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BEYOND THE BLUE BIN: FORGING A FEDERAL LANDSCAPE FOR RECYCLING INNOVATION AND ECONOMIC GROWTH

WEDNESDAY, JULY 16, 2025

House of Representatives,

Subcommittee on Environment,

Committee on Energy and Commerce,

Washington, D.C.

The subcommittee met, pursuant to call, at 10:15 a.m., Room 2322, Rayburn House Office Building, Hon. Gary Palmer [chairman of the subcommittee], presiding.

Present: Representatives Palmer, Crenshaw, Latta, Griffith, Carter of Georgia, Joyce, Weber, Pfluger, Miller-Meeks, Lee, Evans, Fedorchak, Guthrie (ex-officio); Tonko, Schakowsky, Ruiz, Peters, Barragan, Soto, Carter of Louisiana, Menendez, Landsman, and Pallone (ex-officio).

Also present: Representative Harshbarger.

Staff Present: Ansley Boylan, Director of Operations; Byron Brown, Chief Counsel; Christian Calvert, Press Assistant; Sydney Greene, Director of Finance and Logistics; Christen Harsha, Senior Counsel; Calvin Huggins, Clerk; Joel Miller, Chief Counsel; Ben Mullaney, Press Secretary; Kaitlyn Peterson, Policy Analyst; Chris Sarley, Member Services/Stakeholder Director; Katharine Willey, Senior Counsel; Giancarlo Ceja, Minority ENV Fellow; Tiffany Guarascio, Minority Staff Director; Anthony Gutierrez, Minority Professional Staff Member; Caitlin Haberman, Minority Staff Director, ENV; Emma Roehrig, Minority Staff Assistant; and Kylea Rogers, Minority Policy Analyst.

*Mr. Palmer. Good morning, and welcome to today's subcommittee hearing entitled, "Beyond the Blue Bin: Forging a Federal Landscape for Recycling, Innovation, and Economic Growth.''

Before I begin I would like to thank Chairman Guthrie for the opportunity to lead the Environment Subcommittee. I would also like to thank Chairman Griffith for his excellent leadership of the subcommittee, and wish him the best as the new Chairman of the Subcommittee on Health.

And to my friend and colleague, ranking member, Mr. Tonko, I look forward to working with you.

*Mr. Tonko. Thank you. Likewise.

*Mr. Palmer. As Chairman of the Subcommittee on Oversight and Investigations, I focused on the importance of critical minerals to our national security and holding the Environmental Protection Agency accountable. I look forward to continuing that important work in this new role.

Waste and recycling are generally considered to be regional issues regulated at the state and local level. However, we will hear testimony today about the national and economic security implications of recycling policy. In his first days in office, President Trump emphasized the need to secure our critical mineral and rare Earth supply chains. We must use an all-of-the-above approach when it comes to ensuring our ability to access these critical minerals and

elements, which is why electronic waste, e-waste, is so important for our future.

With the growth of data centers and the use of technology, e-waste is accumulating higher rates every year, with billions of dollars in losses as this technology reaches its end life. E-waste is a commodity that can be repurposed in our fight to not only be energy independent, but energy dominant. Let me be clear. We will not recycle our way out of these issues. However, as we look to build out our mining capacities, our processing and refining capacities, e-waste recycling innovation provides vital short and long-term support for our needs as a nation.

The President also issued an executive order on the importance of putting America first in international environmental agreements. As part of the negotiations for the Global Plastics Treaty, the Biden-Harris Administration announced support for bans on plastics and a cap on plastic production. That would not be in America's interest.

I look forward to hearing from our witnesses about the role that American businesses can play in innovating and developing technologies to take advantage of the opportunities in the recycling industry. The threat China poses to the United States and our allies cannot be overstated. We will hear from our witnesses today on how we can use recycling as a tool to compete with China and to

protect our communities.

Thank you to our witnesses for being here today. It is my understanding we have not had a hearing on this topic in some time, and I appreciate my colleagues engaging on this important issue.

[The prepared statement of Mr. Palmer follows:]

**********COMMITTEE INSERT**********

*Mr. Palmer. I look forward to our discussion, and now recognize the ranking member of the subcommittee, the distinguished gentleman from New York, Mr. Tonko, for his opening statement.

*Mr. Tonko. Thank you, Mr. Chair. That sounds good.

Let me start by congratulating you on taking over leadership of the subcommittee. I look forward to working together in striking progress.

The United States leads the world in many things. Unfortunately, this includes the amount of waste we generate, and most of this waste ends up landfilled, incinerated, or littered. In recognition of this we have spent more than 50 years promoting a waste management hierarchy. Every kid learns the three Rs: reduce, reuse, and recycle. So while today's discussion will focus primarily on that third R, I would be remiss if I didn't remind everyone of the needs to similarly focus on reduction and reuse as critical components to our national waste strategy.

Today's hearing will cover a wide range of recycling challenges facing our country, each of which could be its own hearing. But across each of these challenges I believe we will see a common thread: the status quo is untenable, often creating environmental issues while letting billions of dollars of valuable materials go unrecovered.

I understand the desire to promote innovation to

overcome these challenges, as suggested by the hearing's title. But in reality, our recycling system needs some very basic foundational improvements before we can even begin to suggest that new technologies will save us.

More than one quarter of Americans do not have access to recycling, and less than one half recycle at home. There are glaring needs for better data, accessibility, labeling, and education to enable people to feel confident that when they use the blue bin correctly, their efforts will actually result in real recycling -- by which I mean products are ending up in a responsible end market and not being diverted to a landfill or downcycled.

In recent years Congress has tried to address these basic needs of our recycling system. The Infrastructure Investment and Jobs Act included significant funding for state, local, and tribal governments to implement EPA's national recycling strategy. Other bipartisan bills like the RIAA and RCAA, seek to further support these recycling basics. These proposals will not single-handedly fix our system, but they do represent good first steps to improve data and promote accessibility, and I do hope that the coalition-building and policy development that went into these bills will make it easier for us to work together toward bigger and more ambitious policies in the future.

Because of the absence of Federal leadership, several

states have already begun to create such policies. This includes extended producer responsibility, or EPR, laws to require packaging and paper producers to take financial and environmental responsibility for their products. While it is still too early to judge these state laws' effectiveness, we know the intent is to improve recycling services and infrastructure while encouraging greater market demand for recycled materials.

These programs' fee structures often include a concept known as eco modulation to further incentivize the use of products that are more sustainable, including products designed to be more easily recycled. Designing for recyclability is a common-sense innovation worth encouraging. Similarly, in recent years there have been major improvements in optical sorting, including the introduction of AI to improve recycling facilities' efficiency. But many industries have used the notion of innovation to promote a suite of new technologies commonly known as chemical or advanced recycling aimed at transforming hard-to-recycle materials. These are controversial technologies, and not without good reason.

While we should not foreclose consideration of any tool to address the problems with our waste management system, we must ensure that these technologies actually displace virgin production and do not introduce environmental and public

health risks. At this stage I have not seen much evidence that these technologies are succeeding by these metrics, with much of their output being used as fuels, rather than new recycled products. So before we center the debate on these technologies for hard-to-recycle products, I want to reiterate my belief that we should prioritize our systems more fundamental shortcomings, and consider why so many materials that rely upon proven existing recycling technologies frequently fail to reach even 50 percent recycling rates.

Finally, I am glad that members of the majority are beginning to recognize the tremendous opportunity for recovery and reuse of critical minerals. For years Democrats on this committee have proposed policies to promote the development of secure domestic supply chains by recovering critical minerals in EV batteries and e-waste. In the IIJA we included funding support to support the development of battery recycling best practices and voluntary labeling to further this goal, and there is clearly much more that we can do. Moving forward, I would welcome the opportunity to work together to ensure we are maximizing this largely untapped resource.

And again, my heartfelt congratulations, Mr. Chair. I look forward to working with you.

[The prepared statement of Mr. Tonko follows:]

**********COMMITTEE INSERT**********

*Mr. Tonko. And with that I thank you and yield back.

*Mr. Palmer. Thank you, Mr. Tonko. The Chair now recognizes the chairman of the full committee, the gentleman from Kentucky, Mr. Guthrie, for five minutes for an opening statement.

*The Chair. Thank you, Mr. Chairman, and good morning, members of the Subcommittee on the Environment and to our witnesses today. Congratulations, Chairman Palmer, on your new role as chairman of the subcommittee. I thank you for your leadership this Congress on Oversight, but you absolutely have been focused on the issues before this subcommittee, as well, and I really appreciate you taking the leadership of this, and I really look forward to working with you as we look at supply chains, critical minerals, investigating the Biden-Harris Administration's implementation of the Green New Deal and other programs.

Our world is constantly changing, and today we will hear whether our country's waste management policies will enable us to embrace the challenges of the future. For example, we are seeing incredible growth in data centers needed to support artificial intelligence infrastructure. But will our waste and recycling laws allow us to manage an expected uptick in electronic waste, and how we can recover valuable materials such as critical minerals from items that are discarded every day?

Additionally, how do we keep the U.S. economy as a global leader in the face of international negotiations that could limit the production and use of plastics and chemicals and place U.S. companies at a disadvantage against Chinese and European competitors?

I look forward to hearing from our panel of witnesses today, including Mr. Bedingfield from Louisville, on these important questions.

While our country is constantly faced with new challenges, thanks to American entrepreneurship and the spirit of innovation we are also presented with new opportunities. Improving our recycling infrastructure could enhance our global economic competitiveness and national security. For example, according to the Recycled Materials Association, the recycled materials industry has a nearly $169 billion economic impact on the United States. New technologies involving artificial intelligence and robotics have improved sorting capabilities for recyclable products like paper. Advanced recycling technologies enable the conversion of difficult-to-recycle plastics into new products that improve our quality of life.

Today's hearing will provide us with the chance to assess regulatory barriers to the proliferation of new technologies and strategies to grow our domestic manufacturing capabilities while keeping valuable materials

out of landfills.

And it just makes sense that we take valuable materials, we keep them out of -- we take valuable materials, bury them underground and have them stay there until some future civilization discovers them, or we can put them back in the stream of commerce and make it work today. And so that is important, it is certainly part of our green economy to make sure we recycle our -- the materials that we use. And so I am really looking forward to this hearing, looking forward to working with the chair and my friend from New York, Mr. Tonko, to see if we can find a pathway forward to make this work.

[The prepared statement of The Chair follows:]

**********COMMITTEE INSERT**********

*The Chair. And I appreciate that, and I will yield back.

*Mr. Palmer. The gentleman yields. The Chair now recognizes the ranking member of the full committee, the gentleman from New Jersey, Mr. Pallone, for five minutes for an opening statement.

*Mr. Pallone. Thank you, Mr. Chairman.

Today the subcommittee is examining the important topic of recycling. Preventing ocean dumping off the Jersey shore was what initially inspired me to come to Congress, so I am pleased to be discussing ways we can reduce pollution and improve recycling in the United States.

But today's hearing comes weeks after President Trump signed the Republican's big ugly bill into law, and this bill doubles down on their unconditional support of polluters propping up the fossil fuel industry at the expense of clean energy, driving up costs for American families and worsening the climate crisis.

And science tells us that to combat the worst effects of climate change we need to move away from polluting industries, including reducing our reliance on products derived from fossil fuels. And recycling is an essential tool in our environmental protection toolbox to reduce pollution in communities, boost local economies, combat the climate crisis, and strengthen domestic supply chains.

However, with a national recycling and composting rate of just 32 percent, it is clear we still face major gaps in the recycling system that need to be addressed.

That said, the story is not the same for all recyclable materials. For example, paper and cardboard saw a recycling rate of 68 percent in 2018. That is higher than any other material. Unfortunately, the same cannot be said for plastic waste, where a staggering 76 percent was sent to the landfill. And I just think we have to do a lot better. These issues are all compounded by the fact that municipal solid waste recycling systems are severely underfunded across the country. Local governments face tight budgets. And with President Trump's outright assault on state funding, budgets will now be even tighter.

We need to invest in our recycling system to see the improvements we so desperately need. Democrats recognized that need in passing the Bipartisan Infrastructure Law and the Inflation Reduction Act. Together, billions of dollars were invested to help fill gaps in the recycling system and to drive battery collection to grow our domestic circular economy for critical minerals. For example, the Bipartisan Infrastructure Law included $275 million for the Solid Waste Infrastructure for Recycling Grant program, or SWIFR, to bolster recycling infrastructure and help fund improvements in communities around the country.

Beyond funding, we are also seeing promising developments in recycling policy at the state level. Maine, Oregon, Colorado, and others are leading the way by establishing extended producer responsibility, EPR, programs for packaging to help incentivize manufacturers to use recycled content over virgin material. New Jersey has minimum recycled content standards for the sale and distribution of certain products, and I hope this subcommittee will explain -- will explore, I should say -- policies like a national EPR framework to improve our recycling system and help provide certainty for manufacturers.

There are two bipartisan recycling bills, H.R. 4109, the Recycling and Composting Accountability Act; and H.R. 2145, the Recycling Infrastructure and Accessibility Act, that aim to strengthen recycling and composting systems, improve accessibility in underserved communities, and improve data measurement and reporting. We had a bipartisan and bicameral agreement to pass those bills last year in the end-of-the-year funding package, but as we know, House Speaker Johnson tanked that entire package because Elon Musk voiced his opposition to it. I believe these bills are still worth moving, and the Senate Environment and Public Works Committee has already advanced them out of committee earlier this year. I believe this committee should do the same.

And finally, while recycling is an important way to address plastic pollution, we must also focus on reducing our use of plastics overall. It is estimated that eight million metric tons of plastic waste enters the world's oceans every year. That is the equivalent of dumping a garbage truck full of plastic waste into the ocean every minute. This plastic waste can break down into smaller pieces known as microplastics. This is a big deal for my constituents at home on the Jersey shore, as microplastics are polluting the Atlantic and impacting marine life. It is vital that any potential recycling solutions for addressing plastics are science-based, economically feasible, safe for communities, and ultimately make recycled products.

And in 2015, I wanted to mention I led a president -- with President Obama, who signed into law the bipartisan Microbead Free Waters Act, which prohibited manufacturers of rinse-off cosmetics from intentionally aiding plastic microbeads. And that law remains the only bill Congress has passed to limit microplastics in our environment. That was a decade ago, and we just have to do more.

