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1



americhem<sup>®</sup>  
HEALTHCARE

**Sustainability**  
**MGMC Summit**  
**Bill Urban**



# Overview



## Americhem's Sustainability Vision and Mission

What are Americhem's sustainability goals?



## Americhem's Commitment to SDGs

What is Americhem's involvement with the United Nation Sustainable Development Goals?



## Americhem's Transformation to Sustainability

Product – Process – People



## Our Credentials

Awards and recognitions




A small ATM room having two ACs and 4 tubelights, working 24 hours, is asking me not to print a receipt to save the environment.



# About Americhem

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**Over 80**  
years of growth  
and innovation in  
a privately held company



**10 manufacturing**  
**plants** across  
North America,  
Europe, and Asia



**Over 1,200**  
global employees





## americhem<sup>®</sup>

PERFORMANCE | SOLUTIONS | TRUST


Your global partner in manufacturing polymer solutions

**Americhem** is focused on optimizing performance, innovating solutions and earning trust. Our premium brands help solve the most unique challenges—which we approach in the pursuit of excellence, groundbreaking technology and total responsiveness. The enhanced range of industries we serve gives us the potential to realize new opportunities through cross-market innovation.


**Worldwide**  
sales and  
technical support



**Cutting edge**  
organization of  
skilled, diverse  
people



**Recognized**  
global technology leader in  
the plastics industry



We have the power to transform the way your product:



