

# Chemistry, Materials & Packaging Trending: Scalable, Circular Solutions Promise to Revolutionize Plastic Packaging

 [sustainablebrands.com/read/chemistry-materials-packaging/trending-scalable-circular-solutions-promise-to-revolutionize-plastic-packaging](https://sustainablebrands.com/read/chemistry-materials-packaging/trending-scalable-circular-solutions-promise-to-revolutionize-plastic-packaging)

February 17, 2021



Published 4 hours ago. About a 8 minute read.

Image: **Sway creates replacements for traditional plastic derived from seaweed.**  
| [Sway](#)

New innovations from Nature Valley and the winners of Closed Loop Partners' Beyond the Bag challenge continue to chip away at consumer packaging waste.

**Nature Valley's store-drop-off recyclable snack bar wrapper open to industry adoption**



**Image credit: Nature Valley**

**Nature Valley™**'s Crunchy granola bars can now be consumed guilt-free: The company has launched the first plastic film wrapper designated as Store-Drop-Off recyclable by **How2Recycle®** — a standardized labeling system that clearly communicates recycling instructions right on the package. The new packaging bars will be on shelves this spring and bring Nature Valley closer to achieving its commitment to 100 percent recyclable packaging by 2025.

Nature Valley has purposefully not patented the wrapper — making it available for other food brands to apply the technology to their product portfolios. And to help encourage Store-Drop-Off recycling the wrappers and other eligible plastics, the brand has created a multi-channel consumer-education plan to drive awareness of Store-Drop-Off recycling and promote small consumer actions that can lead to big impacts.

“This advancement led by Nature Valley demonstrates that big, innovative thinking can empower and enable consumers to take small steps — like recycling a wrapper through Store-Drop-Off — to make a significant difference in the health of our planet,” said **Mary Jane Melendez**, chief sustainability and social impact officer at Nature Valley parent company **General Mills**. “It’s up to brands like Nature Valley and others in the snack industry to make these changes and do our part to protect the environment for generations to come.”

With this new packaging, Nature Valley plans to educate consumers about the Store-Drop-Off recycling system, re-engage their interest in reducing landfilled material and stimulate recycling. According to the **Hartman Group**'s Sustainability 2019 report, 70 percent of US consumers want to decrease plastic waste but don't know how, yet over 90 percent are within 10 miles of a Store-Drop-Off recycling location. That is a potential 295 million people who could participate in Store-Drop-Off recycling.

Nature Valley introduced the world's first granola bar in 1975 as an on-the-go snack designed to help people get outside and explore nature. Alongside advancements from companies such as **Nestlé** — which in 2019 released the industry's first recyclable paper confectionery packaging — and recycling solutions from **TerraCycle**, solutions such as Nature Valley's at scale could put a significant dent in the waste from conventional snack bar packaging.

“Our drive to be a force for good, and a force for nature, led Nature Valley to invest in this packaging technology,” said **Brian Higgins**, Grain Snacks Business Unit Director at General Mills. “And as the creator and share leader of the bar category, we feel a responsibility to continue innovating and encouraging future solutions that could make recycling wrappers even easier.”

Nature Valley's new wrapper uses advanced film processing with unique polyethylene polymers that protect product freshness and don't compromise shelf life. Once recycled, the materials can be used to create new products such as synthetic lumber and decking equipment. The goal is to implement the wrapper technology across the brand's entire portfolio of snacks by 2025 and extend to other General Mills brands and products.

Nature Valley and other General Mills brands are working with leading NGOs to create infrastructure for plastic film recycling, such as **The Recycling Partnership** and the **Wrap Recycling Action Program (W.R.A.P.)**.

*For more information, visit [NatureValley.com/Recycle4Nature](https://NatureValley.com/Recycle4Nature).*

---

**Winners of Closed Loop Partners' Beyond the Bag Challenge are reinventing the plastic bag**

---



**Image credit: [PlasticFri/Facebook](#)**

Meanwhile, the **Center for the Circular Economy** at **Closed Loop Partners** has announced the nine winners of its inaugural **Beyond the Bag Challenge**. The winning solutions fall into three categories: **Reuse and Refill**; **Enabling Technology**; and **Innovative Materials** – and range from reusable packaging systems, to technology that incentivizes consumers to make sustainable choices, to bags derived from next-generation materials.

The US alone uses an estimated 100 billion plastic bags per year, and less than 10 percent are recycled; single-use plastic bags continue to be one of the top 10 items found along beaches and waterways, according to the **Ocean Conservancy's International Coastal Cleanup**. The global threats brought about by climate change and the pandemic have only underscored the urgency of addressing our current system.

