



East Chicago Recycling Company's Prototype Could Help Turn Plastics into Fuel

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After an I-Team investigation exposed some of the failures of plastic bag recycling, one group of entrepreneurs says a new effort to recycle plastic bags could be a solution to the problem.

The prototype, which could help turn shredded plastic bags and other plastics into fuel, comes from recycling company Telfer Inc. in East Chicago, Indiana. The machine could ultimately help cut down waste.

"I think we have a system that could really be beneficial for the world," Telfer Inc. President Dean Hemmersbach said.

You can't put thin, plastic shopping bags into regular recycling bins because they can get stuck in machines at recycling facilities. To recycle them, the bags must go into separate recycling collection bins at the stores, but those bags may not always get recycled.

In May, the I-Team and ABC News put air tags in plastic bags, dropped them off at store recycling bins around the country and tracked the bags. Bags were dropped off at Walmart and Target stores. Of the 46 bags tracked, only four made it to facilities which said they recycle them.

Most ended up in landfills or trash incinerators.

Those stores told the I-Team they remove billions of single use bags from circulation yearly and are committed to improving their recycling efforts.

The inventors of the prototype are hoping to make old plastic bags more valuable through a process called "Catalytic De-polymerization," using electric heat to melt plastic and turn it in to fuel.

After being vaporized and sent through a tube, the plastic comes out as an oil that can be upgraded to diesel.

While there are similar machines, Hemmersbach says this version is more environmentally friendly. It uses electricity, which can be powered by the sun, water or wind. The machine will also be portable so that it can travel to plants instead of bringing the plastic to the machine.

"We need to bring this into a full-scale because we have a lot of customers and suppliers that are really waiting," Hemmersbach said.

But this type of machine is still controversial, according to Senior Scientist Veena Singla with the Natural Resources Defense Council.

"The intentions can be in the right place, even though these are not the transformational and systemic solutions that we need," Singla said.

Environmentalists like Singla say machines like this regenerate fossil fuels that are harmful to the environment. She proposes eliminating single use plastics altogether.

"We don't want to be creating new forms of fossil fuels to burn," Singla said. "Plastics are not a renewable resource." Hemmersbach said he agrees that overall plastic use should be reduced, but this invention could repurpose existing plastic waste into a usable product.

"I've seen rivers that are just full of different plastics, bottles, bags, you name it," Hemmerbach said.

The creators of the prototype are looking for investors to turn it into a commercially used machine. After the I-Team investigation in May found some plastic bags ending up in landfills, the company that manages the online drop-off directory for plastic bags said it removed Walmart and Target stores from their list until they can confirm that the plastic bags dropped off in their bins are being recycled.

Since the first investigation aired, Walmart said that it has implemented new efforts to reduce waste, such as expanding options, in order to opt out of online plastic bag orders.