ELIMINATING THE IDEA OF WASTE

RECYCLE ALL WASTE

MAKE EVERYTHING FROM RECYCLED WASTE

ELIMINATE WASTE

REDUCE WASTE IN EMERGING REGIONS

GAIN USEFUL HEALTH INSIGHTS FROM WASTE
Used 20oz bottles + Worm Poop Liquid + End Run / over run trigger sprayers = TerraCycle Plant Food
TERRACYCLE IS A GLOBAL LEADER
Active in 21 Countries

TerraCycle Locations
- Brazil
- Canada
- Mexico
- US
- Austria
- Belgium
- Denmark
- France
- Germany
- Ireland
- Netherlands
- Norway
- Spain
- Sweden
- Switzerland
- UK
- China
- Japan
- South Korea
- Australia
- New Zealand

Regionally, TerraCycle is partly owned by several large waste management companies to leverage their expertise and credibility across the globe.
SAMPLING OF PARTNERS

...and many more
TerraCycle Japan Recycling Programs: Founded Jan 2014

Cigarette butts Recycling Program
• Retailer, government office

Toothbrush Collection Program
• School, Dentist, Office, Retailer

Car Air Freshner Recycling Project
• Autobucks Store

Pet Food Packaging Recycling
• Joyful Honda Store

Cosmetics Container Recycling Campaign
• Innis Free Stores

Kiehl’s Container Collection
• Kiehl’s Store

Daily necessities Refill Pouch Recycling
• Government Office, NPO Office in limited areas

Plastic Umbrella Collection Program & Disposable Spoon & Lid Collection Program

Home and Hair Care Recycling Campaign
• Aeon Stores

Pet Food Packaging Recycling
• Joyful Honda Store

Cosmetic Container Recycling Program
• L’Occitane Store
Waste doesn’t exist in nature
Consumption + Complex Materials

creates waste
LIVING IN A PLASTIC CRISIS

448 MILLION TONS of plastic are produced every year.

Consumer product companies are the 2nd largest producers of plastic.

More than 40% of plastic products is used only once.

Less than 20% of all plastic is recycled globally.

Plastics refuse may remain on the Earth for more than 450 years.

Data source: National Geographic 06.2018
More than 9 MILLION TONS of plastics are illegally tossed into the Ocean annually.

Nearly 700 Marine Species are harmed by Ocean Plastics.

By 2050, there will be more PLASTIC in the ocean than FISH.

9 million tons is equivalent to dumping 1 GARBAGE TRUCK of plastics EVERY MINUTE.

Microplastic end up in water sources and food chain.

Data Source: National Geographic 06.2018
TerraCycle creates custom collection logistics for each recycling program. Programs are designed to best suit the client and their waste stream. TerraCycle develops the science and technology to recycle the previously non-recyclable waste into a new raw material. TerraCycle works with each client to drive significant ROI and scalability through their recycling program.
Win A New Addition to Recess!

Colgate, meijer, TERRACYCLE
TerraCycle/PG Beach Plastic in Japan

From the Gogo and Tsushima islands (ironically, mostly Chinese packaging washed up in Japan)
Proud Winner of the United Nations Momentum for Change Lighthouse Award
リサイクリエーション
RecyCreation
RECYCLING THE NONRECYCLABLE

Most products and packaging are considered non-recyclable **only** because of economics. **Examples below:**

**WHEN:**
- **LOGISTICS** + **PROCESSING**
- **VALUE** = **RECYCLABLE**

**WHEN:**
- **LOGISTICS** + **PROCESSING**
- **VALUE** = **NON-RECYCLABLE**

**RECYCLABLE**
- Aluminum
- PET
- HDPE
- Glass
- Uncoated Paper
- Polypropylene

**NOT RECYCLABLE**
- Beauty Products
- Coffee Capsules
- Complex Closures
- Flexible Plastic Packaging
- Cigarette Butts

**SOMEWHAT RECYCLABLE**
- PET
- HDPE
- Glass
- Uncoated Paper
Today we live in a linear world where most products are made, used once and then discarded.

MAKE EVERYTHING RECYCLABLE

Extraction & Manufacturing

Landfill or Incineration
TerraCycle’s first goal is to recycle products and packaging that do not currently have a solution to give materials a second life.
Value of Waste

Value of separation – what they are willing to pay for processed material.

For mixed plastics value - http://www.recycle.net/cgi-bin/exview.cgi?item=LA1132175&w=01.

Mixed plastic value of separation is avg of PE, PET, PP and PS. The value is negative because cost of separation and collection is more than the value of separation.


Value of different specs of PET - http://www.recycle.net/Plastic/PET/xv100100.html - Value of waste - what the suppliers will buy the material for.
ELIMINATE THE IDEA OF WASTE

TerraCycle's third step is to redesign products to enter into a reuse platform, completely eliminating the idea of waste.
Loop is a global platform that enables consumer product companies and retailers to shift from a disposable supply chain to a durable one.
The World Economic Forum is uniquely positioned to support this type of initiative:

- The Forum convenes key stakeholders across sectors necessary for substantive collaboration, including policy-makers, business leaders, technology pioneers, academics, civil society and labour leaders.
- The Forum’s platform has supported a number of leading multistakeholder initiatives, including on future consumption models and advancing the circular economy, developing a strong body of knowledge and relevant stakeholder networks.

The Loop Alliance aims to establish a new model of consumption that ends society’s dependence on disposability and advances the idea of using. By doing so, it supports responsible economic growth while benefitting businesses, governments and the environment.

