



Written Statement of

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To the

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**INTRODUCTION**

Thank you, Chairman Merkley and subcommittee members, for the opportunity to speak at this subcommittee hearing.

I am Clemence Schmid, General Manager of Loop Global - the reuse platform launched by TerraCycle Inc. - and pleased to present my testimony from a business standpoint on the efficacy of reusable products and infrastructure as innovative solutions for waste reduction.

I will also address the critical role of governments in supporting the transition from single-use to reuse consumption models.

I joined Loop in 2018 and successfully led the global launch of the platform, across three continents, multiple categories, and channels. I am a passionate advocate for driving the transition to a circular economy: an economic system that aims to eliminate waste and continuously reuses resources.

Prior to joining Loop and TerraCycle, I spent 15 years working in the fast-moving consumer goods industry, durables, and business-to-business, in companies including Procter & Gamble, Gillette, 3M and more. There, I gained significant expertise in consumer behavior and habit change, business management, and financial modeling. I have led global and US-based teams in marketing, general management, innovation, and sustainability.

As you will hear today, there are many reuse and refill models. My testimony specifically addresses the question of reusable products and infrastructure in a pre-fill reuse system. Loop is uniquely able to comment based on five years of real-world experience operating such a system, where consumers buy products already in reusable packaging (no self-filling required), and then return the empty package at a designated collection point, where it is collected, cleaned, and refilled to begin the cycle again.



## **BACKGROUND ON OUR ORGANIZATION:**

TerraCycle is a successful US-based, for-profit company that is on a mission to Eliminate the Idea of Waste®. TerraCycle's journey started over 20 years ago in Trenton, NJ, and we are now a global leader with programs running nationally in over 20 countries. At the heart of TerraCycle's profitable expansion are innovative sustainability solutions that align environmental and business priorities. We are best known for programs that collect and recycle hard-to-recycle products and packages from flexible plastics to personal protective equipment (PPE), toothbrushes, pill blister packs, and even cigarette butts, and we have been able to scale these to meet business and consumer demand. For example, TerraCycle supports the largest contact lens and eye care recycling program in the United States, and is the world's leading personal and beauty care recycler. The majority of TerraCycle programs are funded by business partners who drive positive return on investment (ROI) from their programs. Today TerraCycle is the proud partner of 40,000 customers, from large multinationals like P&G and Unilever, to big box retailers like Staples and Walmart, to start-ups and smaller businesses.

Loop, our reuse platform, is an initiative that furthers TerraCycle's mission to Eliminate the Idea of Waste® by preventing the creation of waste at the source. Launched by TerraCycle in 2019, Loop is a pre-fill reuse platform that enables brands and retailers to shift from a single-use, linear supply chain to a reusable, circular system. Loop acts similarly to a Deposit Return System and is able to integrate the widest range of packaging and products from baby food to motor oil and everything in between (other food and beverage items, personal care, or homecare). On the Loop platform, Brand manufacturers fill their product(s) in reusable packaging that consumers acquire for the price of its contents plus a fully refundable deposit that will be reimbursed to them upon return of the empty package in any Loop collection point (location agnostic, regardless of where it was originally purchased). The package is collected, sorted, and cleaned within the Loop ecosystem, and then sent back to the original manufacturer to be refilled and sold to another consumer. As an example, Haagen Dazs replaced the coated paper carton (which is not recyclable in most municipalities) with a beautiful reusable stainless-steel container, which can be cleaned and refilled multiple times.

Our objective in creating and scaling Loop is to emulate the virtues that single-use products have brought to our modern lives (namely, convenience and affordability) while solving for the unintended consequences of disposable lifestyles: overflowing garbage cans on street corners, littered streets, polluted waterways, and many more symptoms of the waste crisis. At scale, Loop's "buy anywhere, return anywhere" ecosystem is as convenient as single-use, without the waste.

At its outset, Loop was focused on gathering in-market learnings to prove market readiness. The system launched as an eCommerce platform across five countries, including the United States. This learning phase was completed within the first year of launch within each country, and we have now fully integrated the reverse supply chain within existing retailers both in-store and online. The United States deployment in-store started in Oregon with Kroger's Fred Meyer. I would like to acknowledge Senator Merkley's contribution in bringing Loop's first United States launch to Oregon. More recently, Loop has launched in Washington, D.C., and Virginia with Ahold Delhaize USA, and with Walmart in Arkansas.