So like the climate crisis, pollution is a -- plastic pollution is a global problem that warrants ambitious cooperation from the international community. The U.S. delegation must continue to be a strong voice at the Global Plastics Treaty negotiations next month. We should not take

a back seat or accept weaker standards.

[The prepared statement of Mr. Pallone follows:]

**********COMMITTEE INSERT**********

*Mr. Pallone. So I look forward to the hearing and I yield back, Mr. Chairman, thank you.

*Mr. Palmer. The gentleman yields. We now conclude with member opening statements.

The Chair would like to remind members that, pursuant to committee rules, all member opening statements will be made part of the record.

We want to thank our witnesses for being here today and taking the time to testify before the subcommittee. The witnesses will have the opportunity to give an opening statement, followed by a round of questions from members.

Our witnesses for today are Mr. Ross Eisenberg, president of America's Plastic Makers; Mr. Matt Bedingfield, president of -- at Mint Innovation; Ms. Keefe Harrison, founder and CEO of the Recycling Partnership; and Mr. Dan Felton, president and CEO of Flexible Packaging Association.

We appreciate you being here today.

Do we swear them in?

*Voice. No.

*Mr. Palmer. We don't? Okay.

We appreciate you being here today. I now recognize Mr. Eisenberg for five minutes to give an opening statement.

*Mr. Eisenberg. Okay.

[Pause.]

*Mr. Eisenberg. I will take care of this one for you

guys. Thank you, all right.

STATEMENT OF ROSS EISENBERG, PRESIDENT, AMERICA=S PLASTIC MAKERS, AMERICAN CHEMISTRY COUNCIL; MATT BEDINGFIELD, EXECUTIVE VICE PRESIDENT OF COMMERCIAL STRATEGY AND GROWTH, MINT INNOVATION; KEEFE HARRISON, FOUNDER AND CEO, THE RECYCLING PARTNERSHIP; AND DAN FELTON, PRESIDENT AND CEO, FLEXIBLE PACKAGING ASSOCIATION

STATEMENT OF ROSS EISENBERG

*Mr. Eisenberg. Well, good morning, Chairman Palmer, Ranking Member Tonko, and members of the subcommittee. My name is Ross Eisenberg. I am the president of America's Plastic Makers at the American Chemistry Council. ACC represents the companies that produce the plastics that are essential in modern life.

I want to start by pointing out something that, frankly, you have already noted. The stakeholders of this -- at this table today who represent very different points on the value chain for plastics and other materials, we are saying a lot of the same things. I believe we really are at a point of policy convergence when it comes to recycling, one that probably didn't exist the last couple of times this committee examined the topic. I encourage the committee to seize this opportunity because maybe, just maybe, there is a pathway to making real, substantive, lasting change in the way that we

deal with plastic waste, and to do it in a constructive, bipartisan way. We would certainly support that.

The U.S. chemicals and plastics sectors are vital to our economy. Nearly 27 percent of U.S. manufacturing output is in industries that are highly reliant on plastics. The plastics industry supports almost 5 million jobs across the economy and generates over $391 billion in wages. We maintain a $21.9 billion trade surplus in plastic resins, so we are one of the few industries that actually exports more than we import because we -- it is so competitive here to make plastic.

Now, with this large footprint come challenges. And at the top of that list, as you have all identified, it is waste. Plastic waste does not belong in the environment. It is very plainly unacceptable. And ACC and our members are committed to ending plastic waste and advancing a circular economy for plastics. We are committed to do that because, frankly, we need plastics. Modern life does rely on them. Plastics help reduce emissions, save energy whether by extending the shelf life of food, reducing packaging weight, making homes, workplaces, and vehicles more energy efficient. Plastics are indispensable in health care and emergency response: IV bags, disaster relief, syringes, gloves, masks. Plastic packaging protects food, water, and medical supplies when cold storage or sanitation is unavailable. So all of

these things that make modern life possible.

But as we all know, plastic is just not recycled enough. To fix that we have to modernize the way that we collect, recycle, and reuse plastic and other materials. We have to upgrade a recycling system that was set up in the 1970s for bottles, cans, and paper and bring it to 21st century standards, including new recycling technologies. So ACC encourages the Federal Government to take several strong steps.

Number one, top of the list -- because it is next month -- actively engaged the UN Global Plastics Agreement negotiations and help arrive at a final agreement this year that all countries will support and join.

Number two, please remove regulatory roadblocks to the introduction of some of these innovative new technologies.

And number three, please work together and advance common-sense legislation to help these shared goals.

So starting with the global agreement, in a few weeks a number of us are going to be in Geneva with 170 countries to try to arrive at final text of an agreement to address plastic pollution. ACC supports a global agreement focused on stopping plastic pollution, and we have encouraged the U.S. to engage and provide the necessary leadership to help land that plane and land a final agreement. We believe America can lead the world through championing policies that

incentivize improved waste management infrastructure and that send the right demand signals to spur private investment in collection, sortation, and recycling of plastic.

Here at home we think there are some immediate steps that Congress and the executive branch can do to improve the infrastructure, as well. One of them is to regulate advanced recycling properly. Now, advanced recycling, which we have talked about a bit today -- a good explanation of it, one of our members says it is like unbaking a cake. Imagine you could take a cake, and you could take that cake back down to its elements, the eggs, the flour, the milk, the sugar, the butter, and then you could make it into a cake again. That is advanced recycling. There is a suite of chemical technologies that can do it, but that is essentially the concept that we have got here.

Advanced recycling technology is break down post-use plastics down to their chemical building blocks, and then use them to make new products, including new plastics. They not only help keep plastic out of landfills and incinerators and our environment, but they help create a more resilient U.S. supply chain and well-paying jobs. Advanced recycling can process contaminated plastics, difficult-to-recycle plastics that mechanical recyclers can't take, and the plastics and other sort of harder recycled plastics that you find in the economy.

Now, despite this potential, a number of regulatory barriers stand in the way of new advanced recycling. Conflicting regulations across states and at the Federal level create uncertainty for investors. Every time EPA over the past few years proposed a rule, withdrew a rule, even talked about a rule, we saw the market chill for new investment in this technology because they didn't really know if they were going to be able to get their permits. So it was getting in the way of the technology and stopping its forward progress.

Now, let me be clear. We believe that advanced recycling should be regulated, and we believe it should be regulated strongly, but it should be regulated as manufacturing, because that is specifically what it is. It is a manufacturing facility.

Finally, we hope Congress will act soon on recycling legislation. The bills mentioned earlier, the RIA, the composting bill, those are all good bills. We hope to see them get over the finish line. We also hope to see re-introduction of the Accelerating a Circular Economy for Plastic and Recycling Innovation Act, H.R. 9676 -- in the last Congress. Dr. Bucshon, retired Dr. Bucshon, and Don Davis from North Carolina introduced --

*Mr. Crenshaw. [Presiding.] Thank you, Mr. Eisenberg. If you could, wrap up.

*Mr. Eisenberg. Oh, absolutely, sorry.

And so my written statement has more on that, including EPR.

Sorry for taking so long. Thank you all for doing this. I really appreciate the opportunity to do this today. And let's get it on. Thank you.

[The prepared statement of Mr. Eisenberg follows:]

**********COMMITTEE INSERT**********

*Mr. Crenshaw. I appreciate you being here.

Mr. Bedingfield, you are now recognized.

STATEMENT OF MATT BEDINGFIELD

*Mr. Bedingfield. Thank you. I would like to express my appreciation to Chairman Palmer, Ranking Member Tonko, and the committee members for having me here today. My name is Matt Bedingfield. I am the president of Mint Innovations. I am honored to have the chance to be here to speak to you today about the state of e-waste recycling in the United States, how we can work together to increase recovery of this material, and the value of doing so.

To provide a foundation for this conversation I would like to outline the current e-waste landscape in the United States. We generate approximately seven to eight million metric tons of e-waste each year in this country. Of that volume, more than six million is disposed of in landfills. While this only compromises -- or comprises 2 to 3 percent of landfill volume, it accounts for over 70 percent of the hazardous materials and heavy metals in our landfills. What makes matters worse is these are the materials that are needed to supply the companies that are currently reshoring and driving the current domestic manufacturing resurgence.

Recycling rate aside, we do not have the capacity or capability in our country to recover the metals from the million metric tons that we do recycle. This is all collected domestically and then exported to Asia or Europe to

be refined and, in many cases, then imported back into this country. This does absolutely nothing for the reshored companies I mentioned earlier.

The conventional solution is pyrometallurgical refining. These plants have significant emissions, take over five years to construct and, in many cases, over $1 billion in capital are more to build out. Mint Innovations has taken a different approach by leveraging hydrometallurgy that combines chemistry and biology to efficiently recover the copper, gold, palladium, silver, and tin from e-waste. Our plants cost approximately $30 million, generate no emissions, and take only 12 months to deploy.

Our first full-scale plant, a first of its kind in the world, is located in Sydney, Australia, and the wastewater is literally poured down the drain. We are building our second plant in Longview, Texas. This plant will consume up to 8,000 tons of printed circuit boards per year, and will recover these metal units to be used domestically in the U.S. supply chain. This plant will be online 12 months after funding is secured.

The U.S. is the undisputed global leader in countless categories. Recycling and recovering our critical resources, metals, and minerals, unfortunately, is not one of them. We are not seeking an uneven playing field or a handout. However, this committee is uniquely positioned to provide a

hand up to our industry, which enables us to compete and to win on an even playing field, long term.

This committee and the U.S. Government overall can help in numerous ways, including allocating Federal funding to provide an enhanced education about how and why to recycle e-waste; directing funds to states to encourage and incentivize investment in recovery of metals and critical minerals, which are critical to our national security; and prioritizing companies that have a domestic footprint and the capability to recover these metals when issuing contracts for materials generated by the government and its contractors.

As we think about critical mineral security, the United States cannot and should not rely upon massive government grants for singular projects. Those can become single points of failure, depending on company performance, operations, and poor market conditions. Taxpayer dollars should be spread among lightweight, cost-effective, and proven systems of scale. That is what Mint brings to the table.

I am happy to answer any questions, and I appreciate your attention. Thank you again for the honor of speaking to you today.

[The prepared statement of Mr. Bedingfield follows:]

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*Mr. Crenshaw. I look forward to hearing more from you. Ms. Harrison, you are now recognized.

STATEMENT OF KEEFE HARRISON

*Ms. Harrison. Chairman Palmer, Ranking Member Tonko, Vice Chairman Crenshaw, and the members of the committee, thank you for inviting me in today to talk about recycling in America and the tremendous opportunity we have ahead.

I am a 28-year veteran of the recycling system. In the early days I ran a recycling truck. Now I work with Fortune 500 companies on multi-million-dollar investments because I believe that this recycling system has so much potential for our country. I founded the Recycling Partnership to be a public-private partnership. And after one decade we have achieved half-a-billion dollars' worth of impact working directly with more than 400 communities and recycling facilities across the country. That is a billion pounds of new recyclables that we have added to the stream.

In my experience there has never been a moment like now. Recycling is at an inflection point. We have huge opportunity in front of us, but only if we address the challenges that -- in a very real and data-driven way. These challenges include that 76 percent of paper and packaging materials that are currently in homes, end up in the landfill, not in the recycling system. Cheap imports, often from Asia, are threatening to upend market dynamics for recycling content, putting American jobs at risk. Many

companies are failing to meet their recycling goals that they have set and are responding not by leaning in, but by stepping back. And it is estimated that only half of the packaging -- plastic packaging that is produced is actually even designed for recycling, something that is easily fixable. Finally, only 73 percent of our nation's households have access to recycling.

As we have already heard here, recycling matters for our economy. It is simple. Our nation's recyclables become feedstock for American manufacturing. We can put that to work. Fully investing in recycling would deliver huge benefits: 200,000 new jobs, more than $8 billion of materials returned to the economy, $11 billion of savings -- and taxpayers and local governments who currently foot the bill for this. But to achieve these, we need system change.

Like the title of this hearing, American recycling needs to go beyond the blue bin. When we say recycling, it is one word but it really means many different things. It is how is something designed, it is access. Can the public do it? It is participation. Does the public do it? It is infrastructure and it is end markets, which means does old stuff turn into new stuff? To level up, we must embrace innovation. But as we innovate, we cannot lose a hold of really what is our why.

Recycling for the purpose of recycling is not the point.

We must ground ourselves in science and data and purpose to ensure that we are achieving a goal of conserving natural resources, building regional economies, and creating sustainable, resilient communities.

Today we are going to talk about chemical recycling, and that refers to a broad, wide variety of technologies. It is one term, but it means very many different things. Such technologies offer great -- they vary greatly in terms of what materials they can accept as inputs, what they can create as outputs, what is the amount of energy used, the impacts on the environment and human health. So before we endorse one thing, we really need to get to the heart of taking a broad category and turning it into definitions of the specific things, asking ourselves questions such as, what is the technology? What is the supply chain? How do we make the economics work? How do we ensure that we understand the environmental and human health impacts? Is it scalable, and do we ensure transparency?

So where do we go from here? Three things are on my mind. We need ground decisions and a clear-eyed, data-driven view of the recycling system. We must take a systems approach, no more silver bullets. And we must support robust policies that drive accountability and level the playing field for responsible engagement from our U.S. companies. The good news is that this committee can take immediate steps

to solve the challenges of recycling.

First, the committee should mark up and pass the STEWARD Act that puts together two bills that nearly passed last year and supports our rural communities in this country.

And second, I urge you all to support the CIRCLE Act, which will launch -- which will be introduced today and establish a recycling infrastructure investment tax credit. It would reward domestic investment that could create jobs in every state, every district in this nation.

So thank you for the opportunity to testify today. I look forward to working with each and every one of you to build a better solution for America.

[The prepared statement of Ms. Harrison follows:]

**********COMMITTEE INSERT**********

*Mr. Crenshaw. Thank you.

Mr. Felton, you are now recognized.

*Mr. Felton. I can't get the mike on. Is it?

[Pause.]

*Mr. Felton. Yes, thank you.

STATEMENT OF DAN FELTON

*Mr. Felton. Good morning, Vice Chair Crenshaw, Ranking Member Tonko, and members of the subcommittee. I am Dan Felton, president and CEO of FPA, the Flexible Packaging Association. Thank you for the opportunity to testify today on Federal support for recycling innovation and economic growth in the U.S. This is a core policy issue for FPA and our members and stakeholders, and we must all work together to craft effective industry public policy approaches.