LOOKS



FEELS



PROCESSES



PERFORMS





**World**

**Headquarters**

Cuyahoga Falls, OH, USA

**Manufacturing**

Concord, NC, USA

Cuyahoga Falls, OH, USA

Dalton, GA, USA

Grand Rapids, MI, USA

Liberty, NC, USA

**Morrisville, PA, USA**

Pune, India

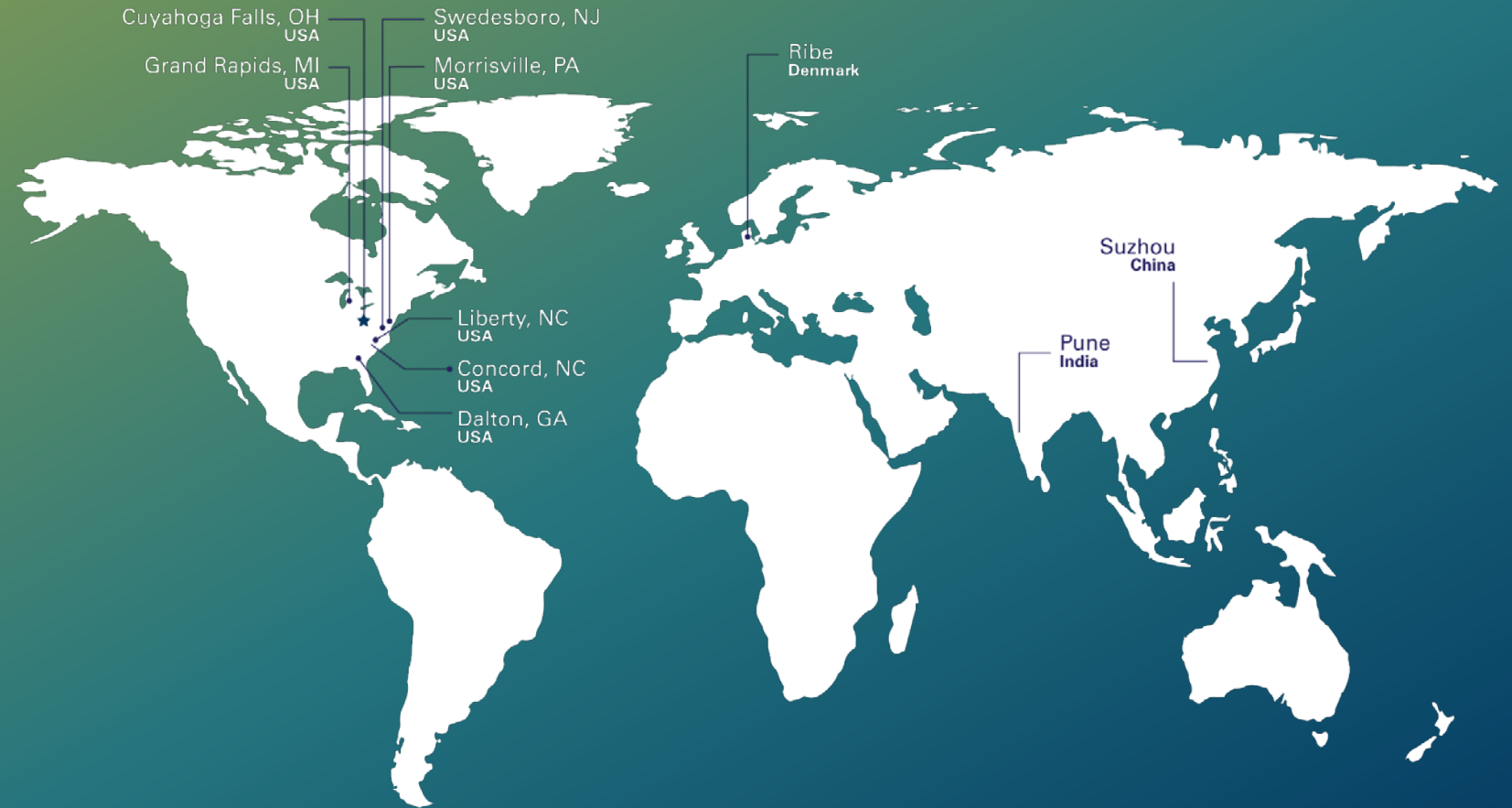
**Ribe, Denmark**

**Suzhou, China**

**Swedesboro, NJ, USA**

❖ **Sites servicing healthcare market**

# LOCATIONS





# Value Proposition

Americhem has the power to transform your products

## Service

- Collaborative partnership with technical support
- Speed to respond, develop, and quote

## Specialization

- Domain expertise in the highly regulated healthcare industry
- Clean manufacturing capabilities

## Reach

- Commercial translation of products & applications globally
- Global scope with localized support

## Quality

- Formulation and quality rigor throughout product journey
- Improved outcomes via unbiased material selection and service



# Industry Standards



USP Class VI



ISO 10993



FDA 21 CFR



ISO 13485 (US, Europe, Asia)



UL-94 Listings



Reach Compliance

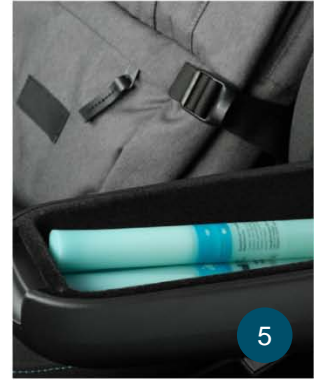
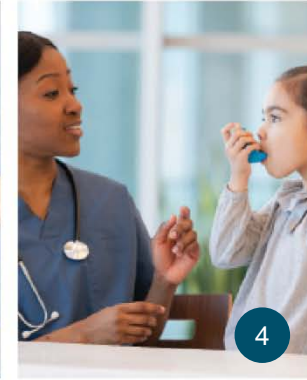
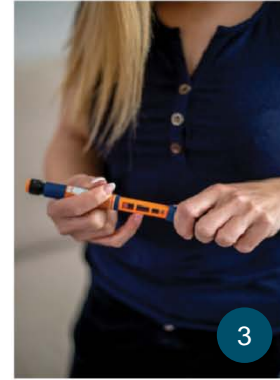






# Market Segments

- Clinical Mobility 7
- Critical Care 2
- Diabetes Management 3,13
- Diagnostics Imaging 14
- Diagnostics 8
- Drug Delivery 4,6
- Lifestyle 5,13
- Patient Monitoring 6,11
- Point of Care 1,7
- Respiratory 10
- Surgical 9,12
- Women's Health 14





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10

# Sustainability







# Americhem's Mission & Vision for Sustainability

## Sustainability on Americhem's Blueprint

### Mission



At Americhem, we are **dedicated to sustainable solutions** for a better tomorrow.

