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The High Costs of the Break Free from Plastic Pollution Act

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Concerns about plastics waste in the world's oceans have raised genuine issues about the impact of plastics on the environment. In response, Sen. Jeff Merkley (D-OR) and Rep. Alan Lowenthal (D-CA) introduced the Break-Free from Plastic Pollution Act (S. 984, H.R. 2238) in March 2021.¹ While the bill's ostensive goal is to protect the environment, it would have the opposite effect, because it is guided by an extreme anti-plastics ideology that seeks to rid the world of plastics without regard to the impacts.

This bill is so extreme that it could completely destroy the U.S. plastics industry, and thus force the United States to import more plastic products from overseas, including from countries with authoritarian governments like China. It proposes to restructure and federalize the nation's solid waste disposal industry, affecting all packaging materials including plastics, metal, paper, and glass. Other provisions would ban a wide range of single-use plastics, impose taxes on plastic bags, and halt the permitting of new plastic production and recycling facilities. The final result would be fewer jobs, higher prices, and the potential for product shortages, including shortages of essential medical supplies and packaging necessary to protect our food supply. And ironically, the environment would suffer as well, as replacement products would require more resources to produce and dispose.

This paper focuses on the Break-Free from Plastic Pollution Act and why it is unworkable. It is the final paper in a series of four related to plastics. The first two papers address how plastics have benefited both mankind and the environment, underscoring the risks associated with efforts to eliminate plastic products.² The third paper examines real problems associated with ocean pollution and offers workable solutions that policy makers and the private sector could pursue without destroying this valuable industry.

Waste Disposal Markets Today. While it is marketed as a means to reduce plastics waste, the Break Free from Plastic Pollution Act will affect all solid waste and completely restructure how waste is managed in the United States. To grasp the significance of this legislation, it is helpful to understand how wastes are managed in the United States today.

Historically, federal involvement in waste collection and disposal has been limited to encouraging states and localities to develop solid waste disposal plans for managing non-hazardous wastes, including regular household waste.³ Local governments, rather than state governments, have generally taken the lead in waste management planning, developing five- to 30-year plans designed to guide waste disposal for various communities.

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Such government waste management planning means that waste collection and disposal markets are heavily regulated. In some cases, local governments own a portion of the market, such as collection services, or they contract with private companies for those services. Hence, with limited exceptions, there are few truly free markets for waste collection and disposal.

As a result, waste management is needlessly bureaucratic and guided by political rather than economic considerations. Not surprisingly, local governments experience a host of problems, including bad investments in disposal technologies, overly expensive recycling programs, stockpiling of “recyclable” materials, illegal dumping, and more.⁴ In fact, it is common for local governments to start and stop recycling programs because, although they are politically popular, they are often poorly run and expensive. For example, Wastedive.com reports that local governments have canceled at least 103 recycling programs during the past several years, largely because of high costs.⁵

The solution to such problems is privatization, allowing market forces—market pricing and competition—to govern waste disposal. Open and competitive waste collection and disposal markets would produce more environmentally sound and efficient disposal systems as haulers compete for collection business and disposal companies compete for the materials.⁶ A fully functioning market also prohibits waste from entering the environment through property rights that bar litter and dumping.

Unfortunately, as detailed below, the Break Free from Plastic Pollution Act would move in the opposite direction, inserting the federal government into local waste management planning. This approach will simply compound problems associated with politically driven waste management policies that cities and towns have experienced in the past.

Extended Producer Responsibility. The Break Free from Plastic Pollution Act would federalize waste management and force businesses—distributors, manufacturers, and retailers—into a heavily regulated federal waste management regime under the guise of “extended producer responsibility,” replacing any markets that exist.⁷ And the bill does not simply apply to plastic products; it covers all packaging—paper, glass, metal, and plastic—and all non-package-related paper products.

Specifically, the bill would set up countless federally guided associations referred to as “Producer Responsibility Organizations,” creating a massive bureaucratic web of groups that would govern a large portion of the nation’s waste management. It would require that industries regulated under the legislation, referred to as “responsible parties,” fund, create, and join these entities—creating an organization for nearly every type of packaging, single use plastic, or paper product on the market. Once approved, plans expire every five years and organizations would need to renew them subject to any revisions required by the Environmental Protection Agency (EPA).⁸ The legislation provides an exemption from antitrust laws to allow businesses to coordinate development of, and participation in, these organizations.

The scope of this extended producer responsibility program would be vast, covering nearly all packaging, all plastic single-use products,⁹ and all paper products as well as anyone involved in related commerce. For example, the definition of covered “beverage containers” includes all drink containers that hold up to three liters with exceptions only for infant formula, meal replacement drinks, and medications. The regulations for beverage containers would also cover aluminum, steel, tin, glass, and many other materials. Cartons, pouches, aseptic packaging, and beverage containers larger than three liters would also be part of the program, but would fall within a slightly different regulatory framework for “covered products.”

The bill’s definition of “covered products” also includes:

- All “packaging,” and all “food service products,” defined as utensils, straws, drink cups, drink lids, food packaging, food containers, plates, bowls, meat trays, and food wrappers;
- “[P]aper;” and
- Any “single-use product” that is not banned under other sections of the law.

The definition and the regulations that apply to it are not limited to food packaging or plastics. The bill covers everything from cardboard boxes to packaging for consumer products to carryout food containers, and more. In addition, it does not limit its scope to packaging since it lists “paper” as a covered product, extending the regulatory reach to office paper, newspaper, paper packaging for food, and anything else made of paper.

Ostensibly, the only thing it does not cover are non-paper consumer products intended for more than one use, with a few noted exceptions. Exceptions include paper that is unsanitary to recycle or reuse, bound books, and anything designed for storing something more than five years.¹⁰

The rules for the extended producer programs are slightly different for “beverage containers” than they are for “covered products” as defined by the legislation. While the definitions of beverage containers and covered products ensure nearly every form of packaging would be subject to massive, centralized, bureaucratic waste management programs, other definitions ensure that the law captures a massive number of businesses as well. There are two definitions of “responsible parties,” depending on which regulatory regime applies: regulations covering either a) beverages or b) covered products. In either case, the covered parties must participate in the funding, development, and implementation of the producer responsibility organizations and “product stewardship plans.”

