

# EMBRACING OUR TOMORROW

2024 Sustainability Report





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#### **MESSAGE FROM THE CEO:**

# LET'S EMBRACE TOMORROW, TOGETHER



Meeting the sustainability goals of our customers requires the same mindset—embracing change while meeting the high-quality standards that consumers demand. Embarking on our sustainability journey is more than just a commitment; it's a pledge for the future. Our mission is to lead with integrity, innovate responsibly, and inspire progress.



We are dedicated to creating a better tomorrow through our eco-friendly masterbatch and compounding product offerings. Our mission is clear: to minimize our environmental impact, promote social responsibility, and foster innovation. As the CEO, I am proud to lead our vision of becoming a global leader in sustainable solutions. By delivering tailored solutions and nurturing partnerships, we aim to help our customers achieve their sustainability goals.

### We are up for the challenge and ready to partner alongside our customers. Together, let's work towards a sustainable future for all.

I challenge each of you-our customers, suppliers, and other stakeholders-to join us in this journey.

Sincerely,

**John Richard** CEO, Americhem

### A LETTER FROM OUR GLOBAL SUSTAINABILITY LEADER

## SUSTAINABLE GROUP, **SUSTAINABLE** FUTURE

In today's world, operating sustainably is no longer a choice, but a necessity. At Americhem, we recognize that sustainability is fundamental to our future and the well-being of our planet. This report demonstrates Americhem's commitment to environmental and social responsibility while taking a comprehensive look at our efforts throughout the entire value chain. This report also explores how we're working to minimize our environmental footprint, give back to the communities we serve, and ensure responsible business practices. We view sustainability as an ongoing journey of progress. This report is not just an accounting of our accomplishments, but rather a path for continued improvement and a testament of our dedication to a better tomorrow.

Sustainability is a guiding principle that has become a core strategy essential to our business. From the highest level within our organization, we are fully committed to doing our part to better the future, as we believe that sustainability is not just a responsibility, but an opportunity to create a better world for generations to come. We've developed sustainability framework built on three critical pillars: People, Process, and Product. Our goal is to protect our environment through innovative, sustainable solutions and promote social wellbeing. As you explore this report, you will find many of our initiatives in these areas echo the United Nations' Sustainable Development Goals. We believe these goals should be used as guidance to inspire our actions as we move forward.

advancements.

Looking ahead, we are proud to also introduce our 2030 Sustainability Goals. These targets mark our commitment to progressing our operations, developing sustainable solutions, and empowering our people, all while giving back to the communities in which we operate.

Earlier this year, we are proud to have achieved a

silver rating through EcoVadis, a comprehensive

sustainability assessment platform. This

achievement ranks us in the top 15% of all

companies assessed. While we celebrate this

achievement, we recognize that it is just the

beginning. There is still much work ahead as

we strive to make progressive and meaningful

As we are excited to share what we've accomplished so far, we are equally as excited about our future ahead.

We invite our partners to join us in this journey because together, we can build on this strong foundation and create lasting positive impacts for our planet and our communities.

Lauren Lutikoff

Global Sustainability Leader

### WHO WE ARE

1

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.





Over 80 years of growth and innovation in a privately held









LOOKS

FEELS



Worldwide sales and technical support



Cutting edge organization of skilled, diverse people



### We have the power to transform the way your product:



PROCESSES



PERFORMS

# OUR JOURNEY

A long history of innovation through the years



### 

### 

### 







# VISION

Collaborating with our customers as their global, trusted advisor to shape the future through innovative and sustainable 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.

We create value with our customers by providing:

### TECHNICAL EXPERTI<u>SE</u>

FAST FLEXIBLE SERVICE

# MARKETS & APPLICATIONS

### Your Business is our Specialty

With expertise spanning transportation, healthcare, synthetic fibers, building & construction and more, Americhem navigates the diverse demands of numerous industries, delivering tailor-made polymer solutions that seamlessly integrate form, function, and sustainability.



#### HEALTHCARE

Surgical Instrumentation Drug Delivery Diabetes Management Hearing Aids





FIBERS

Carpet

Textiles

Turf

#### TRANSPORTATION

Automotive Recreational Vehicles Heavy Trucks





Mass Transit



Nonwovens



### **BUSINESS EQUIPMENT**

Business Machines Machine Wear Reduction



Non-Automotive Vehicles



#### BUILDING & CONSTRUCTION

Cladding Decking & Fencing Roofing & Railing Window & Door



#### FILM AND SHEET

**Optical Films** Solar Panels



Packaging and Containers

### MANUFACTURING LOCATIONS

Cuyahoga Falls, OH, USA

ISO 9001:2015, IATF 16949:2016 Color and additive masterbatch for automotive, building & construction, and packaging

#### Dalton, GA, USA ISO 9001:2015

Color masterbatch for automotive, building & construction, and fibers

#### • Grand Rapids, MI, USA

ISO 9001:2015 Color masterbatch for automotive, building & construction, and fibers

### • Concord, NC, USA

ISO 9001:2015 Color and additive masterbatch for Asia Pacific fibers

### • Liberty, NC, USA

ISO 9001:2015 High volume white, natural, and black masterbatch and compounds engineered compounds with

#### Morrisville, PA, USA

ISO 9001:2015, ISO 13485:2016 Engineered compounds for healthcare, industrial, and electronics

#### Swedesboro, NJ, USA

ISO 9001:2015, IATF 16949:2016 Engineered compounds for healthcare, industrial, and automotive

#### Suzhou, China

ISO 9001:2015, ISO 14001:2015, ISO 13485:2016 Broad range of masterbatch and engineered compounds servicing

#### • Ribe, Denmark

ISO 9001:2015, ISO 14001:2015, ISO 13485:2016 Broad range of masterbatch and emphasis in healthcare

### Pune, India

ISO 9001:2015 Broad range of masterbatch primarily for textiles industry



### ECOVADIS

Earlier this year, Americhem was awarded the Silver EcoVadis Medal. This prestigious recognition places Americhem among the top 15% of companies assessed by EcoVadis, a globally recognized assessment platform that rates businesses' sustainability in various categories. The EcoVadis rating covers a broad range of business practices, including Environmental, Labor and Human Rights, Ethics, and Sustainable Procurement.

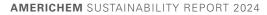
We express our deepest gratitude to every employee and partner who played a role in achieving this remarkable milestone. Over the past year, Americhem has made significant strides in our sustainability efforts, centering our plan around People, Process, Product. This focused approach has allowed us to hone our efforts into the areas that matter most and can have the greatest impact.

SILVER | Top 15% **ecovadis** Sustainability Rating MAR 2024

This achievement marks only the beginning for Americhem to set new standards, continue delivering excellence, and push boundaries within our sustainability goals. The Silver EcoVadis Medal is a testament to Americhem's ongoing commitment to sustainability and our dedication to making a positive impact on the environment and society. This recognition not only highlights our achievements but also motivates us to continue striving for excellence in all aspects of our operations. As Americhem moves forward, we remain committed to setting new benchmarks in sustainability and leading the way in the industry.



SCAN TO REVIEW AMERICHEM'S ECOVADIS SCORECARD





## 2030 SUSTAINABILITY GOALS

### **Building our Sustainable Future**

In 2022, Americhem launched its new sustainability We are collecting key performance indicators campaign: "Americhem, A Sustainability Enabler", highlighting how innovation at the heart of our business yields efficient operations and sustainable product design. This commitment establishes our 2030 Sustainability Goals in three distinct pillars of People, Process and Product to guide our work.

(KPIs) to baseline our performance and establish targets within our business. Each key pillar aligns Americhem's vision for sustainability. Our 2030 goals also continue our focus on cultivating a safe, inclusive, and respectful workplace that values our people at the heart of our operations to achieve the highest level of environmental and product stewardship.

