Flexible Packaging Association
Connecting. Advancing. Leading.

185 Admiral Cochrane Drive
Suite 105
Annapolis, MD 21401

Tel (410) 694-0800
Fax (410) 694-0900

www.flexpack.org

November 13, 2026

Minnesota Pollution Control Agency (MPCA)
Attn: Mallory Anderson
520 Lafayette Road
Saint Paul, MN 55155
online submittal: https://comment.pca.state.mn.us/minnesota-packaging-waste-and-costreduction-act-2026-needs-assessment

Re: Minnesota Packaging Waste and Cost Reduction Act – 2026 Needs Assessment

Dear Ms. Anderson,

Thank you for the opportunity to provide feedback on the 2026 Needs Assessment completed by Eunomia for the Minnesota Pollution Control Agency (MPCA). We appreciate the complexity of documenting and mapping a pathway for extended producer responsibility (EPR) in Minnesota, particularly when drawing on a wide range of stakeholders and limited data sources.

We recognize the considerable effort that went into this report. In reviewing the sections on flexible plastic packaging, we found areas where the data appears incomplete or where additional context may help prevent unintended conclusions. We are submitting these comments and supporting data in the spirit of collaboration, to help strengthen the study and give Minnesota a fuller understanding of flexible packaging and its recovery pathways in the state. While the needs assessment addresses all materials, our comments are limited to flexible plastic packaging.

About FPA and the Flexible Packaging Industry

FPA represents flexible packaging manufacturers and their suppliers across the United States. Flexible packaging is the fastest-growing and second-largest segment of the U.S. packaging industry, with $51.5 billion in annual sales and approximately 98,000

manufacturing workers nationally. In Minnesota, our industry supports nearly 1,400 of those workers and has a total economic impact of nearly $2.3 billion.[1] Flexible packaging is produced from paper, plastic, film, aluminum foil, or any combination of these materials, and includes bags, pouches, labels, liners, wraps, rollstock, and other flexible products.

We understand that Eunomia met with several industry trade associations in preparing the needs assessment. We were not aware of this outreach and did not have the opportunity to participate, and we recognize that the report does not list the stakeholders consulted and so we cannot say for certain who was engaged. As the largest trade association in the U.S. dedicated to flexible packaging manufacturing and recovery, FPA welcomes the opportunity to contribute to this work and are pleased to offer our data and expertise here.

Summary of Concerns

1. The needs assessment treats "flexibles," and at times "plastics," as single categories for performance and program targets and volumes, obscuring large differences in resin, format, end use, and recyclability.
2. The needs assessment does not show what share of flexible film was excluded due to statutory exemptions nor does it breakout volumes by resin and use, which matters for collection and processing strategies.
3. The estimate of 333,100 tons of film generated in Minnesota appears significantly overstated, and its basis is not documented.
4. The assumptions behind the recycling-rate targets are not documented, and the trajectory (13% at both 5 and 10 years) is unexplained**.**
5. End markets and collection access are understated and better data can and should be provided.

[1] John Dunham & Associates (2025) Economic Impact of the Flexible Packaging Association. https://comment.pca.state.mn.us/minnesota-packaging-waste-and-cost-reduction-act-2026-needs-assessment/surveys/contact-information

Understanding the Scope of Flexible Plastic Packaging

"Flexible packaging" is commonly used to describe all packaging formats that mold to the products they protect. In practice, flexible plastic packaging spans many different resins, materials, and formats. This diversity is central to the challenges of recovering these materials.

The needs assessment acknowledges that some materials and formats are more widely recyclable than others, yet its proposed targets, volumes, and strategies refer to flexibles as a whole. At times it assigns targets or volumes to "plastics" without differentiating flexibles from rigids, or resins and formats from one another. "Plastics" and "flexibles" are simply too broad to support meaningful targets and recovery data. For the purposes of an EPR needs assessment, we strongly advise against treating all flexibles as a single entity for goal setting and volume assessment.

To demonstrate this diversity, we are sharing some high-level insights from FPA's brand new Flexible Packaging U.S. Market Profile and Circularity Assessment[2] that examines the mix of resins, materials, and formats on the U.S. market and the potential for recycling and post-consumer recycled (PCR) content. Please note that the data is national.

Material and Resin Makeup

Figure 1 provides a high-level breakdown of flexible packaging categories in the U.S. by pounds of material used. Each category is classified as all-polyethylene (all-PE), multi-plastic, or multi-material. Multi-plastic structures typically combine multiple plastics or use a non-PE structure (for example, all polypropylene – PP). Multi-material structures generally combine plastic with paper or foil, though a few categories may be paper-based only.

