American Sustainable Business Network

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RE: "No Time to Waste: Solutions for America's Broken Recycling System" Legislative Hearing

Introduction

Chairman Tonko, Ranking Member McKinley, and members of this subcommittee, thank you for the opportunity to testify today. My name is Stephanie Erwin. I am the Director of Circular Economy Policy at the American Sustainable Business Network (ASBN) where I lead the Circular Economy Working Group, comprised of businesses, investors, academics, engineers, and other advocates. I am also an entrepreneur with a background in data and financial systems. ASBN was formed in a recent merger between the American Sustainable Business Council and Social Venture Circle. ASBN is a multi-issue national organization comprised of businesses, business associations, and investors, which collectively represent over 250,000 businesses, spanning different sectors, regions, sizes, and stages across the US. Collectively, we are united in our shared vision of an economy that is vibrant, dynamic, stakeholder-driven, equitable, circular, and sustainable. On behalf of my organization, which is a core member of the Break Free From Plastic movement, and the communities and businesses we represent, I want to thank you for convening this hearing to discuss solutions to America's broken recycling system.

Before I start, I'd also like to thank the Members of this committee who have supported the Break Free From Plastic Pollution Act, and Chair Tonko and Ranking Member McKinley for their leadership and work on two of the bills in front of the committee today.

Summary & Context

Plastic has played a critical role in our economy since it started being widely circulated in the 1970s, used in both consumer- and business-facing industries including food & beverage, medical supplies, electronics, automotive, construction, and textile industries. However, despite the positive value some plastics have created in the past and can continue to create in

some cases, it is clear that the use of plastic across the board comes with significant costs to the current and future economic well-being of large swaths of US consumer markets, business, and business supply chains, and the environment in a linear take-make-waste economy. The current plastics-driven economy also precludes the US economy from the enormous opportunities that exist by opening up new markets, new innovations, and supporting the businesses and consumers that are increasingly demanding alternative solutions to single-use and virgin plastics. Enacting policy action at the federal level will help shift the national economy towards more circular innovation and practices, which will contribute to the growth of a strong, vibrant and resilient economy. Additionally, policy can also help reduce the regulatory costs and disparities to businesses that operate in multiple domestic markets.

In theory, certain plastics have the potential to create and retain substantial value for the economy, but, the reality is that 95% of plastic is lost to landfills (86%) or incineration (9%), which translates to an estimated $7.2B economic loss annually (Millbrandt et al, 2022). In fact, the same lesson holds true for the recycling rate of other popular materials used in consumer goods products such as glass and aluminum, where low recycling rates, 31% (EPA, 2018) and 34% (EPA, 2018) respectively, result in the loss of millions if not billions of dollars in commercial value to landfill every year. Investing in our nation's ability to capture, recover, functionally compost, and recycle plastic and these other consumer goods materials like glass and aluminum is an important first step toward a more circular economy[1].

However, recycling is not enough.

To tackle the "broken recycling system," solutions must comprehensively address challenges at each stage in the product life cycle from R&D and design to extraction, production, distribution, use, and end-of-use or end-of-life. Effective solutions must also be material- and/or sector-specific, taking into account the unique properties of each material, how each industry or sector produces, distributes, and sells that material, and how consumers handle and dispose of the end product made of that material. In the case of plastics, a product is likely already destined for landfill or incineration before it even hits the shelf, as more than one-third of plastics are produced for single-use applications and are not designed to be functionally recycled (Geyer, 2017). Or, it is made of mixed materials that are actually too contaminated or expensive to recycle. And, once it is on the shelf, product labels can be confusing and sometimes misleading to consumers, who see the chasing arrow symbol and assume that the product is accepted locally and recycled in practice when it is not.

[1] In industry, the commonly accepted definition of circular economy is 1) to eliminate waste and pollution, 2) to circulate products and materials (at their highest value), and 3) to regenerate nature (Ellen MacArthur Foundation, n.d.)

