsystem, or process.

Stressors

Definition: A set of conditions that may lead to an environmental impact. For example, an increase in greenhouse gases may lead to global warming.

System Flow Diagram

Definition: A depiction of the inputs and outputs of a system and how they are connected.

Weighting

Definition: The act of assigning subjective, value-based weighting factors to the different impact categories based on their perceived importance or relevance.

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