[2] PTIS for FPA (November 2026) "Flexible Packaging U.S. Market Profile and Circularity Assessment"

Figure 1. Material Composition by Weight, 2024[3]

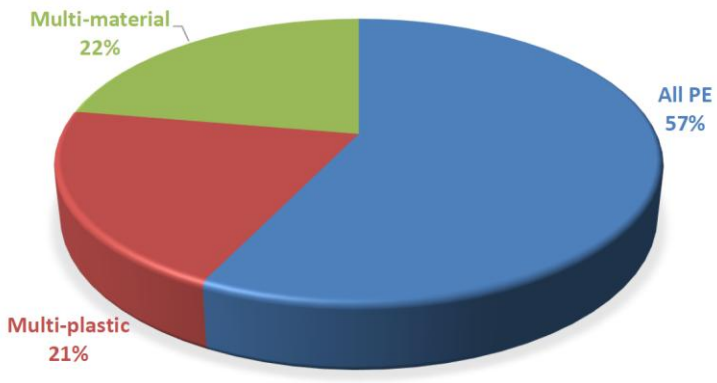


Table 1 breaks down the percentage of the films in the U.S. market by primary resin used.

Table 1: Film and Resin Use by Category[4]

Type	Percentage (%) of Film Used in US Market	Percentage (%) of Resin Used in US Market
Polyethylene	55	77
Polypropylene	26	12
Polyester	11	5
Nylon	4	2
Other	3	3
Polyvinyl Chloride	<1	<1
Biopolymers	<1	<1
Polystyrene	<1	<1
TOTAL	**100**	**100**

What these two data points tell us is that mono-material PE is the majority of the U.S. flexible packaging market whereas multi-plastic and multi-material structures together make up less than half of the market, in similar shares. By resin, PE and PP dominate. Many

[3] IBID
[4] FPA (2025) State of the U.S. Flexible Packaging Industry- Industry Report 2025. Available to MCPA upon request.

films contain multiple resins, but 55% of the film market uses PE and 26% uses polypropylene (PP), followed by polyester and nylon. Two primary resins therefore make up the large majority of the market, with PE the most prevalent.

This is encouraging, since PE films are the most widely recyclable films and have multiple end markets. However, stating that PE films are widely recycled can be misleading, because end use also affects recyclability. When we look at how flexible films are used, the complexity behind these challenges becomes clear. Figure 2 denotes the sectors where flexible packaging is used.

Figure 2: US Flexible Packaging Industry: Breakdown by End Use Market 2024[5]

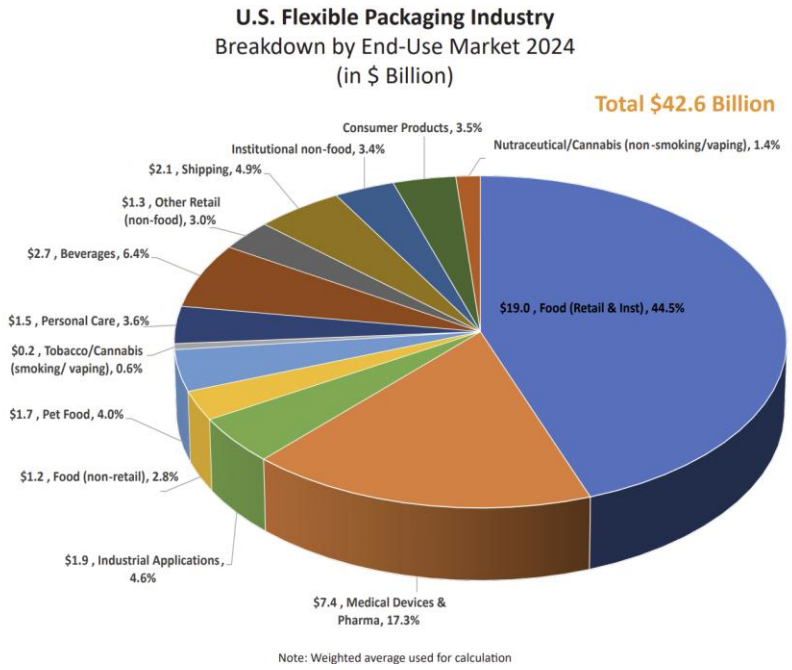


Figure 2 tells us the largest user of flexible films is the food industry, which uses it for both dry and wet products (for example, bread bags versus soup or meat pouches). The next