The definition of “responsible parties” for “beverage containers” includes anyone who distributes beverages in containers sized three liters or less, including manufacturers, distributors, retailers (physical/online stores and restaurants), and anyone who provides beverages at an event for sale or free, including workplaces. The definition of “responsible parties” as it relates to “covered products” is similarly expansive but also includes owners of trademarks to the covered products as well as importers. It is hard to find anyone who is left out of these definitions other than the person who is physically responsible for the product once purchased at its end use: the consumer.

There are exceptions for retailers and restaurants that already comply with similar state or local regulations and for small businesses—excluding franchises—with less than \$1 million in annual revenue starting in 2021 and adjusted for inflation in future years. Fines for responsible parties who refuse to participate are a steep \$70,117 *per day*.

Given the many types of packaging and products covered under this bill, the number of responsible organizations could quickly become unwieldy. Moreover, businesses may form more than one organization for a product category, in which case the EPA administrator could coordinate the activities of those organizations or create *even more* organizations to carry out those functions.

The busy work associated with developing and participating in these organizations promises to be substantial. The bill notes that responsible parties would be allowed to participate in more than one organization for each product type, but would be limited to one national one and one regional one. In other words, the legislation envisions myriad organizations at various levels of government from local to state to national. And businesses would likely feel compelled to hire staff to participate at every level and probably in multiple local organizations to ensure they have representation on key committees that would commit their industry to certain disposal practices.

The legislation requires each organization to develop a “product stewardship plan” for the product it covers and gain EPA approval for the plan. These plans would govern everything from collection to disposal for all the beverage containers and covered products that fall within the bill’s definitions. Companies would have to comply with the performance targets set by these plans. They would also be required to work with local governments—subject to plan rules and specific rules noted in the legislation—in litter control programs and in collection and sorting of their products once consumers throw them away.¹¹

The responsible parties would not have much control over these plans’ details. They would be subject to parameters outlined in the legislation, along with any additional guidelines set by the EPA. They also would have to negotiate with an array of special interests and bureaucrats at various levels of government. Specifically, the bill requires that each organization deploy various plan-drafting advisory committees working with “stakeholders” that include members of industry, environmental activists, consumer groups, community members, state and local bureaucrats, and others.

Among other things, the legislation would also require plans to include:

- Consumer education programs to promote recycling;
- Detailed guidelines for industry collection of post-consumer packaging;
- Detailed design guidelines for reducing products’ environmental impact;
- Measures manufacturers should take to promote reusable packaging; and
- Procedures on how the organization and responsible parties will coordinate efforts with state and local government.

The product stewardship plan requirements that encourage planners to meddle in product design are particularly troubling. Such politicized management of manufacturing would

include unqualified individuals in the process, while political wrangling will likely compromise the integrity of consumer products. Considering the fact that many of the packages are designed to contain food, such political management could impede public health and safety because of inappropriate decisions related to product design. Improperly designed packaging could increase both food spoilage and food contamination with dangerous pathogens. Product design should be left to manufacturers and the engineers qualified to develop such products, rather than become part of political battles among various interests.

The bill also sets minimum performance targets for product stewardship plans, many of which are unrealistic. For example, the plans must require recycling of at least 65 percent for all covered products, except paper, by the end of 2027, escalating to 80 percent by the end of 2032. The rates are higher for beverage containers and paper, calling for a 75 percent recycling rate by the end of 2027 escalating to 90 percent by the end of 2032. Given past experience with government-contrived recycling goals and understanding technical limits, it is highly unlikely that the responsible parties could achieve these goals, and it certainly would raise the cost of disposal and could compromise product integrity.

Meeting the ambitious recycling targets will be even more difficult and probably completely infeasible. The definitions related to recycling in the bills determine what types of recycling would ensure compliance, and by omission, what types of recycling does not. Unfortunately, while the covered products and responsible party definitions were exceedingly broad, the recycling definitions are narrow—thereby excluding innovative recycling technologies.

Basically, the only activities that meet the legislation’s recycling mandates are those that involve reprocessing of beverage containers or covered products back into “similar products.” For example, to comply, recyclers of plastic bottles would need to chop them up, melt them down, and use the recycled material to make new plastic bottles. Using plastic bottles to make carpet or other consumer products would not be considered recycling. Similarly, recycling glass would require recyclers to melt the glass to make more glass. Using it in asphalt or other products will not count as recycling under the legislation, even though such applications reuse the material.

It appears that the goal of this limited definition is to support the bill’s recycling content mandates, which set percentages for how much of each product must be composed of recycled content. For example, the legislation would require that manufacturers make beverage containers, such as PVC soda bottles, with a certain percentage of melted down PVC bottles. And the content regulations are extreme, starting with 25 percent post-consumer content by 2025, gradually increasing to 80 percent by 2040.

This approach threatens to completely undermine “advanced recycling,” also known as chemical recycling, which might be the most feasible technology to ensure the vast majority of plastics are recycled. Advanced recycling technologies transform plastics back into their original chemicals, which can then be used either as fuel or to make brand new, virgin

plastics. It could be used to recycle many plastics that for various reasons are not recyclable at the moment because they are too difficult to sort.

To recycle a plastic product back into the same product, plastic waste must be meticulously sorted according to its plastic type, of which there are many. For example, plastic water bottles contain two types of plastics, one for the bottle and another for the top. And part of the top does not come off when you open the bottle, so they are not easily separated. Unlike traditional recycling, some advanced recycling technologies can process various types of plastics together, eliminating expensive sorting efforts.¹² That benefit would be lost if the Break Free from Plastics Act were to undermine advanced recycling.

Other definitions set standards for which it would be practically impossible to demonstrate compliance. Specifically, the definition of “recyclable” demands that the materials be recycled only with “existing processing facilities.” In addition, products would only be considered “recyclable” if they can be “economically and technically recycled in current United States market conditions” and only if “the United States has infrastructure in place to recycle such materials.” The legislation then details what constitutes sufficient infrastructure by detailing how much recycling capacity must exist for any given product. For example, during the period 2021-2024, a product could only be called “recyclable” if there is capacity to recycle 25 percent of those materials in circulation.

