



Sustainability **REPORT**

2024





Table of Contents

3	Introduction
4	Sustainability Culture
5	Our Mission + Values
6	Sustainability Mission + Approach
7	Science Based Target (SBT)
8	Emissions Reduction
10	Projects to Reduce Emissions
12	CDP Reporting
13	SVPR Product Line (Sustainability: Virgin Plastic Reduction)
14	Circularity
15	PCR Certification



THINNER.
STRONGER.
GREENER.®

Introduction

At Paragon Films, the word character lies at the heart of our mission. It is this value that drives us to champion the cause of sustainability within the stretch film industry. We believe this cause is not only essential to corporate responsibility, but also to being a good steward for the environment and the communities we serve.

At Paragon Films, we are deeply committed to conducting our engagement activities in alignment with global environmental treaties and policy goals. Our dedication to sustainability is reflected in every aspect of our operations, from product development to community outreach. We actively collaborate with international partners to ensure our practices support the objectives of key environmental agreements, such as the Paris Agreement and the United Nations Sustainable Development Goals. By integrating these global standards into our strategic planning and daily operations, we strive to minimize our environmental footprint and contribute to a healthier, more sustainable future for all.

The strongest pillar of our sustainability platform is reducing use—and we lead in the industry by thoughtfully engineering Thinner. Stronger. Greener.® stretch film products in the thinnest possible gauge. It is our goal to keep the highest possible volume of waste out of landfills and produce the highest quality materials to promote recycling.

When it comes to sustainability, Paragon Films' goal is to be the standard bearer for the industry. Why? ***Because it's the right thing to do*** and we owe it to our communities, our planet, and to you to champion this responsibility.

Sustainability Culture



A MESSAGE FROM PARAGON FILMS CEO DARIN TANG

At Paragon Films, sustainability is not a department or an initiative. It is at the core of who we are. It drives how we innovate, operate, and lead. Our commitment goes beyond producing the industry’s thinnest stretch film, a product that reduces waste and carbon footprint while delivering superior performance. It’s about creating a lasting, positive impact for our customers, communities, shareholders, employees, and their families.

We approach sustainability holistically, incorporating science, technology, and continuous improvement into every stage of our product lifecycle. From design and formulation to end-user applications, we engineer solutions that deliver value while reducing environmental harm. Our certified Beyond PCR™ films, 25% post-consumer recycled content, are a key part of this mission. Verified by SCS Global Services, these products support circularity by transforming used film into high-performance stretch film.

We’ve also made major operational strides. From AI-powered maintenance systems to our waste recovery program guided by Operation Clean Sweep, we are investing in technology that reduces energy, cuts emissions, and increases efficiency. Our continued participation in CDP reporting reflects our commitment to accountability. In 2024, we earned a “B” score, placing us well above industry and regional averages.

But perhaps the most significant change in our industry is the rise of Extended Producer Responsibility (EPR) laws across the U.S. States like California (SB 54), Colorado, Oregon, Maine, Washington, and New Jersey are shifting the responsibility for packaging waste management to producers. These new laws require packaging producers to fund and operate programs that improve recycling, reduce landfill waste, and move us closer to a circular economy.

We support this movement. Paragon Films is actively working with the Circular Action Alliance (CAA)—the first approved Producer Responsibility Organization (PRO) in the U.S. to ensure we meet the evolving compliance requirements in each state.

Looking ahead, our commitment to sustainability remains stronger than ever. We will continue to invest in new technologies, design even more sustainable products, and work with our customers, communities, and regulatory partners to create a lasting impact.

Together, we’re not just making better stretch film. We’re building a better future.

Darin Tang
Chief Executive Officer
Paragon Films

We approach sustainability holistically, incorporating science, technology, and continuous improvement into every stage of our product lifecycle.



Continuously strive to be our customers' first choice in innovative, high quality, and value added packaging solutions, dedicated to securing a future for our employees, business partners, and shareholders, while embodying our **Circle of Excellence Values:**

 **CULTURE** EXCELLENCE
Love, Passion, Integrity

 **CUSTOMER** EXCELLENCE
Partnerships, Representation, Commitments

 **LEADERSHIP** EXCELLENCE
Servant Leadership, Inclusion, Diversity

 **SAFETY** EXCELLENCE
Awareness, Accountability, Education, Uncompromising

 **OPERATIONAL** EXCELLENCE
Quality, Technology, Sustainability, Innovation

 **FINANCIAL** EXCELLENCE
Results Focused, Profitable Growth, Increase Shareholder Returns



Sustainability Mission

Sustainability at Paragon Films goes beyond producing the industry’s thinnest stretch film—a superior product that significantly reduces waste. We are minimizing our environmental footprint and passionately leading others with integrity and excellence to do the same in order to secure a better future for our communities, customers, shareholders, employees, and their families.

Sustainability Approach

At Paragon Films, sustainability isn’t just part of what we do, it’s who we are. We believe in creating products our customers, stakeholders, and employees can feel good about, so that we can go home at the end of each day knowing the work we did made a difference—to our communities and our planet.