[5] IBID

largest user of flexible packaging in the U.S. is medical device and pharmaceutical packaging, which will generally be exempt from EPR program requirements in Minnesota. As exemptions and recyclability are factored in, the share of flexible film that is both in scope for EPR and/or recyclable becomes much smaller. For example, wet food contact films are typically not recyclable due to safety and hygiene concerns related to collection and hygiene and contamination concerns after recycling. For this reason, some state EPR laws, including Minnesota, have partially or fully exempted protein packaging and/or raw meat contaminated films from EPR.[6]

We therefore ask: When the needs assessment estimated the amount of flexible film in the Minnesota market, what percentage did it exclude for exemptions, and how was the data broken out by resin and by use? We could not find this information in the report nor its appendices, and from our experience, it is essential for determining which recycling strategies to apply.

Tonnage Generated and Recyclable Estimates

FPA would like to better understand how the needs assessment arrived at its estimate of 333,100 tons of film generated in Minnesota, as well as how it concluded that households generate more film than the commercial sector. We could not find this essential level of detail in the report or appendices.

We would like to offer two cross-checks suggesting this figure is significantly overstated:

1. Eunomia's own 2020 study for the Association of Plastics Recyclers (APR)[7] estimated that 12 million tons of film were produced in the U.S., of which 9 million

[6] Both Maryland and Washington EPR Legislation, and forthcoming Regulations for EPR in Oregon have called out exemptions for meat contact packaging. Note the language and timeframes between them differ.
[7] Eunomia for APR (2024) "How to Scale the Recycling of Flexible Film Packaging: Modelling Pyrolysis' Role in Collection, Quantity and Costs of a Comprehensive Solution" Data Source: Eunomia Research and Consulting modeling using data from Flexible Packaging Association, Stina Inc., The Recycling Partnership, U.S. Plastics Pact, and expert interviews (2019/2020 data)

tons were recyclable (the remaining 3 million tons were considered non-recyclable , such as trash bags and medical packaging). Minnesota represents roughly 1.7% of the U.S. population[8], so 1.7% of 9 million tons suggests approximately 153,000 tons of film generated in Minnesota. This is less than half of the Eunomia's needs assessment estimate.

2. Private market intelligence is lower still. Mordor Intelligence estimates 4.3 million tons of film produced in the U.S. in 2026 (without distinguishing recyclable from non-recyclable).[9] With approximately 1.7% of the US population, Minnesota would generate approximately 73,100 tons. Applying FPA data that roughly at least 17.3% of the U.S. film market is exempt under Minnesota law (we approximate this as medical packaging only)[10] leaves approximately 60,500 tons eligible for EPR. ***This is roughly one-fifth of the needs assessment estimate, a five-fold difference.***

We respectfully request that Eunomia provide more detail on the assumptions behind its estimate. Overestimating the volume eligible for EPR fees and management will have significant consequences for fee structures and for how success rates are measured.

Recyclability and Targets

On page 125, the needs assessment notes: *"Plastic film collection is underrepresented in this data. There is no systematic collection of data on the capture of covered materials generated by covered entities at retail locations."* Stina's Plastics Recycling Data Dashboard[11] is widely considered the most reliable source of U.S. plastics recycling data. Based on surveys of plastics recyclers, Stina publishes a biannual estimate of the total amount of plastics recycled in the U.S. by format. High-level data is publicly available, and more detailed data (such as commercial versus residential versus industrial) is also available for a fee.

[8] United States Census Bureau https://data.census.gov/profile/Minnesota?g=040XX00US27#populations-and-people
[9] Mordor Intelligence (2026) US Plastic Packaging Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)
[10] See data in Figure 2
[11] https://circularityinaction.com/2024plasticrecyclingdata/

According to Stina's 2026 public release of its biannual report, based on 2024 data, an estimated 1,317.2 million pounds of U.S. film were recycled domestically or through overseas markets.[12] At 1.7% based on Minnesota's population, this equates to roughly 22,391 pounds recycled. If we just applied a population-based average to this against the population generation estimate from the Eunomia volumes for APR (which would not be a very accurate calculation for recycling) this is less than 1% of the material in the Minnesota market that is recycled today.

This open us a further question for us, as we could not find the model assumptions for recycling goals in either the report or appendices. How was the recycling rate of 13% for 5 and 10 years calculated by Eunomia? Why is it expected to increase to 13% within 5 years but not advance any further at 10 years?

