

San Jose Is Recycling Its Plastics With A Revolutionary New Method

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What actually happens to our used plastics when they're hauled off to recycling centers? They might be washed and shredded, then molded into the basis for a new bottle. Or they might be melted all the way down into an oil or fuel that can be used to power cars. Scientists could also, theoretically, feed them to the much-touted plastic-eating enzyme.

But there's another way, one that could help us reuse hard-to-recycle plastics like bags. It comes courtesy of the startup BioCellection, which just partnered with San Jose to reshape the city's recycling process.

BioCellection is the brainchild of Miranda Wang and Jeanny Yao, two Chinese-Canadian entrepreneurs who started the company while they were still in college. As Wang explained to CNN, she and You have engineered a catalyst that breaks down plastic. But their process is supposedly cheaper and faster, taking just three hours. At the end of the cycle, the former plastic is a collection of chemicals, which can be used to make paints, nylon clothing, shoe soles, car parts, electronics, and perfumes



Wang claims BioCellection technology has a 90 percent conversion rate, with the potential to scale up to even better numbers.

San Jose is hoping to boost that rate through its newly announced pilot program with BioCellection. With the help of GreenWaste Recovery, which has provided hauling and processing services to the city since 1991. San Jose will work with BioCellection to develop and ultimately implement the process for wide-scale use. The program will last a year, focusing on plastics #2 (milk jugs, shampoo bottles, butter tubs) and #4 (grocery bags, shrink wrap).

"We're thrilled to be partners with GreenWaste to support BioCellection's new technology to divert materials from the landfill to meet our zero-waste goals and protect the planet for future generations," Kerrie Romanow, the director of San Jose Environmental Services, said in a press release.

'At a time when recycling materials are restricted by other countries and stricter recycling mandates. we must find new, innovative ways to manage trash. This pilot is one possible solution to transform soiled plastics into usable products."

California banned single-use plastic bags in 2016, but they're still ending up at GreenWaste's recycling centers - and that's a problem, since this type of film plastic is tough to reuse

"Dirty film plastics, as soon as it's covered in food waste or what we call putresible waste, there isn't a market for those materials, so that segment of film plastic has always gone to the landfill," Emily Finn, director of business development and communications at GreenWaste, told ABC7 News.

oCellection could change that. The startup plans to install mobile labs right at the city's recycling facility centers, with the aim of entering full-scale production by next spring. Son Jose and GreenWaste have invested \$240,000 to help the team execute this rollout.

If the pilot goes well. BioCellection hopes to bring its tech to unspecified "additional areas" in the United States, where it can work to divert even more plastics from the landfill.