We strive to



**minimize our environmental impact**



**promote social responsibility**



**drive innovation** in our masterbatch and compounding solutions.

### Vision



- To be a **global leader** in sustainable masterbatch and compounding solutions.
- Aim to **develop innovative, eco-friendly products** that enable our customers to achieve their sustainability goals.
- By embracing innovation and fostering partnership, we **contribute to a sustainable future** for all.



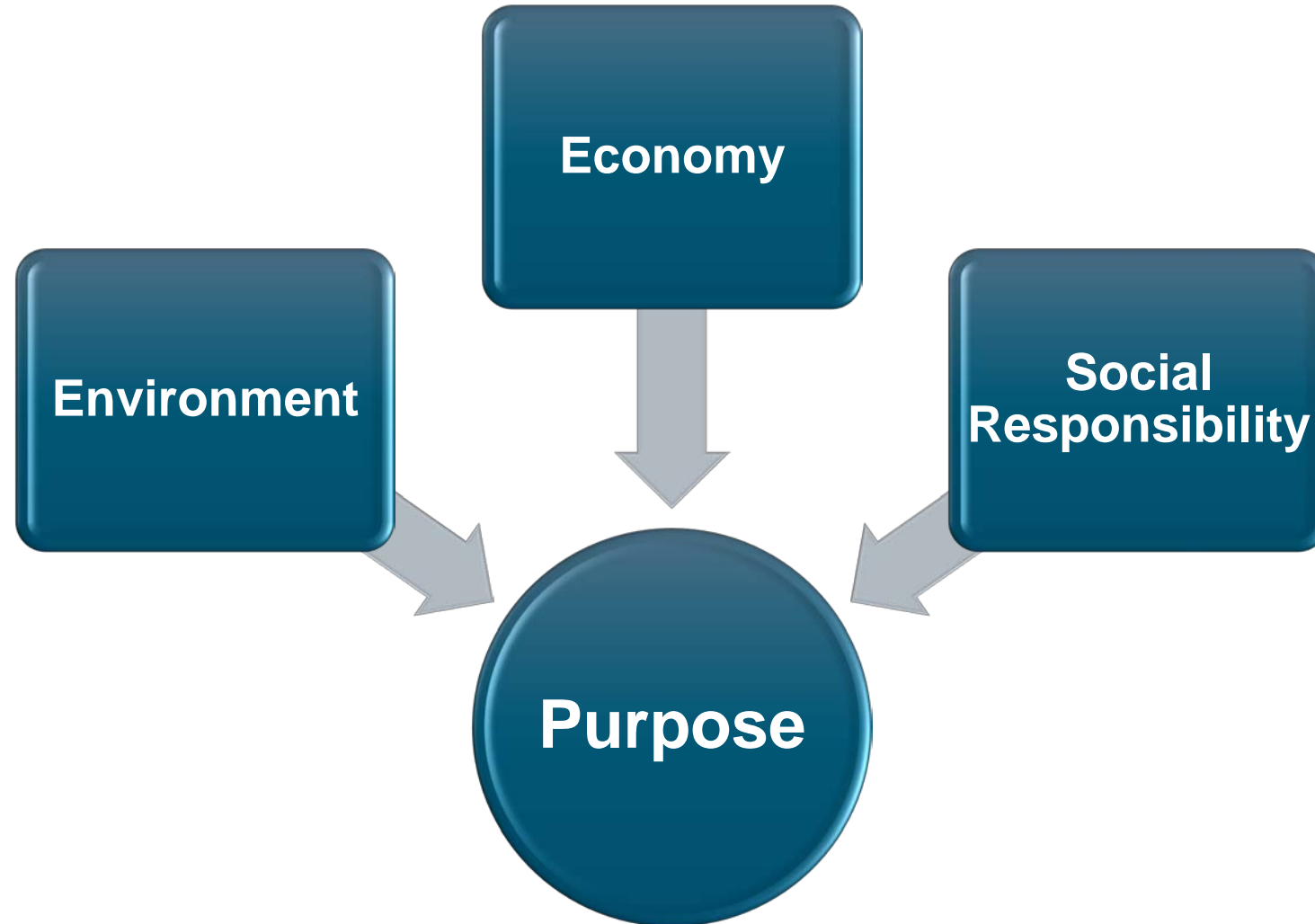


# Sustainability Purpose

Sharing resources and environment with future generations



SUSTAINABLE DEVELOPMENT GOALS





# Americhem's Contributions (Answers) to SDGs



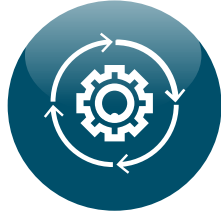
What Americhem has done through daily operation for UN SDGs?