We are also scaling the Loop platform in France and Japan, where our partners are steadily increasing the number of participating products and stores.

In addition to our operating role with over two hundred consumer product manufacturers and retailers, Loop and TerraCycle are often sought as industry experts. We actively participate in reuse and recycling multi-stakeholder initiatives and working groups at a national and international level via organizations like Ellen MacArthur Foundation, World Wildlife Fund, World Economic Forum, and with governmental bodies. For example, we are currently working closely with the U.S. State Department to strengthen reuse input into the United Nations Global Treaty on Plastic Pollution.

### **REUSE IS A VIABLE ALTERNATIVE TO SINGLE-USE:**

Reuse is not a new business concept: when milk was delivered via a milkman, companies reused and refilled glass milk bottles. These glass bottles were a company asset. In the 1950's, as plastic gained in popularity, consumers shifted towards convenient, lightweight, single use plastic packaging. Packaging shifted from a business-owned asset to part of the consumer's product cost, and packaging became a cost of goods (COGS) item. Manufacturers are now pressured to keep prices low, and reduce COGS as much as possible.

By treating packaging as a valuable asset and adding a deposit system to ensure return of these assets, the Loop platform enables manufacturers to innovate and create better packaging. This packaging then significantly improves consumer experience, prevents waste, and drives value creation for the brand.

Compared to a linear, single-use economy that constantly delocalizes industries in the quest of lower costs, reuse has the potential to "re-industrialize" the United States by shifting current overseas packaging production to local supply chains and facilities. In the US, the reuse sector is estimated to provide more jobs per ton of discarded material than landfilling, incineration or even recycling<sup>1</sup>.

Replacing just 20% of single use plastic packaging with reusable alternatives is estimated by some sources to offer a \$10B+ economic opportunity<sup>2</sup>

Further, reuse avoids the negative impacts of plastic production and pollution on predominantly disadvantaged and minority communities in the United States.

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<sup>1</sup> Institute for Local Self Reliance: <https://www.wastedive.com/news/zero-waste-jobs-environmental-justice-reuse-refill/637838/>

<sup>2</sup> Upstream: <https://upstreamolutions.org/reuse-vs-single-use-economics>



**OVER THE LAST FOUR YEARS LOOP AND OUR PARTNERS HAVE PROVEN THE SYSTEM, GATHERED THE NECESSARY LEARNINGS AND IDENTIFIED THE SUCCESS DRIVERS:**

Reuse is a proven, “better for the environment” solution:

The UN has stated that reuse is “the most scalable solution to reduce plastic waste at source.”<sup>3</sup>

Third party verified Life Cycle Assessments (LCA’s) have demonstrated that reuse helps reduce Greenhouse Gas (GHG) emissions, water usage, and waste generation versus disposal in our landfills or incinerators and even versus recycling. Reusable bottles can save up to 47% GHG and 45% water usage<sup>4</sup>

There is market demand for Reuse:

Through years of consumer research and from our operational in-market experience, we know that consumers want reusable products, understand deposit systems, and want to participate in reuse systems. Loop is proven to drive sales: when executed well, the reuse Shelf Keeping Unit (SKU) achieves up to 60% of the total unit sold of its single use equivalent. Reuse is also driving brand and store preference with up to 94% and 80% of American consumers declaring higher likelihood to choose a brand or a store because of the Loop offering.

Consumers’ return is also proven with mature systems like Germany beverage (98% return rate) as well as in Loop, where we have observed up to 80% return rate with over 98% of containers being returned undamaged. We are expecting Loop’s return rate to continue to steadily grow as time in market and availability increase.

Reuse is already operational and at scale today:

Reuse operations exist at scale in several industries, such as beverages (including beer) and secondary or tertiary packaging such as plastic pallets and crates, propane tanks, gas cylinder like SodaStream or water jugs globally and in the United States.

Over the last four years, Loop has built a reverse infrastructure leveraging the technical expertise of industry leaders like Tosca, the US’s largest Reusable Plastic Containers (RPCs) supplier and Europe’s largest reusable pallet supplier, leveraging their expertise of reusing and cleaning secondary packaging or Ecolab, a world’s leading provider of science-based solutions, data-driven insights and world-class service to advance food safety, maintain clean and safe environment and optimize water and energy use. Those partnerships enabled Loop to validate hundreds of SKUs for reuse, meeting brands’ high QA/QC requirements for products as sensitive as baby food. From food and beverage consumables, including frozen foods, to personal and home care products, we have proven our ability to handle the reverse logistics and deposit management required to make reuse infrastructure work. Our operations have been audited by our various partners like Procter & Gamble, Nestle, Unilever and more to match their standards.

