

Could Waste Plastic Reduce Our Need for Oil?

From VOA Learning English, this is the Technology Report in Special English.

The United States Environmental Protection Agency says only seven percent of plastic waste in the United States is recycled each year. A new company in northern New York says it can increase that percentage. It also says it can help the United States reduce the amount of oil it imports.

The company has a machine it calls the “plastic-eating monster.” Every hour, thousands of kilograms of milk jugs, water bottles, and grocery bags are fed into the machine. The plastic waste comes from landfills across the United States. John Bordyniuk runs the company, called JBI.

“Basically they’ve been mining their own piles for us and sending them here.”

Mr. Bordyniuk has invented a new process for turning plastic into fuel. First, many different kinds of unwashed plastics are melted together.

“The viscosity is close to what milk would be like. Almost like when you’re heating milk on the stove. Looks exactly like that, except its black.”

Mr. Bordyniuk uses a special chemical to turn the fluid into a vapor. This reduces the plastic to its most basic elements.

“Plastics are just long hydrocarbon chains. What we’re doing is re-forming them into links and chains that we want so they have a high fuel value.”

Eight percent of the recycled plastic is used to run the system. Independent testers say eighty-six percent of what goes in comes out as fuel.

Bob Molodynia helps run the company. He watches as the plastic-eating machine pours a thin, brown liquid into an oil barrel.

“You could tap this right now and this is ready to go. That’s a number six fuel, that’s what a lot of like US Steel uses, a lot of major companies, that’s what they pay the big bucks for, right there.”

JBI produces several thousand liters of fuel a day. It creates different grades of fuel for different industries. It sells the fuel for up to one hundred dollars a barrel. Each barrel costs about ten dollars to produce.

John Bordyniuk believes plastics will become an important source of fuel for the United States. He says this will reduce the country’s dependence on foreign oil and reduce the amount of plastic waste in its landfills.

Scientists say plastic-to-oil technology is still new and developing. They say it is not yet known if the process is environmentally friendly. And some question whether turning plastic into oil can even be considered “recycling.”

Carson Maxted is with the publication Resource Recycling, a magazine that reports on the plastic recycling industry. He says because there is a lot of plastic waste and a great demand for oil, JBI’s recycling technology may create great changes in both industries.

“So they’re getting value from something that would otherwise go to the landfill, things that wouldn’t be accepted into a recycler.”