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<p>1 NO POVERTY</p>	<p>2 ZERO HUNGER</p>	<p>3 GOOD HEALTH AND WELL BEING</p>	<p>4 QUALITY EDUCATION</p>	<p>5 GENDER EQUALITY</p>	<p>6 CLEAN WATER AND SANITATION</p>
<p>7 AFFORDABLE AND CLEAN ENERGY</p>	<p>8 DECENT WORK AND ECONOMIC GROWTH</p>	<p>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</p>	<p>10 REDUCED INEQUALITIES</p>	<p>11 SUSTAINABLE CITIES AND COMMUNITIES</p>	<p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p>
<p>13 CLIMATE ACTION</p>	<p>14 LIFE BELOW WATER</p>	<p>15 LIFE ON LAND</p>	<p>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</p>	<p>17 PARTNERSHIPS FOR THE GOALS</p>	<p>SDGs</p>



# Americhem's Sustainability Strategy Echoes UN Goals



## Process

At Americhem, we are committed to **conducting our daily operations in a sustainable manner**.

We strive to use affordable and clean energy, while **minimizing our environmental impact** throughout the production process.

Our focus is **on consuming resources responsibly and implementing sustainable practices** that contribute to reducing emissions and protecting the climate.



## Product

Our extensive range of offerings contributes directly to multiple SDGs.

At Americhem, we take pride in delivering products that not only **meet our customers' needs** but also **align with global sustainability objectives**. By emphasizing the principles of **reduce, recycle, and renewable**, we strive to make a positive impact on the environment and society as a whole.



## People

Americhem firmly believes that sustainable development is **centered around people**.

Our commitment to **team building, personal growth, and social well-being** aligns closely with multiple UNs' Sustainable Development Goals (SDGs)





# Americhem Sustainability Pillars


How Americhem Operates in a Sustainable way




Process



## Key Initiative >>>

 **Waste Reduction**

- Reduce material waste
- Waste for beneficial use
- Landfill avoidance
- Increase PIR

 **Emission Reduction**

- Adopt more Green Power
- Source sustainable Raw Materials
- Recyclable packaging
- Utilize more LED lighting

 **Pollution Prevention**

- Zero Pellets



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# Americhem Sustainability Pillars



Process



## How Americhem Operates in a Sustainable way

### 100% Adopt Green Electricity - RDK



Americhem's Denmark plant sources green power from SEAS-NVE Danish Energy Corporation, leading to 100% electricity use generated from wind energy for production, and solar panel for office area.

Americhem is recognized as an Operation Clean Sweep member, having pledged to achieve zero resin pellet, flake, and powder loss to help keep this material out of the marine environment.

### OCS Pledge – Zero Resin Loss



### LED Light - All Sites



Most areas of the Americhem factories have replaced incandescent lights with LED lights for better efficiency.

### Package Recycling



Americhem plants using pallets that meet the recycling requirements for reuse. Meanwhile work with client to recycle and reuse plastic drums.

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# Americhem Sustainability Pillars

