About Coastal Resources of Maine

Coastal Resources of Maine uses an innovative second-generation recycling technology developed by Fiberight to recover sustainable resources from waste otherwise headed to a landfill or incinerator.

Located in Hampden, ME, our environmentally friendly "mini mill" solution helps our partner communities:

- **double recycling rates,**
- **address global climate and sustainability commitments,**
- **create value from otherwise wasted resources.**

Coastal Resources of Maine is the practical application of more than a decade of work by Fiberight scientists and engineers to design, build, test and deliver solid waste processing solutions that meet current market demands to increase recycling rates, achieve complete utilization of organics and lower carbon outputs.

Coastal Resources' leading-edge processing solution ensures mainstream recyclables, like paper, plastic, and metal, inadvertently tossed in the trash are recovered rather than buried in a landfill or incinerated for energy.

Coastal Resources of Maine

TRASH AND RECYCLING PROCESS

Coastal Resources of Maine
POWERED BY FIBERIGHT TECHNOLOGY

CoastalResourcesME.com

**92 Harold Bouchard Way,
Hampden, ME 04444**

What happens to my trash now that it's not being incinerated?

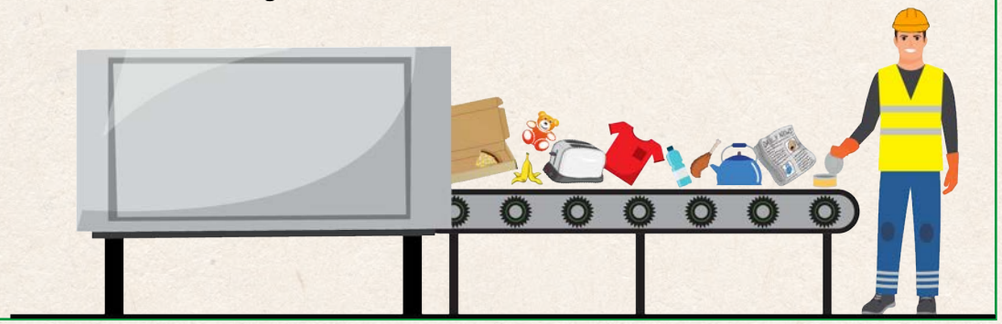
This next-generation recycling technology upgrades the recovered materials into higher value products resulting in a more sustainable and profitable resource recovery solution.

STAGE 1: WASTE IN

The waste and recycling are delivered to Coastal Resources of Maine using the current and local waste collection infrastructure.

STAGE 2: SIZE SPLIT

The waste is de-bagged, placed onto a conveyer and then split into two size fractions using a trommel.



STAGE 3: RECOVERY

Dry textiles are recovered from the larger size fraction prior to pulping. Bulky items such as toasters are separated from the rest of the waste stream.

STAGE 4: PULPING

Both size fractions are pulped to break down the size of the organics; allowing them to be separated from the recyclables.

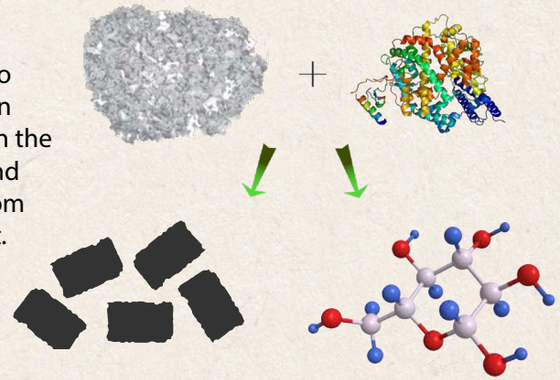
STAGE 5: WASHING & EXTRACTION

First, the pulped material is washed, which allows solubilization and separation of the food waste from the fiber and unrecyclable mixed materials. The fiber is then collected through our extraction process. The mixed unrecyclable materials (mostly plastic) have a high calorific value and can be used for internal energy generation.

Our proprietary process recycles fiber from all sources including 'hard to recycle' materials such as disposable coffee cups, pizza boxes and tetra pak.

STAGE 6: HYDROLYSIS

The fiber, which can be used as a solid fuel or within pulp moulded products, can also be sent to hydrolysis where enzymes are used to break down the carbohydrates (cellulose and hemicellulose) in the fiber to produce sugars such as glucose, xylose and mannose. The liquid sugar stream is separated from the residual solid, which has a high lignin content.



STAGE 7: ANAEROBIC DIGESTION

The solubilized food waste is processed through anaerobic digestion which converts this material into biogas (biomethane and carbon dioxide). The process also cleans the water which is recycled in a closed loop back to washing and extraction.