While we have provided a very imprecise way to estimate data specific to Minnesota, we note that Stina can provide more specific details based on facility level reporting to provide the MCPA with a better assessment of volumes of flexible films recycled in the state or through state efforts. We encourage MPCA and Eunomia to engage directly with Stina to access the detailed commercial and residential breakouts and better assess what should be a realistic recycling rate for films in the state.

Even with emerging end markets beyond those identified in the needs assessment, not all flexible films will be recyclable or have a viable market, even if technically recyclable. Key barriers include:

- **Contamination** from heavy use of inks, adhesives, and coatings.
- **Food contact**, where films cannot be adequately rinsed and cleaned before collection.

[12] Note Stina reports in pounds not tons. Pounds tends to be the most common industry metric for flexible films.

- **Designed to never be recycled**, as with trash bags, which are intended to carry waste to the landfill and will never be recyclable when used as intended.

Setting recyclability goals and targets must account for these nuances.

FPA's new study sought to break down the film market into what could reasonably be recycled.[13] Our estimates are broad and should be read as best-case indicators rather than precise figures, but they offer a solid estimate of theoretical recyclability. Please note these numbers are based on national totals and are not specific to Minnesota.

Figure 3: Recyclability Potential by Packaging Format 2024 (million pounds)[14]

Segment	Mech. Recyclable (MM lbs.)
Bags (PE)	2,545
Stretch film (PE)	2,440
Air pillows+mailers (PE)	2,345
Retail carry bags (paper)	1,920
Retail carry bags (PE)	1,660
Storage bags (PE)	1,330
Shrink bundling (light + heavy)	673
Flow wrap/ heat sealable (PE)	423
Mailers (paper)	315
Stand-up pouch (PE)	245
Liners (PE)	130
Ag films (PE) (10% of total)	95
Glued labels (paper)	84
Forming films (PE)	80
Shipping sacks (PE)	75
Pres sensitive (in mold labels)	25
TOTAL	**14,384**

Segment	Chem. Recyclable (MM lbs.)
FFS (MP)	2,415
Stand-up pouch (MP)	1,502
Ag films (PE – 90% of total)	475
Ind wraps (PE + PP)	363
Forming films (MP)	283
Pres Sensitive labels (MP)	190
Liners (PE)	130
Medical Bags (MP)	118
Retort pouch (MP)	17
	5,546

Segment	Not Recoverable (MM lbs.)
Trash bags (PE)	3,200
FFS (MM)	2,080
Stand-up pouch (MM)	1,177
Medical bags (PE, MM, MP)	1,098
Heavy duty shipping sacks (MM)	535
Ag films (PE) – 40%	380
Glue labels (MP)	340
Industrial wraps (PVC + MM)	333
Cup Lidding (MP + MM)	290
Stretch/shrink label (MP)	284
Ag film (MP)	145
Heavy duty shipping sacks (PE)	115
Stretch/shrink label (PE)	110
Pres sensitive labels (MM)	105
Glued labels (MM)	84
Forming films (MM)	66
Retort pouch (MM)	25
	10,195

Note: PE = polyethylene | MP = multi-plastic | MM = multi-material

[13] PTIS for FPA (November 2026) "Flexible Packaging U.S. Market Profile and Circularity Assessment"
[14] IBID

Figure 3 presents an estimate of theoretical recyclability, assuming materials are collected and sent to recycling. It is a high-level view and does not fully account for food-contact restrictions or the availability of suitable collection and processing infrastructure. Under ideal conditions, up to 66% of flexible packaging could potentially be recycled with today's technologies, if both mechanical and chemical recycling are recognized as acceptable pathways. If Minnesota focuses primarily on mechanical recycling, the potentially recyclable share would be lower.

Applying this to Minnesota and using Eunomia's 2024 estimate of 9 million recyclable tons nationally, roughly 153,000 tons of film would be technically recyclable in the state if all available technologies were considered. This is a generous best-case scenario based on the percentage of U.S. population within Minnesota. However, as we have consistently noted and calculated above, not all films will be recyclable due to a combination of exemptions, technical challenges and health, safety and hygiene concerns. When we take those considerations into account, we believe the estimates of recyclable film vary dramatically from what is reported in the needs assessment.

Table 2: Potential for Recyclability: "Films" as a whole versus an assessment by format.