We do this by bringing technology, science, bold ideas, innovation, visionary problem solving, continuous improvement, and optimization into every aspect of what we do—channeling our efforts into a “lifecycle” approach to engineering stretch film. From design and formulation to end user application, we focus on stretch film sustainability at every step. The result is the industry’s thinnest stretch film—a better product that significantly reduces waste and overall carbon footprint. **Thinner. Stronger. Greener.®** It’s the purpose that drives our practice and our commitment to this cause will never waver.



Member of
SUSTAINABLE PACKAGING COALITION®



Member of
ASSOCIATION OF PLASTIC RECYCLERS



INTERNAL GOVERNANCE SUSTAINABILITY COMMITTEE

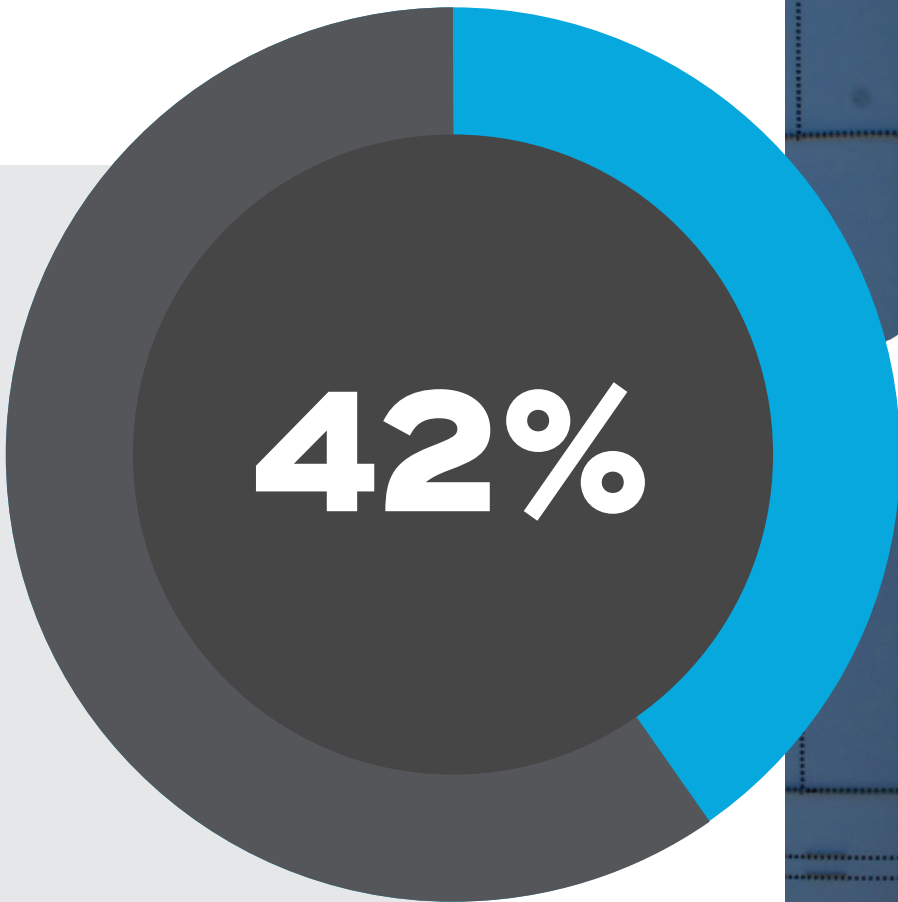
Science Based Target (SBT)

According to the [Science Based Targets initiative \(SBTi\)](#), “Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the worst impacts of climate change and future-proof business growth.”

At Paragon Films, we understand the impact we can make when we choose to set and take action on a Science Based Target (SBT). We are proud to have set our own Science Based Target in 2023. By being committed to our SBT, we can not only help address climate change, but also benefit from cost savings, improved brand reputation, and increased employee engagement.

PARAGON FILMS SBT

Reduce Scope 1 & 2 GHG emissions
42% by 2030 from a 2020 base year
Measure and reduce Scope 3 emissions



Emissions Reduction

SCOPE 1 AND 2

Our 2023 Scope 1 emissions were 407 metric tons CO₂e, while our Scope 2 location-based emissions were 25,262 metric tons CO₂e, and Scope 2 market-based emissions were 29,748 metric tons CO₂e.

To reduce emissions without hindering business success, Paragon Films’ cross-functional Sustainability Committee continues to identify large emissions and take action to reduce them. The Paragon Films Kata team, headed by our Chief Operations Officer, continues to make strides in efficiencies through completed projects such as new chiller installations in Washington.

