

## GE microbes address climate change, sequester carbon dioxide by making plastics

What's the fix for a warming planet? Just one word: Plastics.

As the world grapples with greenhouse gas emissions still rising despite years of political wrangling over how to combat global climate change, a technology to convert carbon dioxide and methane into plastic is emerging as one potential market-driven solution. To boot, the process can be less expensive than producing plastics from petroleum. The market for plastics is massive — and thus the ability to sequester carbon. Plastics are found everywhere from beverage and food containers to toys, furniture and car parts.

The engines behind the greenhouse gas to plastic conversion technology are microorganisms that feed on methane or carbon dioxide pumped into vessels of liquid. The microbes — some enhanced through genetic engineering, others improved via selective breeding — accumulate a biopolymer inside their cell walls as they feast.

“There are pluses and minuses here,” Daniel Kammen, director of the Renewable and Appropriate Energy Laboratory at the University of California at Berkeley, said of the greenhouse gas to plastic technology in an email to NBC News. “At the one level, capturing what would otherwise be (methane) emissions into products is a big step forward.”

**Read the full, original article:** [Climate hack? How plastics could help save us from greenhouse gases](#)