Pathway	Estimated Minnesota Tonnage if we generalized "films"[15]	Estimated Minnesota tonnage based on FPA estimates of film by format per Figure 3[16])
Mechanical recycling	73,440 tons	0.122 tons
Chemical recycling	27,540 tons	0.047 tons
Combined total	**100,980 tons**	**0.169 tons**

[15] We took the higher assessment of films on the market provided by Eunomia in 2022 at 9 million and then calculated it by 1.7% to estimate Minnesota's share based on population rates.
[16] We took the numbers found in FPAs new study and demonstrated in Figure 3 and then calculated by 1.7% to estimate Minnesota's share based on populate rates.

These are very high-level estimates that assume all potential material is collected and sent to recycling, so they are most likely too generous. We share them to illustrate the large gap between the volumes realistically available for recovery, and EPR eligibility in Minnesota, and the volumes the needs assessment claims. It is very important that the state not adopt targets or make assessments about flexible film recycling by considering films as a unified entity, rather than recognizing the need for distinct strategies based on different formats, uses and materials. Our aim is not to challenge the data in the needs assessment per se but to request greater transparency about the data behind these assumptions and encourage more dialogue with stakeholders, so MPCA has the best available information to inform next steps and all parties can succeed.

End Markets

Today there is a robust market for dry, mono-material polyethylene (PE) films, an emerging market for polypropylene (PP) films, and some limited options for multi-material films. The Eunomia study identified 11 end markets for plastics as a whole. A recent effort by the Peer Collaborative, a voluntary collective of U.S. organizations working on flexible film recycling, has identified a broader set of options specific to film:

- More than 35 mechanical recyclers of low-density PE (LDPE), high-density PE (HDPE), and linear low-density PE (LLDPE) that can turn these materials back into resin for future plastic packaging.
- At least nine companies that can recycle plastic films, in some cases including multi-material and multi-plastic films, into durable goods such as road asphalt, construction blocks, roofing, lumber, and road signs.
- At least six companies that can accept some forms of flexible film for advanced or chemical recycling.

Together, this represents a potential total of approximately 50 companies that repurpose discarded flexible films into new products. This suggests that end-market options for film are likely greater than the needs assessment indicates, although capacity, geographic access, and accepted film types vary by company.

Capacity at many of these facilities is not publicly reported. When the Peer Collaborative contacted them directly, however, many indicated they would have available capacity for high-quality bales. Durable goods manufacturers, who can accept a wider range of flexible films, indicated they could expand collection fairly quickly if they had secure sourcing contracts and sufficient demand for their end products. We therefore see a meaningful opportunity for Minnesota's EPR program to support these end markets by establishing long-term sourcing agreements and investing in reducing contamination in post-consumer bales.

We also encourage MPCA to consider a topic the needs assessment does not address: the role of state procurement in supporting end-market growth. Incentives for the use of polymer asphalt, composite lumber, railroad ties, stormwater management systems, and road signs made with post-consumer recycled (PCR) content could meaningfully strengthen demand while providing the state with materials they already use and need.

Alternative Collection for Flexible Packaging

Recyclability must be paired with collection. The malleability that lets flexible films conform to the products they protect also makes them difficult to sort in traditional municipal recycling facilities (MRFs). Films wrap around sorting equipment, slow operations, and force shutdowns for regular clearing. Some communities accept film through a bag-in-bin curbside approach, where it is more readily removed by manual sorting, but the vast majority of U.S. communities do not offer this.

We agree with Eunomia that film packaging should be considered for alternative collection and may not yet be ready for curbside collection. However, FPA believes this conclusion, and its implications for the needs assessment would benefit from more detail on this point.

There are currently three main ways flexible films are collected outside of curbside systems:

1. **Retail and municipal drop-off depots.** In the early 1990s, the flexible packaging industry worked with retailers to provide film collection for dry PE films. Retailers already offered plastic bags, which are well suited to dry PE recycling, and consumers could return them in store. Stores also generate commercial film behind the scenes, such as stretch wrap from shipments. Combining consumer drop-off at the front of the store with commercial film from the back typically yields Grade A or Grade B film bales, which are in high demand. This is the primary way in which post-consumer films are collected and recycled across the U.S.
2. **Doorstep pickup subscriptions.** Over the last decade, several companies have developed business models that collect hard-to-recycle materials from consumers on a regular pickup schedule. Subscribers receive ongoing feedback on what they submit, which produces higher-quality, less contaminated material and serves as an effective educational tool. Examples include Ridwell, which operates in Minnesota, Recyclops[17], and the Hefty ReNew program, which is being phased out over 2027. These programs can collect multiple different types of film, both dry PE films but also multi-material films that don't have significant food residue (i.e., chip bags and granola bar wrappers).
3. **Mail-back services.** Consumers send hard-to-recycle materials to a company that sorts them and routes them to recyclers. This can be effective for lightweight items like flexible films. Examples include TerraCycle and Ridwell. While this is mostly

[17] Recyclops operates in 18 different states, but is not currently in Minnesota.

limited to PE films and multi-materials films that don't have significant food residue, Terracycle does have some unique collection programs for higher food contaminated films like baby food pouches.