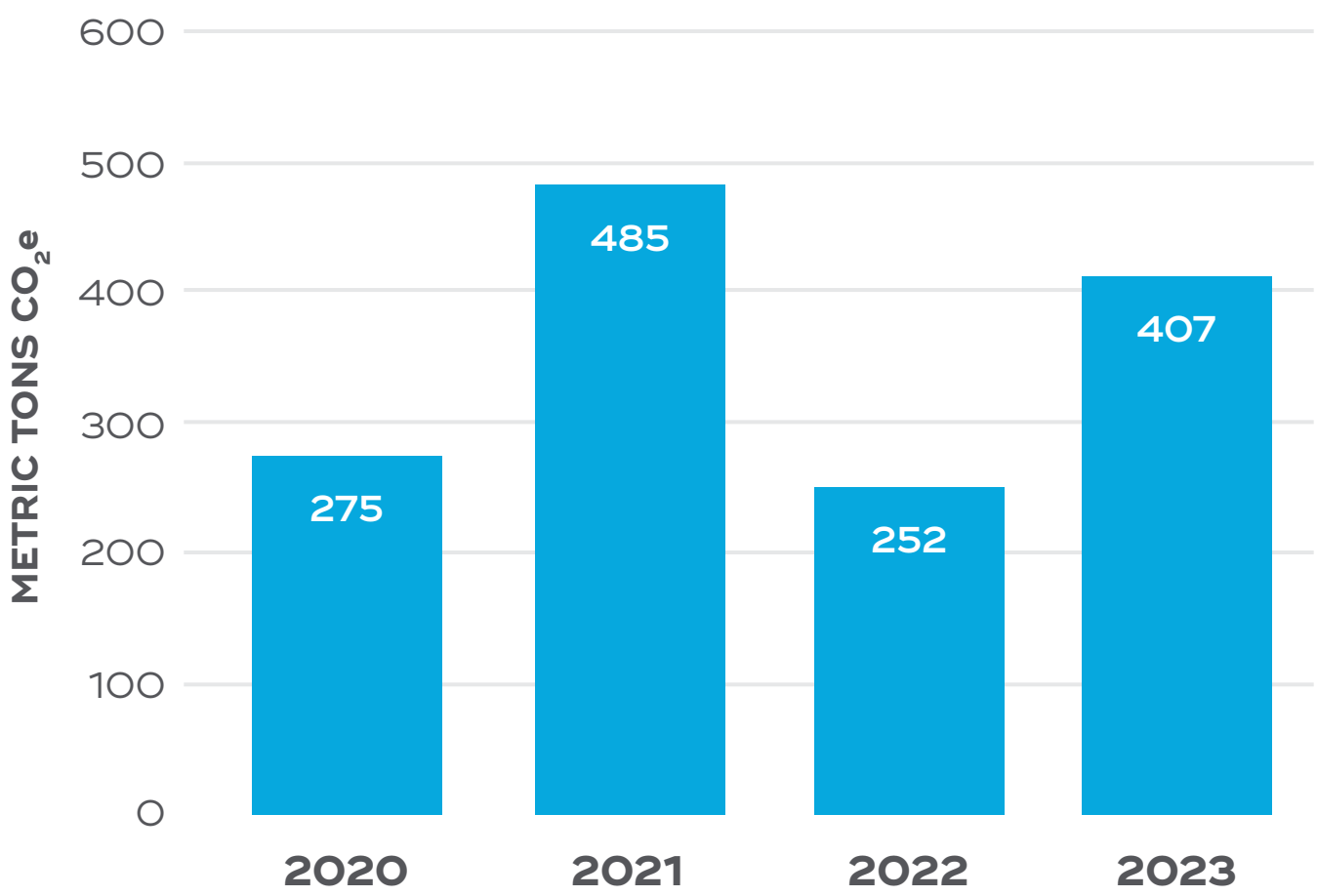
SCOPE 1 EMISSIONS
Direct greenhouse (GHG) emissions from sources controlled by an organization

SCOPE 2 EMISSIONS
Indirect GHG emissions associated with purchase of electricity, steam, heat, or cooling