Perhaps the bill’s goal is to prevent collecting wastes for recycling when there is no market for them. However, there is no practical way of keeping track of such capacity in relation to materials on the market, both of which ebb and flow. Properly functioning markets are dynamic, so whether something could be considered “recyclable” would be a moving target.

Perhaps, theoretically, in a socialist economy both recycling capacity and materials available could be regulated, but as detailed in the third paper in this series, socialized waste management is both ineffective and wasteful.¹³ And fortunately, the United States does not have a socialist economy, although regulation remains considerable in the waste management industry.

In any case, governments are ill equipped when it comes to creating markets that ensure a product can be “economically and technically recycled.” The only way to have such markets is to allow market competition between disposal options. Yet this legislation would completely destroy competitive markets with a vast array of mandates, central planning, product bans, and policies that will decimate advanced recycling and other technologies.

The bill also demands that the plans set unrealistic performance targets for the amount of packaging that businesses must eliminate or make reusable. Specifically, plans must require that industry eliminate 15 percent of packaging, or replace it with reusable packaging, by the end of 2030. For a product to be considered reusable—such as a refillable glass bottle—for the purpose of meeting the legislation’s goals or mandates, manufacturers or consumers would have to be able to reuse it at least 100 times. This definition could lead to increased use of bulkier, more resource intensive products that may or may not actually be used 100 times over.

The Break Free from Plastic Pollution Act would also essentially designate the U.S. EPA administrator to act as a federal waste management czar, who would set plan guidelines, decide which product stewardship plans to approve, and could even arbitrarily set higher standards than outlined in the legislation. In short, waste collection and disposal would no longer be a local enterprise, but would become part of a massive federal program.

The system turns waste disposal—which is a relatively simple economic system—into a massively complicated and politicized endeavor involving numerous people and bureaucratic processes. One can only begin to imagine the untold hours of negotiations, political wrangling, lobbying, and paper pushing it would require to determine how to manage each and every covered product and beverage container—not to mention the costs of all that bureaucracy. Various provisions levy fees on industry to pay for the entire scheme, which could become a way for some businesses to gain special treatment from government officials—and for lobbyists to earn more fees. Ultimately, the costs will be passed on to consumers.

This so-called extended producer responsibility program will add a host of costs and will inevitably prove less efficient and environmentally sound than the current system. Meanwhile, a free market governed by price signals could easily guide us to an efficient management system. Waste need not end up as litter when property rights are enforced, as detailed in the third paper in this series.

Product Bans. In addition to setting up an elaborate producer responsibility scheme, the Break Free from Plastics Act would impose what would likely be the most expansive and most extreme bans on single-use plastics in the world. It would ban retailers from providing shoppers with single-use plastic bags to carry their goods home unless they charge for the bags, and the EPA could levy very steep fines for retailers who fail to comply.¹⁴ The provision of plastic straws would only be allowed if customers request them, a provision to address the fact that many disabled people depend on them. Yet, the EPA would eventually be able to ban them anyway after consulting with representatives of associations for disabled individuals and environmental activists. It would then be up to regulators to decide if there is a “functional equivalent” for plastic straws available, and if so, the EPA could ban all plastic straws.¹⁵ The law even prohibits establishments from providing compostable or recyclable alternatives to plastic utensils unless there is a place for local composting or recycling and the product does not contain a “toxic” substance.¹⁶

The bill also calls on the EPA administrator to implement a wide range of other bans on single-use plastic products, including:

- All polystyrene use for food products, disposable coolers, and shipping packages;
- Plastic mini bottles for personal care products provided by hotels; and
- Plastic stickers on produce.

The EPA administrator would have the unilateral authority to ban any other plastic product that is not already explicitly banned in the bill that he or she deems as not “recyclable or compostable” and that can be “replaced by a reusable or refillable item.”

As outlined in the first and second papers in this series, such bans can have seriously adverse consequences, for both humanity and the environment.¹⁷ For example, it is well documented that reusable grocery bags, which will likely replace plastic carryout bags if this bill passes, can carry dangerous and even deadly pathogens.¹⁸ In addition, both paper and cloth alternatives require far greater resource use than plastics to manufacture. Research has also demonstrated that reusable utensils increase the risk of infections particularly in busy food service settings, such as hospitals, public cafeterias, and fast food restaurants.¹⁹ Straws, which represent less than half a percent of solid waste,²⁰ are extremely important for many disabled people. Granting the EPA administrator the authority to eventually unilaterally ban them is cruel.

Bag Tax. As if consumers were not already facing high enough prices at the supermarket because of inflation, the Break Free from Plastic Pollution Act would slap a ten-cent tax on all carryout bags that retailers provide to consumers. While this tax may encourage consumers to use fewer single-use carryout plastic bags, it won't help the environment because consumers will seek alternatives that will likely have a much heavier environmental footprint, as detailed in the first paper in this series.²¹

Numerous life cycle assessments of single-use, carryout plastic bags and alternatives clearly demonstrate that the thin, single-use bags require less energy and water to manufacture, produce less pollution and less solid waste in landfills than alternatives.²² For example, a RECYC-QUÉBEC study showed that a cotton bag must be used 100 to 2,953 times before it yields any environmental benefits, and few people use them that long.²³ A Use Less Stuff study shows that paper bags use 71 percent more energy, require 96 percent more water, and produce 86 percent more solid waste than single-use plastic grocery bags.²⁴ In other words, plastic bag taxes will produce a net harm to the environment, while raising prices for consumers.