The good news is that businesses are ready to be a part of the solution. The American Sustainable Business Network, including our Circular Economy working group and our greater network, believes that commerce should be in service to all stakeholders—not just industry shareholders. Many of our members alongside hundreds if not thousands of other businesses[2] across all sectors, sizes, and stages have pledged to take action on plastic and plastic packaging, whether by reducing single-use and/or virgin plastic products, by increasing the post-recycled content of products, by scaling reuse and refill models and/or by switching to functionally compostable products. To meet these 2025/2030 targets, businesses like our members are actively seeking strategic opportunities to build and invest in these emerging supply chains where priority is given to markets with established regulations or policies that have already increased the availability of high-quality recycled material feedstocks and are working to make sourcing recycled content price competitive to sourcing products made of virgin materials. Yet there is more room for public policies to further incentivize the private sector to innovate and advance circular economy solutions.

Extended producer responsibility (EPR) policies like the Break Free From Plastic Pollution Act create strong public-private partnerships that enable the government to directly support the business model innovations for which entrepreneurs, business founders, and operators in the United States are recognized globally. This could include sustainable or circular innovations in material flows where capture and recovery processes can reduce quality or material loss or where reuse, repair, and recycling technologies can extend and retain the value of products and materials in existing supply chains. Sustainable and circular innovation can disrupt how businesses make and save money, hire and retain talent (Robert Walters, 2021), and compete while building trust with consumers (Forrester, 2021). This is a win-win for all; consumers receive more choice in the marketplace, and business operations can compete by retaining and even regenerating the value of resources in their business.

There is also a need to meet increasing investor demand for sustainability dimensions built into business models to meet their broader sustainability goals. The rise of data that correlates circular solutions to long-term economic growth is increasingly impacting investor strategies around the world (WRAP 2020). The investor appetite for verifiably sustainable solutions across the retail and consumer markets has grown exponentially over the last decade, last estimated to have reached USD 35T (Global Sustainable Investment Alliance, 2020). Larger firms, wealth managers, family offices, fund managers, and impact investors alike are seeing

[2] There are several well know business-centric plastic initiatives, pledges, and framework around reducing the amount of single-use and virgin plastic and plastic packaging, supporting extended producer responsibility, and exploring innovative models that avoid the use of plastic entirely including Global Commitment led by Ellen MacArthur Foundation & UNEP, the US Plastics Pact, the UN Sustainable Development Goal 14.1, or The Global Plastic Action Partnership led by the World Economic Forum

that sustainable investment portfolios made up of businesses that are proactively addressing carbon, climate, and waste issues have consistently outperformed the markets (Morningstar, 2022).

This push and demand from the investor side reflect the continued rise in consumer demand for sustainable products like those with reusable, refillable, and/or recyclable packaging. It has been noted by the US Chamber of Commerce that over 25% of all products and goods sold in the United States are projected to be sustainable products and that demand is continuing to grow exponentially (Chamber of Commerce, 2021). Likewise, consumer demand for alternatives to single-use and virgin plastic packaging reflects the same values. McKinsey released a report in 2020 that said "consumers are willing to pay more for green, but they would also buy additional sustainably packaged products if more of them were available and they were better labeled. Additionally, moving forward, consumers are almost equally interested in recyclable and recycled plastic packaging and fiber-based substitutes" (McKinsey, 2020). This is sending a clear message to businesses and investors that there are significant opportunities in this space. Current projections predict that the global glass packaging market will reach $97B (GlobeNewsWire, 2022), the metal packaging market will reach $125B by 2028 (Valuates Reports, 2022), the global compostable plastic market will reach $3B by 2027 (Allied Market Research, 2020), and global reusable packaging market will reach $112B by 2027 (GlobeNewsWire, 2021). Laterally, studies show that EPR policies will help scale reuse and refill markets, with one study having estimated that converting 20% of plastic packaging into reuse models would represent a $10B opportunity (Ellen MacArthur Foundation, 2020).