Table 3: Alternative Collection Models and Minnesota Access

Alternative Collection Model	Materials Collected	Availability in Minnesota
Store or municipal depot	Dry PE-based films (HDPE, LDPE, LLDPE)	Nearly 400 locations identified through plasticfilmrecycling.org and NextTrex.com
Doorstep pickup	Dry PE-based films and multi-material films	Over 10,000 subscribers across the Twin Cities
Mail-back services	Dry PE-based films and multi-material films	An estimated 0.2% of the Minnesota population pays additional fees for a mail-back subscription service to recycle materials not available in their communities.

Overall, alternative collection programs are available in 57 counties across Minnesota with an estimated 30 counties lacking access to free alternative collection services. We note that mail-back services are available to all counties but currently, 24 Minnesota counties do not have any subscribers.[18]

While most of the alternative collection services are focused on dry PE films, some of the subscription or mail-back services offer options for multi-material film collection, indicating that with the right investments this could be a growing opportunity.

There is currently no alternative collection option for post-consumer polypropylene (PP) films, although PureCycle has indicated it is looking to expand into that area. We should assume that no consumer PP film recycling will be available in the near term, although commercial collection of PP films is possible.

[18] Data provide by Ridwell, plasticfilmrecycling.org and NextTrex

Cost and Quality Considerations

Cost and quality should factor into decisions about collection methods for EPR materials in Minnesota. In 2025, Navigate, the advisory arm of the Sustainable Packaging Coalition (SPC), completed a study of PE film collection costs.[19] It identified more than 35 planned or completed projects to sort flexible films that show up incidentally in curbside collection. This indicates that MRFs are investing as they plan for a shifting packaging stream, and MPCA should consider this future potential.

Additionally, the Navigate study compared the cost of collecting and processing industrial, commercial (such as retail drop-off, a mix of commercial and consumer film), and household curbside post-consumer film:

Figure 4: The Economics of Film Collection

THE ECONOMIC REALITY OF FILM ECONOMICS

Film Generator		Industrial Production Companies and Distribution Centers	Commercial Retail store, take-back programs	Residential Curbside
Notes		Requires clean, dry, clear source separated bales for shipment directly to markets	*Pricing varies widely with much of the cost depending on material quality and fees paid by the generator to handle film for recycling	
Market/Processing		Mechanical	Mechanical	Chemical
Expense	Bale Value	$350 / ton	$150 / ton	$2.60 / ton
	MRF + Post MRF Cost	NA	$(250 - 1,200) / ton	$(1,200) / ton
	End Market Reprocessing	~$(400) / ton	~$(400) / ton	$(1,800) / ton *(Incorporates a 45% yield loss for chemical recycling)*
Total Cost of Recycling Film		**~$(750 - 950) / ton**	**$(800 - 1,600) / ton***	**~$(3,000) / ton**
Virgin Resin Pricing (contract pricing)		**$1,050 / ton** (Large volume contract clear resin)	**$1,050 / ton** (Less for colored resin)	**N/A**
Revenue/Cost of film recycling based on virgin resin pricing		**$100-300/ ton** (Minus transportation costs and commodity revenue sharing with generator)	**$(250 - 550) / ton**	**$(3,000) / ton**

While this data is national in scope, we believe it supports the case for Minnesota to consider alternative collection as a means of capturing all forms of film, particularly dry PE

[19] Navigate (2025) "Unlocking Curbside Recycling for Flexible Films: What Must Be True" Presentation to SPC Impact (Seattle, WA)

films, where an infrastructure system already exists. National data also indicates that commercial film is the lowest-cost and highest-quality film to recycle, which suggests that commercial collection should be a key strategy for material recovery across Minnesota. This is consistent with earlier work by Eunomia on flexible films, which found that the volumes of commercial and consumer film generated and available for recycling are similar, yet approximately 3.5 times more commercial film is recycled than consumer film.[20]

The needs assessment references the U.S. Film and Flexible Initiative (USFFI)[21], which is testing a model to subsidize material recovery facilities (MRFs) for the collection and sortation of the incidental film they currently receive[22], in order to determine whether this volume of material can secure sufficient end markets. However, this model is not currently set up as a plug-and-play solution for Minnesota. The pilot is currently funded only for California, and replicating a similar approach in Minnesota would require a significant investment of time, funding, and program design. Should Minnesota wish to explore this option, the EPR program would need to be structured to draw lessons from this California-specific initiative and adapt them to Minnesota's infrastructure, material flows, and market conditions.