Moratorium on Plastic Permits and Advanced Recycling. The bill would place a moratorium on permits to expand or start new plastic manufacturing facilities until “regulations are updated to address pollution from the facilities.” It would “pause” approval of new EPA Clean Air Act or Clean Water Act permits for plastics manufacturing plants, advanced plastics recycling facilities, and any facility that produces ethylene and propylene “for the purposes of plastics production.” Ethylene and propylene are petrochemicals necessary to produce most plastics. A similar provision is hidden away in the Climate Leadership and Environmental Action for our Nation’s (CLEAN) Future Act (H.R. 1512), sponsored by Rep. Frank Pallone (D-NJ).²⁵

The word “pause” is another way of saying “moratorium,” which will effectively undermine the rights of these companies to freely conduct business. Industrial facilities cannot operate without EPA permits, so the impact could be severe—and grow in severity every day the moratorium remains in effect, which could be a long time.

Before the EPA could lift the moratorium, it would have 18 months to conduct, or commission the National Academy of Sciences to conduct, a study on the impact of plastics on the environment, after which it would have to issue new Clean Air Act regulations based

on the study findings. Both bills give the EPA three years to complete these tasks, but given the fact that regulatory agencies move slowly and often miss statutorily determined deadlines, it would likely be much longer.

Both bills focus the moratorium on “new permits,” which means it might allow the EPA to renew existing permits. However, if courts somehow determine that permit renewals would constitute “new permits,” then the legislation would shut down the plastics industry within five years, since permits must be renewed every five years. Even if these provisions allow renewals, any changes to operations might require new permits—and any new facilities certainly would. Such limitations would likely have crippling effects on the plastics industry at large.

Petrochemical companies would feel the pain as well, because they produce ethylene and propylene as a byproduct of oil refining and natural gas processing, much of which is sold for plastics production. Under either bill, it is possible that petrochemical companies would not be allowed to get new permits for modifications or expansions if they planned to sell ethylene and propylene for plastics production. Without those markets for these secondary chemicals, petrochemical industry costs and consumers’ energy bills would rise.

Whether the petrochemical industry could find other markets for those chemicals remains to be seen, but if not, much of these valuable chemicals could become waste products. Meanwhile, the supply of ethylene and propylene for plastics production would dwindle, dealing yet another blow to plastics manufacturing.

By destroying the plastics industry and making fossil fuels more expensive, these policies would cause many U.S. job losses, as the plastics industry employs nearly a million people directly and about half a million indirectly, producing \$451 billion in shipments annually, according to the Plastics Industry Association.²⁶

But perhaps more troubling is the potential for shortages and high prices for products with critically important applications. As more plastics manufacturing shifts overseas to places like China, the impact would affect everything from the food industry and essential medical device manufacturing to untold numbers of consumer products and more, as detailed in the other papers in this series.

Conclusion. Efforts to address real problems associated with plastics pollution in the ocean are certainly warranted, but policies guided by an extreme anti-plastics ideology are not the answer. The Break Free from Plastic Pollution Act includes some egregious examples of such misguided policies that threaten a wide range of industries affecting all packaging materials on the market. The absurdly complicated government planning program under the banner of “extended producer responsibility” would tie numerous industries in red tape and unworkable planning schemes. Meanwhile, it would empower lobbyists and activists to meddle in the waste management industry and manufacturing processes even though they lack sufficient knowledge in those fields.

Plastic bans would deprive consumers access to valuable products and impose taxes for no benefits in return. In addition to bans and regulations, provisions to “pause” permitting of plastics and recycling facilities could completely destroy the U.S. plastics industry. Ironically, these policies would adversely impact the environment as alternative products would use more resources, make more pollution, and create more solid waste than the plastics they replace.

Notes

¹ S. 984 – Break Free From Plastic Pollution Act of 2021, 117th Congress, First Session, introduced March 25, 2021, <https://www.congress.gov/bill/117th-congress/senate-bill/984?q=%7B%22search%22%3A%5B%22Break-Free+from+Plastics+Act%22%2C%22Break-Free%22%2C%22from%22%2C%22Plastics%22%2C%22Act%22%5D%7D&s=1&r=1>.

H.R.2238 – Break Free From Plastic Pollution Act of 2021, 117th Congress, First Session, introduced March 26, 2021, <https://www.congress.gov/bill/117th-congress/house-bill/2238?q=%7B%22search%22%3A%5B%22Break-Free+from+Plastics+Act%22%2C%22Break-Free%22%2C%22from%22%2C%22Plastics%22%2C%22Act%22%5D%7D&s=1&r=2>.

² Angela Logomasini, “How Plastics Benefit Wildlife and the Environment,” *On Point* No. 272, Competitive Enterprise Institute, August 31, 2021,

<https://cei.org/studies/how-plastics-benefit-wildlife-and-the-environment/>. Angela Logomasini, “The Immeasurable Benefits of Plastics to Humanity,” *On Point* No. 273, Competitive Enterprise Institute, September 10, 2021, <https://cei.org/studies/the-immeasurable-benefits-of-plastics-to-humanity/>.

³ Waste management planning policies are included in Subtitle D of the Resource Conservation and Recovery Act, which was passed an amendment to the 1965 Solid Waste Disposal Act. For more information see Environmental Protection Agency, “EPA History: Resource Conservation and Recovery Act,” accessed November 29, 2021, <https://www.epa.gov/history/epa-history-resource-conservation-and-recovery-act>.

⁴ For more details see Logomasini, “Ban Overboard: Exploring Solutions to Ocean Pollution,” Angela Logomasini, “Interstate Waste Commerce” in *The Environmental Source*, Competitive Enterprise Institute, November 22, 2010, <http://cei.org/studies-other-studies/interstate-waste-commerce>. Angela Logomasini, “Solid Waste Management” in *The Environmental Source*, Competitive Enterprise Institute, 2008), <http://cei.org/sites/default/files/Angela%20Logomasini%20-%20Solid%20and%20Hazardous%20Waste%20Overview.pdf>.

⁵ Waste Dive Team, “Where Curbside Recycling Programs Have Stopped in the US: Scores of Local Governments Have Canceled or Indefinitely Paused Their Programs Due to Cost Pressures and Other Issues,” published December 18, 2019, updated November 17, 2021, <https://www.wastedive.com/news/curbside-recycling-cancellation-tracker/569250>.