The CLEAN Future Act and the Break Free from Plastic Pollution Act

There are two bills before the committee today, The CLEAN Future Act Title IX on Waste Reduction (H.R. 1512) and the Break Free from Plastic Pollution Act (H.R. 2238), that both offer comprehensive product life cycle solutions to improve recycling in the US through:

- Minimum post-consumer recycled content standards;
- Design for Environment Mandates;
- National bottle deposit & refund programs;
- Standardized and easy-to-read labels for recyclable and compostable products;
- A temporary pause on permitting for new and expanded plastic production facilities;
- Proper labeling and handling of wet wipes
- Funding for recycling and waste reduction education; and
- Provisions for frontline communities and ecosystems that have been harmed by the production and disposal of covered products.

Both of these bills adopt similar and practical strategies that put substantial funding and resources to bear to address the complex nature of recycling challenges. First, both bills leverage tried-and-true local and state policies like the bottle deposit and refund program, which have resulted in an average of 40% higher recycling rates for glass (NYS Pollution Prevention Institute, 2019). The Break Free From Plastic Pollution Act also borrows from state and local policies that have been effective in reducing the use of plastic carryout bags, resulting in findings of less plastic in local waterways and recreational areas (McLaughlin et al, 2022). Second, each bill puts the United States on a path to extended producer responsibility and encourages engagement from multiple stakeholders, including governments, the investment community, industries, recyclers, companies, academia, communities, nongovernmental organizations, and other organizations along the value chain, which is critical to solving systems-level problems and risk like COVID-19 (Institute for Advanced Sustainability Studies, 2020). Third, each bill recognizes the importance of consumer education in the effective implementation and adoption of incentive programs and labeling and design standards for covered products and beverage containers and in fostering a greater understanding of recycling and waste systems. Lastly and most importantly, both the CLEAN Future Act and the Break Free From Plastic Pollution Act (BFFPPA) address recycling challenges at the source. Investing in technologies that try to keep the bathtub from overflowing will never be as effective as turning the faucet off, even temporarily. A temporary pause on permitting for new and expanded virgin plastic production facilities represents an important step that gives the EPA time to establish critical environmental regulations and protections for frontline communities and that allows government, industry, and business time to develop a long-term strategy to invest in plastic recycling and remanufacturing capacity as well as reuse and refill infrastructure.

While both bills share similar provisions and goals, there are a few key differences that set the CLEAN Future Act and the Break Free From Plastic Pollution Act apart. From a business perspective, the Break Free From Plastic Pollution Act offers several strategic advantages if adopted:

1. Accelerates the timeline for action — Most importantly, the Break Free From Plastic Pollution Act has an accelerated timeline that would set the United States on a path to proactively address the recycling crisis by enacting the extended producer responsibility provision immediately, as opposed to years down the line if the CLEAN Future Act is adopted. This timeline and the bill as written would also position the United States to be a leader in the ongoing negotiations for the UN global treaty on plastics (see more details under risk and considerations below).

2. Fosters a model of shared responsibility — Through the Producer Responsibility Organization (PRO), the Break Free From Plastic Pollution Act relies on a model of

shared responsibility that allows for the meaningful inclusion of industry as part of the planning and implementation of the solution and that does not rely solely on taxpayer dollars. In policies that implement a ban or fee on single-use or virgin plastics, the industry pays a fee and may consult with the government agency that oversees and implements the funds to give recommendations, but there is no guarantee that these recommendations will be incorporated. This model also shares the burden of work between the PRO and the EPA, where the EPA has oversight but does not have to undertake all of the planning and implementation work on its own. For comparison, the CLEAN Future Act relies heavily on the ability of the EPA to carry out most of the provisions, including reporting, studies, regulations, and enforcement. Furthermore, many businesses are already looking to invest in new supply chains and technologies that will support the development of alternatives to single-use and virgin plastic and plastic packaging. The Break Free From Plastic Pollution Act through the Product Stewardship Plan offers these businesses the opportunity to strategically pool funds, invest more money in systemic solutions and infrastructure, and get a higher return on investment.

3. Enables wide-scale innovation — The PRO represents a strong example of a public-private partnership that has shown higher success rates in driving the adoption and scale of circular models (UNECE, 2021). The exposure to different ways of thinking and doing with stakeholders along the value chain and across sectors will stimulate innovation at all levels, scales, and verticals.

