

Taxonomy

Defining the resource hierarchy and related clothing terms

The consultation process

Facilitating alignment across government and the Australian clothing industry.

Purpose of the consultation

Seamless is seeking feedback from Seamless members, supporters, subject-matter experts and industry stakeholders on a taxonomy. Having a standard set of terms that have been developed by industry, for industry, ensures efficiency across organisations and sectors, quality assurance through consistent application and integrity of information.

Why we need a taxonomy

This taxonomy includes the R-strategies (also known as the resource or waste hierarchy) as well as additional terms that enable the application of the R-strategies for clothing circularity.

By providing clear, practical, and industry-aligned definitions, this taxonomy will help Seamless to deliver a program aligned with circularity principles. This program enables the design, testing, and evaluation of pilots that provide evidence of the definitions in action. Additionally, the taxonomy will facilitate alignment across the broader industry and government, improving communication, collaboration, and the development of cohesive policies and systems to advance clothing circularity in Australia.

Common definitions by industry, for industry

This draft taxonomy sets out definitions for the R-strategies, which are also known as the resource or waste hierarchy, and other related clothing terms widely used by the Australian clothing industry.

An industry taxonomy facilitates alignment across industry and government to support the effective implementation of circular strategies within the Australian clothing industry.

A taxonomy by industry, for industry

In 2025, a Seamless working group which included representatives from organisations across the clothing industry including clothing brands, recyclers and reuse operators, met across four separate workshops. They agreed on this taxonomy and also provided feedback and recommendations for the consultation process.

Guiding principles

Five principles were used to guide the development of the definitions:

- 1. Purpose-driven:** The primary purpose of these definitions is to support the development of a national clothing collection system. The secondary purpose is to promote standardised terminology across the industry.
- 2. Cross-sector harmonisation:** R-strategy definitions refer to products in general, rather than clothing specifically, to ensure alignment and harmonisation across industries.
- 3. Function over form:** Each R-strategy is defined by the function it serves rather than the specific processes or operations used to achieve it. For example, "Recover" is the definition, while "waste-to-energy" describes a method of recovery.
- 4. Comparative and consultative:** The definitions have been developed in consultation with international best practice sources and local experts e field.
- 5. Adaptability and continuous improvement:** The definitions should be flexible enough to accommodate future changes in industry practices, technological advancements, and regulatory updates. They should also support ongoing refinement through industry consultation and emerging best practices.

Early testing

The draft taxonomy has been cross checked with the [Australian standard for waste and resource recovery data and reporting](#) to ensure there is domestic alignment.

Several of the definitions have also been cited in the [Seamless Circular Clothing Textiles Fund Guidelines](#) and the funded projects will practically test their application.

The taxonomy in use

The taxonomy establishes a shared understanding of terminology and a standardised approach to information across the R- strategies and other related clothing terms to support the Australian clothing industry and all levels of government.

The draft taxonomy

Term	Definition	Sources
	R-Strategies	
Refuse	Refuse refers to the deliberate rejection of products, services, or economic activities that perpetuate overproduction, overconsumption, environmental harm, and social injustice. It highlights the limits to endless growth, linear production models, and unnecessary consumption. This may include actions taken to design radically different solutions that render products, components, or processes obsolete. The act of refusing to buy specific products reduces demand for them and signals changes in the market.	Definition adapted from UNEP Circularity Platform .
Rethink	Rethinking systems, products and consumption practices in ways that allow basic needs to be met while minimising impacts on the planet and people. This includes prioritising access over ownership, and exploring alternatives like leasing, or offering products as services.	
Reduce	Reduce involves minimising the use of resources and products by making choices that result in lower material consumption, reduced waste, and smaller environmental footprints. This can be achieved through extending the lifespan of products, reducing the frequency of purchases, and decreasing the overall amount of materials and products consumed. Additionally, the principle of "reduce by design" encourages the creation of products and services that use fewer materials, generate less waste, and have reduced impacts throughout their lifecycle, from production to end-of-life.	Definition adapted from UNEP Circularity Platform .
Reuse	The repeated use of a product for its intended purpose without significant modification. Small adjustments or cleaning may be necessary to prepare the product for the next use. This practice allows products to be used multiple times, either by the original user or others, extending their life and reducing waste. Resale, where products are sold again for reuse, can also be considered part of this practice.	Definition adapted from Ellen MacArthur Foundation .
Repair	The process of returning a faulty or broken product to a usable state to fulfill its intended purpose. This can be achieved through various mending or repair techniques, which may be carried out by the consumer, a repair service, or the manufacturer. The primary goal of repair is to extend the product's lifespan and avoid the need to produce and consume a replacement product.	Definition adapted from Ellen MacArthur Foundation .

