This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.



Designation: E2987/E2987M - 22

# Standard Terminology for Sustainable Manufacturing<sup>1</sup>

This standard is issued under the fixed designation E2987/E2987M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\varepsilon$ ) indicates an editorial change since the last revision or reapproval.

# 1. Scope

1.1 The standard includes terminology applicable to sustainable manufacturing.

1.2 The values stated in either SI units or inch-pound units are to be regarded separately as standard. The values stated in each system are not necessarily exact equivalents; therefore, to ensure conformance with the standard, each system shall be used independently of the other, and values from the two systems shall not be combined.

1.3 This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.

### 2. Significance and Use

2.1 The terminology included in this standard is intended to provide definitions for sustainable manufacturing terms. This standard is intended to be referenced by other sustainable manufacturing standards.

2.2 The terms defined in this standard are those which have specific meaning in the context of sustainable manufacturing. Terms that have more general application, or for which the dictionary definition is applicable, are not included.

2.3 Terms having application only within a specific standard, or having meaning unique to the context of that standard, are defined or explained in the terminology section of the individual standard, and are not included here.

## 3. Referenced Documents

#### 3.1 ASTM Standard:

E2114 Terminology for Sustainability Relative to the Performance of Buildings

#### 4. Terminology

4.1 Terms and Definitions:

**indicator,** *n*—quantitative value or qualitative information derived from a set of parameters that provides information about the state of a phenomenon.

DISCUSSION—An example of a common indicator is  $CO_2$  equivalent emissions.

Discussion—An indicator can be used as a reference for decision-making.

DISCUSSION—This definition is consistent with the definition in Terminology E2114.

**key performance indicator (KPI),** *n*—a quantifiable attribute that a company or industry uses to gauge or compare performance for meeting operational and strategic goals.

DISCUSSION—See "indicator" for a definition related to measurement of KPIs.

- **process data unit**, n—smallest element of a unit manufacturing process for which discrete data are collected.
- **process model**, *n*—structured representation of the information associated with a manufacturing process.
- **unit manufacturing process (UMP)**, *n*—the smallest element or sub-process in manufacturing that adds value through the modification or transformation of shape, structure, or property of input material or workpiece.

DISCUSSION—Examples of unit manufacturing processes include, but are not limited to: casting, machining, surface treatment, mixing, and preparation for shipping.

#### 5. Keywords

5.1 manufacturing; process; product; sustainability; terminology

 $<sup>^{1}</sup>$  This terminology is under the jurisdiction of ASTM Committee E60 on Sustainability and is the direct responsibility of Subcommittee E60.13 on Sustainable Manufacturing.

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