FPA represents flexible packaging manufacturers and suppliers with business in the U.S. Flexible packaging is the fastest-growing and second-largest segment of the U.S. packaging industry, and is produced from paper, film, plastic, aluminum foil, or combinations of those materials. It includes bags, pouches, labels, liners, wraps, roll stock, and other flexible products. Flexible packaging is used for a myriad of consumer goods, including fresh and frozen food products, personal care items, pet foods, and lawn and garden products. Flexible packaging is also used extensively in the medical device industry to ensure that products like dental instruments, intubation tubes, and personal protective equipment maintain sterility and efficacy before use.

Flexible packaging is one of the most sustainable packaging types, as it reduces water and energy consumption;

improves product-to-package ratio; enhances transportation efficiency; minimizes food waste; and reduces greenhouse gas emissions. However, full circularity options for flexible packaging are more limited than other packaging formats and materials that have been in the market longer and thus have more mature infrastructure solutions for recycling. But we believe that will not always be the case for flexible packaging, as recycling has always been iterative, regardless of product, format, or material.

FPA is deeply committed to solving packaging waste issues and increasing the recyclability and recycling of flexible packaging. We are collaborating with manufacturers, brand owners, recyclers, retailers, waste management companies, and other organizations to continue to make strides towards total packaging recovery. As we collaborate, the following are some key public policy issues covered in greater detail in my written testimony on which FDA is focused and that we believe will help increase flexible packaging recycling through innovation and economic growth, and could also benefit from some Federal Government support.

First, increase data funding and infrastructure. This includes two bills you have heard mentioned this morning currently before the House Energy and Commerce Committee: the Recycling Infrastructure and Accessibility Act and the Recycling and Composting Accountability Act. FPA encourages

the committee to pass these bills this year.

Second, advanced recycling. FPA believes advanced recycling is critical for increasing the use of safe, recycled content in certain films and flexible packaging, particularly for food contact and sterile medical applications. Anything the Federal Government can do to help support advanced recycling, including classifying it as a manufacturing process rather than a solid waste management process, will be meaningful.

Third, recycled content. FPA supports achievable and reasonable government requirements that recognize certain unique attributes or the need to limit the use of recycled content in some flexible packaging. It is also important to recognize the distinction between post-consumer recycled content and post-industrial recycled content for different flexible packaging applications. FPA believes there is an opportunity for the government to support and incentivize the use of durable products for lower-grade recycled content, while supporting research and development for higher grade uses.

Finally, consumers will benefit with more consistent and harmonized national requirements on what is considered recyclable and how and where to recycle it. However, an emerging patchwork of state-level requirements is becoming unmanageable and may create interstate commerce issues. FPA

supports AMERIPEN's proposed Packaging and Claims Knowledge Act, the PACK Act, that would establish Federal requirements for the labeling of packaging for recyclability, compostability, and reusability, with oversight by the FTA that already maintains jurisdiction over guidance on marketing claims through its Green Guides.

Additional public policy issues highlighted in my written testimony include artificial intelligence and extended producer responsibility for packaging. I hope these thoughts from FPA offer some perspective on flexible packaging and what we believe will help support continued recycling, innovation, and economic growth for us and other industries in the U.S.

I appreciate that opportunity to appear before you this morning, and I look forward to any questions you may have. Thank you.

[The prepared statement of Mr. Felton follows:]

**********COMMITTEE INSERT**********

*Mr. Palmer. [Presiding.] I thank all of the witnesses for their testimony. We will now move to the question and answer portion. I now recognize the gentleman from Texas, Mr. Crenshaw, for five minutes for his questions.

*Mr. Crenshaw. Thank you, Mr. Chairman. Thank you to all the witnesses for being here. I think we are all on the same page. We want to strive to build a more innovative economy that incorporates advanced recycling and revitalizes American manufacturing, and I think we need two key elements: clear rules at home and strong leadership abroad.

First we have to provide regulatory clarity and certainty. This is essential for innovation, for investment, and for scaling domestic recycling infrastructure. You can't build the future on a regulatory framework that is often shaped by climate alarmism instead of common sense.

Second, I do want to address the -- our global role in this. The United States must lead at the negotiating table for the Global Plastics Treaty. This is coming up soon. That means rejecting production caps and overzealous environmental mandates that have clearly hampered European industry. We shouldn't be following along with their mistakes, and those mistakes have come at the expense of human prosperity without an obvious benefit to the environment. Our goal should be encouraging innovation and reasonable environmental stewardship without handing the

entire global supply chain to China and our adversaries.

With that said, Mr. Eisenberg, if I could start with you, can you give me just quickly your perspective on what our role on American leadership should be at the negotiating table for the Global Plastics Treaty coming up? Have you had any engagement with the Administration on this?

*Mr. Eisenberg. Absolutely. Thank you for the question.

*Mr. Crenshaw. I think you need a mike.

*Mr. Eisenberg. It doesn't turn on when I -- so thank you for the question.

[Audio malfunction.]

*Mr. Eisenberg. We think they got pretty close at the end of last year. There are still a few provisions that are needed.

[Audio malfunction.]

It is very important that we lead. We, at the last -- the U.S. came in at a time of political changes after the election. They were engaging with a position that we couldn't do in the U.S., we just didn't have the law to support it. And the rest of the world knew, right? They saw that we didn't have that -- so other countries were stepping in and getting [inaudible].

*Voice. Sorry, this thing is not working.

*Mr. Eisenberg. Okay. There is literally no light

here.

So other countries were leading, and they, frankly, weren't doing it in our best interest. So I would recommend the U.S. to engage. We hope they will. We think they will. Thank you.

*Mr. Crenshaw. I appreciate that. Maybe those mikes are made of recycled materials.

[Laughter.]

*Mr. Crenshaw. Mr. Eisenberg, sticking with you, you know, we need to address this fact that advanced recycling is not classified as a manufacturing process. If it were classified as a manufacturing process, what would that do specifically? How might it drive manufacturing growth here?

I mean, it seems that -- obviously, there seems to be vast agreement on advanced recycling here. It checks all the boxes, it is good for the environment, supports American jobs, reduces landfill waste, strengthens our supply chains, enhances our competitiveness. So that question is for Mr. Eisenberg.

Mr. Felton, if you could also weigh in, and Mr. Bedingfield, with what your company is doing.

*Mr. Eisenberg. I will be quick. So there are 25 states in the country that define advanced recycling as manufacturing. That is where it is happening. You can look at the map, and that is where the starts -- they are. Ohio,

Pennsylvania, Georgia, Texas, Louisiana, places like that. So a Federal definition, we think, would open the rest of the country up to that.

*Mr. Crenshaw. So that is interesting. Mr. Bedingfield, is that why you are opening your next spot in Texas?

*Mr. Bedingfield. There are many reasons.

*Mr. Crenshaw. Well, of course, there is a lot of good reasons. Is there a Buc-ee's nearby? I don't know.

*Mr. Bedingfield. Now, with Texas, about 15 percent of the ITAD -- which is ITS at disposition where electronic waste is collected -- are located in Texas. The data center footprint that is growing, the manufacturing footprint that is growing, it is a very business-friendly environment. But recycling is -- regardless of how it is defined, it is manufacturing as much as many as anything else is --

*Mr. Crenshaw. But the definition matters legally. And was that a reason that your next plant will be in Texas?

*Mr. Bedingfield. It is not.

*Mr. Crenshaw. Okay, okay. Would you comment on that in my last few seconds, Mr. Felton, on redefining it?

*Mr. Felton. There we go. I would say -- and I thought Ms. Harrison highlighted really well -- there is a lot of things to think about when we are talking about recycling.

From the perspective of recycled content for flexible

packaging, we can use all sorts of different recycled content and at different levels for different products. For food contact packaging, medical packaging, the best path forward we see is advanced recycling. And I would say that even the FDA has acknowledged that through letters of non-objection for certain types of food contact packaging has recognized chemical recycling. So even at that level we do recognize the value of, really, a need for that in certain types of packaging applications.

*Mr. Crenshaw. Okay, I think I got an answer out of that.

I yield back.

*Mr. Palmer. The gentleman yields. The chair now recognizes the ranking member, the gentleman from New York, Mr. Tonko, for five minutes for his questions.

*Mr. Tonko. Thank you, Mr. Chair. I appreciate that some members may want to focus on those hard-to-recycle materials, but as I stated earlier I really want to try to understand some of the basic deficiencies of our recycling system. Many materials in many parts of the country that aren't considered hard to recycle continue to have what is a very low recycling rate.

So Ms. Harrison, can you help us with the -- diagnosing the root causes that make this the case?

*Ms. Harrison. So when we look at what are the barriers

to recycling working presently, we -- I think about recycling, again, as one word, but it is really a loosely connected, highly dependent network. So some of the challenges that we face we can put into five categories of what would make a healthy one. So if we know where we are and we want to get to a good system, what would make a better system?

First we would focus on design. Are things properly designed and prioritized for recycling?

Second, we would work on capture, which means can the public do it? And right now the majority of Americans still can't recycle at home.

The third thing we would focus on is participation, which means does the public believe and do the activity of putting that material into the bin?

The fourth thing we would focus on is the recovery infrastructure. Do we have the material recovery facilities to take those recyclables back and send them off to market?

And the final thing we would focus on is end markets. Does old stuff turn to new stuff? And are we prioritizing a domestic -- an American -- North American supply chain for our American manufacturers?

*Mr. Tonko. Thank you. So it seems like there is this low-hanging fruit that, with some investments in services and infrastructure, we can dramatically improve our national

recycling rates.

Again, Ms. Harrison, what are your recommendations for how we can best improve the recycling of each -- of easily recycled materials?

*Ms. Harrison. So why hasn't it worked to date? It has been chronically underfunded. Recycling is on the backs of local governments, to -- as materials are made and put into the world, then they come to the community to manage with what happens next, and that is a cost burden for Americans.

What I believe would be a better path would be the future of extended producer responsibility. EPR laws that you are very familiar with, Mr. Tonko, are -- completely change the dynamics of recycling in that they prioritize that design for a recycling piece, and then they engage the producers, the companies that are making the stuff and funding the system to make sure that recycling actually functions at a high level, the way that it hasn't been.

*Mr. Tonko. Thank you. And if recycling depends on robust end markets to incentivize demand for recycled materials, how can policymakers help support the development and strengthening of those given markets?

*Ms. Harrison. Good. The first one is to pass EPR and then to -- second is to layer on the conversation about end market use.

So we can -- what does this really mean? Today we are

talking about domestic innovation, American industry. We can use an example of PET, so soda bottles, a common food packaging. We see a high number of companies that are committed to using recycled content, but we have not invested in the U.S. system to really level up the recycling rate. It still hovers at 25, 30 percent for those materials, highly recyclable materials.

So where are companies supposed to get the material if we are not investing in the supply chain? Well, the answer is we have recently seen up to a 300 percent increase of import of cheap Asian recycled content, and it is flooding the market, putting pressure on our own companies. So that would be an example of how we could see this group lean in.

The other ones would be the CIRCLE Act that I mentioned, and that is dropping today.

*Mr. Tonko. Thank you. And obviously, some of these solutions could be implemented at the state or local levels. What are the most impactful steps that the Feds can take to help stop sending easily recyclable material to landfills and incinerators?

*Ms. Harrison. Some steps would be engaging in the global treaty, as we have been discussing; passing EPR, the CIRCLE Act, the STEWARD Act. These are all things that are ripe and ready to go. They are tested, they are data-driven, and they are -- they represent what the public is hungry for

-- is a cleaner, serious solution that doesn't put it on their burden to figure out how to make something recyclable. The system works for the public.

*Mr. Tonko. Well, according to data from the EPA, recycling rates have largely plateaued in the last 20 years. It is my understanding that part of this plateau is because gains in recycling collection and processing have been offset by increases in the amount of waste generated.

*Ms. Harrison. Mm-hmm.

*Mr. Tonko. Do you think that recycling ever creates incentives that lead to more waste being produced, or takes the focus away from waste reduction?

*Ms. Harrison. I like that you opened with the three Rs. We need to talk about reducing, making sure we are serious about what is being produced; reusing wherever we can. Recycling is a critical component, but it won't -- we can't recycle our way out of that. We have heard this at this -- it is a critical component, but it shouldn't be the solution or the trade-off for making whatever you want.

*Mr. Tonko. Well, I thank you so much.

And with that I yield back, Mr. Chair.

*Mr. Palmer. The gentleman yields. The chair now recognizes the chairman of the full committee, the gentleman from Kentucky, Mr. Guthrie, for five minutes for his questions.

*The Chair. Thank you. Thank you, Mr. Chair.

And Mr. Bedingfield, I know you had to change your travel plans to be here with us today, and we really appreciate you doing that.

So Mint, the company you are with, was founded in New Zealand but is in the process of building an electronic recycling company and in Texas and extracting valuable commodities. And you are looking for other expansion locations. Can you discuss what lead Mint to expand in the U.S., and what growth in data centers in the U.S. will mean for waste recyclers like Mint?

*Mr. Bedingfield. Sure. So Texas is the first of what we hope will be many recycling locations in the United States. The market in the United States is quite large, even the market that is recycled right now, but we are dedicated to trying to help increase that recycle rate, as well, which will only make the opportunity even larger.

The data center presence in the U.S. presents multiple opportunities and reasons why this is of extreme importance. So there is the metal that is in the data centers that we need to -- my favorite thing to say is we need to plug up the hole in the bucket. So this is not going to let us recycle our way out of it, but we can only import these metals once by recycling them and then using them in our industry here, too. But with the data centers we also need to protect the

IP that is in this and the data. So by shredding it, melting it down, and recycling it, reusing it, we solve the cybersecurity risk, we solve the IP risk, and we also return these metals to the domestic supply chain.

*The Chair. Okay, thank you. Thank you for that.

And Mr. Eisenberg, negotiations for the Global Plastic Treaty started with the focus on reducing plastic pollution and supporting recycling. But during the Biden-Harris Administration negotiations, which are trying to ban plastics and restrict chemicals, can you explain why a plastic treaty should not be used as a backdoor way to regulate chemicals, and how a secure domestic supply chain of chemicals is needed to support the semiconductor, transportation, and other industries?

*Mr. Eisenberg. Absolutely, thank you. So this process has been a lot like an NDAA, right? You know, it is going to pass, or you think it has got a pretty good chance to pass. It becomes a bit of a Christmas tree for everybody's ornaments they want to hang on it, and that is exactly what happened.

