UL 3600

STANDARD FOR

Sustainability for Measuring and Reporting Circular Economy Aspects of Products, Sites and Organizations

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Standard for Sustainability for Measuring and Reporting Circular Economy Aspects of Products, Sites and Organizations, UL 3600

Second Edition, Dated October 23, 2024

Summary of Topics

This is the Second Edition of ANSI/UL 3600, Standard for Sustainability for Measuring and Reporting Circular Economy Aspects of Products, Sites and Organizations, dated October 23, 2024 reflects the latest ANSI approval dates and incorporates the proposals dated February 9, 2024 and July 5, 2024.

The new requirements are substantially in accordance with Proposal(s) on this subject dated February 9, 2024 and July 5, 2024.

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UL 3600

Standard for Sustainability for Measuring and Reporting Circular Economy Aspects of Products, Sites and Organizations

First Edition – January, 2023

Second Edition

October 23, 2024

This ANSI/UL Standard for Sustainability consists of the Second Edition.

The most recent designation of ANSI/UL 3600 as an American National Standard (ANSI) occurred on October 23, 2024. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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INTRODUCTION

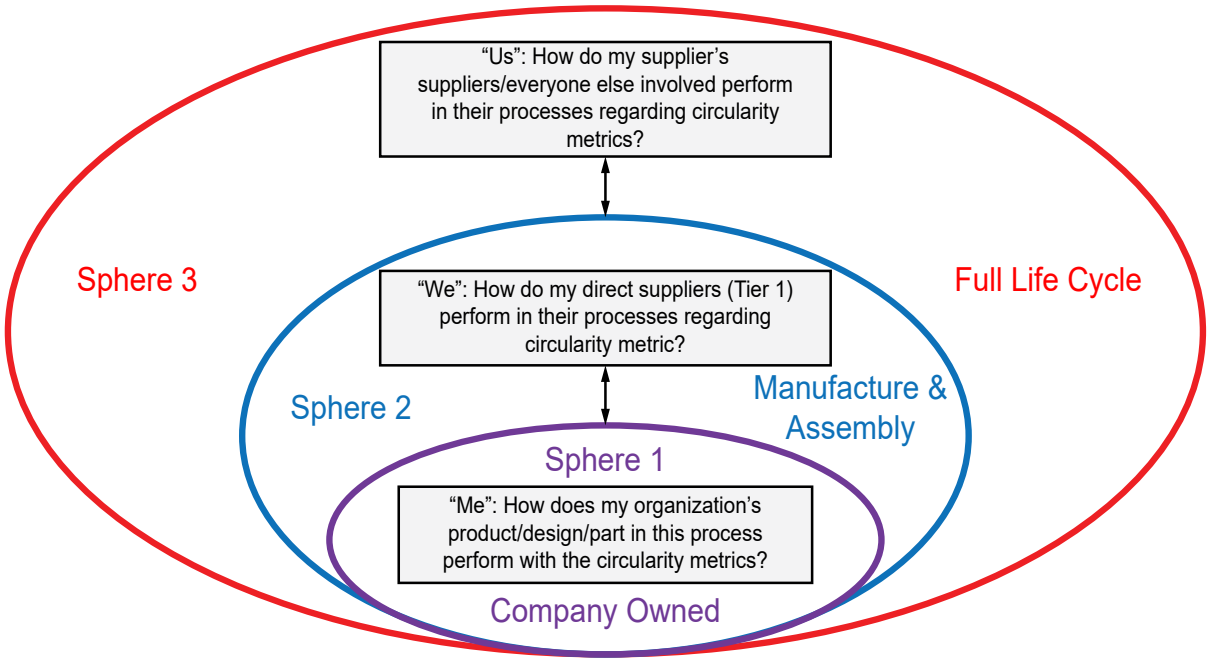
The following concepts have been adopted by the Standards Technical Panel in the development of this Standard and are aspirational.

The boundaries of an assessment can be set against one of three general supply chain boundaries and shall be established before beginning an assessment:

- Sphere 1 – Includes activity data of directly owned and/or managed assets.
- Sphere 2 – Includes all aspects of Sphere 1, as well as Tier 1 suppliers, those suppliers who supply goods (including raw materials, assembly components or semi-finished parts) or services directly to the organization.
- Sphere 3 – Includes all aspects of Sphere 2, as well as the full lifecycle of the products, sites and organizations participating in the supply chain, delivery, use, and post use of the product.
- A graphical representation of the Spheres is shown in Figure 1.

Figure 1

Spheres of Measurement in UL 3600



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These spheres shown in Figure 1 define broad boundaries for projects. An entity may further define the scope of a project to cover a portion of its overall products or sites within the selected sphere. For example, the scope of a specific project may cover one product and one site within the Sphere 1 boundary, or the Sphere 1 boundary may include additional products and sites.

NOTE: In the manufacturing and assembly process, the prioritization is to eliminate material waste sent to incineration and landfill. These non-recoverable materials are not considered circular and are not included in the calculations in UL 3600.

While this standard aims to have its central focus on circularity, it does address other aspects of sustainability such as, biodiversity, social impact, etc. While circularity itself is not the only goal, it is an important component in identifying short- and long-term improvement goals and assessing progress toward full sustainability.

This standard is intended for use by all actors of the product supply chain, up to and including the consumer and post use.

This standard is for the calculation of circular material flow metrics and to instruct the user how to use these metrics to create a Circularity Transparency Label.

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1 Scope

1.1 This standard covers the methods and metrics for measuring aspects of the Circular Economy. Aspects include, but are not limited to, materials flows and the impacts of those flows. The standard is split into two major parts: measuring the material flows (measurement methods) and measuring the impacts of those flows (analytics).

1.2 The metrics and measures are focused on materials and the flow of those materials as a result of the activities of organizations and from any products manufactured by those organizations. In addition to the materials and flows, activities and impacts from those materials and flows in other parts of the supply chain shall be included where they represent significant impact and shall be used as a modifier on the material flows. By addressing both flows and impacts, this standard seeks to address the progress toward sustainability in a more holistic way.

2 Normative References

2.1 The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ANS LTDD 1.0, *Due Diligence in Procuring/Sourcing Legal Timber*

ASTM D5338, *Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials Under Controlled Composting Conditions Incorporating Thermophilic Temperatures*

ASTM D5988-18, *Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials in Soil*

ASTM D6400, *Standard Specification for Labelling of Plastics Designed to be Aerobically Composted in Municipal or Industrial Facilities*

ASTM D6866, *Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis*

ASTM D6691-17, *Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials in the Marine Environment by a Defined Microbial Consortium or Natural Sea Water Inoculum*

ASTM D7612-10, *Standard Practice for Categorizing Wood and Wood-Based Products According to Their Fiber Sources*

ASTM D7991-15, *Standard Test Method for Determining Aerobic Biodegradation of Plastics Buried in Sandy Marine Sediment under Controlled Laboratory Conditions*

ASTM D996-16, *Standard Terminology of Packaging and Distribution Environments*

BS/EN 15343, *Plastics – Recycled Plastics – Plastics recycling traceability and assessment of conformity and recycled content*

BSI/PAS 2050-1, *Assessment of life cycle greenhouse gas emissions from horticultural products*

BSI/PAS 2050-2, *Assessment of life cycle greenhouse gas emissions – Supplementary requirements for the application of PAS 2050 to seafood and other aquatic food products*

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