PEOPLE 100%

of our facilities engaged in local communities

< 0.25 annual total recordable

>75%

incident rate (TRIR)

favorability in DE&I on annual engagement survey

>90%

employee response to annual engagement survey





### **PROCESS**



reduction in landfill waste intensity\*

50%

of all purchased electricity from renewable energy sources

10%

reduction in energy intensity\*

15%

reduction in water intensity\*



### PRODUCT

# %

of key suppliers assessed for sustainability performance



of new products developed have a positive sustainability attribute



AMERICHEM SUSTAINABILITY PILLARS

# OUR PEOPLE

### Americhem's Approach to Social Sustainability



#### ENGAGEMENT & **PROFESSIONAL DEVELOPMENT**

- Diversity, Equity, and Inclusion
- Women in Manufacturing (WIM)



#### **ETHICAL PRACTICES**

- Compliance
- Preventing Corruption



#### **SAFETY & HEALTH**

- Health and Wellness
- Next Level Safety



#### COMMUNITY INVOLVEMENT

- Charity
- Volunteerism



"At Americhem, our employees are the cornerstone of our success and the driving force behind our continuous growth. We strive to attract and retain the best talent by ensuring that Americhem remains a top employer of choice. To achieve this, we are committed to creating a dynamic and inclusive workplace where collaboration thrives and every team member feels valued. We prioritize fair working conditions, encourage cooperative and responsible practices, and champion innovation through diversity and high safety standards.

Our goal is to empower employees by recognizing their unique strengths and supporting their professional development. In response to evolving labor markets, demographic shifts, and the rise of digitalization, we are proactive in adapting our strategies to meet these challenges head-on.

Our commitment to responsible employment practices is encapsulated in the Americhem Code of Conduct and our Ethics and Human Rights Policy. We take any violations of these principles seriously and provide our employees with a robust global whistleblower system, Americhem Speaks, to ensure their voices are heard and respected."

**Diane Shields** Vice President of Global Human Resources



# ENGAGEMENT

Employee engagement and sustainability are two interconnected concepts that can significantly impact an organization's success. When employees are engaged, they are more likely to be committed, passionate, and motivated to contribute to the company's goals. This can lead to greater participation in sustainability initiatives and progress. In 2022, we conducted an annual engagement survey to gauge our employees' workplace well-being, commitment, and satisfaction. This survey is designed to measure how employees feel about their work-life balance and well-being, manager relationships, company culture, executive leadership, career and personal development, and areas of improvement. From our baseline assessment in 2022, we repeated the annual engagement survey each year to measure how we progressed in areas and which topics need further action.

Simultaneously, there are areas requiring development that should be pursued proactively, such as employee understanding of Communication Cascading, Employee Growth and Development, and Continue Positive Trends in Engagement. The strengths and areas requiring development can contribute important findings for cultural adaptation to the evolving business needs.

We plan to continue conducting this survey every year to continue understanding our needs and progress, and our goal is to maintain >90% global participation each time.

In 2024, 94% of our global employees opted to participate providing an overall engagement favorability score of 74.5%, both up 3% since 2022. This score depicts our employees' sentiment about the company and what they are willing to do because of that emotional attachment. In addition, improvement was achieved across all 10 categories. From the 2023 to 2024 survey data, we learned:

- Willingness to recommend Americhem as a great place to work increased by +7.5%.
- Global perceptions regarding Teamwork (+6.7%), Performance Management (+5.2%) and Empowerment (+5.2%) improved the most.
- Sentiment that there is effective cooperation across departments (+8.8%), belief that employee opinions are sought (+8.7%) and opinions that people are held accountable for their performance (+8.1%) increased significantly.
- Manager Relationship (+3.7%) • remained the highest scoring category and conviction that managers treat employees with respect is 83% favorable (+3.5%).
- The belief that the feedback from the survey will be used to make improvements is also +5.1% higher than in 2023 and +6.3% higher than in 2022.



WELL-BEING



**RESOURCES** AND SUPPORT



**TEAMWORK** 



**FUTURE VISION** 



MANAGEMENT



**GROWTH AND** DEVELOPMENT



**EMPOWERMENT** 



Continue to build out communication channels with an emphasis on the flow of information to every employee on a consistent cadence while further incorporating communication into change management strategies.

COMMUNICATION



Leverage employees for problem solving, enhance Individual Development Plans with formal and informal tools with special attention on employees with 3-5 years of tenure.

**GROWTH &** DEVELOPMENT



Continue the positive trends in every category from the prior year. Targeted action planning in regions/sites that have regressed from prior year and share best practices from regions/sites with significant improvements.

ENGAGEMENT

### Focus Areas:

# NETWORKING & PROFESSIONAL DEVELOPMENT

The 2024 Americhem Global Leadership Team Meeting, held in Nashville, Tennessee, was themed "Soar in 2024". This three-day event was designed to be more than just a meeting; it was a pivotal moment for the company to chart the course for its future. The purpose of this offsite was to dive into the heart of personal leadership, business growth, and strategic alignment.



Each day encompassed its own theme including Framing and Messaging, Solutioning, and Commitment. The agenda was carefully crafted to cover several key areas, including enhancing personal leadership skills, discussing and shaping the vision for sustainable business growth, aligning actions with ambitious strategic goals, and creating a collective understanding of what success looks like for Americhem. The meeting also emphasized personal networking and shared experiences to strengthen the bonds and understanding among the leadership team. At Americhem, Talent Engagement and Development are one of our fundamental pillars to success within our organization. To help facilitate this development process, we promote learning through multiple avenues such as:

#### **Business Leadership Rotational Program –**

a rotational program for recent college graduates to fast track experiences across an array of functions, such as manufacturing, technical sales, and technology. Upon completion, these employees are trained to fill key roles within the organization.

**Training Programs -** this includes on-the-job training for most functions, employee support for external training such as Six Sigma certifications, and individual training programs and plans dependent on the role and current business need.

**Networking Programs** – internal networking programs that pair our executive committee and upper management with employees across the organization, providing 1-on-1 time to discuss careers, growth, and give an opportunity to meet one another on a more personal level.

**Workforce Development** – a training platform for our manufacturing employees that Americhem is developing to facilitate efficient on-the-job training and individual development. **Young Professionals Program** – a program directed at fostering development, networking, and mentorship for our up-and-coming younger professional workforce.

Americhem's Young Professionals program is designed to bring young professionals together from across the globe, providing them with an opportunity to network, learn, and grow within the company. Each quarter, we hold meetings with our CEO to discuss and examine a variety of topics. These meetings feature a variety of sessions and activities aimed at enhancing leadership skills, effective communication, industry trends, conflict resolution, and financial acumen. Participants engage in team-building exercises and share their goals for the meeting, fostering a sense of community and collaboration. This initiative achieved the company's goal

of promoting collaboration, professional development, and engagement within the organization.



Shaping the Future Together



As the relationship between work and employees has evolved over the years, Americhem has continuously innovated its people strategy to remain competitive in today's labor market. As part of our key strategy for engagement and professional growth, we are always seeking ways to create opportunities for our future leaders.



Domenchem.

SHAPING THE FUTURE TOGETHER 25

# **DIVERSITY, EQUITY & INCLUSION**

#### Creating a Culture of Inclusivity and Respect

Americhem sees the diversity of its workforce as a corporate success factor and as a driver of creativity, innovation, and cultural competence in business partnerships. We have set out the requirements for diversity, equity, and inclusion (DEI) in our Code of Conduct and our Human Rights Policy. A fundamental principle is the equal treatment of all our employees – irrespective of gender, age, country of origin, sexual identity, state of health, religion, or beliefs. We recognize that a diverse mix of backgrounds, skills and experiences drives new ideas, products, and services to promote sustainable growth and social well-being.