4. Creates a national blueprint for recycling — Historically, recycling programs grant funding and resources at the state and municipal levels, which has created a patchwork of regulation, policy, standards, and processes across the United States, placing significant regulatory and compliance burdens on business. Under the Break Free From Plastic Pollution Act, the PRO with oversight from the EPA can work with state and local governments and stakeholders to identify areas to streamline and standardize recycling and composting infrastructure. It also will help identify critical gaps in education, outreach, and training for consumers and other stakeholders along the value chain and implement a national approach and strategy to direct funding and track impacts and outcomes.

5. Takes a flexible and material-specific approach — The Break Free From Plastic Pollution Act allows the PRO, with the input of the advisory committees composed of key-value chain stakeholders and the oversight of the EPA, to assemble and propose the Product Stewardship plan that will achieve the desired outcomes outlined in the bill, including specified increases in recycling rates, composting rates, and post-consumer recycled

content. The focus of the Break Free From Plastic Pollution Act on the plastic value chain means the solution can be targeted and outcomes will be easier to track and report. It also means the fee paid by producers to fund the PRO will go directly to address the problem at hand, rather than going to a general fund where the funding could be reallocated or reappropriated.

6. Addresses critical and hazardous contamination issues — Many plastic products contain additives that make it difficult, if not dangerous and/or impossible, to recycle without contamination (IPEN, 2020). Several of these additives have been found to be highly toxic and hazardous to human health, including, but not limited to, bisphenol A (BPA) and per-and poly-fluoroalkyl substances (PFAS). To create a truly circular economy, chemicals must be designed out of all plastics. Working with the advisory committee and local and state governments and recyclers, producers can investigate and invest in better design and safer materials.

7. Dedicates funding and resources to frontline communities and ecosystems — The Break Free From Plastic Pollution Act uses funds from the PRO to identify and start clean-up and mitigation programs to address the current and historical harms of plastic production immediately, as opposed to some unspecified future date, which might require a lot of time and money to litigate (if it is even possible to litigate). This policy would also complement the grant programs proposed by the Recycling Infrastructure and Accessibility Act of 2022 (H.R. 8183). This funding could help revitalize these local economies and prevent future health concerns in some of the communities that have been most directly harmed by the plastic pollution crisis.

8. Broadly advances sustainability and the circular economy efforts — Notably, the Break Free From Plastic Pollution Act focuses on technologies and innovations that would aim to recycle materials at their highest value and purity in perpetuity, which excludes waste-to-energy technologies that would downcycle and consume the materials. Conversely, in Title II, the CLEAN Futures Act incentivizes solid waste disposal by categorizing it as a qualified 'renewable energy' resource. But waste-to-energy schemes have no place in a circular economy and must in no way be considered as a form of renewable energy.

Of note, from the business perspective, the Recycling and Composting Accountability Act (H.R. 8059) and the Recycling Infrastructure and Accessibility Act of 2022 (H.R. 8183) appear to offer complementary solutions to the Break Free From Plastic Pollution Act addressing critical information and funding gaps in the recycling landscape.