⁶ Logomasini, “How Plastics Benefit Wildlife and the Environment.” Logomasini, “The Immeasurable Benefits of Plastics to Humanity.”

⁷ H.R. 2238, 117th Congress, pp. 24-42.

⁸ *Ibid.*, p. 62.

⁹ The bill exempts single use products use for medical purposes, such as masks, gloves, and face shields, as well as packaging for hazardous materials. H.R. 2238, Sec. 2(a), 117th Congress, p. 20.

¹⁰ See the summary definitions for “packaging” and “paper.”

¹¹ H.R. 2238, 117th Congress, pp. 43-49.

¹² Alexander H. Tullo, “Plastic Has a Problem; Is Chemical Recycling the Solution?” *Chemical and Engineering News*, Vol. 97, No. 39 (October 6, 2019), <https://cen.acs.org/environment/recycling/Plastic-problem-chemical-recycling-solution/97/i39>.

¹³ Logomasini, “Ban Overboard.”

¹⁴ See Appendix to this paper as well as Part II of the bill, page 70-74.

¹⁵ H.R. 2238, 117th Congress, Part II, p. 75.

¹⁶ *Ibid.*, p.76.

¹⁷ Logomasini, “The Immeasurable Benefits of Plastics to Humanity.” Angela Logomasini, “How Plastics Benefit Wildlife and the Environment.”

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- ¹⁸ Logomasini, “The Immeasurable Plastics Benefits of Plastics to Humanity.” David L. Williams, Charles P. Gerba, Sherri Maxwell, and Ryan G. Sinclair, “Assessment of the Potential for Cross-Contamination of Food Products by Reusable Shopping Bags,” *Food Protection Trends*, Vol. 31, No. 8 (August 2011), pp. 508–513, <https://lruh.org/sites/medical-center.lomalindahealth.org/files/docs/LIVE-IT-Sinclair-Article-Cross-Contamination-Reusable-Shopping-Bags.pdf?rsource=medical-Center.lomalindahealth.org/sites/medical-center.lomalindahealth.org/files/docs/LIVE-IT-Sinclair-Article-Cross-Contamination-Reusable-Shopping-Bags.pdf>. Ryan Sinclair, Andre Feliz, Jaimini Patel, and Christopher Perry, “The Spread of a Norovirus Surrogate via Reusable Grocery Bags in a Grocery Supermarket,” *Journal of Environmental Health*, Vol. 80, No. 10 (June 2018), pp. 8-14, <https://go.gale.com/ps/i.do?id=GALE%7CA539131890&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00220892&p=HRCA&sw=w&userGroupName=anon%7E3489a529>. Kimberly Repp and W.E. Keene, “A Point-Source Norovirus Outbreak Caused by Exposure to Fomites,” *Journal of Infectious Disease*, Vol. 11, No. 205 (June 2012), pp. 1639-41, <https://www.ncbi.nlm.nih.gov/pubmed/22573873>. Morton S. Hilbert and James Henderson, “Disposables versus Reusables: A Study of Comparative Sanitary Quality,” *Dairy Food and Sanitation*, 1985, http://pleass.com/wp-content/uploads/2015/10/packaging_03.pdf.
- ¹⁹ Charles W. Felix, Chet Parrow, and Tanya Parrow, “Utensil Sanitation: A Microbiological Study of Disposables and Reusables,” *Journal of Environmental Health*, Vol. 53, No. 2 (September/October 1990), pp. 13-15, <https://www.jstor.org/stable/44541332?seq=1>.
- ²⁰ Keep America Beautiful, 2020 National Litter Study Summary Report, May 2021, <https://kab.org/litter-study>.
- ²¹ Logomasini, “How Plastics Benefit Wildlife and the Environment.”
- ²² Ibid., Appendix A.
- ²³ RECYC-QUÉBEC, “Environmental and Economic Highlights of the Results of the Life Cycle Assessment of Shopping Bags,” December 2017, https://www.bagtheban.com/wp-content/uploads/2019/02/Quebec_ENGLISH-LCA-Full-Report.pdf.
- ²⁴ Review of Life Cycle Data Relating to Disposable, Compostable, Biodegradable, and Reusable Grocery Bags, (Rochester, MI: Use Less Stuff, 2008), <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.183.2391&rep=rep1&type=pdf>.
- ²⁵ H.R. 1512, 117th Congress, Section 901, p. 833.
- ²⁶ Plastics Industry Association, “Size and Impact: What Plastics Contributes to the Economy,” accessed December 3, 2021, <https://thisisplastics.com/economics/size-and-impact-what-plastics-contributes-to-the-economy>.

Appendix: The Break Free from Plastic Pollution Act Detailed Summary

A summary of the key provisions within these sections follows.

Section 1 simply states the title of the bill as the “Break Free from Plastics Act.”

SECTION 2 Table of Contents

Subtitle K—Producer Responsibility for Products and Packaging

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Section 12505. Grant program to support innovation in packaging reduction and reuse.

Section 12506. Report on reuse and refill product delivery systems.

Definitions

1 – Advisory Committee: Committees established by “producer responsibility organizations.”¹

2 – Beverage: Drinkable substances, except medicines, infant formula, and meal replacement liquids.²

3 – Beverage Container: Container made with any material that holds up to three liters of a beverage, except cartons, pouches, and aseptic packaging unless producers of such packaging voluntarily participate in the beverage container deposit program under section 12104.³ Note that cartons, pouches, and aseptic packaging are included in other “covered products,” so they are regulated under a different section from “beverage containers.”

