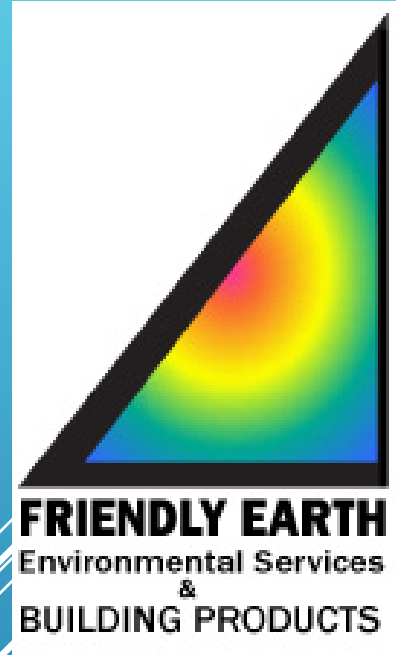


# BUMPER RECYCLING



# About Us

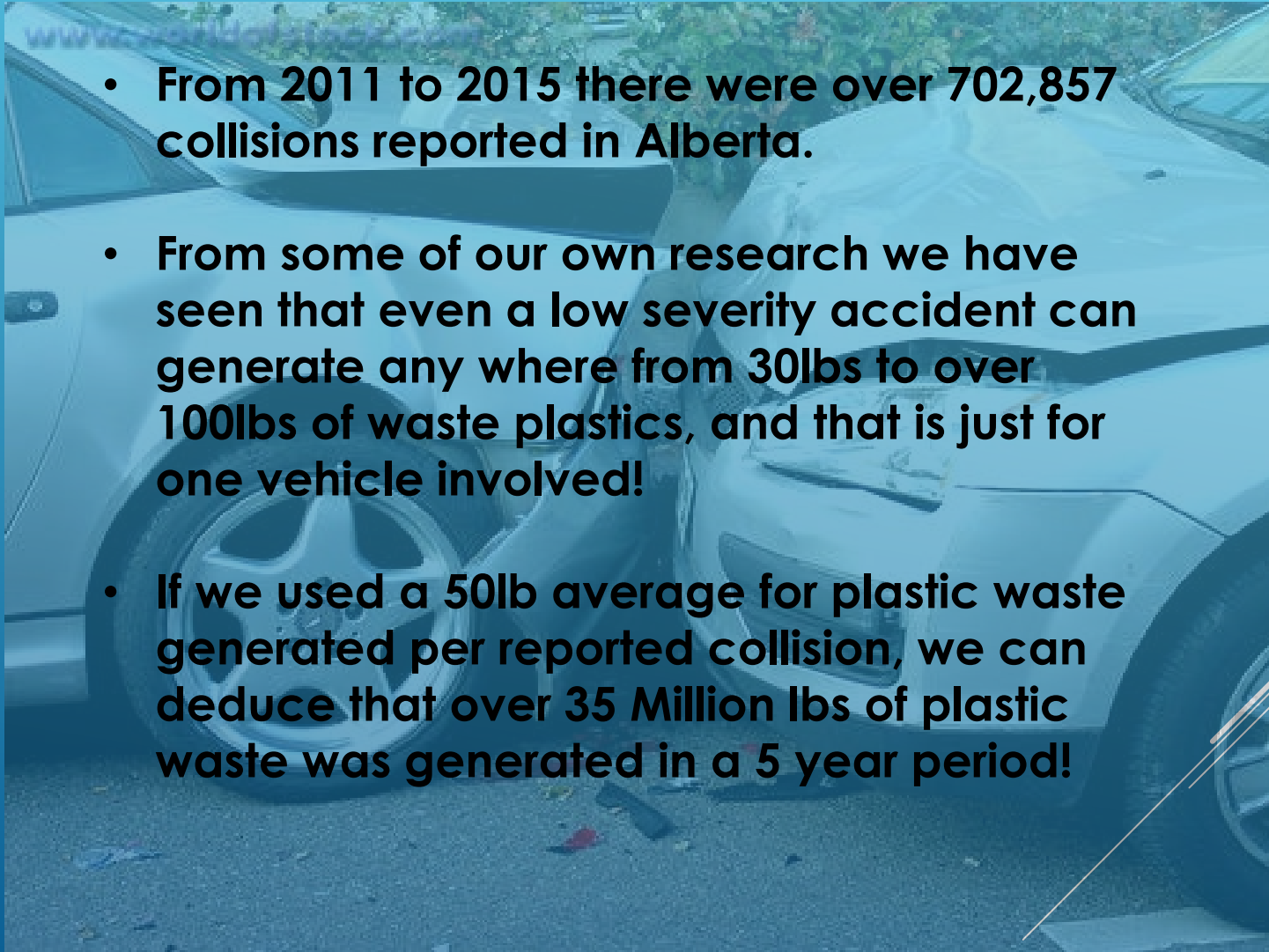
Friendly Earth Environmental Services offers plastic recycling programs to fit our customers needs. We have been recycling plastics in the Calgary area over the last 20 years