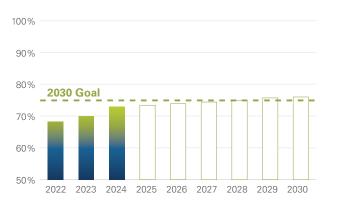
At Americhem, we are committed to creating a culture that values and promotes diversity, inclusion, equal opportunities, and a work environment free from harassment, hostility, and closemindedness. This involves:

- Recruiting, retaining, engaging, supporting, and advancing underrepresented and diverse employees.
- Applying principles of equity and social justice to achieve equal employment opportunities for qualified individuals of all backgrounds.
- Promoting respectfulness, cultural awareness, and inclusivity by encouraging all employees to be accepting of and curious about others' experiences and perspectives, fostering a cooperative work environment, and providing a safe space for all employees to express themselves and feel heard and valued for their ideas.

For Americhem, the international diversity of its workforce is a key element of its corporate culture and therefore a factor in the company's success. Around 48% of employees are employed at sites outside of United States. There are over 7 different nationalities employed at Americhem globally. We support international communication with intercultural training, language courses, crosslocation projects, and stays abroad. To further drive our commitment to Diversity, Equity, & Inclusion, Americhem formed a DEI Advisory Council, responsible for the DEI strategy and coordinating regional activities. Some active focus areas include developing internal peer resource groups, diversity metric transparency, and building a global ethics hotline for employees to anonymously report any breach in ethical behavior.

Americhem believes that DEI is an ongoing process that starts with our employees and enables each and every individual to thrive and prosper without the fear of reprisal when expressing their distinctive individuality. As we continue our journey to promote inclusivity and respect, we strive towards our goal of increasing global DEI favorability to greater than 75% on our annual engagement survey by 2030.

#### **DEI FAVORABILITY**



This graph shows the measure of global DEI favorability across the organization, measured from our annual engagement survey.

### **Demographics 2023**

#### All data as of December 2023:

Global Diversity by Level: Female	
Executives	27%
Directors	19%
Professionals	24%
Non-Exempt	9%
All	14%

### Race and Ethnicity\*

Hispanic or Latino	14
American Indian or Alaska Native	19
Asian	2%
Black or African American	15
Native Hawaiian or Other Pacific Islander	19
Two or more races (Not Hispanic or Latino)	19
White	66



Diversity Leadership: CEO D	irect Reports
Female	27%
Minority	27%
Female or Minority	46%

Age Band*	
under 30	12%
30-50	45%
over 50	42%

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%	Ε
%	N
%	Ρ
%	Ν

Diversity by Level: Minority*	
Executives	13%
Management	20%
Professionals	14%
Non-Exempt	41%
All	34%

\* North America only

 Hinority is defined as culturally, ethnically, or racially distinct group that coexists with but, is subordinate to, a more dominant group

# WOMEN ON THE RISE

#### Shattering the Ceiling

It's no secret that the plastics industry, like many others, has long lacked strong female representation. However, the industry has been recently facing a wave of change through women making significant progress, taking on leadership roles and shaping the future of plastics. At Americhem, women have taken on roles in nearly every part of the business including R&D, engineering, manufacturing, guality, HR, commercial sales, IT, supply chain, accounting, and executive leadership. We are proud to support our women and their remarkable achievements as they are vital to our organization. We believe it is critical to retain top female talent, as this will not only benefit the careers of women, but also bring diverse perspectives to drive innovation in the evolving world of plastics.



### Women in manufacturing®

Americhem is a proud member of Women in Manufacturing<sup>®</sup>, where all employees can join at no cost, enabling networking opportunities, providing resources and education, and promoting leadership development. Women in Manufacturing<sup>®</sup> (WiM) is a dedicated organization working towards a future where manufacturing provides equal opportunities and rewarding careers for all, offering regional and national events and encouraging the next generation of women.



#### Geeta Chavan – Sr. Associate, Quality Pune, India

"Women's involvement in manufacturing is a pivotal driver of economic growth, expanding the talent pool, enhancing productivity, and booting competitiveness. We aim to maximize female representation in our manufacturing facilities so that their passion and pride in their work are reflected. The profound impact of turning obstacles into opportunities and setting new benchmarks makes me feel proud to take it to the next level here."



Candice Jiang – Commercial Support Manager Suzhou, China

"If you don't make the time to work on creating the life you want, you're eventually going to be forced to spend a lot of time dealing with a life you don't want. Persevere, believe in your abilities, and pursue your dreams, no matter what difficulties and challenges you may encounter."
management best prosperous for all."



Ana Pardo – Customer Service Supervisor Mexico City, Mexico

"As a woman, I am proud and driven. My daily commitment is to excel in my role and deliver exceptional service. I am passionate about contributing to Americhem's sustainable growth and ensuring our customers' complete satisfaction through quality products and service."



Shannon Turner – Global Quality Leader Dalton, Georgia, USA

er

"Championing the empowerment of women is integral to sustainability, dedication to diversity, and management best practices. It lights the path towards a brighter future by amplifying women's voices, fostering innovation, and respecting the environment. By supporting women to excel and lead, we can implement viable solutions that are



Rikke Maj Ager – Director, R&D and Technology Ribe, Denmark

agenda, both from an environmental standpoint but also supporting people, including empowering women. My work includes product development and use of the latest technologies to ensure optimal utilization of resources to make us a leading company within our industry. I would like to continue contributing to making a difference both professionally and personally, and I encourage others to do the same."



Alexis Gonzalez – Inventory Control Manager Grand Rapids, Michigan, USA

"It is important to understand that women from diverse backgrounds bring different viewpoints and problem-solving methods leading to a more positive and sustainable work environment and a wider talent pool. I've been fortunate in my career at Americhem to have leaders and colleagues who actively encourage this atmosphere and understand its value and impact."



# **COMPLIANCE & PREVENTING CORRUPTION**

Americhem is committed to the highest standards of business and ethical behaviors. This includes compliance with all applicable laws and regulations in every region that we operate, as well as company policies and procedures. Americhem respects internationally recognized human rights as established in the Universal Declaration on Human Rights and the International Labor Organization's (ILO) Core Conventions.

In line with the UN Guiding Principles on Business and Human Rights, Americhem recognizes the corporate responsibility to respect these principles and commit to 'know and show' this through ongoing human rights due diligence. Furthermore, our efforts include ongoing robust engagement with our business and supply chain partners to mitigate potential human rights impacts beyond our direct control.

Our support of internationally recognized human rights is consistent with our dedication to enriching our workplace, partnering with our supply chain, preserving the environment, and supporting the communities where we operate.

Compliance management is guided by our aspiration of always complying with laws, internal regulations, and voluntary commitments. This is because only as a reliable business partner will we gain the trust of our employees, customers, and business partners needed for sustainable corporate growth. One way

whistleblower complaint.

that Americhem has invested in ensuring that we remain vigilant against corruption is the implementation of Americhem's Secure Speak, our global ethics line solution for both within the company, and outside. This is an anonymous reporting platform allowing anyone within the organization or connected to the company to file a formal

To ensure compliance, our organization is trained annually on our Guidelines for Business Conduct Policy and the use of our Secure Speak line.



# **OCCUPATIONAL HEALTH & SAFETY**

Americhem prioritizes providing a safe and healthy work environment for all employees, contractors, visitors, and stakeholders. Our commitment to world-class safety is demonstrated through our campaign, Next Level Safety. We believe that every employee and contractor have the right to work in an environment free from hazards, and it is our responsibility to identify, assess, and mitigate risks to ensure their well-being. Safety is not just a priority; it is a core value embedded in everything we do.