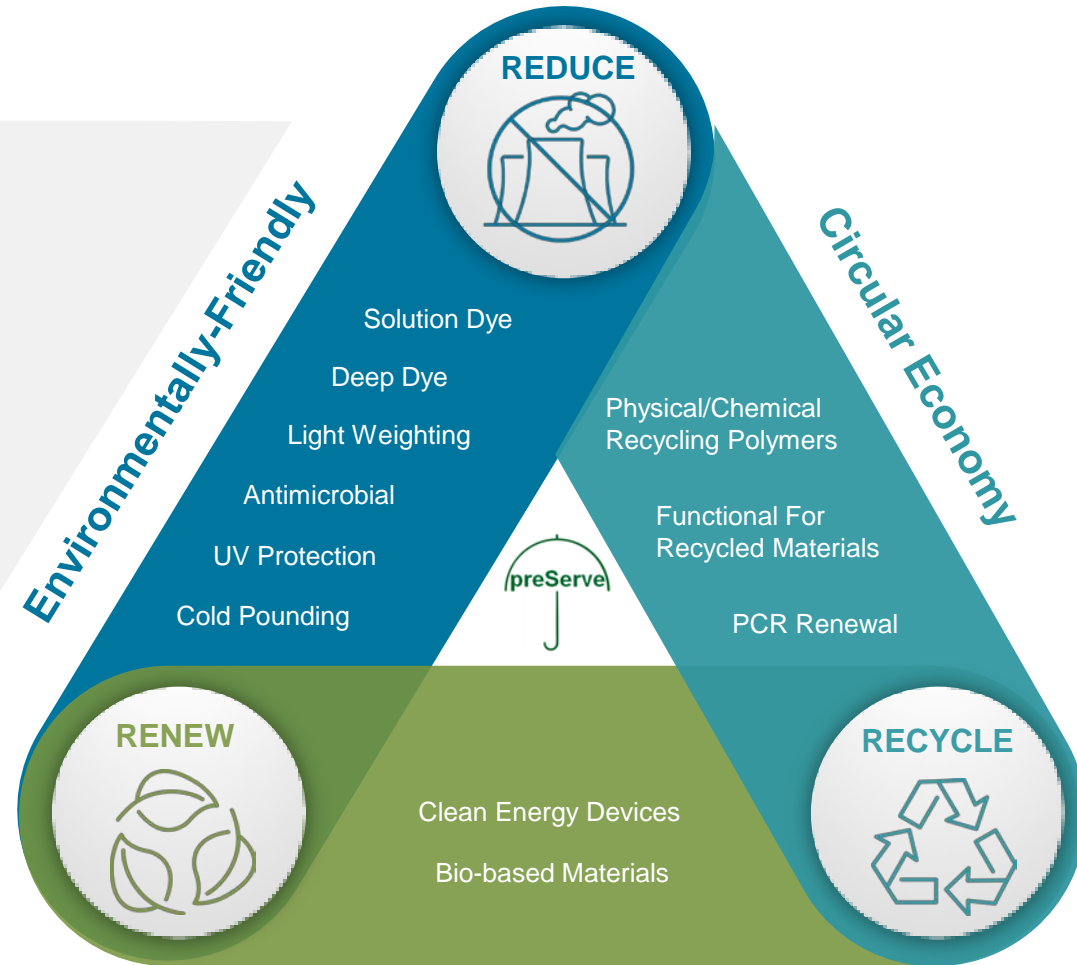
## How Americhem's Products Support Sustainable Growth for the industry



Product

Americhem's innovative solutions promote sustainable practices in the plastics industry through

- **Reducing** resources, emission and petro-material
- Adopting **Renewable** material or support renewable application
- Enabling more **Recycling** for bigger group of application





# Americhem Sustainability Pillars



Product

## How Americhem's Products Support Sustainable Growth for the industry



**Patagonia Claims**

<https://www.patagonia.com/our-footprint/solution-dyeing.html>

**96%**

CO<sub>2</sub> savings when using solution dyeing compared to a conventional batch dyeing process

Compared to post-dye, every **1000 MT** solution dye automotive **carpet** that Tesla purchased, could reduce 548 MT carbon emission

**SAVE**

180,000 L WATER

560,000 KWH

185,000L & Investment GAS

Extra Land & Investment





# Americhem Sustainability Pillars



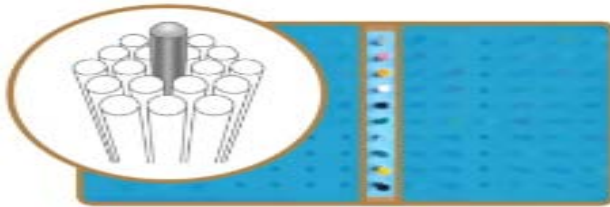
Product



## How Americhem's Products Support Sustainable Growth for the industry

### Heat Stable Color and Functional Solution for Renewable PA

Americhem solution dye colors and functional solution for 100% Bio-based PA1010 monofilament Tynex® RS to adopt renewable resin in PA1010 filament



### Weatherable White in Bo-PET For Renewable Energy

Americhem's very durable, well dispersed, increased opacity, highly loaded TiO2 masterbatch performs with excellent pack thru 8-9µm filter at 285°C processing temperature to support solar panel applications for longer product life cycles.