The original assignment was to address plastic pollution, including in the marine environment. It started -- the scope started to expand as we went over time to production, chemicals, things of that nature. Chemicals are addressed by a number of other treaties, right, including one

that was passed during this process. And so we believe that it is more appropriately handled there, and certainly not in the context of a plastic agreement, particularly because chemicals go in a lot more than just plastic. So if you want to address chemicals, address chemicals in a standalone thing.

Certainly on the production side this is really a competitiveness issue for us. We are the second-largest producer. China is the largest, but it is by quite a bit. And so if you start putting constraints on production, it really does threaten our competitiveness. We think let's start with focusing on pollution, the actual goal here, and handle that right now. That will make tremendous strides, including waste management for folks around the world, and actually start to actually create an environment where -- with real market signals to actually try to fix infrastructure around the world.

*The Chair. Thank you, I appreciate that.

Mr. Felton, in your testimony you mentioned that artificial intelligence and robotics are important tools used by facilities to identify and process different kinds of materials for recycling. Can you discuss how these tools are being used to increase the amount and kinds of materials that are recycled and diverted from landfills?

And are these tools available for only recycling in big

cities, or can they be used in smaller communities?

*Mr. Felton. Yes, thank you -- there we go. Thank you, Chairman, for the question.

If you take a look specifically at flexible packaging and pouches and films and things when they run through what I call more traditional recycling at a material recovery facility, existing equipment may recognize it if it is flat as a flattened box, a flattened can, or something. With increased intelligence and increased use in artificial intelligence and robotics, we are seeing success in recognizing flexible packaging and other materials more precisely within those facilities. And with that then it can be sorted, moved off to the correct bale, as it were, within a recycling facility to then be used in a recycled content manner.

In terms of the cost of that, a couple of things I would suggest is I think we will see, as with any emerging newer technologies, the cost will come down over time. I would also suggest that I think we will see the opportunity to leverage extended producer responsibility in those states that have programs in place for producers, brand owners, and others within the packaging value chain to be -- I won't say forced, but to be recommended to provide funding to that type of technology.

*The Chair. Okay, thanks.

And so Mr. Harrison, in your -- you focus a lot on households, but I know you have big companies in your group, as well. Can you discuss the work your organization does on the front end to help member companies make packaging and products easier to recycle?

*Ms. Harrison. Yes, sir. So my non-profit is funded almost entirely from corporate entities. So when they make a pledge to recycle, we say, great, we want to help you get there. So the work we do is -- really comes down to those five principles of a healthy recycling system, helping them understand that if they want the public to do their part then the companies have to do their part both on design, but then investing in that infrastructure to get it back.

The problem has been that -- I am so proud of the half a billion dollars' worth of impact we have made, but we are trying to solve a $17 billion annual problem. So there is a gap between what we have done, and the companies are asking for policymakers to step in and level the playing field with the EPR policies we are talking about because they want to do more.

*The Chair. Okay, thank you. My time is expired and I will yield back. Thank you for your answer. I appreciate it.

*Mr. Palmer. The gentleman yields. The chair now recognizes the ranking member of the full committee, the

gentleman from New Jersey, Mr. Pallone, for five minutes for his questions.

*Mr. Pallone. Thank you, Mr. Chairman, and congratulations on your new post.

I listened to what Mr. Eisenberg said, and I think I disagree, although I don't want to put words in his mouth, because I do believe that when we talk about the Global Plastic Treaty negotiations we have to shift the economic burden of recycling from consumers and local governments to producers, and I believe it should include measures to address the supply side of a plastic production to help the world get a handle on rampant plastic pollution.

I mean, as I mentioned in my opening statement, you know, part of the problem is if you put all the burden on, you know, consumers, local governments, and they just don't have the resources to do all this recycling -- and I think that is one of the reasons why recycling rates are going down, because of the fact that towns just don't have the resources to do it -- but I don't know that you said that you didn't want any action on producers --

*Mr. Eisenberg. Yes.

*Mr. Pallone. -- so I didn't want to put words in your mouth.

I wanted to ask, though, about these final negotiations for the UN Global Plastic Treaty. I know they are in Geneva

in August. They are going to have -- hopefully, come up with an agreement because the intergovernmental negotiating committee didn't reach a final agreement last December. So they are trying to develop that now in August. But let me go to Ms. Harrison.

Can you please explain why a global plastic treaty is necessary, if you will?

*Ms. Harrison. Yes, a global treaty is necessary because this problem is too big for any one company, one country, or one group to solve alone. And this treaty is also important is -- because material flows around the globe, whether that is through a supply chain or through ocean currents.

We need a global binding treaty to be able to level the playing field so that we have consistent solutions. What does that mean for the United States? It is a tremendous opportunity for us to take this global commitment and bring it home for -- to advance a national EPR approach, to prioritize the material resource conservation, and to drive our economy.

*Mr. Pallone. Well, thank you. The problem I see, though, is that, unfortunately, President Trump has a track record of pulling the U.S. out of other international environmental and climate agreements, you know, obviously, the Paris Agreement being the most notable. And I think that

cedes U.S. global leadership in the process.

So I am encouraged that the U.S. delegation was present at the recent informal discussions, and it is -- but it is still unclear to me how the U.S. delegation will approach the upcoming plastics treaty negotiations. So my second question, Ms. Harrison, is how would meaningful U.S. participation in the plastics treaty negotiations help the U.S. promote American manufacturing, innovation, and job creation?

Because, you know, everything has to be taken back at home in terms of our manufacturing, our innovation, our job creation, if you would.

*Ms. Harrison. So I have been at every one of these meetings thus far, and it has been fascinating to watch the pieces come together.

How this serves the United States is that we are home to some of the biggest companies in the world, and we lead in many areas of innovation. But as my colleague, Mr. Bedingfield said, we are behind in recycling. So if we are not sitting at the table and setting the course for what good looks like in this global treaty, it will not serve our domestic manufacturing, it will not serve our industry, it will not serve our supply chain.

So whether we go all in or not, my organization is not missing a beat in making sure that we take this opportunity

with the global companies who are at the table there, as well, to ensure that we are driving American policy like the ones that we have been talking about today.

*Mr. Pallone. I appreciate that. You know, I just think that engaging in these negotiations can really be a win for domestic manufacturing, boost the recycling sector, improve our resiliency.

You know, I meet a lot of times with the recyclers and the waste management people, and there are so many different ways, you know, so many new ways and innovative ways of doing things that sometimes are very expensive. And so, you know, it is hard to get local organizations to back it because it costs a lot of money. But there is so much innovation in this field --

*Ms. Harrison. Yes.

*Mr. Pallone. -- that could really make a difference in terms of our taking a leadership role. So thank you.

Thank you all very much. I appreciate it.

*Ms. Harrison. Well, if I may --

*Mr. Pallone. Yes, sure.

*Ms. Harrison. Recycling is all about innovation. In fact, in the -- Chairman Palmer's home state we see a company called KW Plastics that started because they were really making batteries, they had all this plastic left over, they saw an opportunity to make money from that, and now they are

the biggest polypropylene recycler in the world. That is the innovation we want.

But without policy it will stay a reaction, not a leading function. That is what we stand to gain.

*Mr. Pallone. Well, thank you.

Thank you, Mr. Chairman.

*Mr. Palmer. The gentleman yields. The chair now recognizes the gentleman from Ohio, Mr. Latta, for five minutes for his questions.

*Mr. Latta. Well, thank you very much, Mr. Chairman, and also congratulations on your gavel here in committee -- in the subcommittee. And so many questions, so little time.

If I could start with you, Mr. Bedingfield, in your written testimony you talk about the extended development timelines that are out there, and you mentioned about how long it takes for smelters for -- you know, to get into production. You know, it is almost a decade from the initial design through permitting, construction, and commissioning. And I guess my question will come down on permitting. How long does that permitting take to get a smelter into production and get it online?

*Mr. Bedingfield. Forced smelting, it can take a very long time. I recently participated in building a secondary copper smelter in Kentucky. And through partnership with both the state and locals, we were able to do that in a

fairly expedited manner. But it is complicated. It can take years in many instances.

Luckily, the technology has caught up to where it can pass for those permits, ultimately, but it does face a lot of scrutiny. That is why we are using the hydrometallurgy process, where we actually produce no air emissions. The wastewater that comes out has salt content in it, but it is less salinity than the ocean water. It actually goes down the drain. So for us, the permitting process is quite quick.

*Mr. Latta. Well, thank you.

Mr. Eisenberg, real quick, you know, your -- reading through your testimony, one of the questions I have is this -- I have about 86,000 manufacturing jobs in my district, and we do a lot of recycling in northern Ohio. And one of the things that, you know, when we are looking at trying to get more people to, you know, put the things back into recycling is this question -- is how far can you ship a product to have it recycled to make it profitable?

*Mr. Eisenberg. Well, that is a really good question, and I probably don't have the best answer for you. We could get you a more technical one in the QFRs.

But, you know, certainly there is interstate commerce of recycled products of sort of -- you know, of waste. And we have seen a number of times that new recyclers are online trying to get, you know, product from somewhere else. One of

the challenges that they have on all of the plastic recycling side -- which is a crazy thing to say -- is not enough access to clean plastic to get into the system, which is bonkers, right?

I mean, we have so much of it, and yet getting it in a very concerted way in is quite difficult. And so that is where we come back to -- and I think all the witnesses kind of agree on this -- if we fix sortation, if we fix collection, of we fix some of those basic services, then we have the supply and we will probably have a lot more folks investing in recycling.

*Mr. Latta. Well, because, you know, that is the problem you have, is that, you know, smaller communities -- and I know my home city in Ohio, Bowling Green, was one of the first cities back in the 1980s that went into recycling very heavily. But it was also making sure they had a market to be able to get that product to. And we have been fortunate in some areas that have been able to get that there. But then for some other areas it is like, okay, it costs more to ship it than it costs -- than you are going to get out of it. So I think that is one of the things we have to think about, too, is where these centers are going to be located.

And if I could just follow up, also in your testimony -- because you also brought up about kind of the ABCs of the

Federal Government when you are talking about the Federal Trade Commission, the EPA, and, you know, about the uncertainty that has chilled the market. And I think the word -- you used the word "certainty'' about twice in about 40 words, and that is one of the words we hear around this place constantly is on certainty.

And could you just talk about the absolute need to have certainty in business to be able to make sure you can do what you got to do?

*Mr. Eisenberg. Sure. We saw it in real time. EPA proposed a rule that was somewhat confusing for the manufacturers on how to handle the product that was coming out of the recycling stream at an advanced recycler, and all of a sudden their customers said, well, we don't know if we really can do this anymore because we don't know if this is going to continue. Companies that are looking to build new facilities, same kind of situation.

I think the challenge here is that we are dealing with an early-stage commercialization-type industry, and it is moving quickly. And the -- you know, the technology is evolving. The regulations aren't necessarily keeping up with it, and regulators are having trouble understanding it. And so you get strange regulations coming out, people are kind of asking them to do things, asking them to act, and they are acting in ways that maybe are not necessarily all that

helpful.

And so we really would like either EPA -- frankly, Congress -- to try to settle this once and for all, and basically just level the playing field. We are not saying preferential treatment. Just let us compete, right? I mean, give this thing a shot. Let it develop just like any other technology, and hope that it succeeds.

*Mr. Latta. Well, in my last few seconds I think you brought up a good point, is that the regulators have to understand what you are doing and have to know what that technology is.

And Mr. Chairman, I will yield back the balance of my time.

*Mr. Palmer. The gentleman yields. The chair now recognizes the gentleman from California, Mr. Ruiz, for his questions.

*Mr. Ruiz. Thank you, Mr. Chairman.

In my district Lithium Valley holds one of the largest lithium deposits in the world, a critical resource that can power battery manufacturing and more clean energy in our clean energy future. This region can supply lithium for electric vehicles and battery storage, strengthening the grid and boosting U.S. energy resilience. Lithium Valley is key to securing clean energy leadership, national security, and energy independence.

But we must also prioritize critical mineral recovery and recycling to build a sustainable supply chain. As we heard in a subcommittee hearing last Congress, recycling is an essential tool in building secure and sustainable critical mineral supply chains. That is why I am proud that Democrats invested in this space through the Bipartisan Infrastructure Law which provided $35 million for EPA to develop battery collection best practices and voluntary labeling guidelines; $3 billion for battery manufacturing and recycling; and $3 billion for battery materials processing.

Mr. Bedingfield, can you speak to how critical material recycling can help both our environment and boost national security and resiliency?

*Mr. Bedingfield. Sure, thank you for the question.

We are actually developing lithium ion battery recycling. Right now we are starting in the UK with a pilot plant to use hydrometallurgy to recover those metals. The vision will be that every site in the U.S., once developed, will also have that technology there.

These metals, if they go into the landfill, leach into our water. But they are also extremely valuable. So it is the right thing, it is the profitable thing. And from a national security perspective, with all the companies that we are reshoring, if we don't have these materials here to supply them, we have really done nothing. That is where all

of this begins.

*Mr. Ruiz. Yes.

*Mr. Bedingfield. So we have to have the metals here.

You are right, we cannot recycle our way out of it. The mines are going to take time to build. We must build them, and we must also recycle them so that we don't continue --

*Mr. Ruiz. Well, we would love to follow up and talk to you about our efforts in the region to build a full supply chain and recycling of batteries in the -- in my district.

Unfortunately, while clean energy drives critical mineral recycling, President Trump and congressional Republicans are attacking the industry through their big, ugly bill. It is a reckless, shortsighted move that undermines our climate goals, our economy, and our national security.

I also want to raise serious concerns about chemical recycling, a practice often marketed as a silver bullet for the plastic crisis that we have. In my district waste facilities using this technology have led to harmful health outcomes for residents, and have failed to deliver the promised recycling revolution. Many of these facilities either close soon after opening or do not actually recycle plastics in a meaningful way.

Ms. Harrison, I want to be clear on whether these facilities are truly part of the recycling system. If a

facility burns plastic using chemical or heated methods and turns that plastic into fuel, do you consider that process to be recycling?

*Ms. Harrison. No, fuel alone is not recycling.

*Mr. Ruiz. Thank you. I agree, and we must be honest and precise. To be considered true recycling, a facility must turn plastic back into plastic, just like we do with paper. Converting plastic into fuel through chemical or thermal processes is not recycling; it is incineration.