Americhem displays a tiered committee approach with support of executive management to govern safety throughout the organization. This tiered approach includes:

- Safety Governance Committee (Corporate) •
- Safety Steering Committee (Site Leadership) •
- Site Safety Committee (Site Employees) •

Our focus areas for 2024 include conducting site assessments of local EH&S systems in place with respective action plans for continuing improvement, conducting additional safety leadership training, developing a robust safety observation program established to improve employee engagement in hazard and safety observations, along with many more site-specific safety mitigation initiatives. We believe safety is the responsibility of every employee and contractor, and by working together we can strive towards zero injury and incidence!



"At Americhem, safety is more than just a priority; it is a core value that underpins every aspect of our operations. Over the past year, we have continued to strengthen our commitment to creating a safe and healthy

work environment for all our employees, contractors, and visitors. Our comprehensive approach to safety is designed to anticipate, identify, and mitigate risks before they lead to incidents, ensuring the well-being of everyone on our sites.

Our dedication to safety is reflected in the continuous improvement of our safety management systems and the proactive engagement of our workforce. We have implemented advanced training programs and leadership initiatives that empower every member of our team to take an active role in maintaining a safe workplace. The integration of innovative safety technologies and data-driven insights has further enhanced our ability to monitor and respond to potential hazards in real-time. As we move forward, we remain steadfast in our commitment to safety excellence."

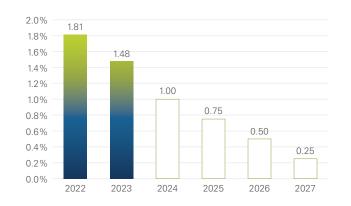
Phil Walsh **Global EHS Director** 



# SAFETY EXCELLENCE

Our unwavering commitment to safety has led to remarkable achievements in 2023. Through diligent efforts and a culture of continuous improvement, we have set new standards in safety performance, significantly surpassing industry benchmarks. These accomplishments highlight our dedication to ensuring a safe and healthy work environment for all our employees. Our Next Level Safety Journey will continue to drive us towards outstanding results.

#### **AMERICHEM GLOBAL TRIR**



This graph depicts our goal of reaching and maintaining <0.25 global TRIR by 2030





LOCKOUT-TAGOUT (LOTO)

Deenergize equipment before beginning work



#### MOBILE EQUIPMENT SAFETY

Only operate mobile equipment with proper training and certification

### **ELECTRICAL SAFETY**

Only trained personnel can open electrical panels

# SAFETY INITIATIVES



SIF PROGRAM **BRANDING / FOCUS** 

EHS PROGRAM IMPROVEMENTS



AMERICHEM SAFETY MANAGEMENT SYSTEM (SMS)



MEDICAL MANAGEMENT PROCESS



PPE PROGRAM (ENHANCED STANDARDIZED

NEXT SAFETY

AMERICHEM SAFETY LEADERSHIP PROGRAM

### GET TO KNOW SIF: SERIOUS INJURY & FATALITY PREVENTION



#### WORKING AT HEIGHTS

Always use the appropriate and approved fall prevention



#### HOT WORK

Understand and complete the "Hot Work Procedure" before beginning



#### CONFINED SPACE ENTRY

Comply with all aspects of "Confined Space Entry Procedure" 35

# HEALTH & WELLNESS

Employee health and wellness is a foundation for sustainability. By encompassing both physical and mental well-being, we believe employees can contribute to a more productive, engaged, and resilient workforce. At Americhem, we take our employees' health and wellness seriously. As such, we offer a variety of benefits to our employees around the globe, highlighting a few below:

In North America, our health and wellness program In the Asia Pacific region, we prioritize physical includes typical benefits such as 401k, PTO, health insurance, and community involvement days. Additionally, we offer on-site wellness screenings, EAP programs, annual on-site financial advisement, charity drives and events. We also ensure that employees have opportunities to participate in community activities during work hours throughout clubs and team-building activities. the year.

In our India region, we focus on various aspects of health and wellness. For physical wellbeing, we offer Fitness Challenge initiatives, annual medical camps, No Tobacco Day, flexishifts, knowledge webinars, and health metrics. For financial wellbeing, we provide a comprehensive employee benefits plan. Social wellbeing is supported through our annual engagement survey, blood drives, and celebrations of safety, service, and international and national events. Lastly, for emotional wellbeing, we focus on birthdays, inductions, rewards and recognition, and marriage and parental gifts/sessions.

health by providing physical examinations to monitor employees' health and wellbeing. We also focus on celebrations and rewards by taking time to celebrate outstanding employees, holidays, Chinese New Year, and successes. For emotional wellbeing, we support activities such as sports

In Europe, we also offer a variety of health and wellness benefits to support employees. This includes Family Day in October, a 5k Walk/Run for Hospital Clowns in September, and annual company events such as the Christmas Party and Summer Party. Employees also receive paid bereavement leave, health insurance, a pension plan, critical illness coverage, life insurance, and disability insurance. These benefits are designed to promote a healthy and supportive work environment.

By investing in the health and wellness of our employees, we are not only creating a more positive work environment but also building a stronger, more sustainable future for Americhem. Our commitment to employee health and wellness demonstrates our dedication to creating a workplace where our people can thrive, both personally and professionally.



At Americhem, community involvement is at the heart of our mission. We are dedicated to making a positive impact in the communities where we operate.

1ºamerichem.

22. september

# COMMUNITY INVOLVEMENT ACROSS THE GLOBE

In North America, our initiatives range from organizing local events such as United Way Day of Action and Fire Station Clean-up by our Dalton, GA team, to participating in environmental efforts including the River-City Cleanup Series around Cuyahoga Falls, OH. We also support our employees in volunteering at several organizations including the American Red Cross, Family Resource Center, local food banks and hospitals, Habitat for Humanity, and Meals on Wheels to name a few. We also love to help keep our environment clean and healthy by participating in monthly park cleanups.

Our team in Pune, India also participated in World Environment Day this year taking action to raise awareness and protect the environment. They planted trees surrounding the facility and initiated "No Vehicle Day", where employees were encouraged to use public transportation, walk, or bicycle to minimize emissions from traditional vehicle commute. They also hold local blood donation drives and participate in local community initiatives.

In Europe, we particapte annually in Pink Wednesday which raises awareness and funds for breast cancer. Americhem also matches employee contributions to these funds supporting cancer research. Most recently, Americhem proudly co-sponsored shirts for a children's soccer training camp.

In Asia, we are heavily involved in child learning and education. By engaging in activities such as tutoring, mentoring, and organizing educational workshops, we can provide invaluable support to children. Our team in China also holds annual fundraisers to raise money and supplies for surrounding schools and daycares.

These activities not only strengthen our community bonds but also reflect our commitment to social responsibility and sustainability. Through these efforts, we aim to foster a culture of giving back and making a difference in the lives of those around us. Having this growing community involvement also aligns with our 2030 goal to have 100% of all locations actively participating in their community.

# OUR PROCESS

### **Driving Sustainable Operations**

### **Focus Areas**



#### **RESOURCE CONSERVATION**

- Minimize Raw Material Waste
- Improve Energy Efficiency
- Reduce Water Intensity •



### **POLLUTION PREVENTION**

- Divert Waste from Landfill
- Utilize Renewable Energy
- Zero Pellet Loss





40



"Americhem is on a mission to make sustainable manufacturing the new norm! We're committed to cutting down our environmental impact by getting creative with our resources. Our strategies include reducing waste through lean manufacturing, managing our waste responsibly, boosting energy efficiency, and saving water. With the help of cutting-edge technology and a shift to renewable energy, we're paving the way toward a greener tomorrow. We're all about continuous improvement and always on the lookout for new ways to trim our carbon footprint. Our goal? To craft a more sustainable future for our planet and our business-because saving the Earth is just plain awesome!"