### Renewable Raw Material Plant Extract for Antimicrobial

Innovative natural antimicrobial active ingredient eliminates odor and gives product lifetime protection against bacteria that can cause material degradation.





# Americhem Sustainability Pillars

How Americhem's Products Support Sustainable Growth for the industry



Americhem enables our customers to use more recycled content in their substrate compounds by providing the highest quality, **longest lasting cap-stocks** on the market today.

We enable our customers to test **the limit of cap thickness to maximize recycle content in the substrate.** We can also help with color consistency to **tone recycle streams and give materials a revived, cleaner look.**



# Americhem Sustainability Pillars



## Americhem Sustainable Product Matrix & Attribute

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	 Automotive	 Construction	 Engineer Resins	 Fiber	 Healthcare	 Industrial	 Packaging	 PVC/TPE
Sustainable Attribute	<ul style="list-style-type: none"> <li>• Light-weighting</li> <li>• Paint replacement</li> <li>• Durability</li> </ul>	<ul style="list-style-type: none"> <li>• Durability</li> <li>• Recycle enabler</li> <li>• Thinner &amp; Less material</li> <li>• Less Petrochemical</li> </ul>	<ul style="list-style-type: none"> <li>• Durability</li> <li>• Weight Reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Resource Reduction</li> <li>• Bio- Composition</li> <li>• Erosion Control</li> <li>• Life Extension</li> <li>• RPET Enabler</li> </ul>	<ul style="list-style-type: none"> <li>• Metal Replacement</li> <li>• Weight Reduction</li> <li>• Durability</li> </ul>	<ul style="list-style-type: none"> <li>• Weight Reduction</li> <li>• Durability</li> </ul>	<ul style="list-style-type: none"> <li>• RPET Enabler</li> <li>• Bio-composition</li> <li>• Less impact to water</li> </ul>	<ul style="list-style-type: none"> <li>• Light-weighting</li> <li>• Durability</li> </ul>
Trademark	ColorComplete™ nShield® nDuramax® nBalance® InStruc™	ColorComplete™ nDuramax® nGrain® eCap™	ColorComplete™ nShield® nDuramax® xCelmax™ nBalance®	ColorComplete™ nShield® nDuramax® nBalance®	ColorFast® ColorRx® InStruc™ InLube™ InElec™	ColorComplete™ nShield® InStruc™ nDuramax® xCelmax™ nBalance®	ColorComplete™ nShield® xCelmax™ nBalance®	ColorComplete™ Sevrene® Cerberon™ Uravin™ eCap™
								