Our staff are proud of being a contributing factor in the recycling of plastics. We all take pleasure in knowing we are doing our part in diverting plastics from the oceans and landfills.

Ethical recycling is of the highest importance to all of us at Friendly Earth Environmental Service

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# Collisions in Alberta & Plastic Waste



- From 2011 to 2015 there were over 702,857 collisions reported in Alberta.
- From some of our own research we have seen that even a low severity accident can generate anywhere from 30lbs to over 100lbs of waste plastics, and that is just for one vehicle involved!
- If we used a 50lb average for plastic waste generated per reported collision, we can deduce that over 35 Million lbs of plastic waste was generated in a 5 year period!

# Out of Sight ...Out of Mind

- You may be asking yourself: why isn't anything being done to solve the problem?
- Most of this ICI waste is not tracked/audited in enough detail to identify where the waste stream is coming from
- This plastic material has a low weight but large volume.
- Recycled Plastic Regrind has a low commodity value



# Bumper Stats

- The average Auto body shop has 30 bumpers a month.
- There are over 600 auto shops in Alberta. That is 216,000 lbs /yr that can be recycled.



This is 200 bumpers ready to be ground in our yard

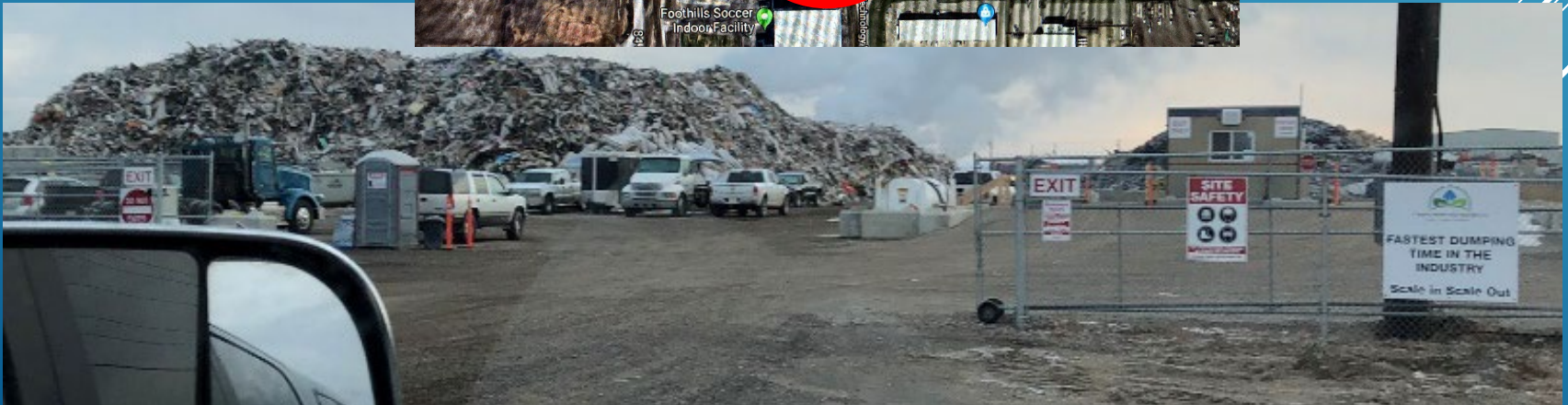
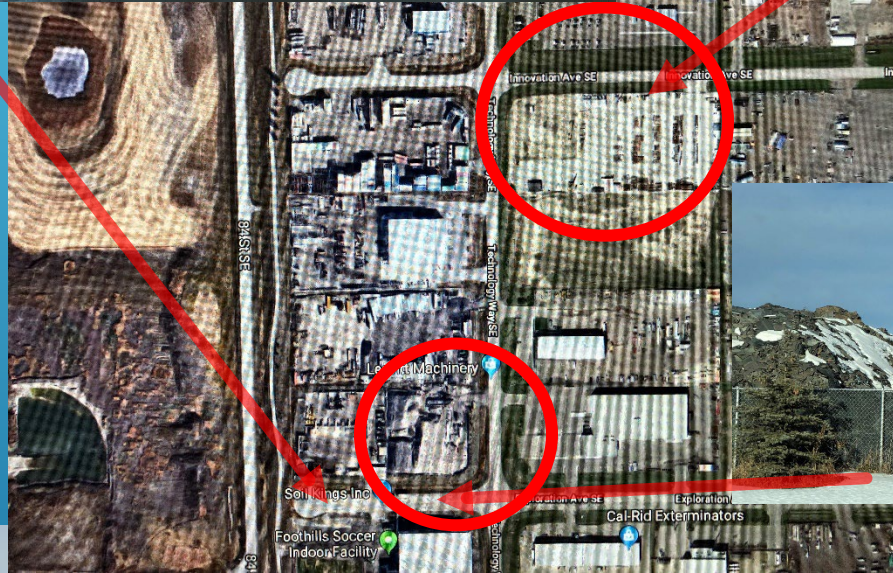
Imagine this pile 1000 times bigger ...in Alberta ....each year