Nick Brueckner Vice President of Global Manufacturing

### WASTE MANAGEMENT

#### Minimizing Raw Material Waste & Diverting from Landfill

As a global manufacturer, raw material usage is a major component of our daily operations. We are committed to minimizing our environmental impact by wasting as little of these raw materials as possible. Our engineers apply Lean Manufacturing principles throughout the production process to achieve this goal, including:

- Optimizing processing conditions and implementing new equipment to maximize vields.
- Repurposing side streams for use in other • processes.
- Refining purge procedures to minimize non-value add material usage.

Once waste is generated in our facilities, it is critical that we manage it responsibly. We want to keep our waste out of landfills while allowing value to be extracted from it as well. Some avenues to achieve this include recycling and conversion of waste to energy. While a portion of our waste is processed using these alternative methods, we are working to significantly increase that amount.

Most of our waste is non-hazardous and comes from production processes. However, all hazardous waste is handled responsibly according to local environmental regulations and governed by our internal hazardous material handling procedures.

Americhem has also found ways to contribute to material conservation and landfill avoidance outside the walls of our own facilities. Many of our products are designed for long-term usage and recyclability to keep them out of landfills. We also have programs at many of our facilities to reuse shipping and packaging materials.

We're making progress! In 2023, several of our sites responsibly diverted over half their waste away from landfills. We continue to work towards our 2030 goal of reducing our landfill intensity by 15% from 2022.

#### Waste Management

#### Small Acts Making Big Differences - Concord, NC, USA

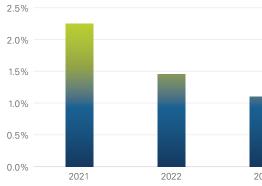
At our Concord, North Carolina facility, the team has been creatively making use of aluminum soda can waste after consumption. Employees have been collecting aluminum cans and periodically taking them to the local Concord fire station. Here, the fire station recycles the cans and uses the proceeds to support the North Carolina Firefighters' Burned Children Fund, where non-medical assistance is provided to childhood burn victims and burn prevention programs are developed. We are proud to say our Concord team has set a great example of turning waste into value, and they have been doing so for over 20 years!

### Major Improvements – Grand Rapids, MI, USA

The Grand Rapids, Michigan, USA facility is Americhem's center of excellence for PVC and TPE elastomeric compounds, primarily serving the automotive and transportation, building and construction, consumer products, electronic, and industrial markets. A leader in minimizing raw material waste and diverting materials from landfill, this operation has cut the amount of material going to landfill per total production in half from 2021 through a two-pronged approach:

- Waste reduction- total waste generated per pound produced decreased by 14% from 2022 to 2023.
- Alternative waste solutions- total percentage of waste to landfill decreased by 8% from 2022 to 2023.

#### LANDFILL PER TOTAL PRODUCTION



Amount of material sent to landfill divided by total amount of material produced







"Through lean manufacturing and innovative waste reduction strategies, our Grand Rapids facility has doubled production efficiency per pound of landfill waste since 2021, demonstrating our strong commitment to sustainability. Our partnership with a local recycler further enhances our environmental stewardship, ensuring a symbiotic relationship that benefits both our operations and the community."

Jason Lepper Plant Manager Grand Rapids, MI, USA

# ENERGY MANAGEMENT

#### Improving Energy Efficiency

At Americhem, we are constantly seeking to lower the energy required to power our operations. Through engineering solutions, we have been able to reduce our carbon footprint and contribute to a healthier planet. Below are examples of the many projects implemented at our facilities across the globe.

#### ColdPound<sup>™</sup> – The Green Solution

Americhem Europe continues to pave the way in green solutions through a unique and patented process called ColdPound<sup>TM</sup> technology, making it possible to reduce carbon footprint during processing while maintaining the full properties of the polymer. Our studies showed the energy consumption can be lowered by up to 85% when using ColdPound<sup>TM</sup> technology compared to traditional extrusion processing. The ColdPound<sup>TM</sup> process can be used on a variety of polymers. This technology will also keep glass fibers intact during the process, resulting in optimal product performance.

#### **High Efficiency Water Heating**

Traditional natural gas boilers are often used in a manufacturing setting to generate steam for various process needs. In the past few years, our manufacturing facility in Cuyahoga Falls, Ohio decommissioned a pair of natural gas boilers and transitioned to highefficiency electric immersion heaters for our process. This removed the need to combust natural gas to generate steam, improving employee safety by eliminating the need to handle acidic condensate generated from natural gas boilers along with the high temperature and pressure required from steam. Steam can also be corrosive and damaging to piping. Overall, the switch to electric process heaters has reduced our carbon footprint while improving the overall safety of our employees.





"At Americhem, we'll continue to look for ways to reduce our carbon footprint. This can be done through modernization or re-evaluating our existing methods of manufacturing. Decommissioning our boilers is one great example."

Jim Huston Plant Manager Cuyahoga Falls, OH, USA

#### Utilizing Free Cooling

Several Americhem facilities located in colder climates make use of "free cooling" to save on energy consumption and take advantage of ambient temperatures. At Americhem, we use "free cooling" in the form of a waterside economizer, which refers to using cool outdoor air, typically below 55°F, to chill supply water then used to cool manufacturing equipment. This system allows us to bypass the refrigeration cycle of a chiller system which results in substantial energy savings and a reduced carbon footprint.

Americhem believes renewable energy paves the way for a more sustainable future. Americhem World Headquarters, located in Cuyahoga Falls, Ohio, USA is demonstrating our continued commitment to sustainability by sourcing all electricity through a local renewable energy program utilizing Green-e<sup>®</sup> certified renewable energy certificates (RECs). This program sources renewable energy generated primarily from wind, solar, and hydropower. Americhem is proud to support the growth and development of the renewable energy sector through this initiative. Furthermore, our goal is to utilize green energy at all facilities over the next few years with work already underway.



#### Promoting Green Energy

Americhem Europe located in Ribe, Denmark, is also leading the way on renewable energy operation. This facility sources 100% of its energy from renewable energy. Our recent expansion of this facility included the installation of several solar panels to generate a portion of green electricity on site, while the remaining electricity is sourced from purchased wind power through RECs. Switching from fossil fuels to renewable electricity can reduce greenhouse gas emissions by over 90%, allowing us to do our part in protecting Earth's atmosphere and lowering our carbon footprint.

### WATER MANAGEMENT

#### Protecting Our Water Sources

Water is an essential manufacturing element for many of our products. In general, Americhem's processes are not highly water intensive compared to many other critical sectors. Our strategy aims at balancing the competing demands of water usage while protecting the environment and ensuring the long-term availability of this vital resource. We have ongoing water conservation projects including:

- Implementation of water-saving fixtures at 50% of our sites by the end of 2024, and 100% of our sites by 2025
- Scope out closed-loop water recycling at our facilities that do not already have this in place
- Compliance with local regulations to ensure no contamination for all locations generating wastewater
- Storm water management best practices such as equipping proper filter systems, quarterly visual inspections of silos, baghouses, etc., and employee training

#### Water Saving Methods – Swedesboro, NJ, USA

The Swedesboro, NJ site uses a unique method of strand cooling on most of their production lines. Their cooling units require less water than traditional water baths and have less losses from spillage throughout operation. As a secondary safety benefit, this keeps water off the shop floor and prevents slip hazards. The site also avoids using water to wash any equipment, limiting their usage for cleanups. Thanks to these measures, they average only 0.76 m<sup>3</sup> of water per metric ton of material produced.