Waste Reduction Strategies: Post-Consumer Content Usage

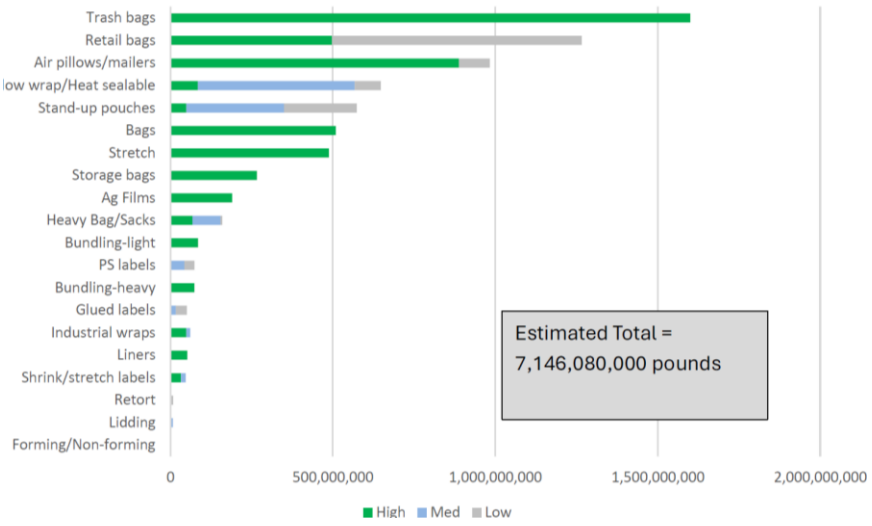
The needs assessment report indicates that flexible films across the U.S. contain a general average of 5% post-consumer recycled (PCR) content. This figure is not broken out by resin, format, or purpose. FPA believes this type of portfolio generalization can be harmful

[20] Eunomia for APR (2024) "How to Scale the Recycling of Flexible Film Packaging: Modelling Pyrolysis' Role in Collection, Quantity and Costs of a Comprehensive Solution" Data Source: Eunomia Research and Consulting modeling using data from Flexible Packaging Association, Stina Inc., The Recycling Partnership, U.S. Plastics Pact, and expert interviews (2019/2020 data)
[21] https://www.usffi.org/
[22] Note incidental film is inclusive of 'film'. It is the film consumers incorrectly throwinto the bin, also referred to as "wish-cycling" Incidental film includes: wet and dry PE films, multi-material and multi-plastic films as well as polypropylene films.

when states set goals, because it may create unrealistic expectations. The needs assessment accurately notes that PCR content is restricted in food-contact and medical packaging, but it does not appear account for these restrictions in its calculations.

FPA's new U.S. Market Profile and Circularity Report offers a high-level, directional assessment of where PCR content could be used most across the different film types on the market. Because the underlying data relies on broad generalizations, the findings should be read as an indication of relative opportunity rather than a precise forecast of what is achievable for any specific product.

Figure 5: PCR Content Inclusion by Potential by Packaging Format (pounds)[23]



As Figure 5 shows, PCR content use is restricted in many applications, while in others rates could be driven well above 5%. We encourage MPCA and the Circular Action Alliance (CAA) to set goals based on where PCR content can be best leveraged, rather than applying a single percentage across the entire portfolio. We strongly caution against adopting the PCR

[23] PTIS for FPA (November 2026) "Flexible Packaging U.S. Market Profile and Circularity Assessment"

content performance targets recommended in Table 167 in the needs assessment, because films differ fundamentally from rigid plastics, and the potential for PCR content use varies widely across film types.

Waste Reduction Strategies: Redesign

The needs assessment places strong emphasis on redesign for recyclability and lightweighting as key strategies for reducing excess packaging. While it correctly notes that significant work has been done in this area, it does not discuss packaging optimization. Efforts to lightweight or source reduce must be balanced against product protection, or greater environmental harm can result, such as increased food waste or product damage.