# What are “they” doing about it

- However, the past bans on cardboard and wood seem to have created other private landfills popping up in other areas... The Municipalities may have to gain control of private landfill permits before they can make any more bans....

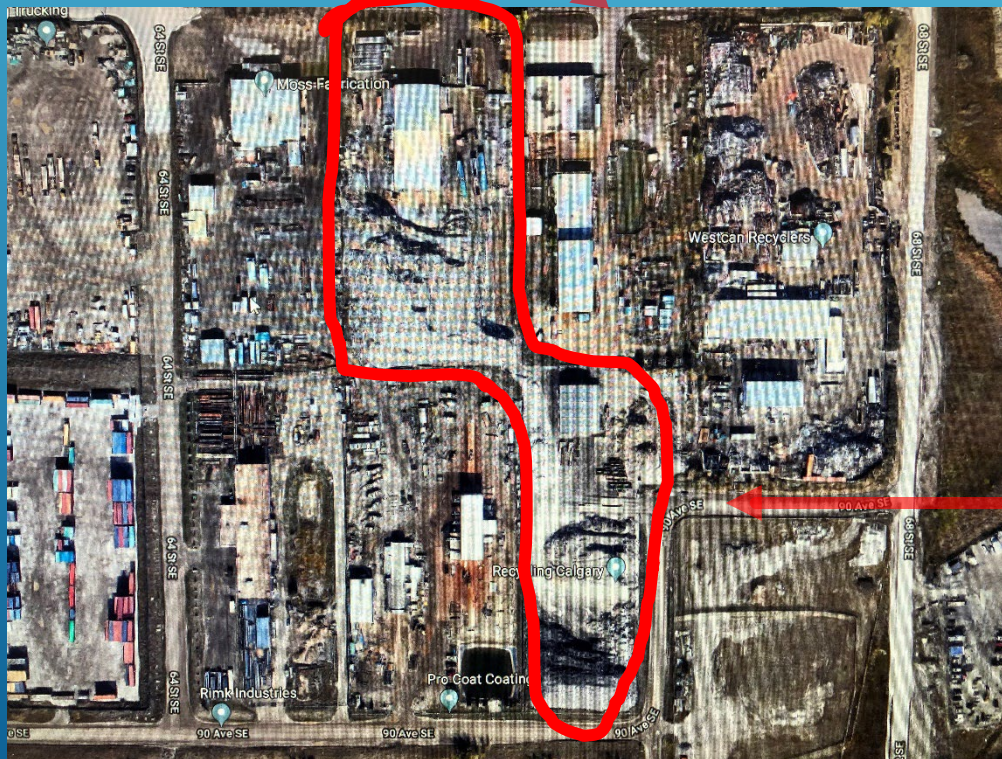












Is your  
recycler  
Recycling?