#### **Operation Clean Sweep**<sup>®</sup>

Operation Clean Sweep<sup>®</sup> was launched in 1991 in the United States as a joint campaign between the Plastics Industry Association (PLASTICS) and the American Chemistry Council (ACC) with the goal of zero plastic powder, pellet, and flake loss at resin manufacturers and handlers. Since then, this program has achieved international recognition and participation. Operation Clean Sweep<sup>®</sup> is designed to prevent harsh forms of plastic from reaching the ocean and waterways causing contamination, pollution, and potentially harming wildlife. At Americhem, we understand the importance of properly containing pellet, powder, and flake material.

manufacturing processes.

# POLLUTION PREVENTION

This is why we are proud to have all facilities with Operation Clean Sweep<sup>®</sup> programs taking the pledge including our location in Europe, who took the pledge earlier this year. Through this pledge, our facilities are implementing programs to reduce spill points, ensure all necessary storm drains are fully equipped with filter systems that are regularly replaced as needed, train employees on the importance of careful waste handling, and implementing good housekeeping that will prevent resin pellet, flake, and powder loss during our



# HIGHLIGHTING INDIA

In May of this year, Americhem India was nominated by TradeFlock<sup>™</sup> Magazine for the esteemed 'Make in India – Best Manufacturer 2024' Award. Our nomination was a result of a comprehensive evaluation process conducted by TradeFlock<sup>™</sup> Magazine, including a third-party survey conducted to manufacturers across India, of which we were a participant. Through investments in research, partnerships, and eco-friendly practices, we drive both customer satisfaction and global innovation. Our commitment to excellence and positive industry change in Southeast Asia and India aligns with our broader objective of promoting sustainability worldwide, reinforcing our overarching goals.

Recent advancements in our manufacturing processes have significantly improved product quality and efficiency. The integration of automation technology has enhanced precision, consistency, and speed in production operations, reducing manufacturing times. Additionally, centralised ERP systems provide improved visibility from order entry to final shipment, ensuring product uniformity. Proactive supply chain strategies enable swift responses to challenges, ensuring uninterrupted production. These innovations reflect our commitment to excellence and continuous improvement, driving enhanced performance and customer satisfaction across all aspects of our operations.



At Americhem India, we are committed to environmental stewardship. Our sustainability initiatives include recycling 30,000 liters of water daily through our Sewage Treatment Plant (STP) and Effluent Treatment Plant (ETP) using this water for gardening purposes, as well as participating in World Environment Day (June 5th) where our team planted 15 trees locally. To further reduce our carbon footprint, we promote sustainable transportation through initiatives like "No Vehicle Day," encouraging employees to adopt eco-friendly commuting habits. We have taken additional steps to protect the environment by requiring all employees, visitors, and vendors to present a valid Pollution Under Control (PUC) certificate and driving license at the security gate to our facility. This policy was implemented on World Environment Day and applies to all personal and company vehicles entering the premises.

#### Nomination Criteria

- Diversified product portfolio & market segment penetration
- WASH (Workplace Assessment Safety & Hygiene) Certificate Certified by Quality Control of India (QCI)
- Solution Dyed Technology (Sustainable as Eco-Friendly) in Fiber Space, against the Conventional Dyeing
- TradeFlock's Editorial Board Stringent Evaluation & Survey from Manufacturing across India





"Our vision and mission steer our actions, guiding us to deliver innovative, sustainable solutions tailored to local markets. Through these ongoing efforts, we are dedicated to creating a more sustainable future for generations to come!"

S. Mani Managing Director, India & Southeast Asia



## PERFORMANCE & GOALS

### Measuring Our Progress & Setting Future Targets

Environmental stewardship has long been a core value at Americhem. Our 2030 goals build upon this legacy by setting ambitious targets for a more sustainable future. As we continue to identify projects to reduce energy consumption, transition to renewable energy, improve waste handling, and promote water conservation, we strive to further decarbonize our operations and protect our invaluable planet.

Category	2022	2023	2030 Target
Landfill Waste Intensity (kg Waste/MT Produced)	29.68	29.61	25.23
Energy Intensity (MWh/MT Produced)	1.06	1.05	0.95
Renewable Energy (%)	3.7	3.8	50.0
Water Intensity (m³/MT Produced)	3.32	3.07	2.82



10% reduction in energy intensity\*

of all purchased electricity from renewable energy sources

50%

15% reduction in water intensity\*

\* Relative to 2022 baseline year. Landfill waste intensity is the ration of material that is disposed via landfill divided by material produced.



# OUR PRODUCTS

Americhem is a global leader in custom color masterbatch, functional additives, engineered compounds, and performance technologies. Our commitment to sustainability is deeply ingrained in our development process, and our product portfolio is a testament to this dedication. We believe that innovation and environmental responsibility are not mutually exclusive but rather interconnected forces driving progress. By understanding the unique challenges faced by the industries which we serve, we've developed a diverse range of products that deliver exceptional performance while minimizing their environmental impact. This section delves into the heart of our sustainability journey, focusing on how we've transformed customer needs into sustainable product solutions.



#### MATERIAL FOCUS

- Recycled Content
- Bio-Based Content
- Eco-Friendly Content
- Climate-Positive Content

#### DESIGN & PRODUCTION FOCUS

- Resource Efficient Products
- Lightweight Products
- Degradable Products
- VOC Reduction

#### **IMPACT FOCUS**

- Carbon Footprint Reduction
- Development to Promote Alternative Energy Applications
- **Erosion Control**

#### **FUNCTION FOCUS**

- Barrier Products for Content Protection
- Antimicrobial Content
- Recycling Enabler

#### CERTIFIED SUSTAINABLE

- Oeko-Tex®
- C2C Certified®
- Bluesign<sup>®</sup>

8 ECCANTWORK AND ECONOMIC GROWTH 2 TERD 13 CLIMATE 13 CLIMATE 13 CLIMATE



"Our customers demand high-performance materials that are also environmentally responsible. Americhem is dedicated to meeting these challenges head-on by developing innovative products that balance performance with sustainability. We are proud to be a leader in this space and are committed to a greener future."

Mark Juve Vice President / General Manager of Commercial, North America

# DESIGNING FOR **SUSTAINABILITY**

#### A Focus on Sustainable Development

Americhem's diverse collection of technical products is driving sustainable solutions across high-growth sectors including automotive, building and construction, fiber, healthcare, outdoor, and aerospace. As the global shift towards circular economy accelerates, our total sustainable portfolio is poised to expand to more than 25% of new products developed by 2030. Our unique combination of global reach, innovation, and customizable solutions positions us to capitalize on responsible opportunities while delivering exceptional value to our customers. Together, we are building a more sustainable future!

#### **Our Approach**

Inclusion of sustainable design attributes in our technology portfolios allows our partners to deliver more sustainable performance solutions. Our approach centers on a cradle-to-cradle philosophy, emphasizing resource optimization and minimal environmental footprint across our product lifecycle. By incorporating circular economy principles and eco-friendly design strategies, Americhem is committed to creating innovative solutions that not only meet our customers' needs but also contribute positively to the communities we serve.



"Americhem thrives on collaboration, partnering closely with customers to develop innovative solutions that address industry challenges and drive sustainability forward. Regulations limiting the use of certain chemicals in plastics, such as phthalates, halogenated functional additives, and heavy metals have driven innovation toward safer product designs. We've worked hand-in-hand with leading carpet manufacturers to develop heavy metal-free color palettes, enabling our customers to pursue Cradle-to-Cradle<sup>®</sup> certification. Our partnership with major automotive OEMs has yielded products containing increased recycled content without compromising performance. Small changes in formulation, yielding lower specific gravity, have made significant impact to light-weighting for the aerospace industry. These collaborations underscore our dedication to reducing environmental impact while delivering exceptional value to our customers."