We have seen the harm from these misleading practices before in east Los Angeles, Mecca, and the San Joaquin Valley, where hazardous waste sites are often placed in low-income communities of color. In 2010, Mecca, a small farm worker community in the eastern Coachella Valley near where I grew up was exposed to toxic fumes from an unregulated waste facility that was leased on tribal land. For months residents suffered headaches, nausea, nosebleeds, and respiratory issues, especially young children. A local school had to be evacuated. Community members spoke out.

One mother, Lydia Varga, said, "I am afraid to let my children play outside some days. My kids had to stay indoors all the time.''

A teacher, Richard Reyes, shared he felt "very lightheaded, having a hard time concentrating and thinking. I got real shaky. I was very nauseous.''

Despite hundreds of complaints, action only came after public outrage. This was more than regulatory failure. It was a failure to protect a vulnerable community. And as we move forward with clean energy and battery manufacturing, we must center the needs of our communities, our vulnerable communities, frontline communities, science, and public health, not fault solutions that put profit over people (sic).

Thank you, and I yield back.

*Mr. Palmer. The gentleman yields. The chair now recognizes the gentleman from Texas, Mr. Weber, for five minutes for his questions.

*Mr. Weber. I thank the Chairman. Thank you on your new role.

Mr. Eisenberg, I am going to come to you real quick. Reading -- I wasn't here when you gave your testimony, I apologize for that. You said, as president of America's Plastic Makers, you oversee a self-funded group of 19 ACC plastics division member companies -- like we have Dow Chemical, for example, in my district who do a really good job -- who are working together to maximize the value and minimize the waste of one of the most versatile materials on the planet. Are you able to recruit and get more companies to do -- to get on board?

*Mr. Eisenberg. Yes.

*Mr. Weber. And how do you -- how does that work?

*Mr. Eisenberg. So companies have to apply for membership in the ACC in the plastics division. We are separately funded within ACC, but yes, we are able to. We take -- we are largely the resin producers, so the folks take it from raw material to plastic pellets. But we also have a number of what we call the value chain members, so the companies that take it from the pellets and turn it into your cups and useful products like that. And then recyclers, so traditional mechanical recyclers and advanced recyclers.

*Mr. Weber. All right. Well, thank you. I was interested in that. Interesting.

I am thankful that this subcommittee is discussing the state of recycling in the U.S. One of my top priorities in this space is working with the industry to introduce the Packaging and Claims Knowledge, PACK, Act of 2025. This legislation, as most of you all are going to know, would create the framework to establish a consistent national standard for recyclability labeling, avoiding a patchwork of state regulations.

Let me be clear. This is not about creating burdensome red tape, so I don't want all the naysayers to start that -- going down that path. It is actually about cutting through the red tape to create a uniform, pro-growth regulatory framework that helps innovators innovate. It helps consumers

make informed choices, helps industry lead the way.

Also, did I mention that the accreditation is voluntary? I want to get that out there. So this legislation would not create any mandate.

If we want to beat China, if we want to protect American jobs and reduce waste, then we need to empower American manufacturers to do what they do best: build, grow, and compete. It is not written to score political points, it is written to deliver real results, and aligns the Federal Government's role with industry-driven resolutions.

Mr. Bedingfield, I am coming to you. You are building a plant in Texas, in Longview, Texas, the northeast part of Texas, okay? You did mention that there is possibilities for more plants in Texas. Okay, we want you to get those hurried up and done in Texas. What is the status on that plant?

*Mr. Bedingfield. Thank you for the question. And yes, if I am able to do my job even halfway, there will be many more of these plants constructed.

The status of the plant right now is we have secured the site, we are taking possession of it, and we have ordered long lead time equipment. We are currently out in the market raising capital to ensure that we can build that one and the next one to two after that. So we are right in the middle of that process right now.

*Mr. Weber. Okay.

*Mr. Bedingfield. We should have the first operation hopefully up and going by Q1 of 2026, with the plant operational by the end of 2026, early 2027.

*Mr. Weber. Okay. Well, for number two we are taking applications in Galveston County, just so you know, okay?

*Mr. Bedingfield. We are engaging with a lot of different states, and we would love --

*Mr. Weber. All right, I love hearing that.

Mr. Felton, can you speak to the importance of having a unified national framework for recyclability claims as proposed in the PACK Act, rather than relying on a state-by-state approach? Tell us why that is important.

*Mr. Felton. Thank you, Representative Weber, for that question, and I very much appreciate your leadership on this issue.

We are absolutely supportive of a Federal standard, and I think you have heard discussion of recycling is very different around the country. You have heard discussion about consumer confusion of what they can recycle, where they can recycle. We believe a voluntary standard at the Federal level, through law, with jurisdiction by the appropriate agency, will help significantly with helping consumers understand how to recycle and where to recycle things. And that will give us an opportunity as an industry to be able to feel support, as it were, for these products that are being

recycled, our packaging that is being recycled, and as well the recycled content, right, that we can get from that.

So we believe the Federal standard on labeling will drive that desire to push for more recycled materials.

*Mr. Weber. I appreciate that, thank you.

Mr. Eisenberg, as you know, my district along the Texas Gulf Coast is the home of many plastic manufacturers. I mentioned our great Dow Chemical that is one of our biggest. These manufacturers are also at the forefront of developing new recycling techniques and infrastructure. Can you speak to how we strike the right balance between emerging recycling methods such as chemical recycling, while still encouraging development and investment in this space?

*Mr. Eisenberg. Yes, absolutely, so -- and that is an important point.

To actually get to the goals that we have set for the country, and to keep, essentially, waste out of landfills and the environment and all these things, you need all of these technologies, right? We need to dramatically scale up mechanical recycling. We need to dramatically invest in and scale up advanced recycling. So it is all necessary.

And we need, frankly, a good policy and a sound policy and rules of the road so that companies can feel comfortable investing in this.

*Mr. Weber. Yes.

*Mr. Eisenberg. If they can, I think they will.

*Mr. Weber. Yes. Thank you for that, Mr. -- I appreciate you all being here and your input.

Mr. Chair, I yield back.

*Mr. Palmer. The gentleman yields. The chair now recognizes gentlelady from Ohio, Ms. Schakowsky, for five minutes for her questions.

Illinois, sorry.

*Ms. Schakowsky. Yes, thank you. Get my state right.

*Mr. Palmer. Jan, I know better.

*Ms. Schakowsky. That is right. Let's see. Hold on.

Ms. Harrison?

*Voice. Yes.

*Ms. Schakowsky. Ms. Harrison, I want to thank you for the important work that you do, and I hope the work that also really affects me. I have the pleasure of living right on the -- really, right on Lake Michigan. My home is just about a couple blocks down the street. A lot of my district really loves the wonderful lake. I have a home in Michigan City, Indiana, which is right on the lake.

But I am very concerned that about 22 million -- what is it? Million --

*Voice. Pounds.

*Ms. Schakowsky. Pounds of plastic are in the lake every year. That is a lot of plastic, and we really need to

do something about that as soon as we can. And so I wanted to ask you, what are the things that we can do quickly to make sure that the lake is safer for all people?

I mean, we are swimming, we are doing everything within the lake, and yet we have this problem that is there so much. So if you could, just tell me what we need to do.

*Ms. Harrison. Yes. Thank you for your question and for your commitment to the water. And I live in Providence, Rhode Island, right on the water, too, and I see it every day.

So there are three things that come to mind for immediate impact. One is to encourage the U.S. to stay very engaged in the Global Plastics Treaty. The second is to engage with us on the CIRCLE Act, which will be introduced today, which provides tax credits for businesses and creates more opportunity for plastics recycling. And the third one is the STEWARD Act. The STEWARD Act brings forward opportunities for rural communities on recycling. Those are three immediate things that this committee can do.

*Ms. Schakowsky. So what are the things that would actually change in communities and make them safer?

*Ms. Harrison. Sure. So when we talk about a healthy recycling system, we break it into five parts.

We talk about how companies are engaged in what they produce and streamlining what they produce from -- into

things that can actually be recycled by your public.

The second one is bringing better funding for your communities so they are not paying for their recycling system, that we are using EPR to drive a new funding system for it.

The third thing is making sure that the public trusts and understands and puts that material in the right bin, never litters, never throws away or incinerates something that has so much value, the recycling of it.

And then the final piece is really making sure that old stuff turns to new stuff, investing in our infrastructure here in the -- in this country.

*Ms. Schakowsky. So the Environmental Protection Agency, does it play a role here in what we are seeing in the lakes?

*Ms. Harrison. Yes. The EPA has set targets for recycling, which has really developed momentum. It has an opportunity to really bring people together from the public and the private sector. This is not an us versus them situation. This is a bipartisan opportunity to really drive forward solutions.

So the EPA's goals help align for a common approach, and then the other critical thing that EPA has provided are SWIFR grants, which are dollars that go directly to communities to help improve their infrastructure, to connect with their

businesses, and to prevent the pollution that you are talking about.

*Ms. Schakowsky. Well, thank you so much. I hope you are having an opportunity to enjoy the lake during the summer. I think everyone ought to do that. And -- but we want to make it as safe as possible and as clean as possible. So thank you for your work.

*Ms. Harrison. Thank you.

*Ms. Schakowsky. I yield back.

*Mr. Palmer. The gentlelady from Illinois yields back. The chair now recognizes the gentleman from Georgia, Mr. Carter, for five minutes for his questions.

*Mr. Carter of Georgia. Thank you, Mr. Chairman, and thank all of you for being here today. This is certainly an important subject.

We know that recycling is a essential tool to keeping our environment clean and to mitigating streams of pollution and to creating jobs in America. Let's don't forget about that, as well. However, the proposed caps that -- on plastic production by groups such as the United Nations I don't think are the answer. Plastic is essential, and it is essential -- I am a pharmacist, a health care professional -- it is essential because of the many lifesaving products that are in the medical field such as personal protective equipment and medical-grade plastic needed for surgery. We all understand

that.

So capping production of plastic is not going to fix our issue. In fact, demand for recycled plastic is outpacing the supply, so we need to focus on fixing confusion, regulation -- confusing regulations surrounding recycling. We also need to support businesses that are putting -- are pursuing cutting-edge recycling technology such as advanced recycling.

Mr. Eisenberg, let me ask you. Can you tell me about the impact that fostering advanced recycling in the U.S. would have on the economy and on our supply lines?

*Mr. Eisenberg. Absolutely. So first things first. On the recycling side, it would make a dramatic impact, right? I mean, the types of plastics that advanced recycling can cover just aren't going to be covered by other types of recycling. So those then get out of landfills, they get out of the environment, and you have made a substantial impact there on the environment.

On the economic side, our -- my written testimony walks through some of the numbers. But essentially, if you scale this up you are creating municipal jobs, you are creating manufacturing jobs, you are creating sort of all of those follow-on jobs across the supply chain. And just like any other manufacturing industry with a sort of a high multiplier effect on jobs, you are spurring the economy, right? So you can actually do good while you are doing well, and that

really is the goal of this, to create essentially an industry around this that is thriving.

*Mr. Carter of Georgia. Great. What are some of the -- or let me ask you this. Timeliness. You mentioned in your writing that the timelines for obtaining permits are already lengthy, and due to outdated environmental review protocols and inconsistent regulatory framework. What can Congress do? Tell us what we can do to help. Tell us what we can do to fix this issue.

*Mr. Eisenberg. I appreciate that. So certainly, there is permitting legislation that is, you know, being discussed almost all -- almost every Congress. But again, right now that would be a good place for this. It would be great if Congress would essentially define advanced recycling as manufacturing, just like there is 25 states in the country that have done that. That would essentially take this issue away from the permitting process. Otherwise, you are essentially injecting uncertainty in the permitting process and making it -- and making those times speed up.

Regulating as manufacturing is a pretty significant standard, right? Under the Clean Air Act, under some of these other laws, these are significant controls that are put in place, some of the strictest in environmental law. So we are not saying don't regulate it, just regulate it consistent.

*Mr. Carter of Georgia. Okay, got you.

Mr. Bedingfield, let me ask you, what is e-waste?

*Mr. Bedingfield. That is a good question, and it is defined differently in different places. But basically, anything that has got a -- that is electronic, that has a cord on it. So from your vacuum --

*Mr. Carter of Georgia. So you are talking about the physical parts of computers and all.

*Mr. Bedingfield. Yes, sir. The entire thing is classified as e-waste. The motherboard is a specific part of it, but there is commodities that we can use in this country from the plastic, the aluminum, the steel, all throughout that appliance.

*Mr. Carter of Georgia. How are we going -- you know, Georgia is a big home to data centers. And how are we going to be able to handle this? How are we going to be able to handle all this e-waste that is going to be coming from all the AI-driven data centers?

*Mr. Bedingfield. Well, that is exactly what we are trying to do. The question is how quickly can we scale it up.

So there is a smelter being built in Georgia right now. They are stopping short and I believe exporting the product to be finished in Europe. So it is not adding back to the economy from a metals perspective. Our facilities, we are

trying to ramp up as quickly as we can to deal with them. But there are more and more electronics in our lives each and every day, which means this problem is only going to get larger if we don't come up with a way to address it.

*Mr. Carter of Georgia. So you say that the smelter is being built in Georgia, but they -- the finished product is being built overseas?

*Mr. Bedingfield. They have an existing network of facilities in Europe that actually recovers the metals back to exchange grade metal to be used in industry. There is an intermediate product that will be produced in Georgia.

*Mr. Carter of Georgia. Okay. Is that not something we can do over here if we encourage that?

*Mr. Bedingfield. It could. And I am not speaking for that company at all, but I would imagine that that is something that they probably consider.

*Mr. Carter of Georgia. Okay. Okay, good. Well, thank you all again for being here. This is extremely important.

Thank you, Mr. Chairman, and I yield back.

*Mr. Palmer. The gentleman yields back. The chair now recognizes the gentlelady from California, Ms. Barragan, for her questions.

*Ms. Barragan. Thank you. Thank you, Mr. Chairman.

Ms. Harrison, traditional recyclers that sort and process materials or turn old aluminum cans into new ones are

regulated as waste management operations with environmental standards to protect nearby communities from pollution. But some chemical recycling companies backed by the plastics industry want to call themselves manufacturers instead. That shift would let them dodge stronger environmental protections under laws like the Clean Air Act and the Resource Conservation and Recovery Act, even though many of their facilities are in low-income communities and communities of color that already face high pollution levels.

Should chemical recycling facilities have to follow the same environmental standards as other recycling and waste operations?

*Ms. Harrison. Thank you.

