



REQUEST FOR PROPOSALS: EXPANDING POLYPROPYLENE (PP) PLASTIC RECYCLING MARKETS AND INFRASTRUCTURE

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Closed Loop Fund (CLF) is requesting proposals for projects that collect, sort, and/or process post-consumer PP plastic.

Situation:

1. Nearly 4m tons of PP is landfilled in the US annually costing municipalities over for the \$840m¹.
2. Recycled PP should be as cost effective as virgin assuming strong supply and demand. To get there, cities need to accept PP in recycling collection, MRFs need to accept PP from municipal recycling streams and plastic processors need to demand PP feedstock. Demand from processors is strong, and there is need to focus on PP sorting so it makes economic sense for municipalities and MRFs to accept this material.

Solutions:

There is an opportunity to increase recovery of PP with the proper infrastructure, driving cost savings for municipalities, increasing revenue for MRFs and supplying greater volumes of high value material into the manufacturing stream.

Research indicates that MRFs can profitably sort PP by upgrading or expanding sorting equipment, as well as by leveraging innovative technologies. In addition, Plastic Recovery Facilities (PRFs) and secondary MRFs can drive value to MRFs by purchasing "mixed" bales of plastic and further sorting for value. The profitability and applicability of solutions can vary depending on the local context including volumes, collection programs, population, and end-market proximity. CLF is interested in any project that addresses the above situation.

Examples of candidate projects include:

¹ Source: EPA 2014 SMM Report



- MRFs servicing large municipalities receive enough volume to justify the addition of conveyers and optical sorters to sort and bale polypropylene.
- Advanced image recognition and robotics could be applied to enhance the efficiency and capture rate of sorting multiple plastic types, including PP.
- By adding or updating star screens to a smaller gauge, some MRFs can efficiently sort non-bottle rigid and small format plastics into a mixed bale (i.e. #3-7 plastics) and reduce contamination to other streams.

CLF Support:

Closed Loop Fund seeks to provide municipalities, MRF operators, PRF operators and/or other entities with flexible, below market financing and technical assistance to update their facilities and equipment in order to increase PP recycling.

CLF may fund up to \$5M per project and can support arranging additional financing, if needed. Loan terms may range from 3 – 8 years.

Acceptable uses include equipment purchase, lease financing, working capital, and real estate or facility loans for refinancing or expansion.

Equity requirements: The borrower, or a sponsor of the borrower, should be able to contribute 10% of the project's total funding in equity.

Preference will be afforded to applicants who:

- Are experienced MRF or PRF operators or recycling professionals with existing operations.
- Do not explicitly accept all size/format PP packages today, but could do so profitably with the successful implementation of the proposed project, equipment or technology.
- Will be able to sort small format items (3" or less) and estimate and track the cost/benefits.
- Can begin processing material within 18 months of closing on financing.
- Have applicable projects that will fund upgrades at multiple facility sites, or upgrades that form part of a larger MRF capital expenditure project.
- Have identified co-investors or are able to attract co-investors (preference for 2x or greater co-investment).



To Apply:

Complete the standard CLF application (available online at www.closedlooppartners.com/apply) and submit to bob@closedloopfund.com. Please be sure to address the items above in application.

In addition, please submit the following additional information as part of your application:

- Describe the current acceptance of PP at your facility and (if known) at the communities that provide feedstock?
 - PP container explicit acceptance
 - PP container implicit acceptance
 - PP not accepted, but not explicitly prohibited
 - PP containers explicitly prohibited
 - No recycling program