Linda Boyett Vice President of Global Technology & Innovation

### **OUR APPROACH**



**CUSTOMER** 

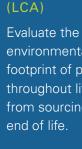
NEEDS



#### MATERIAL **SELECTION** ASSESSMENT

Identify customer challenges and sustainability goals across diverse markets.

Prioritize sustainable materials with recycled content, bio-based or biodegradability, and low environmental impact.







#### LIFE CYCLE ASSESSMENT

environmental footprint of products throughout lifecycle, from sourcing to



#### **DESIGN FOR** EFFICIENCY

Optimize product design to minimize material usage, energy consumption, and waste generation.



#### CONTINUOUS **IMPROVEMENT**

Regularly review and refine the design process to ensure ongoing sustainability progress.

### **RESPONSIBLE SOURCING**

Americhem's responsible sourcing strategy is built on a foundation of promoting positive social, ethical, and environmental outcomes throughout our supply chain. We partner with suppliers who adhere to our Supplier Code of Conduct, ensuring ethical practices, employee welfare, and reduced environmental impact. We assess our suppliers to ensure safety in the handling of raw materials before buying any items from them. Our commitment to high standards drives meaningful change, influencing every stage from material sourcing to final product delivery. We believe open partnerships with our suppliers is essential to achieving meaningful sustainability success.

Americhem treats its employees with respect and integrity and expects its suppliers to do the same. Our Supply Chain Management System indicates that all suppliers, vendors, contractors, and agents are compliant with Americhem's labor requirement and Code of Conduct policies. We favor those who demonstrate clear and measurable efforts to prioritize their employees' welfare and combat discrimination, harassment, and anti-competitive practices.

Americhem's Conflict Minerals Policy supports the aims and objectives of U.S. legislation under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, Section 1502. Our policy mandates that Americhem does not knowingly procure metals from facilities in conflict regions that are not certified as "conflict-free." We also require suppliers to provide written evidence documenting that they have established policies, due diligence frameworks, and management systems consistent with the Organization of Economic Co-operation and Development (OECD) "Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk Areas" that are designed to accomplish this goal.







"Sustainable procurement in the specialty chemical industry focuses on sourcing raw materials and products in ways that minimize environmental impact, ensure ethical practices, and support long-term resource availability. This approach helps create safer and more responsible products for our customers and ultimately the consumers while fostering industrywide sustainability, improved durability and resilience."

**Rod Manfull** Vice President of Global Supply Chain Management

# ECOLUBE™: SUSTAINABLE LUBRICANT TECHNOLOGY

#### Environmentally-Friendly Lubricant Technology

Poly- or perfluoroalkyl (PFAS) and associated substances, including polytetrafluoroethylene (PTFE), have come under regulatory scrutiny due to their persistence in the environment and potential human health risks. While PFAS has been widely used in various industrial applications, including in some plastics for their non-stick and lubricating properties, there's a growing demand for PFAS-free alternatives.

Americhem's new product line, EcoLube<sup>™</sup>, delivers advanced tribological and mechanical properties in moving plastic parts while addressing industry challenges around proposed PFAS regulations and promoting environmental responsibility. EcoLube<sup>™</sup> pre-lubricated engineered compounds and alloys are designed to help manufacturers reduce the wear and friction of moving plastic parts, reduce noise during use, and decrease coefficient of friction for plastic-on-plastic and plastic-on-metal applications – all without the use of PFAS components. End-use applications can include healthcare, industrial, transportation, building & construction, and more. Developed with a focus on cost reduction, service life, and environmental impact, EcoLube<sup>™</sup> compounds offer a lightweight, suitable and sustainable replacement for metal with formulations that resist corrosion and other damaging factors.

#### EcoLube<sup>™</sup> Family of Lubricants

EcoLube<sup>™</sup> shatters the limitations of conventional lubrication, ushering a new era of embedded performance. This revolutionary technology integrates specially designed functional additives directly into the material providing long-lasting lubrication from within. A variety of functional additives cater to specific application, resulting in a versatile EcoLube<sup>™</sup> product line capable of tackling a wide range of lubrication challenges:

- Solid state, non-migrating lubricants stand up to extreme pressures, reducing frictional wear and "slip-stick" behavior in nylon bearings.
- Multifunctional, migrating boundary lubricants reduce the coefficient of friction and wear rate by providing immediate lubrication at start-up and high speeds.
- Non-traditional formulations offer shear reinforcement and abrasion resistance between moving, mating parts.
- Low friction, non-migratory additives are designed to offset PTFE in various applications and thermoplastics.

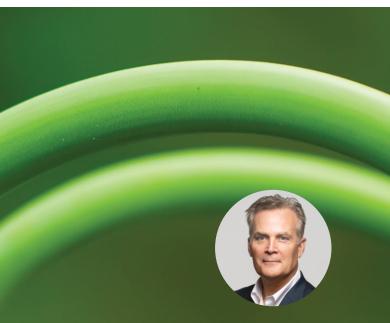


#### A Wide Range of Base Resins

Americhem has formulated EcoLube<sup>™</sup> compounds in a wide variety of base resins that include: ABS, PBT, PCABS, PC, PEI, PPE, PPS, PE, PP, PSU, PPSU, POM, PEEK, PPA, PA, and TPU.

#### Predicting Friction and Wear

Using industry-backed data, Americhem's experts can analyze the application, materials of the mating parts, product life cycle, and frequency of use to predict the coefficient of friction and wear-resistance rate. Our experience includes a practical approach to ensure you achieve real-world tribology, moldability, and CTQs with EcoLube<sup>™</sup>.



"With regulations around the world severely restricting or banning the use of PFAS and PTFE, converters and manufacturers are challenged with finding alternatives that can match their self-lubricating performance. Our new PFAS-free EcoLube<sup>™</sup> line showcases Americhem's dedication to innovation addressing our customers' concerns while promoting environmental responsibility and product safety. Our EcoLube<sup>™</sup> line combines Americhem's specialty thermoplastics compounding experience with our lubricant additive technology to offer advanced eco-friendly solutions packaged to optimize the performance of a variety of products in markets like medical devices, industrial applications, nonautomotive vehicles, and more."

#### Matt Miklos

Vice President / General Manager of Americhem Engineered Compounds

# COLOR THAT CARES: ECO-FRIENDLY TEXTILE SOLUTIONS

#### Lowering the Carbon Footprint in Fibers for Decades

Conventionally, many textile materials are post-dyed, a process in which fiber yarn is dyed post-extrusion using large dye baths and multiple rinse cycles to achieve desired color. Conversely, solution dyeing, also referred to as dope dyeing or spin dyeing, refers to the addition of a color masterbatch to a polymer melt during the extrusion phase of the fiber manufacturing process. Americhem's masterbatch plays an important role in coloration of textile materials, specifically polyester and synthetic fibers, through solution dyeing, where fiber spinning and coloring is achieved in one step. Plus, the pigment becomes an intrinsic part of the yarn resulting in fiber with superior color performance. It is estimated that solution dyeing can result in over 50% water savings and over 25% less energy consumed in the textile dyeing process! Americhem is proud to have partnered with our customers over the past few decades unlocking solutions that pave the way toward a more sustainable future. Further, Americhem offers dye enhancing technology to optimize the dyeing process in polyester along with toner solutions for improving the look of recycled polyester.

Additionally, our custom color expertise also enables us to design masterbatch compliant with the EPEA's Cradle-to-Cradle® Certification, a rigorous evaluation process that assess products based on their environmental impact throughout their entire lifecycle. We have also developed specialty masterbatch to meet ASTM D6400, a compostability standard based on biodegradation and eco-friendly performance.