The World Economic Forum is working with Loop to support this type of initiative.

Klaus Schwab, Founder and Executive Chairman, World Economic Forum

**東京都公募事業より選定**

東京都では、「持続可能な資源利用」を進める観点から、ワンウェイ（使い捨て）プラスチックの削減に係る取組を推進しています。

このたび、ワンウェイプラスチックの削減などプラスチックの持続可能な利用に向けた取組を先駆的に実施する事業を公募し、下記のとおり今年度事業を採択しましたので、お知らせします。

1 選定した事業

リユース容器を利用した商品提供プラットフォーム（Loop）

2 提案者

LOOP Global Holdings LLC 及び TerraCycle Japan 合同会社
Loop is a global platform that enables consumer product companies and retailers to shift from a disposable supply chain to a durable one.

Loop launched in May 2019 with inaugural markets, New York and Paris. Loop will expand to London next, with Toronto, Los Angeles, Tokyo, Germany, and Australia coming soon.
Since Loop’s high-profile press conference announcement at World Economic Forum Annual Meeting on January 24, 2019, there have been 4,000+ media placements and 7.2 billion+ impressions, including coverage from CNN.com, Forbes, Associated Press, Bloomberg, BBC, The Guardian, Wall Street Journal, Vox, Fast Company & more.
WISDOM FROM THE PAST

Refillable durable packaging used to be the norm.

When a package is considered an asset, its allocation per fill is the cost divided by the number of uses it can bear. **The more durable the package the lower the cost per fill.**
THE CURRENT REALITY

Disposability is cheap and convenient.

COGS

When a package is considered a COGS (Cost of Goods Sold) its cost is fully allocated per fill. The cheaper the package the lower the cost per fill.
Manufacturers reduce the weight of their packaging to save on costs and minimize environmental impact. In the process, **recycling rates** and **consumer delight** have deteriorated.
How do we solve the unintended consequences of disposability while maintaining its virtues?
Loop fundamentally changes the ownership of packaging.

**COGS to Brand**

- Packaging cost
  - $0.10

**Cost per use**

- $0.10

**Increasing consumer delight**

- $3.00

**Asset to Brand**

- 100+ uses

Cost of cleaning: $0.03

1 use

[Diagram showing the cost flow from COGS to Brand, through increasing consumer delight, to Asset to Brand.]
Durability enables reusability, design & new features.
we pick up and replenish
The stand-alone e-commerce model is suitable for a low-scale, test-and-learn launch. Loop executes all receiving, outbound + inbound distribution, and cleaning. Manufacturers refill product in packaging they have redesigned for durability and reuse.

Kroger, Carrefour, Tesco and more have enabled durability for their retail environment. The integrated retail models allow consumers to access Loop in-store and through e-commerce. Any retailer, small or large, physical or digital, can embed the Loop engine into their stores and enable a circular supply chain for their shoppers.

and many more coming soon.
LOOP STAND-ALONE MODEL

The Loop stand-alone model is suitable for quick and low-scale test & learn launch. Brands are integrated onto the Loop e-commerce website (www.loopstore.com in the US and www.maboutiqueloop.fr in France). Loop executes all receiving, outbound distribution, inbound distribution, and cleaning.

Consumer signs up and orders product online, selecting “refill” or “one-time” options. Consumer pays $X (product price) and $Y (100% refundable deposit).

Loop delivers product to consumer in Loop Tote.

After use, consumer places empty packaging in Loop Tote and requests pick up.

Manufacturer redesigns product for durability with Loop.

Loop cleans packaging and ships to manufacturer for refill. Loop DC then orders product content from manufacturer.

Loop DC checks in tote and empty packaging. Products set to refill are sent to consumer, who pays only $X (product price).
INTEGRATED MODEL (IN-STORE & E-COMMERCE)

Loop is partnering with retailers to embed Loop into their digital and physical environment, allowing consumers to shop Loop side-by-side in-store and via e-commerce.

Consumer gets a return bag in-store or online. After use, consumer places empty packaging in return bag.

Consumer requests pick up by retailer OR returns to retail store. Retailer sends return bags to Loop.

Loop DC checks in return bags and empty packaging. Loop buys back packaging and returns $Y deposit to the consumer via the retailer.

Manufacturer redesigns product for durability with Loop

Consumer shops Loop products alongside traditional products at retailer. Consumer pays $X (product price) and $Y (100% refundable deposit)

Consumer pays $X (product price) and $Y (100% refundable deposit)

Loop cleans packaging and sells to manufacturer for refill. Retailer then orders product & packaging wholesale from manufacturer.
Based: Online consumers in Paris area (n=296)

Q: Based on the description and images of Loop you just saw, how interested would you, yourself, be in buying products through Loop? Indicates a statistically significantly higher percentage at the 95% confidence level between markets.

**Consumer Interest in Loop Concept of 250 consumers surveyed**

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<thead>
<tr>
<th>Feature</th>
<th>Before</th>
<th>After</th>
<th>Change</th>
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</thead>
<tbody>
<tr>
<td>Convenience</td>
<td>84%</td>
<td></td>
<td></td>
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<tr>
<td>Luxury</td>
<td></td>
<td></td>
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<tr>
<td>No Waste</td>
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**Convenience**
Auto redelivery based on demand.

**Luxury**
Beautiful, functional packaging to display.

**No Waste**
No more hassle from trash and recycling.

Source: Multi-City Survey, May/June 2018
QUESTIONS? CONTACT US

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