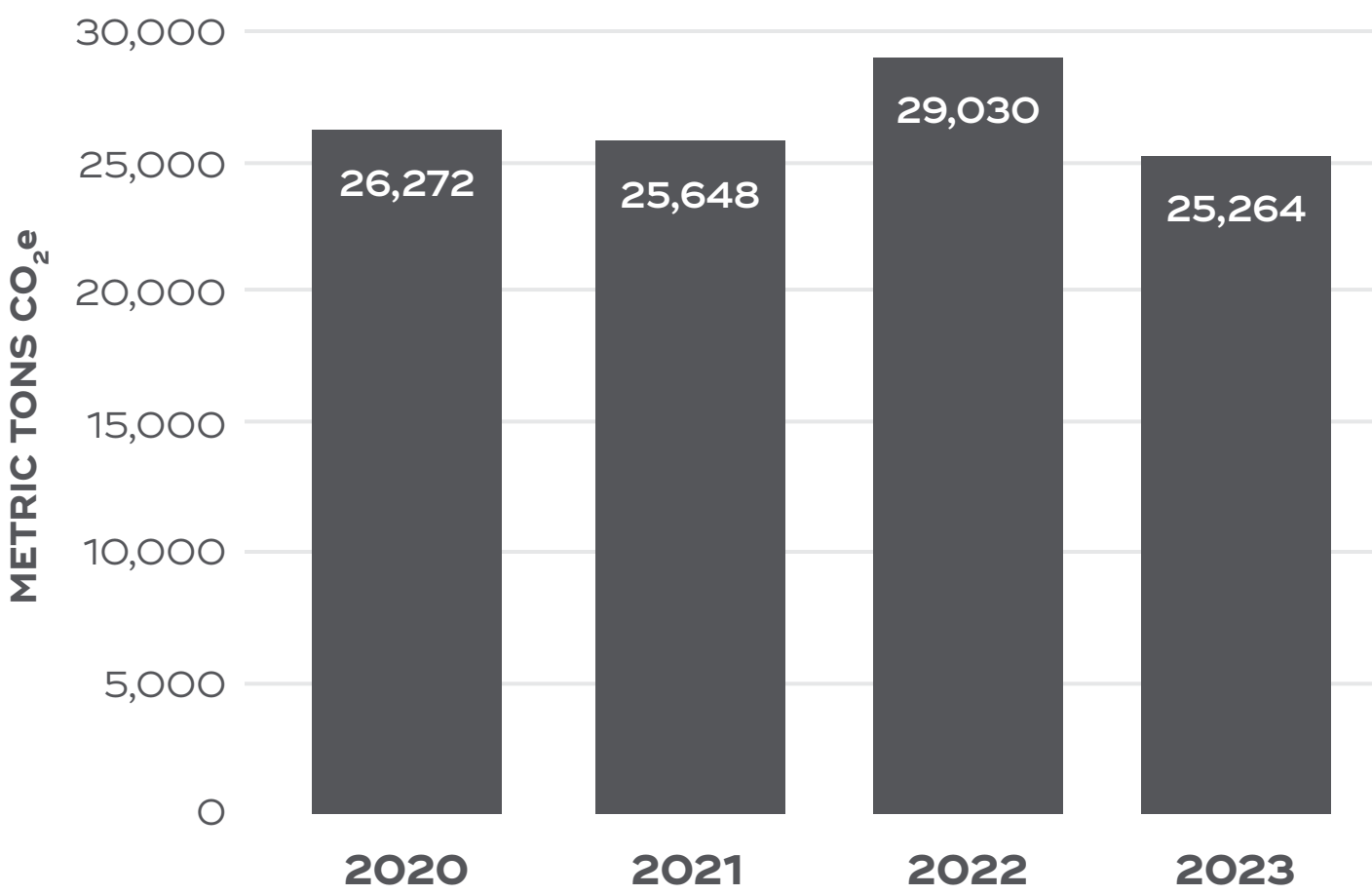
SCOPE 3 EMISSIONS
Value chain emissions resulting from assets not controlled by an organization, but that the organization indirectly affects

SOURCE: [EPA Center for Corporate Climate Leadership](#)