When we talk about chemical recycling, the challenge that plagues me is that it is not one thing. We have given a blanket term to many different technologies. And so I think, if we are going to really address the challenges that you have just outlined, we first need to start with what is the technology and its different types of unbaking the cake, as has been described earlier. So what is the technology? What is the supply chain -- which means how will we -- how -- what would be possible for feeding that plant? What are the health and human impacts, or the human health impacts and environmental impacts of that technology? And importantly, what are the economics?

In each of those environmental standards are critical. So I can't answer a yes or no because there is no one thing. This is multiple things that we are talking about.

Should we protect our land, our soil, our air? Yes, absolutely. We have to protect our planet. And recycling has to be advantageous to the protection of our planet.

*Ms. Barragan. Great. And in your testimony you list important questions that must be answered for chemical recycling. If a chemical recycling facility doesn't meet environmental quality standards, causes unacceptable harm, or is not financially viable, should it be part of our recycling system?

*Ms. Harrison. That is the question that we have put in our longstanding position. We want more innovation. We need more types of creating end markets and materials going to end markets. But in order to ensure that they are viable, we have to make sure that they are economically sound, environmentally sound, that there is transparency, and that you can track the material through them.

*Ms. Barragan. Great. And recycling only works if people know what goes in the bin. What does the Recycling Partnership's research show that helps reduce confusion and contamination, especially in multilingual communities?

*Ms. Harrison. It is very important to address multilingual and diverse communities where they are. It is

not a matter just of translating into a different language. It is really coming from a common understanding. So we do a lot of work with the diverse communities all across this country, because who is our recycling demographic? It is every single person of every age and every background. And so ensuring that the recycling system works for all is critical.

*Ms. Barragan. Great. And the infrastructure law included major investments in recycling education, outreach, and infrastructure. But the EPA is facing major staff cuts that threaten the effectiveness of the program. Can you -- how could that weaken education campaigns like you described?

*Ms. Harrison. Many -- some of the tools that the EPA uses to help support community recycling programs are grants. And if you administer grant funding for a community, you need the staff behind it to make sure that the money is managed well.

And you can't just throw money at a problem. You have to apply best management practices. If there is not the humans to do the work, the money won't matter, the effort -- the goal won't matter.

*Ms. Barragan. Right. And finally, research by the Recycling Partnership found that nearly 40 percent of Americans in apartment buildings don't have access to basic recycling. What is blocking better access? And what

programs can Congress support to help fix -- to help communities fix it?

*Ms. Harrison. Residential recycling in this country has traditionally focused on single family households, leaving multi-family households behind. Why? Some of it comes down to the way that solid waste is managed in communities. Typically, apartment buildings of four units and above -- below are part of the residential -- or the municipal collection. So it is the city that is operating that. Anything that is above four units becomes into a commercial program. So it is out of the jurisdiction of the community, and it has just become this stranded opportunity.

So we have leaned in to how we do that, because it is -- there is -- this affects every single community and a significant part of the population. But it will take a different solution.

*Ms. Barragan. So how do we get to them?

*Ms. Harrison. We need more -- we need better policy that -- such as EPR. We need things like the STEWARD Act that pull together resources for rural communities. And we need to make the value of the supply chain work better so it is advantageous to the communities. We will not get there without policy.

There is also opportunity for local mandates to ensure that recycling is required in multi-family.

*Ms. Barragan. Great. Thank you so much.

*Ms. Harrison. Thank you very much.

*Ms. Barragan. I yield back.

*Mr. Palmer. The gentlelady yields. The chair now recognizes the gentlelady from Iowa, Mrs. Miller-Meeks, for five minutes for her questions.

*Mrs. Miller-Meeks. Thank you, Chairman Palmer and Ranking Member Tonko, for holding this important hearing on recycling.

As a representative from Iowa, I know firsthand the challenges that rural communities face in accessing recycling services. Over 36 percent of Iowa households lack access to recycling, and that is over 450,000 families. It is an economic and a national security imperative, as well as an environmental issue. Iowa's manufacturing sector depends on recycled materials as feedstocks, yet we are watching China and other competitors purchase our scrap at above market prices while our own factories struggle to source domestic materials.

The data shows we are landfilling millions of tons of valuable manufacturing materials every year, materials that should be creating jobs and strengthening supply chains right here in America. In Iowa alone we are capturing less than half of our aluminum cans and only 15 percent of our steel cans, despite having a deposit on aluminum cans. That is not

just waste; it is a lost economic opportunity for our manufacturers and increased dependance on foreign suppliers.

And this challenge extends beyond traditional materials. Last year my amendment to the NDAA directed the Department of Defense to report on recovering rare Earth elements from electronic waste using acid-free dissolution technology developed by the Ames National Laboratory.

We must keep these critical minerals in American hands, not ship them overseas. It is also why I introduced the Recycling Infrastructure and Accessibility Act. RIAA would establish a pilot grant program specifically targeting communities like many in my district, without a recycling facility within 75 miles. It is bipartisan legislation that has earned endorsements from industry leaders -- many of you here today -- and manufacturers who understand that recycling infrastructure is manufacturing infrastructure, and that domestic material supply is economic security. And I urge this committee to pass RIAA.

Mr. Felton, are there ways to better utilize our pre-established recycling systems? For example, would a hub and spoke pilot program connecting small towns to establish recycling infrastructure as seen as my -- in my bill, the RIAA, improve recycling without requiring a resource-heavy system overall?

*Mr. Felton. Thank you, Representative Miller-Meeks,

for your question. And absolutely, the RIAA is another critical tool in the toolbox, if you will.

We have -- I never like to hear the phrase "recycling is broken'' in the United States. My belief is recycling is continuing to mature, and always will continue to mature. And the RIAA is a very perfect example, really, of how to increase recycling, give more people access -- a little bit of funding, right, from the Federal Government, but it is, again, another tool in the toolbox, along with a thoughtfully crafted, implemented extended producer responsibility, recycled content requirements which actually drive, don't restrict, packaging. So again, absolutely, that is a tool we need.

*Mrs. Miller-Meeks. Thank you.

Mr. Bedingfield, we are losing 10.6 billion in critical minerals through e-waste exports. My NDAA amendment last year addressed recovering rare Earth elements from defense electronics. Beyond supporting individual technologies like yours, what broader Federal framework do we need to capture the full value of our e-waste from precious metals to rare Earth elements, and keep those strategic resources in the American supply chain?

*Mr. Bedingfield. Sure, and thank you for your leadership in this space. As much as I would like to say we can solve the whole problem, we can't. So the funding that

is available right now, directing that to states to be able to incentivize businesses like ours, I think, would drive it. Working with states and local communities to find the need to create the jobs there, to recover the metal that ultimately supplies the businesses that we are bringing back is the key.

But the scale is massive. It is going to take a long time to do it, but we must get started.

*Mrs. Miller-Meeks. Thank you.

And Mr. Eisenberg, we have a Novellus and our iconic facility in our district that rely on secondary aluminum. I also have Gerdau and SSAB, and most people don't realize that 98 percent of the steel in the United States is recycled, but they are struggling to source domestic materials. We are seeing China purchase our aluminum scrap at above-market prices, process it, and sell it back to us at a premium. So just asking for you, how does a bill such as the RIAA help to address this issue?

*Mr. Eisenberg. Well, so those -- you know, this is the beauty of actually putting Federal dollars and creating pilot programs to improve sort of the accessibility here. There has been so many -- and plastics, frankly, has the exact same problem, right?

I mean, I have visited recyclers. And in the town that they are in they don't have blue bins because the municipality can't afford it. And it is -- you sort of see

this really strange dynamic. So you absolutely -- I mean, it is something that could use Federal attention. I really appreciate you doing this. We strongly support the RIAA and think it is a bill that really could make a big difference here.

*Mrs. Miller-Meeks. Thank you very much. My time has expired.

I yield back.

*Mr. Weber. [Presiding.] The gentlelady yields back. The gentleman from Florida is now recognized for five minutes.

*Mr. Soto. Thank you, Chairman.

Every week millions of central Floridians recycle, the blue bin that we have been talking about already. But we face some challenges in central Florida, particularly with glass. We see Orange County, the biggest county, is able to recycle glass. They have 20 recycling centers, a 72 percent recycling rate. But mid-size counties like my home county of Osceola County and also Polk County don't have glass recycling. We have applied for some grants. It hasn't worked out.

Obviously, glass has been recycled for thousands of years -- I mean, I was looking into this -- back to, like, the Roman Empire, right? So Ms. Harrison, how do we improve the ability for mid-sized and small counties to do glass

recycling, something that has been done for so long in human history?

*Ms. Harrison. Rural communities need extra support because recycling is a critical mass exercise. When you have enough of a like thing that you can turn into something new, you can make a profit. It is -- that is an extra burden for smaller communities because, one, they have less to collect and, two, further to ship. So the STEWARD Act is exactly this type of legislation that would help solve this sort of problem.

One of the questions that we heard earlier is, does transportation impact the value of a material? When it comes to things like glass, glass has a smaller radius with which it can move before the cost of transportation exceeds the value of return. When we establish that only economic drivers fuel recycling, it is -- we are only going to recycle it if it is making money, we are limiting ourselves for the important environmental and community impacts that would impact that. So glass is a great example for your community.

*Mr. Soto. Would that legislation address things like breakage or contamination that I know seem to be some of the obstacles to glass recycling?

*Ms. Harrison. Glass is infinitely recyclable. It is -- for thousands of years, absolutely right. And so it is best when it is kept whole, but it can still be recycled as

broken pieces.

But yes, can it affect that? By engaging the public you can reduce the contamination. So we want to keep non-glass materials out of glass, for example, and then keep it as whole as possible. And reducing transportation would help with that, too.

*Mr. Soto. Thank you. Recently the Corsair Group has reached out to local governments like St. Cloud and Poinciana and Osceola County. They are out of Europe, and have strict regulations they follow especially in places like Finland that apparently have some of the highest in the world to do pyrolysis, which is a heated, oxygen-free environment where they put plastics in it and run gases through wet scrubbers to prevent air pollution and change the smoke into oil to make gas, diesel, kerosene, and new plastics.

Mr. Eisenberg, are you familiar with the pyrolysis technique? And do you have any opinions or recommendations for our local communities, as well?

*Mr. Eisenberg. Yes, I -- yes, thank you. Yes, I do. Ms. Harrison said there is sort of a variety of different technologies. Pyrolysis is probably the dominant technology for advanced recycling right now. There is solvent-based ones and depolymerization, things like that. But pyrolysis is the one that I think most of the advanced recyclers now are using.

And every company does it differently. You know, this is an area where, you know, certainly they are responding -- from what you just said, they are obviously aware of the footprint that they have, and they are aware of -- that they do produce emissions and things like this. And so, you know, hold them to it, right? They -- you know, make sure that they are, you know, keeping track of what their emissions are.

The vast majority of our members that are doing this are very happy to sort of open up and show you their books and say this is what we are putting out into the environment. They want to be good neighbors, right? I mean, they are there to make a difference.

That being said, the emissions from these facilities is largely pretty darn low. They are often permitted as synthetic minor sources because they really are putting out things that are on the scale of like a hospital or something like that. But like any other manufacturer that moves to your district, you should, you know, make sure that they are permitted correctly and are complying with all their air, water, waste permits. And hopefully it works out well. It is a great technology, and something that we really think has a lot of promise.

*Mr. Soto. We all recognize there is a ton of plastic out there, but it is recyclable and we can recycle a lot of

it. How to do it most cleanly and efficiently is something I think we are all trying to grapple with here. And then, of course, the potential jobs resulting from it.

We benefit in central Florida from a lot of wind. There is no mountains. There is -- we are surrounded by water on all sides, so air quality is something that we haven't had to stress about as much. But I know different communities are going to look at different technologies to see what is the best fit.

I appreciate the advice, and I yield back.

*Mr. Weber. The gentleman yields back and the gentleman from Pennsylvania is now recognized for five minutes.

*Mr. Joyce. Thank you, Mr. Chairman and Ranking Member Tonko, for holding this important hearing, and to our panel for being with us here this morning.

If you look around the room where we are holding this hearing, you will see laptops, you will see cell phones, you will see cameras, you will see TV monitors and many other pieces of technology. When all of these products are eventually replaced -- and often it is sooner than later -- they will become electric waste, the e-waste that we are discussing.

With the continued increase in the amount of this technology we use each and every day, the creation of e-waste has rapidly accelerated. Efficient recycling of e-waste is

not only made difficult because of the amount of waste produced and how it is outpacing existing recycling infrastructure, but also the fact that we have new technology requiring innovation in the actual methods of that recycling.

The e-waste problem is only projected to get worse. As I have discussed extensively on this committee, the data centers needed to support AI are very resource intensive, and that intensiveness is requiring technology. The technology for the data center operations will need to be regularly advanced and updated, and the potential to add millions of additional tons to e-waste each and every year. It is estimated that in the United States alone nearly 10 billion in e-waste is discarded each year. Much of the value of this comes from critical minerals, minerals that we already lack a sufficient domestic supply of. If we want U.S. leadership in this technology and AI, we need to do a better job at recycling some of these materials.

Mr. Bedingfield, in your written testimony you stated that only 15 to 20 percent of e-waste generated in the U.S. is processed through certified recycling channels. What is happening to the rest of it?

*Mr. Bedingfield. That is a great question, and I agree with all your comments. Thank you for them. It is going to the landfill. And many of the heavy metals that actually have a lot of value -- the gold, the palladium, the silver,

the tin, the copper -- are leaching into the ground.

One thing we are extremely excited about is this seems to be one of the few bipartisan issues that people can wrap their mind around. Whether it is sustainability, national security, supply to all of our domestic manufacturing, there is something everyone here can get their -- get behind.

*Mr. Joyce. What countries are currently the leading recipients of the e-waste that is not recycled here?

And should the lack of domestic processing of this waste concern us?

*Mr. Bedingfield. The lack of domestic processing should absolutely concern us.

As I said before, all the companies that are coming here for manufacturing, they need raw materials. If we don't have them here, then we have really not done much by reshoring them. So having that full supply chain here is critical. The countries we are exporting to right now have this infrastructure, and they are in Europe and they are in Asia.

*Mr. Joyce. Mr. Bedingfield, as we continue to develop the technologies for recycling e-waste and work to deploy them, what role can the Federal Government play in helping to manage the waste until we have those capabilities?

