Circular Economy

Transition to circular economy

- Waste Prevention & Recycling
- Product Lifecycle Management

Waste Prevention & Recycling

Source Metadata

Field	Value
source	eu_taxonomy
source_version	EU Taxonomy 2026 revision
source_id	EU-CIR-001
eu_objective	circular
sector	Waste Prevention and Recycling
mitigation	N
adaptation	N
last_checked	2026-05-26

EU Taxonomy Definition

Waste prevention and recycling under the EU Taxonomy cover activities that substantially contribute to the transition to a circular economy by reducing waste generation, increasing material recovery, and enabling secondary raw material markets. Eligible activities include collection and transport of non-hazardous waste in source-segregated fractions, material recovery facility operation, recycling of specific waste streams (plastics, textiles, electronics, construction and demolition waste, batteries), repair and refurbishment services, and development of secondary raw material trading platforms. The 2026 revision strengthens criteria for plastic recycling quality and introduces textile recycling performance benchmarks.

Technical Screening Criteria Summary

Collection systems must achieve source-separation rates that maximize recyclability of collected materials. Material recovery facilities must achieve sorting efficiency above 85% and contamination rates below defined thresholds per material stream. Plastic recycling must produce secondary raw materials meeting quality standards equivalent to virgin material for the same application (food-contact recycling requires EFSA authorization). Textile recycling must achieve fibre-to-fibre recovery rates above defined benchmarks. Electronics recycling must comply with WEEE Directive targets and recover critical raw materials. Construction waste recycling must achieve at least 70% material recovery by weight. All activities must respect the waste hierarchy, prioritizing prevention and reuse above recycling.

Do No Significant Harm (DNSH)

Waste and recycling activities must not harm mitigation (energy-efficient processing, logistics optimization), adaptation (facility climate resilience), water (leachate and process water management), pollution (air emissions from recycling processes within limits, no cross-contamination of hazardous substances into secondary materials), and biodiversity (siting of facilities away from sensitive areas, prevention of waste leakage to natural environments).

LATAM Relevance

LATAM's recycling infrastructure is growing but remains underdeveloped compared to EU standards — recycling rates in Colombia average 17% versus the EU's 48%. EU Extended Producer Responsibility frameworks influence how European companies manage waste from products sold in LATAM markets. The EU's Plastic Waste Regulation and textile strategy create compliance incentives for LATAM manufacturers exporting to Europe to invest in taxonomy-aligned recycling infrastructure.

Colombia Green Finance Taxonomy Alignment

The TVC covers waste management and recycling under its circular economy and environmental objectives. Alignment is partial — Colombia's framework addresses recycling broadly but lacks the EU's specific sorting efficiency thresholds, material quality standards for secondary raw materials, and textile recycling benchmarks. Colombia's informal recycler integration (recicladores de oficio) represents a social dimension not captured in the EU framework.

Cleantech Taxonomy Crosswalk

Maps to Cleantech Taxonomy sector WA (Waste) — nodes WA-REC (recycling), WA-PRE (waste prevention), WA-COL (collection systems), WA-MRF (material recovery). Cross-references with IN (Industry) for industrial symbiosis and secondary material use, and BU (Buildings) for construction waste recovery.

Product Lifecycle Management

Source Metadata

Field	Value
source	eu_taxonomy
source_version	EU Taxonomy 2026 revision
source_id	EU-CIR-002
eu_objective	circular
sector	Product Lifecycle Management
mitigation	N
adaptation	N
last_checked	2026-05-26

EU Taxonomy Definition

Product lifecycle management under the EU Taxonomy covers activities that design, manufacture, and manage products to minimize resource use and waste across their entire lifecycle — from raw material extraction to end-of-life. This includes eco-design of products for durability, reparability, and recyclability, remanufacturing and refurbishment operations, product-as-a-service business models, digital product passport systems, and industrial symbiosis platforms. The 2026 revision aligns criteria with the EU Ecodesign for Sustainable Products Regulation (ESPR) and introduces requirements for Digital Product Passports for taxonomy-eligible products.

Technical Screening Criteria Summary

Eco-design activities must demonstrate that products meet or exceed ESPR requirements for durability (minimum product lifetime), reparability (availability of spare parts, repair manuals), recyclability (design for disassembly, material identification), and recycled content (minimum percentages per material type). Remanufacturing must restore products to original performance specifications with warranty equivalent to new products. Product-as-a-service models must demonstrate material efficiency gains of at least 30% versus product ownership models through utilization optimization and lifecycle extension. Digital Product Passports must comply with the ESPR delegated acts and provide transparent material composition, carbon footprint, and recyclability data. Industrial symbiosis must demonstrate quantifiable waste-to-resource conversion between participating entities.

Do No Significant Harm (DNSH)

Lifecycle activities must not harm mitigation (net GHG reduction over product lifecycle), adaptation (supply chain resilience to climate disruptions), water (water-efficient manufacturing processes), pollution (products must comply with REACH, RoHS, and chemical safety requirements; no substances of very high concern without substitution plans), and biodiversity (raw material sourcing must not cause habitat degradation, alignment with due diligence requirements for conflict minerals and deforestation-free supply chains).

LATAM Relevance

EU product sustainability regulations — ESPR, battery regulation, deforestation regulation — create compliance requirements for LATAM manufacturers and raw material suppliers exporting to Europe. The Digital Product Passport requirement impacts LATAM supply chains for electronics, textiles, batteries, and agricultural products. Colombia's manufacturing and export sectors must increasingly adopt lifecycle thinking to maintain EU market access, making taxonomy-aligned product management a competitive necessity.

Colombia Green Finance Taxonomy Alignment

The TVC does not explicitly cover product lifecycle management or eco-design as standalone categories, representing a significant gap. Colombia's circular economy strategy (ENEC - Estrategia Nacional de Economía Circular) provides a policy framework, but the TVC lacks the EU's specific product-level criteria, ESPR alignment, or Digital Product Passport requirements. This is an area where future TVC updates may seek closer EU alignment.

Cleantech Taxonomy Crosswalk

Maps to Cleantech Taxonomy sector XS (Cross-Sectoral) — node XS-LCA (lifecycle assessment), and IN (Industry) — node IN-ECO (eco-design). Cross-references with WA (Waste) for end-of-life management and IC (ICT) for Digital Product Passport infrastructure.