Industry is conducting significant research on design for recycling, but there is still little comprehensive analysis of what share of redesign strategies could be achieved, and at what cost. A new collaborative led by the Canada Plastics Pact and supported by Canadian producer responsibility organizations (PROs), FPA, the U.S. Plastics Pact, and PMMI, aims to quantify this by late spring 2027. Until that data is available, we caution that the needs assessment's conclusion that 55,600 tons of mono-layer film and 5,500 tons of multi-layer film could be reduced through waste reduction strategies may be premature. As we noted earlier, the base film generation volumes that likely informed this estimate have not been verified, and without confidence in the baseline, the projected reductions cannot be reliably assessed.

Education

The needs assessment reinforces the value of consumer education for reducing contamination and encouraging proper collection, and it cites valuable work by The Recycling Partnership (TRP) and the Sustainable Packaging Coalition (SPC). We would add

to these resources: FPA and the Flexible Film Recycling Alliance (FFRA)[24], along with several Minnesota organizations, companies, and peers, are collaborating on a consumer education campaign promoting film recycling through depot drop-off.[25] Research behind this initiative—*The Let's Get Flexible* campaign—indicates that consumers are unclear about what "flexible film" means and which types can or cannot be recycled.[26] This campaign is designed to address that confusion. The intent is to work with alternative collection providers to measure both the volumes of film recycled and consumer response to the campaign. The collaboration has already engaged Hennepin County and Minnesota's Recycling Market Development Center, and we would welcome the chance to discuss with MPCA how to better incorporate this effort into the state's EPR strategy.

This research, noting consumer confusion over what denotes recyclable flexible films, further reinforces the risk in lumping film collection and recycling strategies as one entity as promoted in the Minnesota needs assessment. Rather we need to be clear that different formats, materials and even end uses will require more nuanced approaches from one another and education will be a necessary tool to ensure success.

Conclusion

We appreciate the effort that goes into developing a state needs assessment for multiple materials and trying to gather and consolidate data from private and public entities, but we do feel that some of the conclusions drawn for Minnesota will lead the state in the wrong direction for successful flexible film recovery. As the trade association for the flexible packaging industry, we assert we are happy to meet with the MCPA, Eunomia and any

[24] More information on the Flexible Film Recycling Alliance (FFRA) can be found at: https://ffra.org/. The FFRA operates an online directory of depot and subscription opportunities. More information can be found at plasticfilmrecycling.org
[25] Funders of this campaign include: MBOLD, Schwanns, General Mills, Cargill, P&G, Novolex, Shorr Packaging, Circular Action Alliance, FPA and FFRA
[26] ERM (2025) "The Weak Ties of Flexible Film" Qualitative Research for FPA and FFRA (Availanle upon request)

other stakeholders to share the data we have an ensure packaging EPR strategies developed for Minnesota are impactful and drive progress. To make our recommendations easier to act on, we have consolidated them here:

1. **Provide transparency on the film tonnage methodology**, including the exemptions excluded and the breakout by resin, and reconcile the 333,100-ton estimate with the alternative estimates presented above.
2. **Treat flexible films by resin, material, and format** rather than as a single category when setting goals and assessing volumes.
3. **Engage Sina directly** to access detailed commercial versus residential recycling data.
4. **Base recyclability assumptions on use, makeup, and collection pathway**, rather than lumping flexibles as one entity.
5. **Prioritize commercial film collection first**, then alternative collection (depot, doorstep, and mail-back), until curbside viability is demonstrated.
6. **Consider state procurement incentives** for products made with PCR content, such as polymer asphalt, composite lumber, railroad ties, stormwater systems, and road signs.
7. **Avoid adopting portfolio-wide PCR content targets** for films at large, rather, set goals by film type where PCR content can best be used.
8. **Defer film redesign and source reduction targets** until the forthcoming quantification data (spring 2027) is available.
9. **Ensure a consumer education campaign around films includes clarification on the diversity of films** and what can or cannot be recovered under current technologies and collection strategies.

FPA provides these comments in the spirit of ensuring that the goals, programs, and assessments for flexible film EPR in Minnesota are informed by the best available data and have the confidence of all stakeholders. We look forward to future dialogue.

Respectfully,



Kyla Fisher
Director of Regulatory Affairs and Sustainability
Flexible Packaging Association
kfisher@flexpack.org