Carbon

We see plastic waste differently.

- The recycling market is in crisis
- More than 91% of Plastic Waste is not recycled
- China's 'Green Fence' now requires 95% clean plastic waste
- Most sorting facilities have extremely outdated equipment
- Every city has different regulations and issues
- Plastic tipping rates are rising drastically for cities daily

Plastic Waste Issues

- Plastic has to be sorted by type – sorting is expensive
- Most plastic is contaminated (ketchup, honey, manure, etc.) and cleaning adds more cost to the processing
- New forms of plastic (bio-plastics) can contaminate plastic waste streams
- Plastic recycling technologies on the market today all involve heat or chemicals which cause dangerous gases to be released from most plastic groups


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opportunity

- Every piece of waste that goes into a landfill means the loss of valuable resources and cost of taxpayer money for disposal
- $11.4 Trillion dollars in plastic value is wasted in the United States each year
- Plastics are used and wasted around the globe

our solution

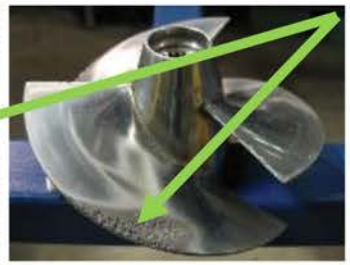
EcoPCR™ – Plastic Carbon Recovery Unit

We reclaim Carbon (carbon) from **any organic material** source including plastics:

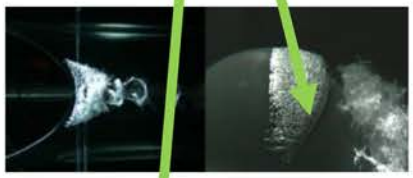
- No Plastic Sorting – 1" pieces max.
  - (Groups 1 – 7 all contain carbon)
- No Cleaning (ketchup, manure, plants, and bioplastics are all carbon based)
- Any non-carbon elements (metal, soil) will be reduced to powder/inert dirt

Our process

The pure carbon is reclaimed from waste then combined with hydrogen from water to form long hydrocarbon ‘chains.’ This process forms a pure organic lubricant that usually has between 15 and 18 carbon atoms. The lubricant can be used for machinery or used to close the loop in the creation of new plastic products.

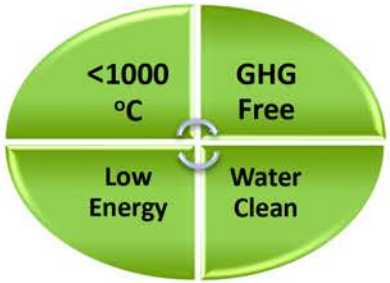


Cavitation Damage



How we do what we do: *EcoCavitation™*

EcoCavitation™ simply put, is a physical process that requires no added heat, not a chemical process. It is millions of tiny micro-bubbles that attach to the surface of an object and then collapse at the speed of sound generating a lot of force on a very tiny area (as small as a molecule), with very high heat (1000°C) inside the air bubble; these bubbles act as very tiny 'hammers' destroying what they attach to including the weak carbon bonds; this makes the carbon available to us to combine with the hydrogen in our water to create a **pure organic lubricant.**



market interest

- Customer has offered a Purchase and Sale Agreement for five (5) units and a territorial license, subject to seeing the final data from the prototype, independent laboratory report and engineering report
- Manufacturing lead time 8-11 months

Economics

EcoCavitation™ market demand creates prosperity

Ground plastic waste (Groups 1 – 7 including bags, unsorted, unwashed) is supplied at up to 200 tons per day (tpd) [2 ½, 40' Tractor Trailers of Plastic Waste] in a single shift….

GHR Unit Size: 8' x 8' x 40' ~100 kW power usage

Input Volume Per Day of Plastic: 200 US Tpd(~180 mtpd) all types
Output Volume: 92% net yield @ 7.33 bbl/ton = 1,400 bbl/day synthetic lubricant
(Yield varies depending upon the density of carbon in the plastic mix)

Operating Period: 360 days/yr

Daily Organic Lubricant Yield @ $40/bbl** (1400 bbl x $40) = $56,000/day
Annual Organic Lubricant Yield Value ($56,000 x 360) = **$20,160,000**

Annual Operating Cost ($714,000 x 12) = $8,568,000 (curb to final sale)
Gross Annual Revenue ($20,160,000 - $8,568,000) = $11,592,000 @ $40/bbl

200TPD Plastic Carbon Recovery Unit

GHG free,
Chemical free,
No added Heat

Pure Organic Lubricant

***This economic analysis uses the price of crude oil at $40/bbl*

Carbon

We see plastic waste differently...

We hope you now do too!