PARAGON FILMS SCOPE 1



PARAGON FILMS SCOPE 2



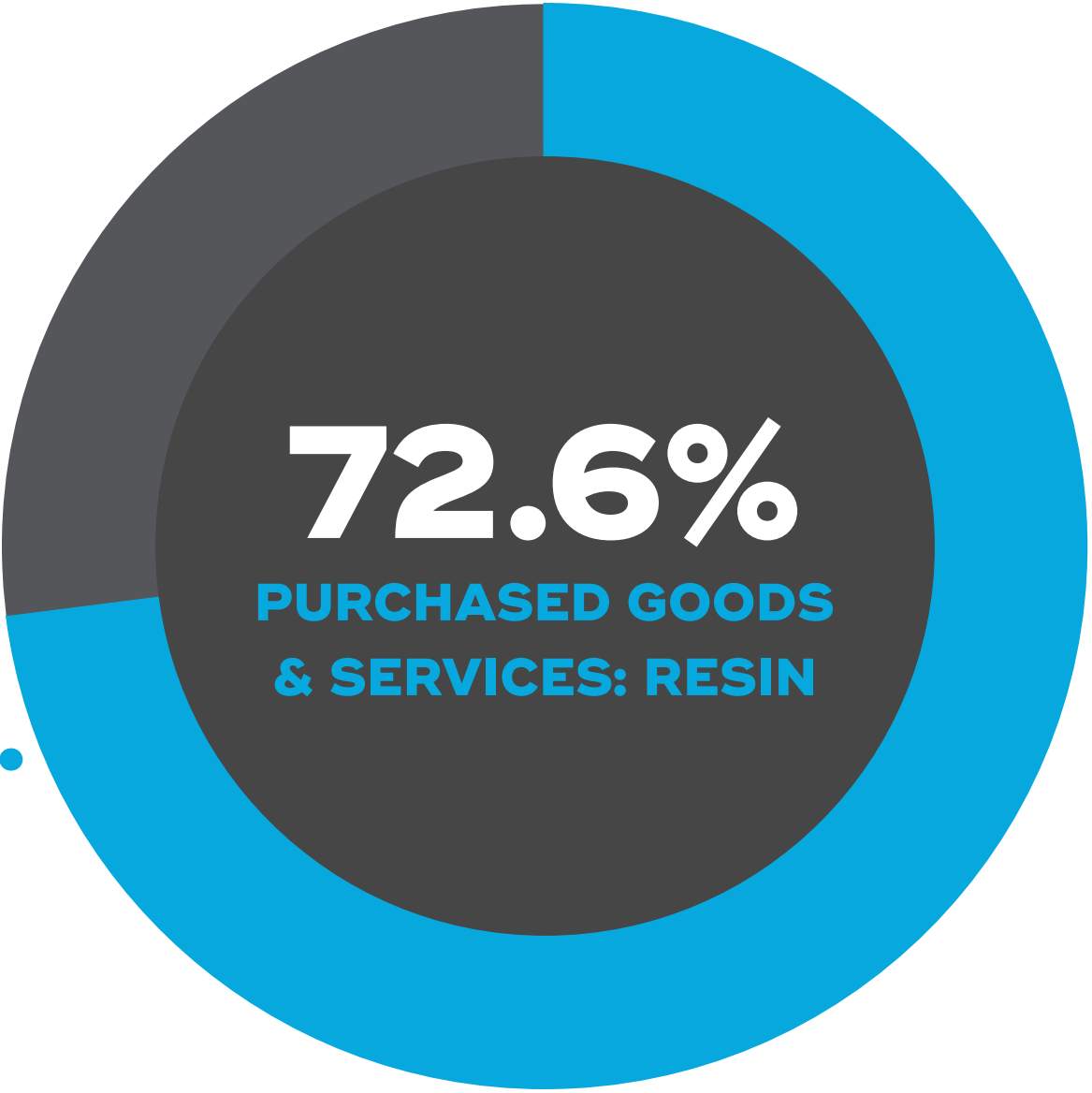
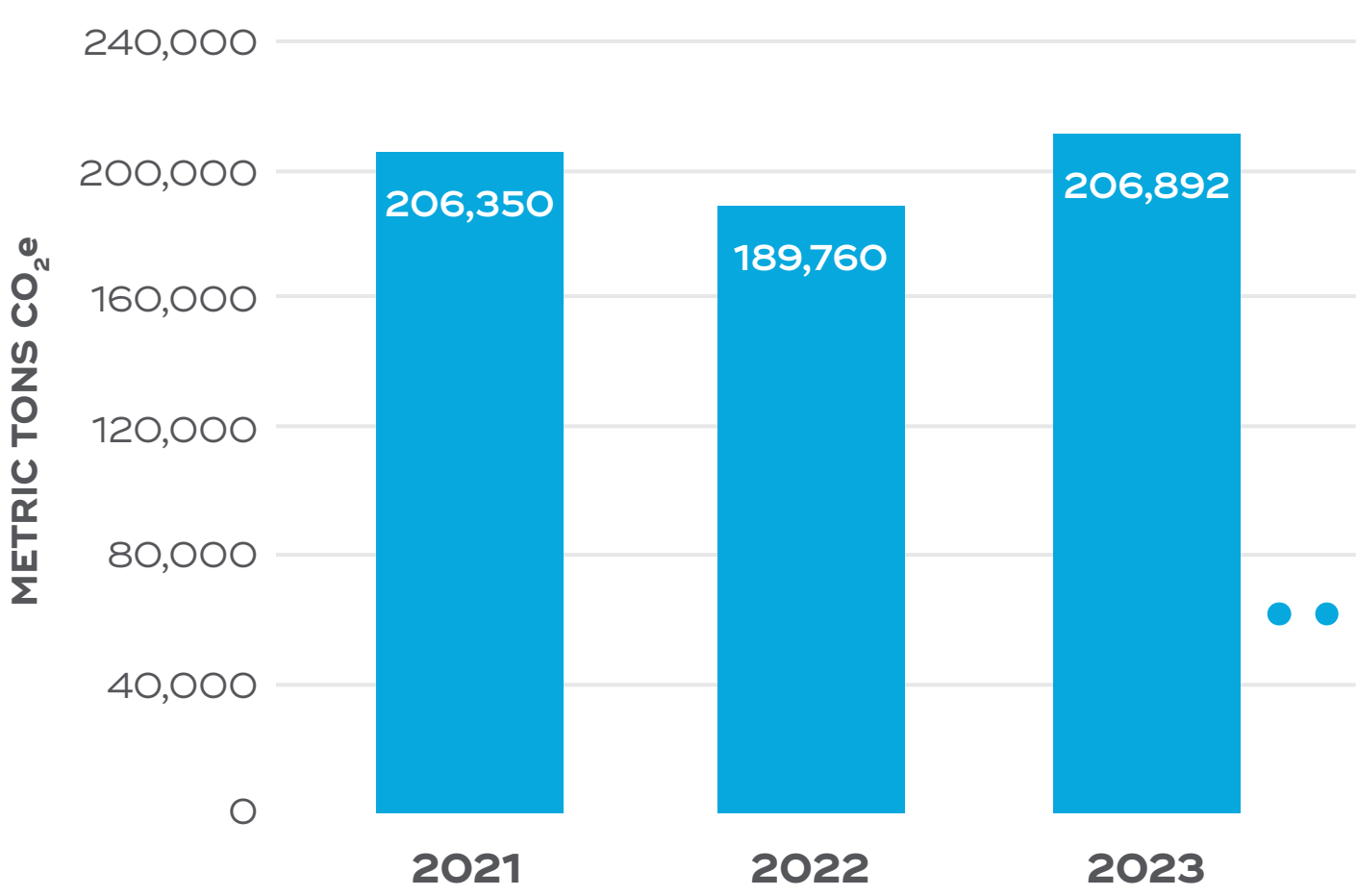
Emissions Reduction

SCOPE 3

In alignment with our SBT, Paragon Films has measured Scope 3 emissions for the past three years. Significant methodological improvements were made between 2021 and 2022, making the results incomparable. The increase from 2022 to 2023 was driven by business growth, with purchased resin having the highest emissions contribution. Scope 3 emissions in 2023 were 206,892 metric tons CO₂e, with Category 1 Purchased Goods and Services contributing 72.6 percent. As with scope 2, the Kata Team completed efficiency projects that impact scope 3, such as Pin/Trim loss and reduced scrap in collaboration with Operation Clean Sweep. Paragon Films will continue implementing initiatives and new products to make Thinner. Stronger. Greener.[®] film, which will in turn reduce the amount of purchased virgin resin needed and reduce the end-of-life impact of sold products.



