CHEMICAL "RECYCLING"

A FALSE SOLUTION TO THE PLASTIC CRISIS IN HOUSTON

Plastic water bottles, food containers, grocery bags and other single use items equate to 40 MILLION TONS of plastic waste in the U.S. EVERY YEAR. Most plastic ends up in landfills, and modern waste management systems struggle to keep up. We now know that single-use plastics contain PFAS, or "forever chemicals," which can be absorbed into food and water, contributing to health problems like CANCER, LOW BIRTH RATE, and AUTOIMMUNE DISEASES. As awareness rises about these concerns, the industry that produces plastic claims to have the solution.

WHAT IS CHEMICAL OR ADVANCED "RECYCLING"?

A process that heats plastic and chemicals to break it down into raw components to be used to make other plastics or fuel. It is essentially plastic burning, and the process emits CO_2 and multiple air toxics. This process has not been shown to actually reduce single-use plastics, but is being widely promoted by the petrochemical industry as a solution to plastic waste.

FACTS ABOUT CHEMICAL/ADVANCED "RECYCLING"

1. UNPROVEN TECHNOLOGY

Few chemical recycling plants are operationally at-scale and their claims of output are largely inflated (Hindenburg Research, 2020).

2. DIRTY TECHNOLOGY

The plastic being heated in the process is generally lower quality. As a result, the plastic “recycled” from this method tends to contain higher levels of toxins (GAIA, 2020) and "forever chemicals" (Greenpeace, 2023).

3. BAD FOR CLIMATE

Processing 1 ton of plastic in a burning facility emits at least 3 tons of CO_2 (GAIA, 2020).

4. AIR TOXIC HAZARD

Burning plastic releases toxins into the environment (GAIA, 2020) including several known carcinogens (NRDC, 2022).

5. ENVIRONMENTAL INJUSTICE

Facilities tend to be located in communities that are low income and/or communities of color, where there are already multiple sources of air pollution (NRDC, 2022). Local chemical recycling facilities are already the area's worst polluters.

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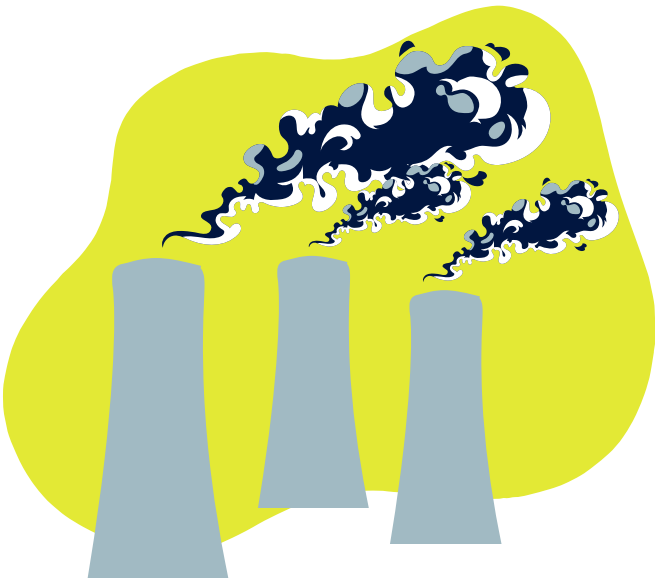
WHAT IS HAPPENING IN HOUSTON?



- Chemical "recycling" is expanding in Houston/Harris County in the same places where major polluters are already operating.
- The City of Houston entered into agreements with several petrochemical companies to form the Houston Recycling Collaboration and to expand chemical "recycling."
- ExxonMobil plans to expand its chemical "recycling" facility in Baytown to a capacity of 500,000 metric tons (~1 billion pounds of plastic waste), which will produce 1.5 million tons of CO_2.
- LyondellBasell plans to transition its legacy refinery in east Houston to chemically recycle 2 million metric tons by 2030, resulting in 6 million metric tons of CO_2.

REAL SOLUTIONS TO THE PLASTIC CRISIS

PRODUCE LESS PLASTIC.

- The petrochemical industry will not voluntarily cut back on plastic production, so public policies are required, such as bans or taxes on single-use plastics and disincentives on constructing new plastic production facilities.

ENCOURAGE ALTERNATIVE SERVICE DELIVERY METHODS.

- Switching to non-plastic alternatives is becoming increasingly common, and a growing number of zero-waste businesses offer reusable options for transporting and storing common household items like cleaning solution and shampoo.

IMPROVE MECHANICAL RECYCLING.

- Mechanical (traditional) recycling does cut down on some plastics. To recycle more efficiently, we need to eliminate plastic additives and mixed-material plastics.

AVOID FALSE SOLUTIONS.

- Chemical "recycling" emits hazardous toxins and greenhouse gasses that pose a risk to human health and the environment. We need local decision-making to hold these polluters accountable and stop endorsing this false solution.

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