# How we Recycle Bumpers



Our recycling center



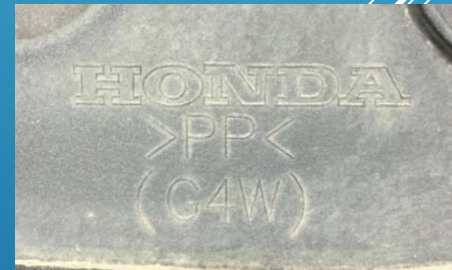
All bumpers to be cleaned of all metals, lights, wires.

Bumpers are collected for \$7.50 / bumper Plus \$100.00 per pick up. We can collect in all regions of Alberta.



We inspect material to ensure there are no contaminant metals, glass or foreign plastic material. It will not be accepted by the commodity trader. (We can only accept TPO, TPE, TOE, PPE, PE or PP into the mix.)

After sorting and inspecting we shred and then grind the plastic. This commodity only sells at pennies per pound and does not cover the cost to process it.



# Cost Comparison - 30 bumpers/ month

## Recycle

30 at 7.50 - 225.00  
Pick up fee - 100.00

325.00/month



Cost to Taxpayers to  
clean up the site?



## Landfill

½ day labour to cut up 30 bumpers  
to hide in dumpster - 260.00  
Dump fee - 50.00

310.00/month

Non reputable hauler/recycler  
Bin rental - 50.00  
Bin pick up fee - 100.00  
Landfill fee - 50.00  
Plus ICI waste fine - 20.00

220.00/month



# Current State of Automotive Recycling

Automobiles are one of the most recycled consumer products in North America

Most non-ferrous and ferrous metals are recycled along with fluids, tires, and electronics

Parts that can be re-used are stripped by auto wreckers and then sold back into the market

There is no incentive for auto wreckers to remove plastic as the commodity price does not warrant the effort to process it.

If plastic had a market prior to processing people would steal parts of cars to get the cash. Our process of billing for the service to the shop eliminates this risk of vandalism.

*In Alberta we have lobbied the Insurance companies to pay a \$7.50 Environmental fee to the Auto Repair shops. Many shops are receiving these fees for the recycling of bumpers.*

# What to do with the other Waste Plastic?

We hope to find some innovative solutions in the next year on other car plastics that

- cannot be cost effectively recycled,
- are difficult to quantify
- the commodity is not sellable/usable

The Federal Government is supporting innovation in plastics

- Separation
- Construction waste
- New products using recycled plastics.



# City of Calgary By-laws excerpt:

## **How to comply with the recycling bylaw**

To comply with this bylaw, businesses need to:

Collect and store recyclables separately from the waste generated by your tenants, employees and/or customers.

**Ensure recyclables are taken to a recycling facility.**

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## Sources

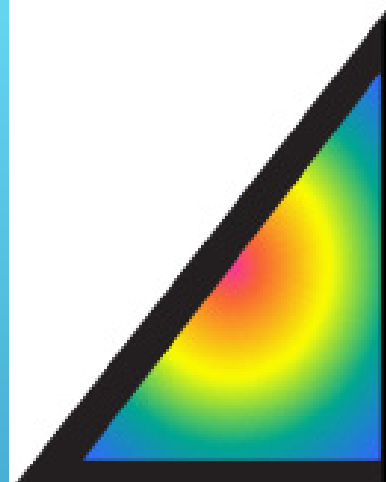
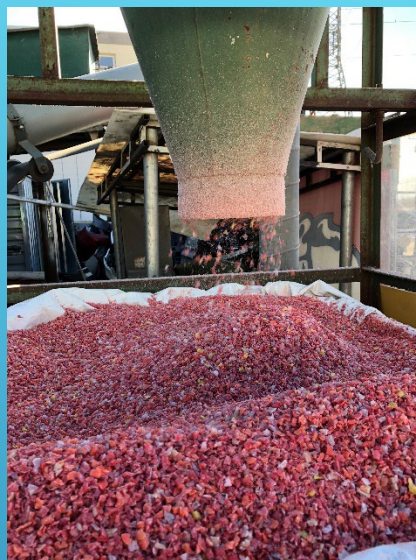
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<http://www.transportation.alberta.ca/Content/docType47/Production/AR2013.pdf>

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[https://www.edmonton.ca/programs\\_services/garbage\\_waste/commercialwaste.aspx](https://www.edmonton.ca/programs_services/garbage_waste/commercialwaste.aspx)



**FRIENDLY EARTH**  
Environmental Services  
&  
BUILDING PRODUCTS

RECYCLING PLASTIC IN  
ALBERTA FOR TWO DECADES