PARAGON FILMS SCOPE 3



Projects to Reduce Emissions

CYCLE WHEEL

Cycle Wheel helps us manage inventory more effectively. Led by the planning team, Cycle Wheel enables sustainability wins and cost savings by reducing how much inventory goes bad.

This project was off to a strong start in 2023 with plans for full implementation inside of a year. In 2024, this project will encompass a trial of AI-enabled predictive maintenance, which provides expert-level insights and helps eliminate unplanned downtime. This information will help us improve efficiencies and reduce energy consumption resulting from shutdown and start-up.

In addition, operations improved how we use the min-max Cycle Wheel approach to run more efficiently. We continued applying Kata for continuous improvement brought the crew of our Washington plant fully up-to-speed on Line 34, and R&D has worked with them on enhanced PCR processing.

TAPE REDUCTION

By moving away from a tape 72mm wide in favor of a tape 48mm wide, Paragon has reduced annual tape consumption from 12,597 ft³ down to 8,398 ft³, effectively removing 4,199 ft³ from the waste stream.

OPERATION CLEAN SWEEP

[Operation Clean Sweep \(OCS\)](#) is a program created by the Plastics Industry Association (PLASTICS) to reduce the environmental impact of plastic resin. As an OCS member, Paragon Films has pledged to prevent plastic resin, flake, and powder loss to the environment, landfills, and waterways.

We not only make this pledge at a corporate level—we also ask each employee to sign a personal pledge to help Paragon Films achieve the ultimate goal of zero resin, flake, and powder loss. Paragon Films encourages every employee to be fully engaged in following OCS principles each day. It is this personal commitment of every employee that is key to success.



Projects to Reduce Emissions

PALLET PACKAGING RECYCLABILITY

As part of our commitment to sustainability and a “lifecycle” approach to stretch film engineering, every pallet of Paragon Films stretch film we deliver has packaging components that can be recycled. **This includes the application of polypropylene labels and shipping slip pouches to our stretch film packaging,** which makes recycling easier and helps reduce contamination in the recycling stream. We have also reduced the size of our (100 percent recyclable) packaging placards, which reduces both our paper usage and color printing resources.

In addition, all trays, boxes, edge guards, layer pads, and shrouds are made from uncoated corrugated paper and can be recycled with other corrugated materials. Our stretch film cores are also made from 100 percent reclaimed paper fiber and are 100 percent recyclable. We also stack our products on pallets that are classified as “Above Grade A,” which means our pallets can be reused with confidence.

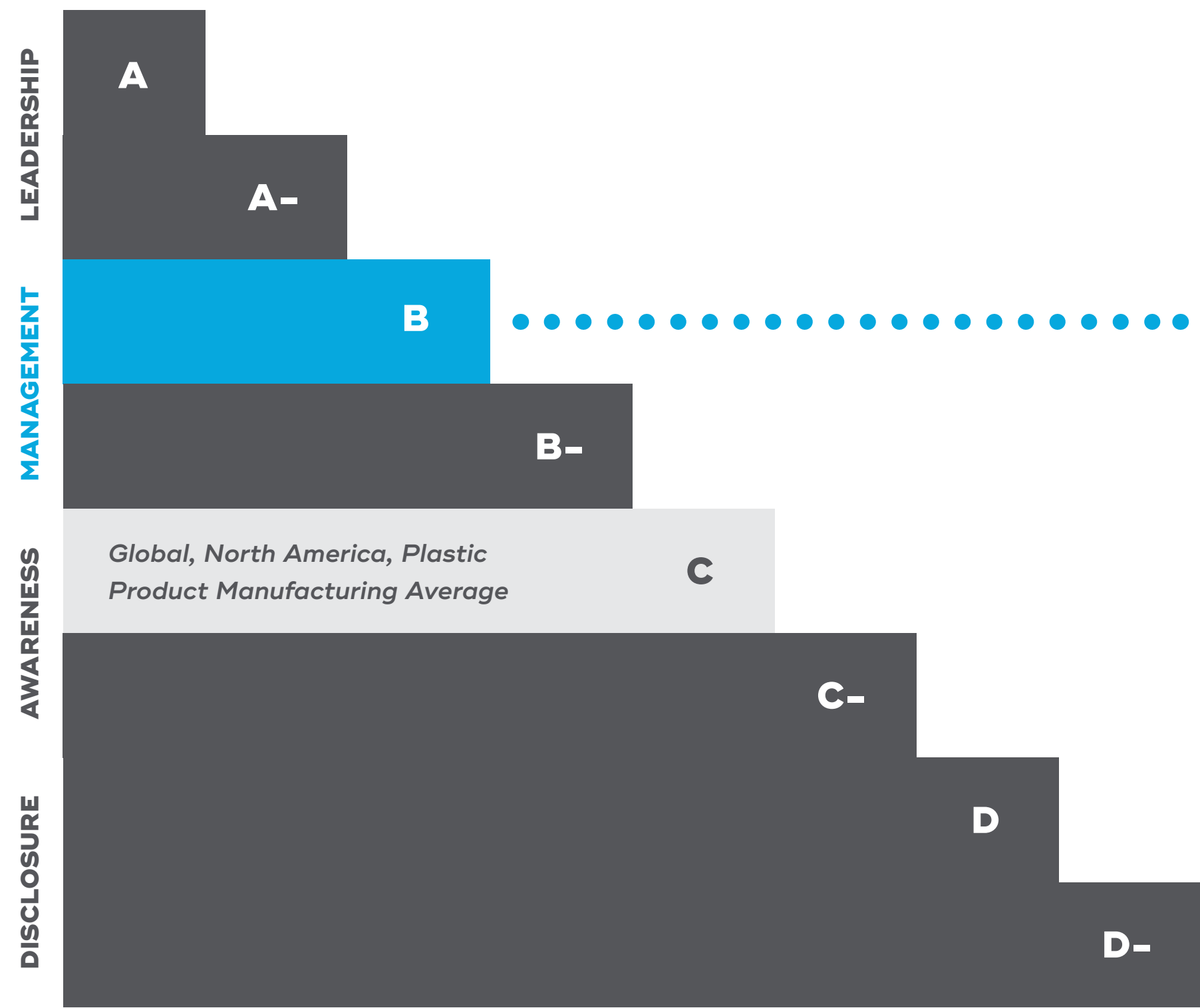
To keep our customers informed about these packaging updates, we have published [a series of video guides](#) to educate our customers on how to recycle the packaging components of our finished good packaging for our bulk hand film, case packed hand film, and machine film products.



