

September 10, 2025

The Honorable Gary Palmer, Chairman
Committee on Energy and Commerce Subcommittee on Environment
U.S. House of Representatives
170 Cannon House Office Building
Washington, DC 20515

The Honorable Paul Tonko, Ranking Member
Committee on Energy and Commerce Subcommittee on Environment
U.S. House of Representatives
2269 Rayburn House Office Building
Washington, DC 20515

RE: Beyond the Blue Bin: Forging a Federal Landscape for Recycling Innovation and Economic Growth

Dear Chairman Palmer and Ranking Member Tonko,

On behalf of the **Flexible Packaging Association (FPA)**, I very much appreciated the opportunity to appear before the U.S. House of Representatives Committee on Energy and Commerce Subcommittee on Environment on July 16, 2025, for the hearing titled, *"Beyond the Blue Bin: Forging a Federal Landscape for Recycling Innovation and Economic Growth,"* to present and discuss our positions and views on recycling infrastructure, needs, and technology for flexible packaging in the United States. This is a critical core policy issue for **FPA** and the flexible packaging industry in the U.S., and we must all work together to craft effective industry and public policy

approaches. I also very much appreciate the opportunity within this letter to respond to the follow-up questions for the record (QFRs) received from you on August 27, 2025.

FPA represents flexible packaging manufacturers and suppliers to the industry in the U.S. Flexible packaging in the U.S. represents \$42.9 billion in annual sales, is the second largest and fastest-growing segment of the packaging industry and employs approximately 83,000 workers. Flexible packaging is produced from paper, plastic, film, aluminum foil, or any combination of these materials, and includes bags, pouches, labels, liners, wraps, rollstock, and other flexible products.

Flexible packaging is also used for medical device packaging to ensure that the products packaged, like diagnostic tests, IV solutions and sets, syringes, catheters, intubation tubes, isolation gowns, and other personal protective equipment maintain their sterility and efficacy at the time of use. Trash and medical waste receptacles use can liners to manage business, institutional, medical, and household waste. Carry-out and take-out food containers and e-commerce delivery, which became increasingly important during the global COVID pandemic, are also heavily supported by the flexible packaging industry. Thus, **FPA** and its members are particularly interested in and deeply committed to solving packaging and plastic waste issues and increasing the recyclability and recycling of all packaging.

The following responses to the QFRs reflect these commitments.

The Honorable Robert Latta (R-OH)

1. In your written testimony, you briefly touched on the distinction between post-consumer recycled content and post-industrial recycled content.

a. Can you elaborate on the current state of post-industrial recycled content infrastructure in the United States?

FPA Response:

Post-industrial recycled (PIR) content is also known as pre-consumer recycled content. This type of recycled content comes from the excess trim, scraps, or defective products collected during the initial manufacturing of a product. PIR content typically stays within the manufacturing facility and is reworked back into the manufacturing process before the final product reaches a consumer. If the manufacturer does not have the technology to regrind and reuse PIR content onsite, it may be sold off to a third party to make additional products. In contrast, post-consumer recycled (PCR) content refers to materials that have been used by consumers and then collected through recycling programs. Since PCR content generally goes through a material recovery facility (MRF) or secondary sortation facility, it is easier to track volumes and infrastructure investments through the sale and movement of materials. While some PIR content is sold and also runs through the U.S. recycling system, a significant volume stays onsite and is reused by manufacturers. As a result, there is insufficient data on the volumes of PIR content versus PCR content or the infrastructure available for processing PIR content. Most investment in PIR content is an internal capital investment by the manufacturer, seen as an efficiency and cost savings expenditure.

Organizations like the Association of Plastics Recyclers (APR) tend to report total recycled content, noting what they can track moving through the recycling system and not separating what they know to be PIR from PCR content. This still excludes what is reused onsite at manufacturing facilities. Recently, the Vinyl Institute did clarify the difference between PIR and PCR recycled content that they could track moving through

the recycling system.¹ They reported a total 1.1B pounds of vinyl is recycled across the United States and Canada, with 958 million pounds of that material being PIR content and only 142 million pounds being PCR content.² ***The majority of recycled vinyl (almost 90%) came directly from PIR.*** While most packaging materials have a more robust collection process to recycle post-consumer plastics than vinyl does, this data does help reinforce that there are significant volumes of PIR content that the U.S. plastics industry is using but which is not being measured or quantified towards our state and national recycling rates.

Additionally, when it comes to recycling, quality matters. As noted in my written comments submitted for the hearing on July 16, PCR content material is often graded according to the level of contamination that it experiences as it moves through manufacturing, consumer use and various collection and sortation processes. In contrast, PIR content material retains significantly high-quality levels due to the controlled environment in which the waste is captured, making it an excellent input for products requiring high levels of regulation. PIR content material from packaging can typically be recycled mechanically and turned back into packaging in the ideal closed loop system. In contrast, depending on how plastic PCR content is collected and sorted, the higher contamination rates tend to drive this material towards lower value durable goods or require advanced/chemical recycling to meet the high quality and regulatory requirements necessary for use in packaging.