Other long-term business and economic risks and considerations

- Advanced or Chemical Recycling — Currently, so-called "advanced recycling" technologies are being discussed as a possible solution to the plastic pollution crisis. These technologies should be distinguished into two types of technologies: (1) Technologies that use pyrolysis and gasification, also known as "plastic-to-fuel" or "waste-to-energy" technologies, to incinerate plastic in order to produce the fossil fuel derivative byproducts of naphtha or synthetic crude oil, fuels, or wax; or (2) Technologies that aim to break plastics from polymers to monomers with the goal of achieving the same level purity and quality of virgin-like polymers (i.e. plastics-to-plastics recycling) (Mckinsey, 2022). As defined by the CLEAN Future Act and the Break Free From Plastic Pollution Act, recycling includes technologies or processes that convert waste into a raw material with "minimal loss of material quality" or that waste is "used in the production of a new product, including the original product." By this definition, advanced recycling that results in a fuel byproduct does not qualify as "recycling" but rather as "downcycling." Similarly, claims that these waste-to-energy technologies support the circular economy ring false as pyrolysis and gasification do not "circulate products and materials at their highest value" (Ellen MacArthur Foundation, n.d.). On the other hand, while plastic-to-plastic technologies could, in theory, meet the criteria for recycling and circularity, it is important to note that these technologies remain immature, energy-intensive, expensive, and risky. At this time, there are no examples in the United States where this technology has been demonstrated at scale (GAIA, 2020). Ultimately, plastic waste is currently filling our landfills and our waterways, particularly in the form of microplastic particles found in the oceans, in the soil, and inside our own bodies; none of that plastic pollution can be economically recycled. Likely, its cleanup represents a long-term challenge that we will be dealing with for the foreseeable future. Looking forward, in order to handle this leftover plastic waste, a seemingly simple solution like incinerating plastic may not be the smartest choice. We must be strategic and avoid capital investments or subsidies in infrastructure or technologies that would lock the United States and its markets into the current linear take-make-waste paradigm where pricing and market signals are thrown off by the externalized costs of extraction, production, and disposal over recycling, reuse, and remanufacturing.

- Competition from European and Canadian Markets — At this time, European markets are leading on investment and infrastructure in recycled plastics as a result of established extended producer responsibility policies and strong investments by the public and private sectors (S&P Global, 2019). Canada also recently enacted a ban on single-use plastic to take effect in December 2022. Without a strong policy in place to

help improve recycling and bring the price of recycled plastic down (and the price of virgin plastic up), the United States may fall behind and miss out on the willingness of businesses to invest now to meet their 2025/2030 goals on plastic, waste, and/or climate.

- Climate risk — Expected impacts of climate change, including extreme weather patterns, rising global average temperatures, rising sea levels, and water scarcity, present a unique form of systemic and nonlinear risk to businesses and the global economy that will disrupt supply chains as well as the cost and availability of raw materials. These impacts will disproportionately affect markets and supply chains that are vulnerable to heat, flooding, drought, and loss of biodiversity. As more than 99% of plastics are made from fossil fuels, cleaning up plastic pollution and finding alternatives to single-use and virgin plastics made from fossil fuels will be an important pillar of any strategy to reduce greenhouse gas (GHG) emissions. Without intervention, the GHG footprint of the US plastics industry is currently on track to exceed the GHG footprint of coal-fired power in this country by 2030 (Beyond Plastics, 2021). Globally, GHG emissions from plastic are expected to grow to 19% of the global carbon budget by 2040 (UNEP, 2021).

- UNEA Treaty on Plastics - As plastic is a complex, transboundary, and multilateral issue, more than 175 United Nations Member Nations agreed by consensus earlier this year (February 2022) to negotiate a new treaty to end plastic pollution by 2024, with the adoption and signing to be completed in 2025. The United States, in particular, was nominated by our region to be the representative on the board of the Negotiating Committee. The treaty aims to address the whole lifecycle of plastic, from the beginning to the end-of-life. While both the CLEAN Future Act and the Break Free From Plastic Pollution Act contain provisions that would address the intent of the treaty, adopting the Break Free From Plastic Pollution Act would empower the United States with a national action blueprint to meet the minimum criteria and 2025 timeline for the negotiation and adoption of an international treaty (CIEL, n.d.). It should be noted that all companies who do business outside of the United States will be impacted by the anticipated treaty and will likely already be considering how best to comply with new international treaty standards. Passing the Break Free From Plastic Pollution Act would set these businesses up to succeed and, if they are required to join the PRO per the Break Free From Plastic Pollution Act's directive, allow them to meaningfully participate in the planning and implementation of the Product Stewardship Plan to meet the goals on recycling and composting rates, post-consumer recycled content, and source reduction.

Conclusion

From our perspective, the Break Free from Plastic Pollution Act offers a comprehensive and proactive solution to a complex and systemic problem and takes advantage of multiple strategic opportunities at play in the business and the global economy.

Acknowledgments

We also want to recognize the work and efforts of the Break Free from Plastic movement for coordination in bringing together a diverse group of stakeholders to solve such an important, complex, and multifaceted issue.