CDP Reporting

Paragon Films is proud to be a CDP Discloser. CDP is the premiere nonprofit global disclosure organization and gives accountability to organizations that report. We have been reporting to the CDP annually since 2021 and we hope that through our disclosure to CDP, we can better understand our impact on the environment and continuously enhance our sustainability culture. By disclosing, we are prepared to handle the increasing demand for environmental transparency from investors, customers, and policymakers.

We are proud to have achieved a CDP score of “B” in 2024, which is higher than the North America regional average, plastic product manufacturing sector average, and global average of “C.” This score indicates Paragon Films falls within CDP’s “Management” progress category and we are “taking coordinated action on climate issues.”



SVPR Product Line

(Sustainability: Virgin Plastic Reduction)

When it comes to sustainability and doing the right thing, we will always challenge ourselves to do more. Nowhere is this commitment more visible than in our SVPR product line. Our Sustainability: Virgin Plastic Reduction products are our thinnest, most sustainable stretch films that are designed to help our customers' efforts in reducing virgin plastic use and promoting circularity in transportation packaging.



Beyond™ is one of our most sustainable machine stretch film products we offer. This 39 gauge machine film is designed for customers who are focused on better performance, less film used, and annual cost savings.



Beyond PCR™: Our industry-leading sustainable machine film, made with certified Post Consumer Recycled (PCR) content, offers ultra high-performance and enhanced load containment while using less virgin plastic. Available in 10% and 25% PCR offerings, this film features patented technology, tear resistance for ABC load profiles, and one side cling to eliminate tails. It ensures superior quality and consistency, promoting source reduction and cost savings, making it the ideal eco-friendly packaging solution.



Power Edge PCR™ is a certified 25% Post Consumer Recycled (PCR) hand stretch film designed to support circularity. It is thinner, stronger, and greener than most PCR films available. Power Edge PCR uses less virgin plastic than other hand films on the market.



Titus®, designed with sustainability in mind, provides exceptional load security and excellent puncture resistance at an ultra-thin gauge. Titus delivers performance and dependability while using less film. The result is a hand film that provides both cost savings and source reduction.

