

WHITE PAPER

The End-of-Life Problem No One Solved.

How Trashie built the infrastructure the donation economy never had — and why it changes everything for consumers, brands, and the planet.

85%

of U.S. textiles end up in
landfill

100B+

garments produced globally
each year

95%

of items Trashie recirculates

A Broken System at Scale

The United States has a textile waste problem that existing institutions were never designed to solve. Approximately 85% of discarded textiles end up in landfill. More than 100 billion garments are manufactured globally every year — and an estimated 10% never sell at all.

These numbers are not improving.

The assumption has long been that donation solves this. Drop it off at Goodwill. Bag it for the Salvation Army. Hand it to a charity shop. The clothing is out of your hands — and therefore, presumably, out of the waste stream.

That assumption is wrong.

Traditional donation organizations and secondhand retail models — however well-intentioned — are built around a retail logic. They can only process what they can sell. What they cannot sell moves into opaque secondary markets, bulk export bundles, or

ultimately, the same landfill the donor hoped to avoid. The system doesn't fail at the edges. It fails at the center, by design, because it was never built to handle the full volume of what consumers generate.

Trashie was built to solve the problem everyone else *assumed away*.

What the Donation Economy Gets Wrong

The Resale Model Has a Ceiling

For decades, the dominant response to textile waste has been resale: thrift stores, consignment platforms, and peer-to-peer marketplaces. These models work well for the best 20% of what comes in — clean, desirable, on-trend items with a ready buyer. They struggle with everything else.

Most resale operations sort a fraction of donations for in-store or online sale, then move the remainder into secondary wholesale markets in bulk. The bulk is sold by weight, with minimal sorting, limited category tracking, and no accountability for downstream outcomes. When a buyer in a secondary market takes possession of a mixed bundle, the original donor's good intentions effectively end.

ThredUp, Poshmark, and similar platforms have improved the consumer experience of secondhand buying, but they remain selective at intake. Items that don't pass their quality filters are returned, discarded, or handed off — again, without transparency about what happens next.

Traditional Donation Organizations Are Overwhelmed

Charitable donation organizations face a compounding challenge. The volume of donated textiles has grown dramatically, while their processing infrastructure has not kept pace. Sorting is labor-intensive, space is constrained, and the economics of moving low-value items are difficult. The result is that a meaningful share of donated clothing — even clothing in wearable condition — cannot be efficiently processed and placed into a reuse channel.

This is not a failure of mission. It is a structural mismatch between collection capacity and processing capability. The infrastructure simply was not built to handle today's volume.

The Problem No One Wanted to Name

The uncomfortable truth is that the existing donation ecosystem, taken together, functions as a form of delay — not diversion. Items leave the consumer's hands feeling responsibly disposed of. But without sorting infrastructure, downstream accountability, and defined

offtake channels, a meaningful portion of those items reach landfill anyway, just later and with less visibility.

Solving textile waste requires building something the sector has never had: end-to-end infrastructure that handles 100% of what it collects.

The Trashie Model: Infrastructure First

Trashie is not a donation organization. It is not a resale platform. It is infrastructure — built specifically to handle the full volume of consumer textile waste, from collection through final disposition, with accountability at every stage.

The model rests on three principles that distinguish it from every existing approach:

- **100% intake.** Every item that enters the system is processed — not a curated selection.
- **Domestic sorting.** All items are sorted and graded in U.S. facilities before any export or redistribution.
- **Defined offtake.** Every item is directed into a specific, tracked channel: resale or material recycling.

This is not incremental improvement. It is a category-level departure from how the donation economy has always operated.

Phase 1: Collection

Trashie's consumer-facing Take Back Bags and Boxes provide an accessible, mail-in collection mechanism that removes the friction of traditional donation. Consumers participate from home, on their own schedule, for any category of textile — not just clothing, and not only items in sellable condition.

Increasing collection access is a prerequisite for everything else. Volume matters. Without scale, downstream processing economics break down. Trashie's collection model is designed to grow with consumer adoption.