4 – Compostable: A material recognized as compostable under certain international standards organization or by an independent party approved by the EPA. Otherwise they are wood or natural fiber products that have no coatings, additives, or, starting February 2023, no toxic substances. Paper is not included as compostable.⁴

5 – Covered Products: Any food container other than beverage containers. Covered products include the containers that were excluded from the definition of beverage container: cartons, pouches, and aseptic packaging—unless their producers participate in the Section 12104 beverage deposit program. Excluded from covered products are beverage containers because they are regulated under a different section of the bill.⁵

6 – Covered Retail or Service Establishment: Restaurants and retailers that sell food, drinks, or any other product to the public or that comply with the bill’s single-use product bans. This does not include those subject to a state program for which the EPA has allowed to waive those sections because the state has already enacted similar bans.⁶

7 – Food Service Product: Anything used to package or put food in your mouth, including utensils, straws, drink cups, drink lids, food packages, food containers, plates, bowls, meat trays, and food wraps.⁷

8 – Microfiber: Fibrous shaped particles sized less than five millimeters that are released from a textile during its life cycle.⁸

9 – Organization: Short for Producer Responsibility Organization.⁹

10 – Packaging: All packaging and anything used to contain or protect a product that is sold to a consumer in the United States, including online. It includes the product packaging itself, packaging that contains multiple packed products for sale to consumers, any tertiary packaging used in transport or distribution directly to a consumer, and any elements attached to the package to facilitate hanging or displaying it. It excludes packaging designed for long-term storage of not less than five years.¹⁰

11 – Paper: All paper products including newsprint and inserts, magazines and catalogs, direct mail pieces, office paper, and telephone directories. Excluded are bound books and paper that would be unsanitary to recycle or reuse.¹¹

12 – Plan: Product Stewardship Plan described in section 12105.¹²

13 – Program: Product Stewardship Program established under section 12102(a)(2).¹³

14 – Recyclable: A product that can be recycled in the current U.S. market with existing processing facilities [with many conditions on capacity at various levels] and does not contain a “toxic substance.”¹⁴

15 – Recycle: Only includes a product that is processed into a new product or composted. Excluded are materials that are processed in ways that are not suitable to make the same product or one that is “substantially similar.” If the processing does not preserve the nature of the original material, it does not qualify as recycling. Processing plastics back into fuel or for use at a waste-to-energy incinerator or use in construction materials is not considered recycling. Aggregating plastics for use in products that are substantially different from the initial use is not considered recycling. Use of a product for construction materials, such as for example, using glass to make roads, is also not consider recycling under this bill.¹⁵

16 – Responsible Party: Anyone distributing beverage containers—including manufacturers—or beverages to U.S. retailers, consumers, or commercial enterprises for resale. This includes retailers who provide beverages or beverage containers for sale—or for free—at a workplace or event. With respect to a covered product, the term “responsible party” means a manufacturer, trademark owner or licensee, or importer of the covered product who uses it in a commercial enterprise, sells, or distributes the covered product in the United States.¹⁶

17 – Restaurant: Eat-in restaurants and take-out restaurants, including fast food places.¹⁷

18 – Reusable: A product that is technically feasible to reuse or refill in United States market conditions at least 100 times, or as many times as the EPA administrator determines.¹⁸

19 – Single-Use Product: A consumer product that is routinely disposed of, recycled, or otherwise discarded after a single use.¹⁹

Excluded are: Medical food, supplements, devices, or other products determined by the Department of Health and Human Services (HHS) to necessarily be made of plastic for the protection of public health. These include items such as masks, gloves, face shields, and personal hygiene products that, due to the intended use of the product, could become unsafe or unsanitary to recycle. For example, excluded items include diapers or packaging that is used for the shipment of hazardous materials.

20 — Toxic Substance: A substance that may cause injury through ingestion, inhalation, or absorption into the human body and is subject to reporting requirements under several environmental laws or that has been found hazardous by a government research program—such as those run by HHS and the National Institute of Environmental Health Sciences—or via “expert testimony” to the EPA. Automatically included on the list are all per- and polyfluoroalkyl substances (PFAS), Bisphenol-A, halogenated or nanoscale flame retardants, pesticides, and all ammunition components.²⁰

21 – Translation Services: “Professional language interpretation and translation services provided in any language spoken by more than 5 percent of the population residing within a community for written documents and notices and oral communications.”²¹

PART 1—PRODUCTS IN THE MARKETPLACE²²

Extended Producer Responsibility.²³ All responsible parties—most manufacturers, retailers, and distributors of beverages/beverage containers or other food containers—must participate in, and satisfy the performance targets of, an EPA approved plan developed by “producer responsibility organizations” created under the Act.

One or more responsible parties must create at least one producer responsibility organization for each product category (categories defined by EPA via regulation) and fund them via membership fees. If more than one per product category is created, the EPA administrator will coordinate their activities or create another organization to do so. Responsible parties may participate in more than one organization for each product type—but only one national one and one regional one. The legislation provides an exemption from antitrust laws to allow businesses to coordinate development of, and participation in, these organizations.

Participation Exemption: The legislation exempts a) small business with less than \$1 million in annual revenue in 2022 (adjusted for inflation after 2022) as long as they are not franchisees and have only one retail outlet and b) manufacturers who produce less than one ton of covered products in commerce annually. Fines for not participating amount to \$70,117 per day.

The Act directs these organizations to develop advisory committees composed of political “stake holders,” including industry; federal, state, and local bureaucrats; private waste management companies; and environmental activists. The Act further requires these organizations to pay nonprofit and local bureaucrats to participate in the advisory committees, which must develop waste management plans to submit to the EPA. Fees to industry also include the administrative and cleanup and waste management costs related to the products covered. Fees must cover reimbursement to the EPA for the agency’s costs of administering the program.

Covered Product Management. “Responsible parties,” working through their producer responsibility organizations, must provide for collection and sorting of their “covered products” after consumers dispose of them. Working within these organizations, they must also engage in cleaning up litter. The bill provides detailed guidelines for conducting such collection²⁴ and cleanup. It also requires industry to fund programs to pay for “improvement or development of new recycling or composting infrastructure.”²⁵

National Beverage Container Program.²⁶ Creates a beverage container deposit program under section 12104.

Product Stewardship Plans.²⁷ By February 1, 2023, each organization must submit a stewardship plan to the EPA for approval that outlines a wide range of activities and performance targets for “responsible parties” to meet. Once approved, plans expire every five years and require renewal subject to EPA-required revisions.²⁸ The legislation would require plans to include consumer education programs to promote recycling. It also contains detailed guidelines for, among other things:

- Industry collection of post-consumer packaging;
- Product design;
- Measures manufacturers need to take to promote reusable packaging; and
- Procedures on how the organization and responsible parties must coordinate efforts with state and local government.

