

Challenge Topic: Overcoming Insufficient Volume for Recycling

Challenge Description

All retailers generate recyclable materials such as plastics, cardboard, or even waste textiles but many do not produce enough volume per store to justify hiring a contractor to pick up the material. This is because, while these materials may be commodities in a secondary market, their value at low volumes does not cover the costs of hiring a contractor or allow for the contractor themselves to make a profit from gathering it.

Many retailers' stores do not have room to sort and store materials until enough volume accumulates to justify a pickup. While backhauling (using the same truck that delivered product from a distribution center to a store to take items from the store back to the distribution center) to a centralized consolidation location like a distribution center could overcome volume challenges, many retailers do not have the backhauling capabilities or capacities.

Because many recycling markets are regional, the severity of the issue can vary by material and by region, and it is generally more efficient to build volume by consolidating pickups from different retailers in the same region than for one retailer to have all its stores ship the materials to one location.

How might we construct a replicable process for recycling (or, for select items, donating) materials generated at a low per store volume?

Success Criteria

1. Presents a general process for multiple retail store locations within a region to schedule or prepare for a scheduled pickup of a material
2. Process minimizes environmental impacts
3. Use agreement requires pick up/recycling vendor to explain end of life process and prioritizes vendors with most circular/environmentally preferable processes
4. Provides retailers with easily accessible per company and per store waste diversion metrics
5. Complies with applicable waste disposal regulations
6. Use agreement minimizes risk of unauthorized use – e.g. reselling, theft of proprietary information etc. of garments or textiles, branded polybags, etc.
7. Vendor selection process accounts for anti-trust considerations

Relevant Efforts

1. [Ellen MacArthur Foundation](#)
2. [Closed Loop Partners](#)
3. [Curb My Clutter](#)
4. [g2revolution](#)
5. [Smarter Sorting](#)
6. [Earth911](#)
7. [Call2Recycle](#) (example of approach to this challenge for batteries)

Relevant Perspectives

The solution needs to satisfy the needs and stand up to the scrutiny of these stakeholders – consider interviewing some of them.

1. Store managers & associates
2. Material lifecycle experts
3. Waste haulers
4. Municipalities