



The Hefty ReNew Program: A Detour from the Path to Sustainability

August 20, 2024

INTRODUCTION

Tucson Environmental Services has teamed up with Reynolds Consumer Products and Dow Chemical to collect single-use disposable plastics in the community (primarily flexible, foam and film plastics). Known as Hefty ReNew, residents must buy special 13-gallon orange plastic bags at participating retail stores and then fill the bags up with plastic items that are accepted in the program. The bags must be taken to one of five drop-off sites for pick up.¹ The program may be expanded in the future to allow residents to deposit the orange bags in the curbside recycling bins. The collected materials will be managed in the following three ways:

- Repurposed into alternative building and construction materials (e.g., plastic lumber, benches and building blocks),
- Converted into burnable fuel and/or small amounts of chemicals at high heat waste facilities, such as pyrolysis and gasification systems (often referred to as “advanced recycling” by its industry proponents)²,
- Burned in cement kilns as a substitute for coal.³

Sustainable Tucson’s Zero Waste Working Group has studied the Hefty ReNew program to assess its viability for addressing the proliferation of single-use plastics and their impacts. We took a holistic approach and benchmarked the program against the multiple challenges that plastic has created for our environment and human health. We found that Hefty Renew doesn’t address the climate and toxic impacts of plastic across its lifecycle. It also does not address the root cause of the plastic waste problem; we are producing and using too much single-use plastic. We believe many actions and solutions are required to confront this problem, with a strong focus on reducing plastic waste at the source. To achieve this, we have included a set of recommendations to help our City leaders transition the community to a more circular, sustainable future where we reduce our impact on the environment, keep materials in circulation for as long as possible and preserve the planet’s resources for future generations.

KEY FINDINGS

- **The Hefty ReNew program perpetuates wasteful throwaway systems and single-use habits.** The primary focus of the program is diverting single-use plastics from the landfill instead of stopping this waste before it starts. This approach takes a very limited view of the plastic pollution and waste problem, overlooking the harmful effects of plastic throughout its production chain and lifecycle. It also creates a facade that allows the consumer brand companies to exponentially inundate the marketplace with even more

disposable products, while deflecting attention from the root issue: the overproduction and overconsumption of single-use plastic. In fact, research has shown that consumers produce more waste when they think it may be “recycled” because they worry less about the amount of trash they generate.⁴ Hefty ReNew was developed by two companies, Reynolds Consumer Products and Dow Chemical, that have a vested interest in perpetuating our single-use “throwaway” lifestyle. Reynolds sells disposable products, such as garbage bags, plastic wrap, plastic cups, food storage bags and disposable tableware.⁵ Dow is the third largest plastic manufacturer in the world, producing many types of single-use bound resins, including polyethylene, polypropylene, and polystyrene.⁶

- **Hefty ReNew underscores the fossil fuel industry’s pivot to plastic production as its next major growth market.** Nearly all of the single-use plastic collected in the Hefty ReNew program is made from a combination of fossil fuels and chemicals.⁷ The fossil fuel and plastic industries are deeply connected. What’s more, keeping us awash in plastics is “Plan B” for the oil and gas industry as the world moves away from fossil fuels for energy and transportation due to mounting climate change concerns. The fossil fuel giants like Shell and ExxonMobil are counting on petrochemicals, and plastics in particular, as their next major growth market.⁸ In the U.S., the glut of cheap fracked gas is fueling a “build-out” of petrochemical and plastic infrastructure, most notably in the Gulf Coast and Ohio River Valley regions of the country.⁹ Current levels of plastic production—about 460 million metric tons a year—are already unsustainable. Despite the urgent need to cut our reliance on fossil fuels, global plastic production doubled between 2000 and 2020 and is poised to triple again by 2060.¹⁰
- **The program fails to address plastic’s widespread threats to the environment and human health.** We tend to view plastic as a waste or litter issue. However, plastics can threaten the environment and human health long before the single-use products reach store shelves and our homes.¹¹ The production of plastic begins with the extraction of fossil fuel—oil and natural gas—from the ground. These drilling and fracking activities can release an array of toxic substances into the air and water, along with a potent greenhouse gas, methane.¹² The refining of fossil fuel feedstocks into the main ingredients for plastic involves high heat and a lot of electricity—both generated using fossil fuels—making plastic production one of the largest industrial contributors to greenhouse gas emissions in the world.¹³ If plastic production and use grow as currently planned, the plastic industry will soon eclipse coal as a major climate threat.¹⁴ Plastic production also releases a host of harmful pollutants into the air, water and soil, which can increase the risk of health issues like cancer, cardiovascular disease, and respiratory illnesses for industry workers and nearby communities.¹⁵ In fact, these frontline communities, often low-income and communities of color, are “ground zero” for some of the worst pollution in the country.¹⁶
- **Repurposing plastic waste into alternative building and construction materials is not circular.** A significant portion of the disposable plastic collected in the Hefty ReNew program will be repurposed or downcycled into alternative building products (e.g., plastic lumber, benches and building blocks) instead of creating a new version of the same

product.¹⁷ This means more virgin materials will be needed to produce the next generation of single-use products. Unfortunately, the types of plastics currently being produced are exceedingly complex and often not used in an easily recyclable form. This is because the consumer brands and plastic industry haven't done enough to build circularity into their packaging and products. While there is a place for repurposing in the solid waste management system, it is not a substitute for closed-loop recycling systems where discarded material is captured and reintroduced into the product manufacturing process. Closed-loop recycling benefits the environment by saving energy, emissions, water, resources and money to make the products we buy.¹⁸