Also noted in my written comments submitted for the hearing, the use of mechanically recycled PIR content from well-managed manufacturing waste sources can be an excellent source of recycled material. FPA members have demonstrated the ability to

¹ Vinyl that was reused onsite by a manufacturer was excluded from these numbers.

² 2019 Tarnell Company Recyclers Survey for the Vinyl Institute (Amounts Sold) – PVC recycling estimates are from a tri-annual survey of 140 recyclers in the U.S. and Canada, last completed in 2019. Totals exclude manufacturing scrap that is internally reused by the producer.

replace up to 95% of virgin resin with PIR content in non-food high-performance flexible packaging applications where film appearance, toughness, and processibility must meet stringent performance criteria. The use of PIR content offsets the use of virgin resin and avoids material going to waste. For these reasons, PIR content should be recognized as an important means to meet any mandated requirements for recycled content, and FPA believes the federal government could take a lead role in recognizing and incentivizing the use of PIR content even further in the United States, including through tax credits and incentives to encourage manufacturers to utilize even more PIR content within their facilities.

b. What type of benefits could we see from scaling up the volume of post-recycled content available in the United States?

FPA Response:

When considering recycling in the U.S., we need to look at supply, availability and demand. A 2025 report by AMERIPEN and Recycling is Real examined the available supply of PCR content from various packaging materials versus the demand based on corporate goals and state recycled content mandates and contrasted that against the domestic capacity to process the supply of material to meet demand.³ The study did not evaluate PIR content given the challenges noted above.

When examining the PCR content use rates for plastics, by and large, demand outpaced available capacity, followed by supply. The biggest challenge is to engage more consumers to recycle to increase the supply of PCR content. However, it should be noted that even if supply were matched with available capacity, the U.S. currently lacks enough infrastructure to meet the demand for PCR content.

³ AMERIPEN (2025) [US Packaging Recycled Content Goals Analysis](#).

Further supporting the analysis into the gaps between supply and capacity, APR notes that if supply was increased to meet the capacity needs of plastic recyclers across the U.S. and Canada an estimated 2 billion additional pounds of plastics could be recycled each year.⁴ This would amount to an increased volume of recycled plastics of 36% for polyethylene terephthalate (PET), 35% for high density polyethylene (HDPE), 42% for polypropylene (PP), and 44% for film.⁵

This data is based on scaling up PCR content as that tends to be the standard unit of measurement globally when reporting recycling rates, but as noted above, if we could start to quantify what volumes manufacturers recycle onsite or examine the potential of PIR content material that is not currently captured in recycling metrics, we would see a significant jump in our national recycling rate.

An economic impact report from the Recycled Materials Association (ReMA) notes that in 2021, over 600,000 FTE jobs were created from the recycling industry with an estimated \$169B economic impact.⁶ Recycled materials are among the nation's largest exports by value, and overall, exports account for over 30% percent of the industry's economic activity.⁷

The ReMA analysis further notes that greenhouse gas (GHG) emissions can be lowered by 35-96% by using recycled materials.⁸ Recycled materials in manufacturing tend to reduce industrial energy consumption by 27-90% depending on the material and processes used.⁹ On average, recycling one ton of materials saves 3,000 pounds of coal from being mined.¹⁰

⁴ APR (2025) [2025 Plastics Recycling Capacity in the U.S. and Canada](#)

⁵ IBID

⁶ ReMA (2025) [Recycling's Role in our Economy](#)

⁷ IBID

⁸ ReMA (2025) [The Sustainability Impact of Recycling](#)

⁹ IBID

¹⁰ IBID

Scaling up recycling across the U.S. would not only reinforce our strength as a global exporter of recycled materials, but it would also create additional high paying jobs and reduce our cumulative environmental impact through resource efficiency. This is evidenced in my written comments submitted for the hearing on July 16, with several examples of FPA member companies driving the demand for and supply of recycled content, enabling new end markets for flexible packaging and other products – all while expanding existing and opening new facilities and creating new jobs.

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In conclusion, **FPA** appreciates the opportunity to share with you our thoughts on the current state of post-industrial recycled content infrastructure in the U.S. and the benefits of scaling up the volume of post-recycled content available in the U.S. We hope you find our responses helpful, and please don't hesitate to contact me at (410) 694-0825 or dfelton@flexpack.org if I may be of any further assistance.

Sincerely,

A handwritten signature in black ink, reading "Dan P. Felton". The signature is fluid and cursive, with the first name "Dan" being the most prominent.

Dan Felton

President & CEO

Flexible Packaging Association (FPA)