Phase 2: Processing

This is where Trashie's model diverges most sharply from the industry.

All incoming items are sorted and graded at Trashie's U.S. facility. The sorting process begins with true waste removal — biohazard-contaminated materials, heavily soiled textiles,

and items that cannot safely or responsibly be handled — and then proceeds to item-level assessment of rewearability and category.

Last year, Trashie sorted products into 613 distinct grades, spanning categories including children's apparel, denim, athletic wear, outerwear, knit tops, and household textiles. Grades and volumes are tracked weekly, monthly, and annually.

Zero percent of Trashie's output is sold as mixed rags — bulk, unsorted bundles that obscure downstream accountability. **This is not a differentiator. It is a commitment.**

Phase 3: Offtake

Sorted, graded items are directed into one of two primary channels based on condition and category: resale or recycling.

Resale channels include domestic charity stores, thrift retailers, and vintage resellers, as well as direct relationships with vetted international retail partners. International partners are not bulk buyers. They purchase specific grades and categories matched to documented demand in their markets, and sign agreements committing to generating no more than 5% waste from purchased goods.

Items that are not suitable for resale enter material-specific recycling streams. Pathways vary by fiber type and condition, and may include mechanical processing into insulation, wiping cloths, or other secondary-use materials.

Reuse is always prioritized over recycling, in alignment with EPA Waste Management Hierarchy principles. The hierarchy is not aspirational language at Trashie — it is the operational sequencing of every item processed.

Outcomes at Scale

The results of Trashie's model are measurable. Based on most recent distribution data:

Outcome Channel	Share of Volume
International resale (vetted retail partners)	65%
Domestic resale (thrift, charity, vintage)	10%
Material recycling (primarily domestic)	15%
True waste (biohazard, unsalvageable)	5%

Approximately 95% of all items entering the Trashie system are successfully recirculated through resale or recycling. That figure is not a rounding estimate. It is the direct result of processing 100% of intake with defined downstream accountability for every item sorted.

Responsible Global Distribution

International resale is sometimes treated with skepticism in sustainability conversations — the assumption being that export equals abdication. Trashie's approach challenges that assumption directly.

Nearly 4 billion people worldwide live on less than \$5,000 per year. Access to affordable secondhand clothing is not a niche concern in those economies — it is essential. A responsible international resale network, built on sorted, graded finished goods rather than mixed bulk bundles, creates genuine value in markets where demand is real and waste is minimized at the destination.

Trashie's international partners are not commodity buyers. They purchase specific product categories and quality grades. They commit contractually to 5% or less waste from received goods. The chain of custody doesn't end at the U.S. border — it extends through the final point of sale.

This is the difference between export as diversion and export as distribution.

Charitable Impact

Beyond environmental outcomes, Trashie generates direct charitable value from the goods it processes. Proceeds from collected items support a roster of charitable organizations including the Red Cross, Every Mother Counts, and Purple Heart.

Consumers also have the option to direct their reward credits — earned through Take Back Bag participation — as direct charitable donations. This creates a participation model where choosing to recirculate clothing generates both environmental and philanthropic returns.

Why This Matters Now

Overproduction is not a problem Trashie can solve. The brands and systems that produce 100 billion garments a year require their own reckoning. But overproduction's downstream effects — the landfilling of 85% of U.S. textiles, the quiet failure of donation infrastructure to keep pace with volume — are problems that infrastructure can address today.

Trashie's approach establishes a new baseline for what responsible end-of-life handling looks like:

- Full intake, not selective intake
- Domestic sorting before any export
- Category-level grading at scale
- Defined, accountable downstream channels
- Transparent reporting on outcomes

Every one of these commitments is operationally demanding. None of them are standard practice in the donation sector today. That gap is exactly where Trashie sits.

**Your items are not simply exported or discarded.
They are sorted, graded, directed intentionally,
and tracked.**

Transparency matters. So does scale. We're building infrastructure for both.
