

# STOPPING FALSE SOLUTIONS & PLASTICS-TO-FUELS

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## EXECUTIVE SUMMARY

Virginia's waterways are under assault by single-use plastic pollution, but chemical conversion, also known as "advanced" or "chemical" recycling, is a false and flawed solution to the plastic pollution crisis threatening our local waterways, oceans, and aquatic animals. Chemical conversion will not reduce the use of single-use plastics – it will incentivize the continued use of plastics as a feedstock for plastics-to-fuel facilities. The resulting air pollution and hazardous waste generated from chemical conversion would put Virginia's communities and environmental health at risk. Policy can ensure that the industry does not pollute waterways, entrench our dependence on single-use plastics, and inequitably burden communities of color where chemical conversion plants are often sited.<sup>1</sup>

## CHALLENGE

Chemical conversion is a broad term encompassing a variety of failed and experimental processes where plastic is incinerated in an oxygen-free environment to render a raw material to create fossil fuel (see graphic below). Often, the plastic used in this process is sourced from brokers or single companies, and would not accept residential or local plastic products used by Virginians.

The increased air pollution and hazardous waste production resulting from chemical conversion put Virginians' health at risk. Pollution disproportionately burdens communities of color and, as a result of this environmental injustice, Black people are three times more likely to die from exposure to air pollutants than white people.<sup>2,3</sup> In particular, seven of the eight chemical conversion facilities in the United States are in communities that are predominantly low income, Black, or both;<sup>4</sup> this combined with the fact that these facilities frequently violate EPA hazardous waste regulations further demonstrates chemical conversion as a false, inequitable solution.

Plastic pollution and the lack of an effective recycling industry have given the plastics industry an opportunity to market "advanced recycling" technology, like plastics-to-fuel, as a solution, despite the complete lack of operating success<sup>5</sup> or addressing the root issue of an overabundance of plastic products.

The American Chemistry Council has succeeded in convincing eighteen state legislatures<sup>6</sup> to pass bills which exempt these facilities from standardized industrial waste regulations – including Virginia.<sup>7</sup>

Moreover, the short history of chemical conversion facilities in Virginia confirms it as a false solution to the plastic pollution crisis and a waste of taxpayer money. Braven Environmental LLC abruptly canceled its plans to build a facility that purported to serve as a "solution" to

the state's plastic waste problem in Cumberland County after receiving over \$200,000 in state grants in 2020.<sup>8</sup>

## SOLUTION

The EPA recently said that it would strictly regulate plastics-to-fuel operations under the Clean Air Act but we still need a strong defense to ensure that Virginia does not fall victim to investing taxpayer money in false solutions.

State solid waste management policy should focus on reducing single-use plastics in the waste stream and as litter, reusing products where possible, and if recycling is required, elevating proven solutions that reduce the amount of virgin plastics manufactured.

Emerging technologies, such as plastics-to-fuel, should be robustly evaluated for safety and proof of scalability before being allowed in Virginia. Technologies should be revenue generating (i.e. not reliant on taxpayer dollars) and proven to achieve goals that advance Virginia's quality of life, such as litter reduction, plastic waste management, and environmental equity.

We have seen the plastics-to-fuel industry stumble due to issues surrounding technology scalability, high volumes of hazardous waste production, energy consumption, and overall inability to turn over a profit.<sup>9</sup> To truly tackle the plastic pollution crisis, Virginia needs actual plastic reduction solutions that reduce our reliance on single use plastic to protect human health, water quality, and aquatic life (see REDUCING PLASTICS, LITTER, & MARINE DEBRIS).

## POLICY RECOMMENDATIONS

Establish that plastic-to-fuel, plastic-to-fuel substitute, or plastic-to-fuel additive technologies are not "recycling" as cited in the EPA Draft National Strategy to Prevent Plastic Pollution, and should be regulated using all applicable solid waste and environmental protection laws.

Support proven solutions that reduce overall plastic production outlined in REDUCING PLASTICS, LITTER, & MARINE DEBRIS.

Require comprehensive environmental justice impact analysis, including robust air quality monitoring systems in site suitability studies, to protect environmental justice communities in Virginia from disproportionate impacts of chemical conversion facilities.

Establish that tax incentives are not available to business (private or public) entities operating plastic-to-fuel, plastic-to-fuel substitute, or plastic-to-fuel additives facilities.