



Bill Title: House Bill 21 Environment – Recycling – Prohibition on the Chemical Conversion of Plastic
Committee: Environment and Transportation
Date: January 29, 2021
Position: Report Unfavorably

On behalf of Eastman, thank you for the opportunity to provide comments on House Bill 21 Environment – Recycling – Prohibition on the Chemical Conversion of Plastic (HB 21). As attention increases on the waste plastic crisis, it is vital that representative government, advocates, and private industry collaboratively develop solutions to recycle a broad range of these materials. As a private industry stakeholder, Eastman has great concern that legislation like HB21 will stifle the current progress and ultimately result in less plastic being recycled.

Founded in 1920, Eastman is a global specialty materials company that produces a broad range of products found in items people use every day. As a globally inclusive and diverse company, Eastman employs approximately 14,500 people worldwide and serves customers in more than 100 countries. In Maryland, Eastman operates a manufacturing facility in Chestertown where we produce materials used in building and construction, medical applications and consumer goods.

The current pattern of consumption and disposal of plastics is not sustainable. Approximately 300 million tons of plastic are produced each year globally. At the end of use, 40 percent goes to landfills, 25 percent is incinerated, and 19 percent is disposed in unmanaged dumps or otherwise makes its way into the environment. Only 12 percent is recycled.

While traditional or mechanical recycling is necessary, the infrastructure and capability to process a range of plastics inhibits it from being the singular recycling solution to address the scale of the global waste plastic crisis.

In 2019, Eastman began commercial-scale molecular recycling, a form of material-to-material chemical recycling, for a broad set of waste plastics that would otherwise be landfilled, incinerated, or worse, end up in the environment. We see this as a key early step to address the challenges with today's limited recycling options. Eastman Advanced Circular Recycling technologies are designed to process waste plastics where traditional mechanical recycling methods cannot—including polyesters, polypropylene, polyethylene, and polystyrene—derived from a variety of sources, including single-use plastics, textiles, and carpet. These platforms, which utilize both gasification and methanolysis technologies provide a true circular solution of endless recycling for materials, allowing them to be reused repeatedly, without sacrificing quality and performance.

A circular plastics economy is necessary to address a challenge as great as the global waste crisis. In other words, rather than proceeding on the linear pattern of creating, using and disposing of resources, we should establish a system that harnesses and unlocks the potentially infinite value of materials by keeping them in production – lifecycle after lifecycle – while simultaneously reducing greenhouse gas emissions by reducing dependence on fossil feedstocks. While the “reduce, reuse and recycle principle” remains important to addressing the global waste



crisis, our current system has not typically included technologies that can recycle more complex materials. Recognizing the ability of these technologies to create recycled material will go a long way to ensuring these complex materials are recycled in an environmentally responsible way and put back into commerce. The alternative is the continued manufacture of new products, only compounding our waste plastic crisis and perpetuating the use and impact of fossil feedstocks.

Material-to-material recycling technologies, such as Eastman's advanced recycling capability, enable waste plastic not suitable for traditional recycling processes to be broken down and used in the creation of new plastics. Eastman's material-to-material recycling technologies break down plastic waste to its molecular building blocks, identical to virgin plastic's building blocks, for the manufacture of new plastics. Since the waste plastic is reduced to the molecular level and built back up into new plastic, there is no plastic degradation in the new product, which allows the molecules to be reused infinitely in place of virgin raw materials.

HB21 would prohibit materials manufactured using these advanced recycling processes from being defined as recycled. Further, the bill would not allow a facility that utilizes these technologies to be sited in Maryland.

Advanced recycling is critical to increasing recycling rates and preventing discarded plastic from being incinerated or landfilled. It is Eastman's strong desire to steadily replace traditional fossil feedstocks with waste plastic. We take seriously the concept of reduce, reuse, recycle. While we do not manufacture single-use plastics, we can upcycle them to more durable plastic products, like refillable water balls and eyeglass frames. By 2030, we expect to recycle up to 500 million pounds of waste plastic annually.

At the same time, we're actively working to find new ways to reduce our own environmental impact, advocating for the creation of a more robust recycling infrastructure and helping our partners preserve natural resources through molecular recycling. By using plastic waste in place of fossil feedstocks, our technologies show 20-50 percent improvements in carbon footprint in the production of key building blocks.

Eastman advanced recycling technologies are truly circular, allowing for plastic to be recycled on an infinite loop. They are also more sustainable than traditional processes for manufacturing plastic. We believe it would be a mistake for the House of Delegates to close off this important component to the national and global waste plastic problem and urge an unfavorable report from the Committee.

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