The legislation also sets minimum performance targets that plans must include. Specifically, the plans must call on responsible parties to meet the following recycling rates by December 31, 2027:

- 65 percent recycling rate of all products except paper (80 percent by 2032);
- 75 percent recycling of beverage containers and paper products (90 percent by December 31, 2032); and
- Composting of 50 percent (70 percent by December 31, 2032) of “industrially compostable” products.”

Plans must also include targets calling on manufacturers to reduce packaging by 15 percent by December 31, 2030 or shift 15 percent to reusable packaging. In addition, after December 31, 2030, the EPA administrator can set recycling targets and dates for meeting them as he or she “determines to be appropriate.” Responsible parties that do not satisfy performance targets may not label products as recyclable or compostable.²⁹

Section 12106 details how program plans must conduct public outreach and education to achieve plan targets.³⁰ Section 12107 details various reporting requirements that organizations must make available online.³¹

PART II—REDUCTION OF SINGLE-USE PRODUCTS³²

Product Bans. The Act bans retailers from providing shoppers with single-use plastic bags at the point to sale (the cash register) except for bags subject to a tax. Exemptions include:

- Thicker and woven plastic bags;
- Machine washable bags;
- Bags used inside the store for fruits, vegetables, meat, or prepared foods;
- Newspaper bags; and
- Door and hanger bags.

The EPA will provide one warning to stores that violate this ban and then can levy fines of \$250 for the first violation, \$500 for the second, and \$1,000 for the third. For retailers with annual revenues of more than \$1 million a year, it appears that the agency can levy an unlimited number of such fines, while it can levy such fines only once every seven days for stores with annual revenues below \$1 million.³³

The bill bans plastic utensils, stating retailers or service providers may not “use, provide, distribute or sell a plastic utensil.”³⁴ The bill would also prohibit establishments from providing “compostable or recyclable” alternatives to plastic utensils unless there is a place for local composting or recycling and the product does not contain a “toxic” substance.³⁵

Businesses can only provide plastic straws upon request to customers, and they must keep some plastic straws on hand for that purpose. It does not apply to plastic straws used at home. The bill allows plastic straws by request because of the adverse impacts of plastic straw bans among the disabled, but the bill would allow the EPA to initiate an all-out ban if, after consulting with representatives of associations for disabled individuals and environmental activists, the agency determines that a “functional equivalent” for plastic straws comes on the market.³⁶

The bill would also grant the EPA administrator the power to implement random bans on any plastic products he or she deems not “recyclable or compostable” that can be “replaced by a reusable or refillable item.” It then calls on the administrator to ban all polystyrene use for food products, disposal consumer coolers, shipping packages, single-use plastics for miniature bottles containing personal care products provided by hotels, and plastic stickers on produce. Fines for violations are the same as those for single-use plastic bags.

Section 12203 regulates e-cigarette-related trash, starting with a study on e-cigarettes’ impact on the environment that the administrators of the EPA and the Food and Drug Administration must provide to Congress. They also must publish a report on the study in the *Federal Register* with details about what the agencies will do to address e-cigarette waste “including recommendations for incorporating plastic tobacco filters and electronic cigarette components into an extended producer responsibility program.”³⁷

PART III—RECYCLING AND COMPOSTING

Federalization of Waste Collection and Recycling. Section 12301 requires that the EPA issue guidance to standardize recycling and collection practices for the entire nation after consulting with state and local governments and “stakeholders.”

Recycled Content Mandates³⁸

Beverage Containers. Section 12302 would require for beverage containers to be made with the following percentages of post-consumer materials:

- 25 percent by 2025;
- 50 percent by 2030;

- 70 percent by 2035; and
- 80 percent by 2040.

After 2040, the EPA Administrator could set percentages for post-consumer content, and the agency may adjust these mandates based on a study that the proposed act would fund to assess the “technical and safe minimum post-consumer recycled content requirements for covered products.” In addition, the bill states that the EPA administrator must require that responsible parties ensure that their plastics do not include any “toxic substances” by February 1, 2023, which amounts to a ban on Bisphenol A, PFAS, and other substances.³⁹

Other Packaging. Under this section at item (b), recycled content mandates also apply to other “covered products”—which is pretty much everything else beyond beverage containers. It first funds a multi-agency study “to determine the technical and safe minimum post-consumer recycled content requirements for covered products and beverage containers, including beverage containers composed of glass, aluminum, and other materials.” Upon study completion, the EPA must publish a report based on the study findings, submit it to Congress, and publish in the *Federal Register* with a description of proposed agency actions. Based on the study findings, the legislation requires the EPA administrator to set minimum recycled content standards for covered products and beverage containers, which must increase the recycled content of the products over a time period “established by the administrator.”⁴⁰

Product Design Mandates. Sec. 12303, “Designing for the Environment,”⁴¹ grants the EPA administrator authority to require manufacturers to design their products to “minimize the impacts of extraction, manufacture, use, and end-of-life management.” The legislation lists a number of goals, including reducing materials used, reducing additives, and other things not based on product performance or feasibility. Firms can be subject to fines up to \$70,117 for each violation of this provision.⁴² Because of the vague nature of the goals, it seems that fines may be levied at the whim of the EPA administrator.

Labeling Regulations. Sections 12304, 12305, and 12306⁴³ set various labeling mandates covering everything from plastic bags to disposable wipes (labeling related to whether they are flushable) to compostable and recyclable products. Under general labeling rules, the agency can levy fines of up to \$70,117, and the EPA can shut down a company that does not comply. The agency may also delegate enforcement of this provision to state governments. The EPA would be allowed to levy fines of \$2,500 for each violation of “do not flush” labeling mandates up to a total of \$100,000.