“There is no one-size-fits-all solution to tackle a problem as complex as our reliance on single-use plastic bags,” says **Kate Daly**, Managing Director of the Center for the Circular Economy at Closed Loop Partners. “The diversity of our winners underscores how businesses and consumers alike need to employ a range of solutions to fit different geographic, social and economic contexts. We’re thrilled to announce these companies entering the next phase of the initiative, as we continue to support their growth and begin to implement select pilot programs.”

The **Consortium to Reinvent the Retail Bag** is a pre-competitive collaboration committed to reimagining the retail bag and creating a more circular delivery system. Launched in July 2020, the Consortium’s Beyond the Bag Initiative is an ambitious, three-year undertaking that aims to identify and scale innovative alternatives to the single-use plastic retail bag. Since its launch, Consortium founding partners **CVS Health, Target** and **Walmart** committed \$15 million collectively to the collaboration — additional retail partners **DICK’S Sporting Goods, Dollar General, The Kroger Co, The TJX Companies, Inc, Ahold Delhaize USA Brands, Albertsons Companies, Hy-Vee, Meijer, Wakefern Food Corp** and **Walgreens** have since signed on.

“It is exciting to see the potential of our efforts to reimagine the single-use bag in action as we unveil these innovative solutions,” says **Eileen Howard Boone**, SVP of Corporate Social Responsibility and Philanthropy at CVS Health. “We look forward to exploring opportunities to pilot these solutions at CVS Pharmacy locations.”

The winners, according to category, are:

- **Reuse and refill:**

- **ChicoBag** — offering a new service that enables customers to borrow bags on-site
- **Goatote** — kiosk system that allows shoppers to access clean, reusable bags anywhere a kiosk is found
- **Returnity** — reusable shipping bags and boxes for products bought online or through pick-up services

- **Enabling technology:**

- **Eon** — an IoT tracking system for understanding how bags are being utilized across the value chain
- **Fill It Forward** — the company created a tag and app that connects to the reusable bag consumers already own, allowing them to track environmental impact, earn rewards, and help give nutritious food to people in need
- **SmartC** — an IoT platform that incentivizes shoppers with rewards every time they reuse their shopping bags

- **Innovative materials:**

- **Domtar** — developing a new bio-based, recyclable material of 100 percent cellulose fiber, but stretchable and more durable
- **PlasticFri** — maker of starch-based, compostable bags made from agricultural waste
- **Sway** — maker of compostable, carbon-negative plastic bags made from seaweed

## The selection process

---

Over 450 innovators from around the world entered the Beyond the Bag Challenge. The cohort of 9 winners were selected from a shortlist of 58 promising concepts that addressed criteria in three areas:

- **People:** The solution must maintain the convenience, efficiency and effectiveness of the single-use plastic bag for customers and retail employees alike. It must take into account accessibility and inclusivity;
- **Business:** It must have attainable, long-term value for retailers in a variety of environments;
- **Planet:** It must operate within a circular system and lessen or eliminate environmental and social harm in its sourcing, production, useful life and end-of-life.

The winners all receive a portion of \$1 million in prize money and are eligible for additional financial support to support testing, piloting and scaling efforts. They will now work closely with the Consortium to prototype, refine and test the viability of their designs to scale as long-term solutions.

“We congratulate the organizers, partners and innovators of this initiative for the enormous collective effort over many months to get ‘beyond the bag,’” said **Chever Voltmer**, plastics initiative director at Ocean Conservancy. “Single-use plastic bags are one of the most prevalent, most insidious forms of ocean plastic pollution, and we were heartened by the creativity and sheer volume of submissions seeking to address this problem.

“Identifying innovation is just the beginning; and we need to take a holistic approach that accounts for environmental impacts before, during and after the useful life of any alternative materials or models. Sea creatures don’t discriminate between a fossil fuel-based bag and one made of other plastics, for example; so ensuring proper waste collection and investment in circular systems remains critical for the health of our ocean. We are excited to see how each of the nine winners progresses under more rigorous testing and evaluation during the next phase of the Beyond the Bag Initiative.”

Closed Loop Partners' Center for the Circular Economy offers a holistic approach to tackling complex challenges to a circular economy, by operating across every point of the value chain. The Center has so far united industry competitors to uncover solutions to common problems – its first initiative, the **NextGen Consortium**, assembled food and beverage giants including **McDonald's** and **Starbucks** to identify and commercialize a widely recyclable, compostable and/or reusable cup. In 2019, **12 winning cup solutions** were selected; the Consortium is now testing these new solutions and conducting select pilots to accelerate their path to scale.