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<sup>3</sup> United Nations Environment Program 2023: <https://www.unep.org/resources/turning-off-tap-end-plastic-pollution-create-circular-economy>

<sup>4</sup> EMF: <https://ellenmacarthurfoundation.org/circular-examples/a-reusable-drinks-bottle-design-for-multiple-brands-universal-bottle>



## **WE NEED TO UNLOCK THE FULL ECONOMIC AND ENVIRONMENTAL POTENTIAL OF REUSE BY JOINING SOUND BUSINESS STRATEGY WITH GOVERNMENT ACTION:**

We have identified the key drivers that make Reuse a profitable business proposition:

- **Durable packaging design plays a pivotal role in establishing a profitable business model for reuse.** An important challenge facing reuse is that manufacturers have built their supply chains and manufacturing facilities around single use products. A successful design will drive consumer preference and lower operational costs, striking the right balance between durability (i.e., the number of rotations the packages can withstand) and the appropriate deposit amount (which safeguards the packaging owner against asset loss). Loop supports our partners by identifying efficient and lower cost options for reusable packaging which may include modifying packaging that is already in their portfolio, or sourcing “off the shelf” durable containers that could be repurposed as packaging. It also provides design guidelines as a framework for brand manufacturers to identify the right durable packaging that drives profitability and environmental benefits.
- **A centralized and flexible private system operator is necessary to enable the mutualization of the reverse logistics infrastructure.** For reuse to compete with single use on affordability and convenience, it is critical to have a sortation, cleaning, and return system that can handle the widest possible range of products. This “mutual infrastructure” is the quickest way to lower costs for all participants, while also simplifying the consumer return experience through one single system. We would warn against developing individual systems for specific products or industries, which will end up not being viable in the long term.
- **Reuse needs to grow in scale.** Loop pilots have proven that consumer demand exists for reuse, and that we are able to stand up a functional reuse ecosystem. Loop also partnered with McKinsey & Company to confirm the business proposition: at scale reuse can drive up to 10% more profit for the value chain. Driving more volume into the system is what will create positive environmental and economic impact which is only possible by adding more products in reusable packaging and increasing availability of distribution and return points.

Initial capital investment is needed to achieve this scale and economy-wide transformation. Making substantial infrastructure investments is only attractive for businesses if they can expect long-term volume to flow through the system and are certain that reuse is the United States’ direction. We believe the government can help demonstrate this at both the federal and state levels:

- **Provide a legal framework that confirms reuse needs to be part of our economy.** Loop is supportive of Reuse being part of Senator Merkley’s “National Bottle Bill” and would recommend not to limit it to Bottles.
- **Develop guidelines that promote reuse and foster more voluntary actions until the legal framework comes into effect.** Loop would be happy to partner with the Environmental Protection Agency (EPA) and other government agencies and share the guidelines it already developed as a starting point.



- **Provide public funding to co-fund the development of reverse infrastructure** and the necessary education to explode the market demand via supporting operators. The government could even create reuse incentives to encourage the use of reusable options.
- **“Lead by example”** to expedite adaptation and encourage the private sector to follow suit. This could look like introducing reuse into government procurement policies and rolling out reuse initiatives within government properties and in operations.

To conclude, now is the moment to embrace reuse models: the private sector has conducted all the necessary pilots to prove the concepts and there is global momentum at a legislative level to propel reuse forward. Delaying action could stall the measurable progress that has already been made towards a more sustainable future, potentially setting us back decades into the harmful "throw-away" system that continues to contribute carbon emissions and worsen the waste crisis. With existing market demand and voluntary actions underway, government support can be the catalyst to turn reuse into a full-scale reality. Therefore, I urge policymakers to actively support reuse through legislation, investment, education and launching internal initiatives.

I appreciate the opportunity to provide this testimony to the subcommittee and would be pleased to address any questions.

A handwritten signature in black ink that reads "Schmid".

Clemence Schmid,  
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