# Americhem Sustainability Pillars

## How Americhem Grow as a Sustainable Group



People

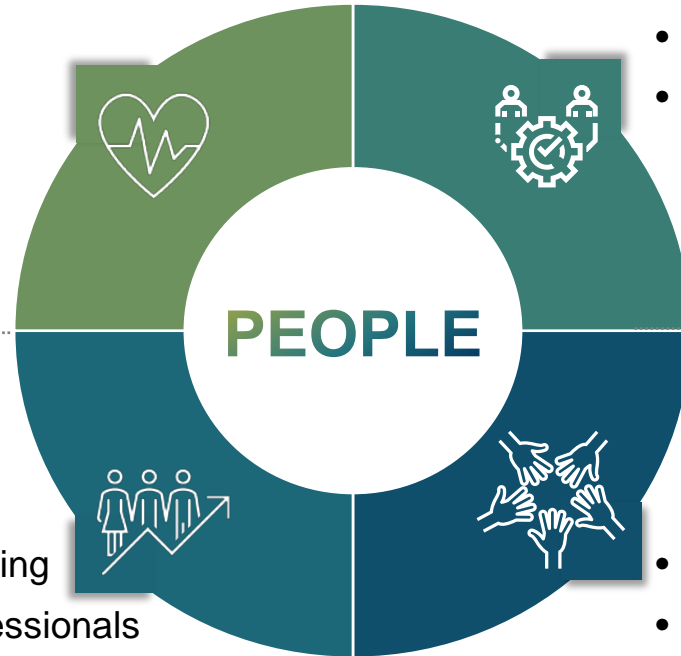


### Safety & Health

- Health and Well-being
- Next Level Safety
- Compliance

### Engagement

- Advisory Council
- Engagement Survey
- D.E.I.
- WIM



- EC Networking
- Young Professionals
- Weekly Leadership Message
- Support Education for Employee

- Charity
- Volunteerism
- Sponsor Young Gen's sustainable project

### Society Community

### Development & Communication



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# Our Recognitions

We always take social responsibility







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24

# Other Considerations





## Other Considerations

**Looking Ahead...**

**EcoVadis**

**Plasticbank**

# Conclusion

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- Process | Product | People
- Line up with UN SDGs
- Socialize throughout organization
- Make it actionable





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27

# Thank You







# Appendix





# Other Considerations

## PPWR – Packaging and Packaging Waste Regulation

- Entry into force: expected Q1 2024
- Not included in the regulation: Logistics and Manufacturing
- Med Devices are also in scope (excluding secondary and tertiary packaging)
- Primary Packaging: Sales packaging e.g. injection pen “packages” the pharmaceutical drug
- Secondary Packaging: Grouped packaging
- Tertiary Packaging: Transport packaging
- Aim to get away from Single Use - can get around this but need to demonstrate the necessity for Single Use.
- Recyclability will not impact med devices directly but we’re looking at a timeline of 5 years.

## ESPR – Ecodesign for Sustainable Products Regulation

- Entry into force: expected Q4 2023 earliest but likely Q1 2024
- Part of EU Climate neutrality by 2050 (EU Green Deal)
- Includes REACH, IED, WFD, PPWR, CFR
- High priority industry: Fibers - increase value retention (longer life cycle)
- Med devices not targeted but biomedical and medical apparel are:
  - Implantable plastics
  - Footwear
  - Scrubs
  - Linen

## PFAS ban (part of REACH)

- Entry date: expected 2025
- Considers the ENTIRE value chain (no exceptions for processes)
- Transition period (see slide 19)
- 13,5 years for Medical and healthcare applications (currently exemption if already in use)
- Interplay with MDR regulation
- EU PFAS take the OECD definition, US PFAS is defined differently: US excludes Fluoropolymers.



## Definitions

PIR is an abbreviation for Post Industrial Recycled and is the raw material made from waste generated within the industry.

PCR is an abbreviation for Post Consumer Recycled and is the raw material made from waste from the consumer/end user.

Closed loop: recycling of a material can be done indefinitely without degradation of properties. In this case, conversion of the used product back to raw material allows repeated making of the same product over and over again.

Open loop: Open loop recycling refers to recycling a product into a different product. For example, often **plastic water bottles are recycled into sleeping bags or fleece jackets**. There's still a loop, with the plastic bottle going from manufacturing, to use, to recycling collection to recycling.

Net-Zero: Simply put, Net Zero means consuming only as much energy as produced, achieving a sustainable balance between water availability and demand, and eliminating solid waste sent to landfills.





# Our Awards and Recognitions

We always take social responsibility



United Way uses its global reach and local presence to build stronger, more resilient and more equitable communities where everyone can thrive. We work to improve the health, education, and economic mobility of every person in every community we serve.

Campaign Dates	
CFO	10/31/22 - 11/14/22
SCP	11/2/22 - 11/14/22
CNC	10/8/22 - 11/11/22
GMI	10/12/22 - 11/19/22
DAL	10/5/22 - 11/30/22
LNC	10/19/22 - 11/19/22
SNJ	11/9/22 - 12/16/22
MPA	11/7/22 - 11/20/22

Contributions Goal: \$58,052  
Contributions to Date: \$37,842