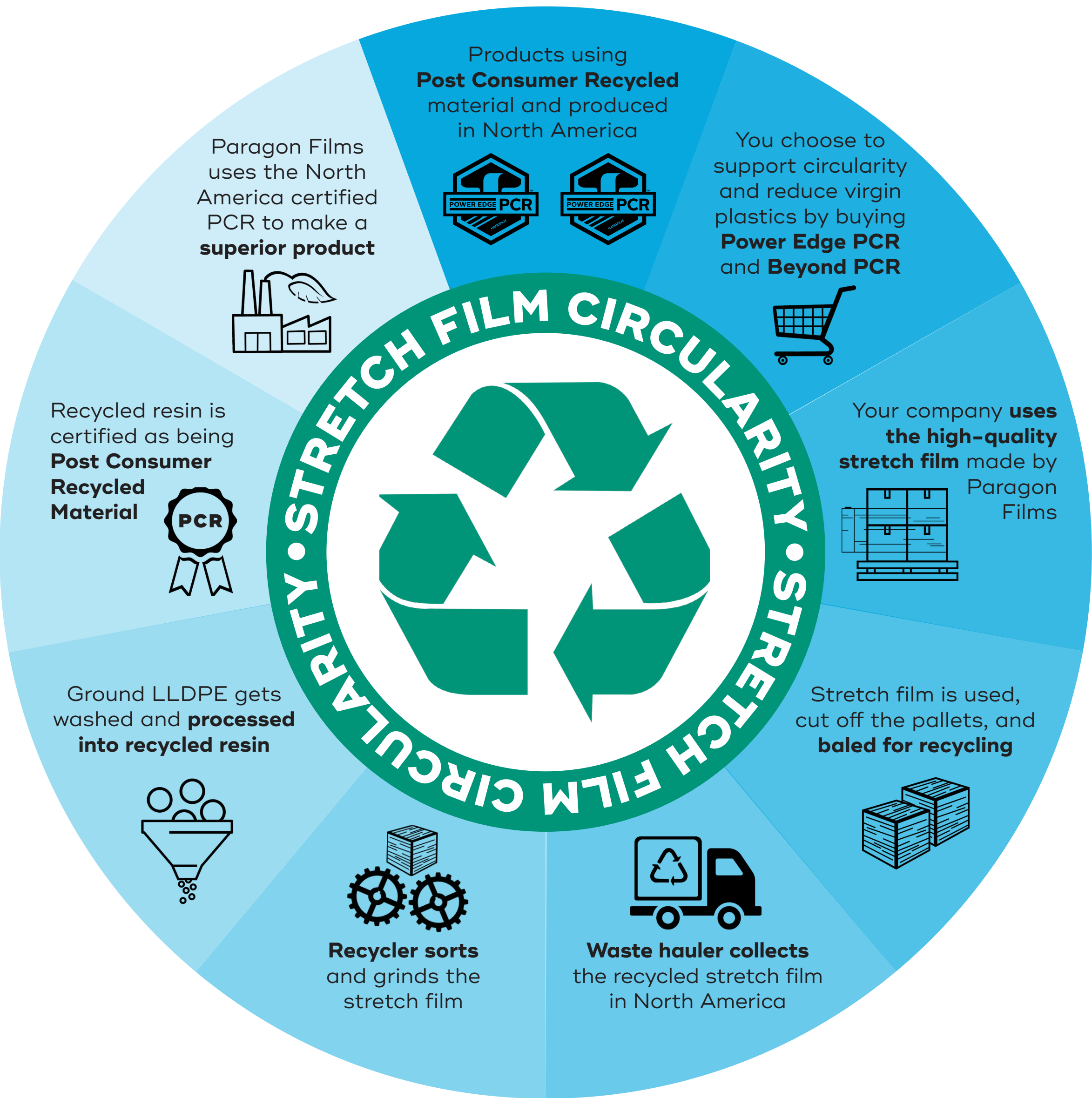
Circularity

Plastic waste in North America is a problem.

The plastic packaging market as a whole increased its virgin use by 8% and increased PCR use by 1 percentage point since 2018¹. This means that PCR use has been growing at a slower rate than the use of virgin resin; therefore, lessening the improvements in becoming a circular economy, respectively.

A solution is to promote circularity to reduce virgin plastic and reduce plastic waste. According to the Ellen Macarthur Foundation, the circular economy is a system where materials never become waste and nature is regenerated. A key aspect to circularity is when a product is purchased in the same geography as where the product is used, which is why US-based suppliers who make a post-consumer-based product are critical. We are proud of our leadership in this area, particularly with our introduction of Power Edge PCR—a **certified** 25% Post Consumer Recycled (PCR) hand stretch film specifically designed to support circularity.

¹Heffernan, Marissa. "Ellen MacArthur Report: Less Plastic Used in 2023." Resource Recycling, 26 Nov. 2024, <https://resource-recycling.com/recycling/2024/11/26/ellen-macarthur-report-less-plastic-used-last-year/>.



PCR Certification

PARAGON FILMS POST-CONSUMER RECYCLED MATERIAL IS CERTIFIED BY SCS GLOBAL SERVICES. Endorsed by the Association of Plastic Recyclers, SCS Global is a pioneer and the leader in sustainability standards and third-party certification. This certification provides clarity to the sustainability choice being made by those choosing to buy SCS Global-certified products.

Our Beyond PCR™ 10% machine film is specifically certified by SCS Global to have 10% Post Consumer Recycled (PCR) resins and our **Beyond PCR™ 25% machine film** is SCS certified to have 25% PCR resins. In addition, our **Power Edge PCR™ hand film** is SCS certified to have 25% PCR resin. Using SCS Global’s strict standards, these resins have been certified through the entire value chain. Post-consumer resins must come from stretch film that an end-user customer has consumed. That stretch film is then picked up by a waste hauler and delivered to a certified recycler to be re-pelletized, cleaned, and then sold to Paragon Films to create 10% and 25% post-consumer-recycled hand film.

Paragon Films is proud of the clarity of our certification to point out the post-consumer recycled content in our product expressly. This clear certification helps sustainability leaders and consumers of our products understand the true impact of reducing plastic waste.



[Beyond PCR 10% Certificate](#)



[Beyond PCR 25% Certificate](#)



[Power Edge PCR 25% Certificate](#)



MINIMUM 10% RECYCLED CONTENT
POST-CONSUMER



MINIMUM 25% RECYCLED CONTENT
POST-CONSUMER



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