- **Turning plastic waste into burnable fuels and/or small amounts of chemicals through pyrolysis and other high heat waste facilities is inefficient and dirty.** Tucson Environmental Services has solicited a project proposal from a company that would like the City to send plastic waste to a pyrolysis facility that it plans to build in Eloy, AZ.¹⁹ This would be a huge misstep. Pyrolysis systems are ineffective in reducing plastic waste, require huge amounts of energy, and emit hazardous air pollutants, including dioxins and polycyclic aromatic hydrocarbons, an extremely toxic category of organic pollutants. Most of the plastic waste will be turned back into fossil fuels, which will get burned and pollute the air. Moreover, pyrolysis can be just as environmentally problematic as landfilling as these systems produce both hazardous waste and greenhouse gases.²⁰ A recent National Renewable Energy Laboratory study found that the economic and environmental costs of turning plastic waste into new plastic using pyrolysis are 10 to 100 times higher than processes that make new plastics from fossil fuels.²¹
- **Sending plastic waste to cement kilns to create energy is also highly polluting.** Burning plastic in cement kilns as a substitute for coal is not a climate solution; it merely substitutes one form of fossil fuel with another. Further, the toxic pollution from plastics burning may be worse than coal, as plastics are made from thousands of chemicals, many of which are known to be hazardous to environmental and human health.²² Burning plastic waste emits volatile organic compounds, heavy metals, PFAS, dioxins and furans, which are persistent in the environment.²³

RECOMMENDATIONS

The unpleasant fact is that the number of single-use disposable plastics in our community—and the amount being produced—is simply too much to handle. While improving recycling is important, it will never be able to keep pace with the ever-increasing amount of single-use plastic being produced.²⁴ Instead, recycling must be coupled with a drastic reduction in plastic production, particularly single-use products and unnecessary packaging.

Such action will require strong government policies, a significant improvement in business practices, a shift in societal culture, and individual behavior changes. To this end, Sustainable Tucson recommends that:

1. Tucson residents shift their focus to reducing and refusing single-use plastic and other disposables through lifestyle changes instead of spending money buying even more disposable plastic to collect material that was designed to be used once and then thrown away. Reducing the use of plastic may seem daunting, but small actions can make a big

difference. Making just one simple swap, like purchasing a reusable water bottle, can spare the environment hundreds of plastic bottles each year.²⁵

2. Mayor Romero and City Council members should prioritize front-end strategies that prevent the generation of plastic waste in the first place over approaches that seek to manage it after the fact. To stem the tide of plastic pollution, the City of Tucson should actively promote alternatives to single-use plastic and incentivize new ways to bring products to consumers in refillable and reusable packaging. These recommended actions include:
 - a. Developing a public education campaign (e.g., “Make Throwaway Go Away”) to raise awareness about the dangers of plastic and encourage residents to avoid single-use products by creating an “on-the-go” zero waste kit (e.g., stainless steel water bottle, reusable straw, reusable bags, cloth napkins, travel mug and tiffin food carrier).²⁶
 - b. Partnering with restaurants, bars, and commercial food/beverage establishments to scale up the use of reusable packaging, including reusable cups and take-out containers.²⁷
 - c. Establishing a small grant program aimed at helping small businesses replace disposable utensils, cups, plates and to-go containers with reusable items. Reusable options would include dishwashers, durable dishware, reusable take-out containers, and other in-house reuse solutions.²⁸
 - d. Creating a voluntary “Skip the Stuff” program that encourages restaurants, cafes, bars, fast food, and other food service providers to provide straws, plastic utensils, napkins and condiment packets only if the customer requests them.²⁹
 - e. Using the purchasing power of the City to eliminate single-use plastics and replace them with reusable products in public facilities.³⁰
 - f. Advocating for state, national and international action that would make consumer brand companies accountable for wasteful products and phase out unnecessary plastic.³¹

CONCLUSION

No matter how “green” Hefty ReNew appears on the surface, it is not a substitute for—and should not distract us from—real solutions for addressing the proliferation of plastics in our lives. To protect our environment and human health, we must seriously rethink our relationship with plastic. We need to transition to a circular economy where unnecessary or excessive packaging is eliminated, where stores sell our favorite brands in reusable or refillable containers, and where waste becomes the exception, not the norm. Otherwise, we will lock ourselves into a plastics-filled future that will be hard to recover from. Unless we dramatically reverse the growth in plastic production and use, the consumer brands and chemical companies will just find something else to wrap or package in plastic.

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