*Mr. Bedingfield. Until we have those capabilities it is very difficult because you can't stockpile as much material as you are talking about. There is -- there are

significant stockpiles already within the government. There is up to a seven-year backlog of classified assets within our military departments that we are trying to find a solution for. So directing those materials to domestic companies with domestic capabilities helps to build the business cases to get the investments that we need to drive the capabilities here.

*Mr. Joyce. Thank you.

Mr. Felton, in your written testimony you discussed medical device packaging, the packaging that we see around IV solutions or syringes, or around isolation gowns. How can industry work with hospitals to solve the packaging and plastic waste which we know has only increased since the COVID-19?

*Mr. Felton. Thank you for your question, Representative Joyce, and I would say there is a couple of ways to sort of tackle that problem.

It could be considered business-to-business recycling, right? So in instances in hospitals and other commercial settings, there may be systems already established to recover those materials and put them back into other products, have them be recycled. It is significant impact from the flexible packaging industry. Pharmaceutical medical is about 16, 17 percent of the flexible packaging industry in the U.S.

So I think B2B is important, and then look for

opportunities to do public-private partnerships and also potentially even extended producer responsibility done responsibly. Oregon's program, for example, doesn't only cover residential recycling, it covers commercial recycling.

So, you know, if the programs move forward in the States and we can have the ability to do some more partnerships so that industry can be getting those materials back, we would find that a benefit.

*Mr. Joyce. Thank you, Mr. Felton, and thanks to all of our witnesses for appearing today.

We do have an opportunity to create a more efficient technology supply chain by leading the way in e-waste recycling. These are valuable resources if we support the innovative recycling infrastructure necessary to process them and to retain them.

Thank you, Mr. Chairman, and I yield back.

*Mr. Joyce. The gentleman yields back. The gentleman from Ohio is recognized for five minutes.

*Mr. Landsman. Thank you, Mr. Chairman, and thank you all for being here today. I wanted to do a couple of things. One is just underscore -- which has been done, but -- the economic impact, the -- just the overall impact of recycling in the United States. The EPA's Recycling Economic Information report found that recycling contributes to 681,000 jobs, $3,738 million in wages, and about $5.5 billion

-- $5.5 billion -- in tax revenue.

Ms. Harrison, can you talk a little bit about the recycling industry's impact on manufacturing and economic security?

*Ms. Harrison. Yes, I expect that there will be a number of staffers from the Recycling Partnership watching this today, and a lot of them are from Ohio, so you have got big fans.

*Mr. Landsman. Right.

*Ms. Harrison. And they want to hear the questions that you are asking right now, because recycling has long been felt -- you know, we teach it in schools, but it is like a feel-good thing --

*Mr. Landsman. Yes.

*Ms. Harrison. -- of, like, do your part in recycling. It is really about domestic supply chain. It has always been about creating fuel for U.S. manufacturing.

*Mr. Landsman. Yes. And so can -- talk a little bit about the importance of the data and all of this, the -- and improving data availability for strengthening this system.

*Ms. Harrison. Yes, recycling has long been woefully under-dated. I think that is a real word.

*Mr. Landsman. It is.

*Ms. Harrison. And that ambiguity has led to wishful thinking, has led to green-washing, but it has also led to a

missed opportunity to do the work that matters most.

The Recycling Partnership for 11 years has worked to document what is produced in the household. We actually do studies where we participate with communities to study what is in community trash cans and recycling so we can really measure what is there. Then we can map how it is getting to market. By having that data we see where the gaps are so we can have a detailed application of what works in Ohio versus, say, Tennessee. And we are able to create a prescription for how we meet the community with what they need most and serve the businesses in those locales.

*Mr. Landsman. And they -- this is a bipartisan, you know, issue, both recycling but also the data as we try to collectively get better.

The two bills, the Recycling and Composting Accountability Act and Recycling Infrastructure and Accessibility Act of 2025, would help to bolster recycling data and measurement as well as accessibility. These two bills were in the final spending package, and so this is -- it is important, I think, as we approach the next spending bill, to appreciate all of the things that got pulled out. These two bills were pulled out. Can you talk a little bit about the impact these two bills would have?

*Ms. Harrison. Yes. This committee has the opportunity to mark them up and put them together in the STEWARD Act, and

that would serve primarily rural, but all communities with solutions. It would drive forward opportunities for small manufacturing and large, and there is an opportunity to do that right now. So the STEWARD Act is an immediate step this group can take, and then the CIRCLE Act that is being introduced today is the next one.

*Mr. Landsman. Yes, STEWARD, CIRCLE, and potentially, as part of a final, you know, end-of-year spending package. But I hope this committee pursues that bipartisan work, getting it on the floor, getting in something that is moving, STEWARD or otherwise, and making sure this gets done finally, since we didn't get it done last year. Thank you all --

*Ms. Harrison. Thank you.

*Mr. Landsman. -- very much.

I yield back.

*Mr. Palmer. [Presiding.] The gentleman yields. The chair now recognizes the gentlelady from Tennessee, Mrs. Harshbarger, for her questions.

*Mrs. Harshbarger. Well, if I -- microphone on -- can you hear me?

*Voice. Yes.

*Mrs. Harshbarger. Good. Thank you, Mr. Chairman, for allowing me to waive on, and thank you to the witnesses for being here today.

You know, we use plastic in everything. I mean, we

store our food that way, we use it in medicine. You don't -- you can't walk into my pharmacy and not see syringes or anything like that. I mean, we use a lot of plastic. But when we are talking about the future of plastics, we need to work towards making a more circular economy.

And my district is home to Eastman Chemical Company, and it is the largest dedicated advanced recycling facility in the world. And in Kingsport, Eastman has been taking plastics that normally would go into the landfill and then instead use the materials -- the material recycling process. And they can convert and create new plastic materials that have the same quality integrity as plastics that were made directly from petrochemicals. And to Mr. Bedingfield's point, it keeps those plastics out of the landfill from leaching out microplastics. There is a lot of health concerns when it comes to that.

So when I think about this, I think it is important to weigh the economic opportunities for our country, and it is possible to direct U.S. policy to provide incentives that will build these advanced recycling facilities in the U.S. instead of overseas in China. And we can bolster confidence in the domestic recycling system. And I think you will see a lot more onshore manufacturing that brings domestic jobs and investment to our country.

Mr. Felton, I guess I will ask you this. What plastics

are generally recycled, I guess, the most today?

And what are the barriers to recycling a broader range of those plastics currently in use?

*Mr. Felton. Thank you, Representative Harshbarger, for your question.

Generally speaking, if you look at -- if you think of the resin identification codes on products, including packaging, they are generally one through seven, generally speaking, one and two. So even a bottle like this may be more recyclable. Many of those others are -- those others, three through seven, are recyclable. It needs the infrastructure behind it and the opportunity to recapture that.

And advanced recycling, as you have mentioned, is one of those examples for particular types of recycled plastics to be able to move them back to full circularity. And that is why FPA is supportive of that.

And I think also looking at the opportunities for specific packaging applications as you recycle those plastics -- you mentioned pharmaceutical, medical devices --

*Mrs. Harshbarger. Yes.

*Mr. Felton. -- food contact.

*Mrs. Harshbarger. Yes.

*Mr. Felton. It is critical. Companies are trying to use as much -- less virgin plastic, more recycled content,

but they need pathways forward to do that --

*Mrs. Harshbarger. Yes.

*Mr. Felton. -- different collection methods, as Ms. Harrison has suggested, also different recycling methods.

*Mrs. Harshbarger. Yes, that is why I think circular recycling is the bomb.

*Mr. Felton. Yes.

*Mrs. Harshbarger. Well, how does advanced recycling improve the recycling system in the U.S., I guess, and what are the steps that need to be taken to make those technologies complementary to the existing technologies that are deployed?

*Mr. Felton. Yes, thank you for that question.

I would say one of the things to be thinking about is collection. We have, you know, what we typically call traditional recycling at curbside.

*Mrs. Harshbarger. Yes.

*Mr. Felton. Absolutely, we need that. The flexible packaging industry needs and wants it, but we need other methods, as well, right? We want store drop-off, we want depots, we want subscription services. And all those different types of abilities, ways to collect packaging and other products are meaningful to contribute to that full circularity.

*Mrs. Harshbarger. Yes, exactly. You know, we have

seen periodic efforts, I guess, to increase recycling infrastructure domestically. You see them here, you see them there. There is not really a defined path. But policies are needed to see a nationwide improvement in these recycling rates and the development of infrastructure that can address the plastic being used by Americans today. Do you agree, everybody?

I mean --

*Mr. Eisenberg. Yes.

*Mrs. Harshbarger. I just -- look, if anybody wants to throw anything in that I haven't covered, but I am all about recycling. But we can go to infinity and beyond with some of these plastics that you recycle over and over and over, and we can get away from some of the petrochemicals. Anybody got anything to add?

Yes, ma'am.

*Ms. Harrison. So the example of the Kingsport Eastman facility is a good one to bring innovation, American industry at its best. What it needs most, though, is protection to make sure that companies are using that high-quality recycled content that you talked about, and ensuring that it is not getting displaced by cheap imports that could disrupt the momentum that you are talking about. So that is an area that we would love to see your help leaning in.

*Mrs. Harshbarger. Well, that is what I am working on.

So thank you all.

And I will yield back, Mr. Chairman.

*Mr. Palmer. The gentlelady yields back. The chair recognizes the gentleman from New Jersey, Mr. Menendez, for five minutes for his questions.

*Mr. Menendez. Thank you, Chairman.

I am always proud to represent New Jersey, especially since it has been a national leader on extended producer responsibility, or EPR, laws which shift accountability for product recycling from households and municipalities to our industry partners. In 2024 New Jersey passed the first-of-its-kind EPR law for electric vehicle batteries to incentivize recycling and sustainable management of EV batteries, and ultimately advance vehicle electrification.

EV batteries contain valuable materials, and collecting and recycling batteries helps us conserve resources while reducing harm to human health and the environment. New Jersey's EPR law for EV batteries is just one example of how EPR can be applied in innovative ways to solve many types of waste issues.

Mr. Bedingfield, you mentioned in your testimony that Mint's platform is expanding to lithium ion battery recycling. How can recovering and recycling critical materials from EV batteries help promote a circular supply chain for American manufacturers?

*Mr. Bedingfield. Thank you very much for that question.

So first of all, there is a difference. We do recycle a lot of materials, and it is processing and getting things down to commodity level. But then many of those processes and the process -- or the material that comes out of lithium ion batteries is called black mass. We don't have the processes here in many instances to recover it back to the cobalt, lithium, nickel that comes out of that to be able to be reused. That is what is being exported.

So the process that we are developing actually recovers it so that we can feed those right back into the businesses that are based here in the country to make new batteries. So that is the key, is finishing that loop. You know, the collecting is only step one. Then we have to be able to recover the metals to be reused here.

*Mr. Menendez. For sure, I appreciate that. And obviously, that will have immense benefits for our supply chain as we continue to have more domestic manufacturing of EV vehicles. Is that correct?

*Mr. Bedingfield. Yes, sir.

*Mr. Menendez. Yes.

*Mr. Bedingfield. It is only growing.

*Mr. Menendez. And it is important that we foster circularity to reduce our environmental impact and reliance

on foreign supply chains, as we just discussed. EPR programs can also help bolster supply chains by keeping recycled materials in use and promote more sustainable product design.

Ms. Harrison, in general why should businesses take financial responsibility for the full life cycle of their products?

*Ms. Harrison. So I think a good example of what change looks like -- in 2023 we partnered with the Coca-Cola Foundation, and we piloted a new education campaign in Newark, New Jersey. So we helped put 4,000 new carts, recycling carts, on the ground and redid the whole education program. And we project that Newark now collects more than 700 new tons of material per year. That is an opportunity that companies have not just to work on what they are producing, designing for recycling, but by investing in communities they see that they can make meaningful change.

The challenge is, one by one, it takes a very long time to do that. That is where the opportunity of policy, EPR, comes in to be able to give the same opportunity that Newark got in -- for -- in your fine state to every community.

*Mr. Menendez. Yes. No, I appreciate that. And, you know, obviously in the current construct, right, it is the individuals, the families, it is the municipalities who are paying for the waste and the recycling. And EPR programs can help ensure that manufacturers take responsibility.

I think you brought up a good point. It is -- thinking about when they are responsible for the full life cycle, it may enhance their design phase, right --

*Ms. Harrison. Yes.

*Mr. Menendez. -- to think about what they are delivering to the customer if they are also responsible for recycling, right? I think that is --

*Mr. Eisenberg. Correct.

*Mr. Menendez. It is good business, and it is good for our environment. It is good for our -- all of our constituents.

Ms. Harrison, can you expand on how EPR can spur needed investment in our nation's recycling system?

*Ms. Harrison. Yes, the U.S. recycling system, if we were going to fix it -- which we can --

*Mr. Menendez. Yes.

*Ms. Harrison. -- which means that everyone can recycle, everyone does, and old stuff turns to new stuff, we are looking at a $17 billion CapEx. So that means everyone has carts, we have got trucks, we have got good infrastructure. Then annually that is a $17 billion investment to run it.

We know the return is more than fourfold on that. It comes back into the U.S. opportunity to make new things, to domestic supply chain. So we see a really strong opportunity

to invest in our system. It serves our communities, it prevents pollution, and it serves manufacturing. So it is a no-brainer in my book.

*Mr. Menendez. Yes. And do you think -- is there a way we should be sort of reframing the conversation? Right? Because as we have alluded to here, you grew up with the three R's about recycling, right? And it seems like sort of like more of a task, right, for both for companies and for individuals, for communities. Is there an opportunity in this moment, because of all the benefits that we have discussed in this 4-and-1/2 minutes and in the broader committee hearing, is there a way that we should be reframing it to get people to engage in it in a way that they are going to actively want to participate?

*Ms. Harrison. Yes. The first step is to make sure that they can, and that it is easy, and it is not confusing, and then trust. They want to see the process of their yogurt cups becoming car parts, and their cans becoming airplane parts. They would love to know about that.

But I would challenge us not to rely on it always being the consumers' -- the public's burden. We need to build the system. Once the system is there, then they will participate.

*Mr. Menendez. Yes, I appreciate that.

*Ms. Harrison. Thank you.

*Mr. Menendez. I would love to hear from Mr. Bedingfield, but I don't want to be too -- anyway, I will yield back. Thank you all so much.

*Mr. Palmer. I thank the gentleman for yielding. I now recognize myself for five minutes for questions.