"Americhem stands as a leading innovator in sustainability and technology within the fiber manufacturing industry. As the leader in solution dyeing technology, Americhem enables fiber manufacturers to reduce water and energy usage in their process. In addition, Americhem enhances the performance and longevity of fibers through advanced additives and also champions environmental responsibility by providing solutions that enable the recycling of postconsumer and post-industrial waste. Through these pioneering efforts, Americhem continues to set the standard for sustainable practices and technological advancements in the fiber industry."

Robert Baldy Business Director, Fibers & Packaging



## HIGHLIGHTING EUROPE

Americhem Europe operating in Ribe, Denmark has been paving the way in sustainability by recently developing a sustainable product line, ColdPound<sup>™</sup>, built to have a reduced carbon footprint through a unique energy-saving manufacturing process. These products can be available globally in many engineered polymers with potential to meet various applications. The mechanical properties of ColdPound<sup>™</sup> compounds are similar to that of virgin material and more enhanced compared to traditional extrusion processes, allowing superior product performance.

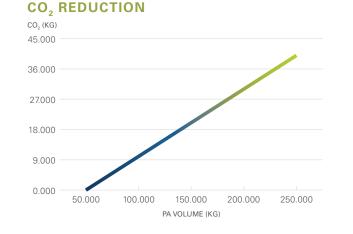
#### ColdPound<sup>™</sup> Polymers:

- Glass-filled PA, PP, POM, PSU, ABS, PBT
- Unfilled PEEK, PSU, TPU

The ColdPound<sup>™</sup> products can be produced in any custom color. It is also possible to add different additives as well, such as UV stabilizers and anti-stat to the compound.

#### ColdPound<sup>™</sup> Applications:

- ٠ Hearing aids
- Surgical instruments ٠
- Structural consumer goods •
- Diagnostic medical devices ۰
- Casings/Housings

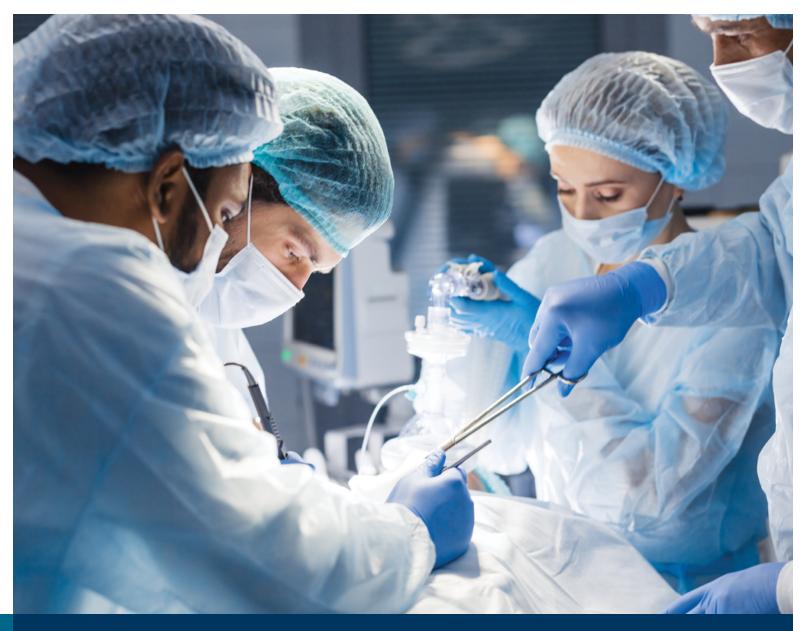


This graph shows the CO<sub>2</sub> reduction when compounding 50% glass filled PA6,6 using the ColdPound<sup>™</sup> method compared to traditional extrusion

The data below shows the comparison of PA66 50% GF as virgin material, and colored material done with the ColdPound<sup>™</sup> process and an extrusion process.

	Test Method	Unit	Virgin	ColdPound™	Extrusion
Elongation at break	ISO 527-2/1A	%	11	11	10
Tensile	ISO 527-2/1A	MPa	217	187	154
E-Modulus	ISO 527-2/1A	MPa	689	658	566
Impact	ISO 179	kJ/m³	105	60	48
MFI	ISO 1133	cm <sup>3</sup> /10 min	21.6	21.9	54.5

All polymer was dried to specification prior to testing.





"ColdPound<sup>™</sup>, a patented manufacturing process that is not only

energy efficient by design, but also powered by clean energy, has a significant positive impact on our carbon footprint, making us all very proud at Americhem Europe. The manufacturing process is suitable for tailor-made small lot batches. The nature of the process lends itself to producing energy efficient compounds without the need of exposing the material to an unnecessary additional heat profile that could have an adverse impact on resin property. Customers will be able to easily distinguish products made from our process through the unique ColdPound<sup>™</sup> name."

Barto du Plessis Vice President / General Manager, Europe

### **HIGHLIGHTING CHINA**

#### Plant-Based Antimicrobials: A Cleaner Choice

The evolution of antimicrobial additives in garments has shifted towards a more sustainable approach. Initially, metal-based antimicrobials were the primary choice for odor control. However, concerns about their environmental impact have led to a growing preference for natural alternatives.

Americhem's plant-based essential oil masterbatch, infused into fabrics, offer a promising solution. These natural additives not only effectively combat odor-causing bacteria but also provide additional benefits. For instance, certain essential oils, such as peppermint or eucalyptus, impart a cooling sensation, making them ideal for sports apparel. By reducing the need for frequent washing, these sustainable fabrics contribute to water conservation efforts and extend the garment's lifespan.

#### **Applications:**

- Performance textiles
- Sportswear
- Uniforms •
- Intimate apparel •
- Casual wear

### Americhem Value:



"As consumers increasingly prioritize eco-friendly products, Americhem's innovative masterbatch meets the demand for sustainable textiles by providing natural antibacterial properties that enhance garment longevity and hygiene. As metal-based antimicrobials have the potential to contaminate ecosystems, our essential oil masterbatch offers a cleaner choice for environmentally conscious consumers. We are proud to enable our customers to contribute to a greener future ultimately allowing a more sustainable fashion landscape!"

Rose Tu Managing Director, China

- Excellent antibacterial performance after 50 wash cycles • Compatible with PP/PE/PBT/PTT and other synthetic fibers • Meets ISO 20743 | JISL 1902 | AATCC100 and other
  - antibacterial test standards
- No additional spinning equipment needed
- Cost comparable to heavy metal and synthetic antibacterial technology
- Can be used for spun fiber or nonwoven fabric applications

# FUTURE VISION

Americhem's journey towards sustainability is a testament to our belief that business success is linked to environmental responsibility and social progress. As we move forward, we envision a future where sustainability is not merely a goal but rather an intrinsic part of our operations and the broader business landscape. As we look to the next decade, Americhem is excited to implement a new decarbonization strategy focused on:

Renewable energy, waste handling, and resource conservation projects at facilities

Establishing science-based Scope 1 & 2 emission reduction targets

Increasing collaborative efforts with our suppliers and customers to reduce GHG emissions

Analysis and Product Carbon Footprint data products

Through innovative solutions and strategic partnerships, we aim to deliver sustainable products and services that meet our customers' evolving needs in a changing world while minimizing our environmental impact and working towards achieving our ambitious 2030 goals. We also recognize that the above could not be possible without our most important asset and driving force: Our People. As we look ahead, we remain committed to innovation, transparency, and accountability in our sustainability efforts.

### Together, we can build a better future for ourselves and generations to come.







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Sustainability at Americhem: www.Americhem.com/pages/sustainability