Term	Definition	Sources
Refurbish	To extend a product's lifetime through significant repairs, which may involve replacing parts, updating specifications, and improving the cosmetic appearance, without altering its original functionality. The process of refurbishment often requires more time and resources than simple repair. Responsibility for refurbishment can be shared between the consumer and the producer, depending on the extent of the refurbishment required.	Definition adapted from Circular Transition Indicators and Ellen MacArthur Foundation .
Remanufacture	To disassemble products and components to an as-new condition with the same, or improved, level of performance as a newly manufactured one. The responsibility for remanufacturing often lies with the producer or specialised remanufacturing entities, depending on the product.	Definition adapted from Circular Transition Indicators .
Repurpose	The process of transforming products, materials, or content to serve a different function than originally intended. By reusing discarded goods or components and adapting them for new uses, the material is given a distinct new lifecycle. This can help return the material to the economy, retaining some (if not all or more) of its value.	Definition adapted from UNEP Circularity Platform .
Recycle	Transforming a product or component into its basic materials or substances and converting them into new products or secondary materials that are returned to productive use (excluding for energy). Recycling can occur in both closed-loop (where materials are recycled into the same product-type) and open-loop systems (where materials are recycled into different products).	Definition adapted from Ellen MacArthur Foundation and Department of Climate Change, Energy, the Environment and Water .
Recover	The process of using waste materials for energy recovery or beneficial applications, such as composting or applying materials to land.	Definition adapted from EU Waste Framework Directive .
Related clothing terms		
Collection	The gathering of post-consumer clothing textiles by retailers, charity-owned businesses, commercial collectors or local authorities. Retailers may initiate their own collection programs through 'take-back' schemes or other customer-return initiatives. In some cases, collection involves the preliminary sorting and storage of textiles before transport. 'Separate collection' refers to gathering textiles by type or nature to facilitate specific next-life processes; this term is more frequently used by local authorities in reference to the separation of textiles from other materials exiting households.	Definition adapted from WRAP and EU Waste Framework Directive .

Term	Definition	Sources
Sorting	The process of separating products according to quality or market specifications. This process typically occurs after collection, and it determines the next life of products. Sorted material is prepared and redistributed for a range of reuse, recycling or recovery options. May include disassembly, decontamination and/or minor transformations such as shredding.	Definition adapted from Maldini et al. 2017 , WRAP and Department of Climate Change, Energy, the Environment and Water .
Wearable (or rewearable)	Garments that can be reused in their original form and for their original purpose. Wearable garments (or 'wearables') are typically categorised into cascading grades according to factors including but not limited to their quality, signs of wear, brand name, and ability to be sold at a higher price (saleability). Two wearable grades are: High value wearable – Garments in good to very good condition, suitable for resale or direct reuse. Low value wearable – Garments in worn or heavily used condition, still suitable for reuse but with limited resale potential.	Definition adapted from Fashion For Good .
Unwearable	Unwearable textiles are used garments that are deemed unsuitable for reuse, repair or redistribution due to corporate branding, damage or substantial wear and tear. These items are typically directed toward waste-to-energy options, or open-loop or closed-loop recycling, depending on the material specifications, quality, and available end markets.	Definition adapted from Maldini et al. 2017 .
Downcycle	Downcycling refers to the process of recycling discarded textiles into new products that are of lower economic value than the original item. This typically involves mechanical processes, where textiles are repurposed into items like cleaning cloths, insulation, fill materials, or incorporated into composite materials, often with industrial applications.	Definition adapted from Circular Transition Indicators and Maldini et al. 2017
Upcycle	Upcycling refers to the process of reusing discarded textiles or materials and transforming them through redesign, remake techniques, or high-value recycling into new products of higher quality or value. This can involve incorporating recycling processes to enhance the materials' aesthetic or functional worth.	Definition adapted from Refashioning Guidelines .