Export Bans. Section 12307 imposes the following bans on plastic waste exports:

- To all nations that are not members of the Organization for Economic Cooperation and Development (OECD).
- To OECD members unless the OECD member is given “prior informed consent of the relevant authorities in a receiving country.”
- To OECD states of plastics that include any halogenated plastic polymer and of plastic waste is that is “contaminated with greater than 0.5 percent of other plastics”

or by “other materials,” including “labels, adhesives, varnishes, waxes, inks, and paints; and composite materials mixing plastics with nonplastic materials.”

- To OECD nations if the plastics would then be exported to a non-OECD nation.
- To OECD nations of any plastics that are contaminated with “hazardous chemicals,” or “toxic substances” that would constitute it as hazardous waste.⁴⁴

PART V—REDUCTION OF OTHER SOURCES OF PLASTIC POLLUTION

The following sections include provisions calling for mandated filtration systems in washing machines and dryers, a study on microplastics, a pilot program on microplastics, various grant programs, and studies. Specifically, these sections include:

- Section 12501. Study and Action on Derelict Fishing Gear.
- Section 12502. Mandatory Filtration Standard for Clothes Washers.
- Section 12503. Study and Action on Microfiber Pollution Reduction.⁴⁵
- Section 12504. Microplastics Pilot Program.⁴⁶
- Section 12505. Grant Program to Support Innovation in Packaging Reduction and Reuse.⁴⁷
- Section 12506. Report on Reuse and Refill Product Delivery Systems.⁴⁸

SECTION 3

Amendments to the IRS Code.⁴⁹ Section 3 would amend the Internal Revenue code to impose a 10-cent tax on all carryout bags provided at restaurants and other retailers. Fines for the first violation would be \$250, \$500 for the second, and \$1,000 per violation after that. Businesses with less than \$1 million in total annual revenue could only be fined once every seven days. The bill would create a “carryout bag credit program” (it is unclear as to how this would work) to reward consumers who use reusable bags and to finance a trust fund that the federal government can use to fund litter cleanup, studies, and other things.

SECTION 4

Moratorium on Plastic Production and Advanced Recycling Facility

Permits. This section places a moratorium—referred to as a pause—on issuance of Clean Air Act and Clean Water Act permits to all plastic production facilities and advanced plastics recycling facilities. The pause would last until the EPA issues new regulations—which it would be required to do within three years—based on a study the agency must either conduct itself or commission to the National Academy of Sciences, to be completed within 18 months. Given the length of time to complete the study, and that the issuance of regulations can take a long time, facilities would likely have to wait out the entire three years before expanding or starting new product lines. Given the fact that agencies often miss statutorily determined deadlines, it could be longer. The proposal includes some very specific criteria for the rules that the EPA must issue, which may or may not be feasible for industry to meet.

Notes

- ¹ H.R. 2238, 117th Congress, p. 2.
- ² H.R. 2238, 117th Congress, p. 2.
- ³ H.R. 2238, 117th Congress, p. 3.
- ⁴ H.R. 2238, 117th Congress, p. 4.
- ⁵ H.R. 2238, 117th Congress, p. 6.
- ⁶ H.R. 2238, 117th Congress, p. 7.
- ⁷ H.R. 2238, 117th Congress, p. 8.
- ⁸ H.R. 2238, 117th Congress, p. 9.
- ⁹ H.R. 2238, 117th Congress, p. 9.
- ¹⁰ H.R. 2238, 117th Congress, p. 9.
- ¹¹ H.R. 2238, 117th Congress, p. 11.
- ¹² H.R. 2238, 117th Congress, p. 11.
- ¹³ H.R. 2238, 117th Congress, p. 11.
- ¹⁴ H.R. 2238, 117th Congress, p. 12.
- ¹⁵ H.R. 2238, 117th Congress, p. 13.
- ¹⁶ H.R. 2238, 117th Congress, p. 15.
- ¹⁷ H.R. 2238, 117th Congress, p. 18.
- ¹⁸ H.R. 2238, 117th Congress, p. 19.
- ¹⁹ H.R. 2238, 117th Congress, p. 19.
- ²⁰ H.R. 2238, 117th Congress, p. 20.
- ²¹ H.R. 2238, 117th Congress, p. 23.
- ²² H.R. 2238, 117th Congress, pp. 24-70.
- ²³ H.R. 2238, 117th Congress, pp. 24-42.
- ²⁴ H.R. 2238, 117th Congress, pp. 43-49.
- ²⁵ H.R. 2238, 117th Congress, pp. 49-51.
- ²⁶ H.R. 2238, 117th Congress, pp. 51-59.
- ²⁷ H.R. 2238, 117th Congress, p. 59.
- ²⁸ H.R. 2238, 117th Congress, p. 62.
- ²⁹ H.R. 2238, 117th Congress, pp. 63-64.
- ³⁰ H.R. 2238, 117th Congress, pp. 64-76.
- ³¹ H.R. 2238, 117th Congress, pp. 67-70.
- ³² H.R. 2238, 117th Congress, pp. 70-81.
- ³³ H.R. 2238, 117th Congress, pp. 70-74.
- ³⁴ H.R. 2238, 117th Congress, p. 74.
- ³⁵ H.R. 2238, 117th Congress, p. 76.
- ³⁶ H.R. 2238, 117th Congress, p. 75.
- ³⁷ H.R. 2238, 117th Congress, pp. 80-81.
- ³⁸ H.R. 2238, 117th Congress, pp. 82-85.
- ³⁹ H.R. 2238, 117th Congress, p. 83.
- ⁴⁰ H.R. 2238, 117th Congress, p. 85.
- ⁴¹ H.R. 2238, 117th Congress, pp. 85-87.
- ⁴² H.R. 2238, 117th Congress, p. 87.
- ⁴³ H.R. 2238, 117th Congress, pp. 88-106.
- ⁴⁴ H.R. 2238, 117th Congress, pp. 106-107.
- ⁴⁵ H.R. 2238, 117th Congress, p. 113.
- ⁴⁶ H.R. 2238, 117th Congress, p. 115.
- ⁴⁷ H.R. 2238, 117th Congress, p. 118.
- ⁴⁸ H.R. 2238, 117th Congress, p. 120.
- ⁴⁹ H.R. 2238, 117th Congress, pp. 122-131.