And I am sorry. This is my first hearing, and it is like I have never done one.

[Laughter.]

*Mr. Palmer. I now recognize the gentleman from Virginia, Mr. Griffith, for five minutes for his questions.

*Mr. Griffith. I really appreciate you, Chairman, allowing me that opportunity, and let me apologize to the witnesses. I have been chairing a meeting downstairs and trying to juggle when I could get up here. And so I ran up the stairs to get here.

Microplastics is something I am really interested in. I apologize if it is repetitive, but there is concern. It is becoming more visible issue, with news media beginning to publicize what is going on and microplastics in the brain. And where is that plastic coming from? And I am hearing all kinds of different reports from my plastic water bottle to the tires on the highways. Does anybody have a definitive answer yet?

*Mr. Eisenberg. So I am happy to take that one, and t is --

*Mr. Griffith. I assume the answer is no, nothing definitive yet. But where are we going?

*Mr. Eisenberg. Yes. So -- and that is really symbolic of the challenge.

So there are a number of sources, right? We know that it is coming from tires and tire runoff. We know it is coming from textiles, from the clothes we are wearing and things like that. We know it is coming from big plastics that become little plastic because of their environment and they start to degrade and things like that. We are still trying to figure out how much of it is coming off of existing plastics that -- you know, in sunlight and things of that nature.

And really, that is the -- that is what, I think, the message that I think is most important here is that I think if you ask anybody -- scientists, environmental activists, industry person -- we all need more science, right? We need dramatically more science to help inform the policy here.

We, the chemical industry, the global chemical industry, are putting -- we funded over 100 researchers in 37 institutions around the globe. We need so much more than that. We are trying to get these answers. We hope that Congress will act and help do this as well. Let's get those answers so that we can reassure the public of what is going on here.

*Mr. Griffith. Well, and I appreciate that. And of course, the problem right now is you don't know what to do. I mean, I --

*Mr. Eisenberg. Agreed.

*Mr. Griffith. It is little stuff, but I changed out my tea bags this week because apparently some of them use a plastic fiber, and a lot of them are switching back to plant-based. And so I switched my bags out and went with a more expensive tea bag. I am cheap and was trying to stay cheap, but it is that kind of stuff that we worry about.

*Mr. Eisenberg. Yes, and totally understandable, right?

Now, I will channel the chemical side of the house at ACC. The presence of a chemical is not a risk, right? I mean, we have to do our risk evaluation and understand that -- if the presence of the chemical actually does demonstrate a risk to human health, and that is something that we should absolutely be doing here as the science develops.

But in the meantime we can also be focusing -- I mean, that is the great thing about this recycling message that we are all putting here. We can take care of the big plastics not becoming a little plastics, right? Let's get them back into the system. Let's make this circular, and make sure that that piece of the challenge is taken care of right now.

*Mr. Griffith. And I would say I am really excited about some of the recycling stuff that is happening out

there. I have visited -- I know you heard from Diana Harshbarger a few minutes ago, and I don't know what her questions were, but I have visited the Eastman facility that is in her district because it is within eight miles of my district. And so I have -- about 10 percent of their workforce is in my district. And the research that they have been doing for decades on cracking open different carbon molecules and rearranging them and creating new plastics, it is absolutely fabulous. And instead of putting this plastic into the ground, if we can find good, efficient practical ways to recycle it, that is absolutely the goal, I think, of all Americans. Does anybody disagree with that?

None of our panelists -- let the record reflect none of the panelists disagreed with that comment. And so I really appreciate what you all are doing. We just have to try to figure out the science, and that is the hard part.

I have about a minute left. Does anybody have something to add to the questions I have asked or the concerns?

Yes, ma'am.

*Ms. Harrison. Well, I think the very nature of -- you, as just an individual trying to figure out what is the best way to handle this -- which tea bag is right? What about your carpet? What about the clothes? That is exactly why we need this committee and why we need leadership from Congress. Because the public can't answer all that. Busy moms can't

answer all that. They just need things to be healthy.

And so this is where we need policy to set up a good system to -- that drives innovation and U.S. opportunities, but that also keeps the public safe. And so I think the research that we need has to be funded in part from you all and in the leadership so that we can all make those good choices.

*Mr. Griffith. And I won't disagree with that because what I want to see is that we make decisions based on science, and too often what we do is we decide something is bad, we get scared, and it is understandable that the public gets scared. I mean, as cheap as I am, I wouldn't have bought new tea bags if I didn't have some concern about, you know, plastics in the brain.

But that said, we have got to have the science before we go throwing the product out, which has been an amazing product for consumers and, in fairness, for the health of the environment over time. It doesn't mean everything is perfect, but I believe it has been a real asset to our environment. Notwithstanding those who just look at the negatives, the positives far outweigh those in my mind.

With that, Mr. Chairman, I appreciate you giving me the time, and I yield back.

*Mr. Palmer. I thank the gentleman for yielding. I now recognize myself for five minutes for my questions.

And as I was about to point out earlier, yesterday I introduced the Securing America's Mineral Supply Act of 2025 to codify President Trump's executive orders that will ensure we secure our critical mineral rare Earth element supply chain. So Mr. Bedingfield, you spoke of the importance of securing processing of e-waste, and I would think you would include refining, as well. But what they -- a lot of people don't realize is what a national security risk we have created for ourselves by basically exporting the processing and refining to an adversarial nation. In your process you destroy any data -- any potential for data recovery. Is that correct?

*Mr. Bedingfield. Yes, sir, we do. We shred to below two millimeters, which is NSA standard for data destruction.

*Mr. Palmer. Do you think China does that?

*Mr. Bedingfield. I am honestly not sure what China does. I don't think any of us are, and that is absolutely the problem. But if they can get data, I would think they would sure take it.

*Mr. Palmer. You also talked about how you have the capabilities -- each facility has the capability to recover, for instance, 1,000 tons of copper, a ton of gold, 250 tons of lithium, 500 tons of cobalt. These are the things that we are having to import from China. You said 1,000 tons of nickel. Those elements and those minerals were very likely

not sourced from here. Would you say that, that they are likely sourced from mines in Africa and South America and processed and refined in China, placed in the electronics that we buy, so we are recovering basically what China has mined, processed, and refined? Would you agree with that?

*Mr. Bedingfield. Yes, sir. We have to import them because we don't have the capacity here. And then, when we export them, we do it all over again. So we need to keep those minerals here. If we have to import them the first time, fine. But once we get the mines up, hopefully that ends. But at the very least right now, we should only import them once.

*Mr. Palmer. You also in your written testimony said that we export 340,000 tons of e-waste each year. Where does that go?

*Mr. Bedingfield. Most of it goes to either Europe or Asia. That is where the big refineries are. They have built these things over decades and decades --

*Mr. Palmer. Europe has the refining capability to refine e-waste. Do they also have the refinery capability to refine processed aggregate, or is that -- that is obviously a different process, isn't it?

*Mr. Bedingfield. It is, but I believe they do, as well.

*Mr. Palmer. Okay. Mr. Eisenberg, we talked about

recycling, and part of the problem with that is -- I think -- is that the market doesn't support it. And do you see a future where the market would pay for recycling so the recycling would pay for itself?

*Mr. Eisenberg. Pay for itself? I mean, hopefully, yes. I mean, any technology, if you -- is my mike on?

*Mr. Palmer. Yes.

*Mr. Eisenberg. Any technology, if you do sort of mature it, will become cost competitive, right? I mean, that is the beauty of it, and putting all the additional time --

*Mr. Palmer. Okay.

*Mr. Eisenberg. -- and effort into it.

*Mr. Palmer. Ms. Harrison, I asked my colleague, Mr. Tonko, to let me see his cranberry juice bottle. And on it there -- it states that we will pay $0.05 for redemption. One state on the bottle pays $0.10. Do you think that that would play a role?

And I say that because when I was just a kid we had a chance to go to the University of Alabama to see the state basketball playoffs, but we had to have $5, and I was -- I grew up dirt poor, so I walked up and down the road and pulled soft drink bottles out of the ditch, went to the neighbor's house and asked for them to try to come up with 100 to get the $5 I needed.

*Ms. Harrison. Did you do it?

*Mr. Palmer. I did. I bought a hamburger.

[Laughter.]

*Ms. Harrison. Deposits can definitely help, but I think it is important we break this into two parts. There is the cost of collecting it and getting it to the end market. And that deposit helps offset the cost for communities to get it into the recycling system.

*Mr. Palmer. But you are talking about communities, and I think that is where we kind of lose the market part of it. We have got to figure out a way where there is a market solution to incentivize people to do this because if it is just a matter of trying to remember to separate what you put in your trash -- put out, you know, one time a week or whatever -- but if there is some way that we can incentivize this --

*Ms. Harrison. Yes.

*Mr. Palmer. -- I think it would really help.

And you talked about, Mr. Eisenberg, about a national standard. I think what we ought to be talking about here is not, you know, some of the politics that we get into here, but really coming up with a solution that makes sense, that it is not always run by the government because there is -- I think there is an automatic dismissal of government programs unless it is enforced on people. So if we could come up with a way to incentivize this, I think we would make some pretty

significant advances in our ability to recycle and solve some of these problems that we have.

I can't believe I am already out of time. But I will yield back and recognize the gentleman from Louisiana, Mr. Carter, for five minutes for his questions.

*Mr. Carter of Louisiana. Thank you, Mr. Chairman, and thank you to our witnesses for joining us today.

I am a proud supporter of recycling, not just because it is good for the environment and sustainability, but it also -- but because it is -- the circular economy where materials are reused, recycled, and kept in circulation is good for business. The business community gets this. That is why my hometown of New Orleans began partnering with New Orleans and Company, our local tourism bureau, to create recycled dat. Dat, like who dat.

[Laughter.]

*Mr. Carter of Louisiana. The first official recycling effort for Mardi Gras, the largest street party on Earth, generated more than two million pounds of trash annually, which the city had to collect after the parties and parades were over. Now they have shifted their efforts to working with local recycling businesses to keep those plastic beads, beer cans, and water bottles from clogging our storm drains or ending up in landfills. This past year the program collected over 23,000 plastic bottles, 46,000 pounds of

glass, 22,800 pounds of beads and parade throws. Our tourism leaders understand that visitors to our city not only want to enjoy our culture, but they also want to do it in an environmentally responsible way.

On a national scale, an expanded circular economy can create jobs, reduce greenhouse gas emissions, and make our supply chain more resilient. According to the EPA, recycling and reused -- recycling and reuse already supports 680,000 jobs, generating more than $37 billion in wages and $5.5 billion in tax revenues annually. Programs like the Solid Waste Infrastructure for Recycling, or SWIFR grants, and the recycling education, or REO, programs are critical lifelines for communities seeking to modernize outdated recycling infrastructure and educate the public on effective recycling practices. These aren't just environmental programs; they are economic development tools, as well. A quick question for Keefe Harrison.

Mr. Harrison -- Ms. Harrison, I am sorry, Ms. Harrison -- the City of New Orleans is proud -- is a proud recipient of a SWIFR grant. Your team at Recycling Partnership helped put the application together, and now we are assisting the city in implementing the project. Nearly four million in bipartisan funding from the Bipartisan Infrastructure Law will transform the way my neighbors and I can recycle.

Can you tell us more about how the grant will improve

recycling in New Orleans, and how this project can serve as an example for other communities across the country, recognizing the great work that we have in New Orleans?

*Ms. Harrison. Yes, Representative Carter. We were so proud to join you in that announcement, and our team worked hard to make sure that New Orleans is a shining star.

This grant will make sure that 83,000 community -- or households in New Orleans will now be able to recycle. It will give them the infrastructure that you are talking about. It will also layer in the education to make sure they know what to do.

Our research shows that 58 percent of Louisianans don't understand what to recycle.

*Mr. Carter of Louisiana. As you mentioned, a portion of the award will go toward solid waste master plan, including an evaluation of regional recycling processing infrastructure opportunities for the city to obtain Materials for Recovery Facilities, or MRF, which receive -- sorts and prepares recyclable materials for sale to manufacturers. Why should Federal funding be used for municipalities to undertake these studies?

And why would a new MRF be beneficial to the New Orleans region?

*Ms. Harrison. A new MRF would be beneficial because the -- so when we put our stuff into the recycling cart, it

is all mixed together. Then you have got to separate it out. That is what happens in a MRF. It is a critical step for making sure that those materials make it to end market. Many of those MRFs, you know, they have evolved over time, and they are not at pace with the diversity of packaging that we are talking --

*Mr. Carter of Louisiana. How much time does that save you when you don't have to go and resort all this stuff?

*Ms. Harrison. It saves time, it saves money, but it also increases the amount of recyclables that get to U.S. manufacturing.

*Mr. Carter of Louisiana. And we know we generate a lot of beads, a lot of plastics.

[Laughter.]

*Ms. Harrison. I have been.

*Mr. Carter of Louisiana. You know, when we say, "Hey Mister, throw me something,'' we throw it. We want people to enjoy Mardi Gras. We want them to enjoy it respectfully, peacefully. And we want to recycle, not just during Mardi Gras. That is, obviously, an important time. But as you know, New Orleans has no shortage of festivals, French Quarter Festival, Jazz Festival, Essence Festival, Tomato Festival, fried chicken festival. And all of those things generate a lot of debris that can be recycled and put back into the secondhand market for manufacturing.

*Ms. Harrison. Yes. The mayor of New Orleans recently joined me for a webinar, and she is so fiercely proud of the leadership that she is bringing to the community to make sure that everyone has the opportunity. The equal opportunity is key.

*Mr. Carter of Louisiana. And I am proud to say the people of New Orleans are eager. They love what you do. They love the idea of recycling. They love the idea of having venues so they can recycle.

So, Mr. Chairman, my time is up and I yield.

*Mr. Palmer. Hey, Mister, can you throw me some fried chicken?

[Laughter.]

*Mr. Carter of Louisiana. Absolutely.

*Mr. Palmer. The gentleman yields. I would like to thank our witnesses for being here today.

Members may have additional written questions for you, and I will remind members that they have 10 business days to submit additional questions for the record, and I ask that the witnesses do their best to submit responses within 10 business days upon receipt of the questions.

I ask unanimous consent to insert in the record documents included on the staff hearing documents list.

Without objection, that will be the order.

[The information follows:]

**********COMMITTEE INSERT**********

*Mr. Palmer. Without objection, the subcommittee is adjourned.

[Whereupon, at 12:30 p.m., the subcommittee was adjourned.]