

2021 Sustainability Report

INNOVATING SOLUTIONS



In an effort to reduce the environmental impact, this report is available only as a digital file. Besides reducing paper use and waste, a digital report also allows for easier navigation and interactivity.

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A MESSAGE FROM OUR CEO

“We are a company of problem solvers... Essentially, we set the future up as a challenge and work toward solving it piece by piece.”

Phil McDivitt
President and Chief Executive Officer



A MESSAGE FROM OUR CEO (CONTINUED)

We are a company of problem solvers. We operate Ascend Performance Materials based on a long-range plan that imagines the future of our company and sets annual goals toward that future. Essentially, we set the future up as a challenge and work toward solving it piece by piece.

In our first report, we wrote that we have a responsibility to lead the industry in sustainability. In a sense, that report set the vision for a more sustainable Ascend. When I look back at that report and the company we were, I see a strong foundation with a lot of potential.

In this report, titled Innovative Solutions, we highlight some of the solutions we have put into place to bring us closer to where we want to be as a company. What you will notice as you read through these pages is our evolution into a company that pursues meaningful, long-lasting sustainability improvements including:

- driving down our injury rate,
- providing career growth and training to our people,
- improving our operations to reduce environmental impacts, and
- reducing the amount of waste we create.

Also, I have the distinct honor in this report of announcing our [2030 Vision](#), a set of nine sustainability targets we intend to hit by the next decade. These targets are the clearest public vision of what we want Ascend to be in the coming years and are a result of some exceptional problem solving across our company.

Of course, it's our people who innovate and drive us forward. I want to take this opportunity to thank our growing and increasingly global workforce for the hard work they have put in to get us this far. Achieving our 2030 Vision will require their ingenuity and commitment to living our values.

Finally, we closed our 2018 report with Paul Cartlidge, our vice president of environment, safety, security and health, acknowledging that sustainability requires accountability.

In 2021, we joined the United Nations Global Compact to show that we are committed to improving in the areas of human rights, labor, environment and anti-corruption. It has made us publicly accountable across the four areas of the UN Global Compact, necessarily broadened the scope of our efforts and encouraged us to look beyond our gates to work with our neighbors, suppliers and customers to create a future that advances for all.

In that spirit, if you have an opportunity for us to innovate together to improve people's quality of life today and inspire a better tomorrow, reach out through our website. As a company of problem solvers, we are always looking for ways to be **better every day**.

Phil McDivitt
President and Chief Executive Officer

For all of us at Ascend Performance Materials, sustainability is about improving the quality of life today and inspiring a better tomorrow for our employees, their families, the communities in which we live and countless people across the globe.



ASCEND VALUES

- One Ascend**
All together, with a common set of goals and an eye toward the future.

Better Every Day
We invest in our people and our processes to improve every day.
- We Care**
We operate safely with high integrity for our employees, our customers and our communities.

Agile
We think broadly and lead proactively in a constantly evolving organization and industry.
- Customer-Focused**
We exist for our customers; they drive our actions. Their success is our success.

OUR THREE SUSTAINABILITY PILLARS



- EMPOWERING PEOPLE
- Workforce health and safety
 - Employee engagement, recruitment, and development
 - Diversity and inclusion
 - Community engagement and relations



- INNOVATING SOLUTIONS
- Sustainable products
 - Research and development
 - Circular economy
 - Supply chain

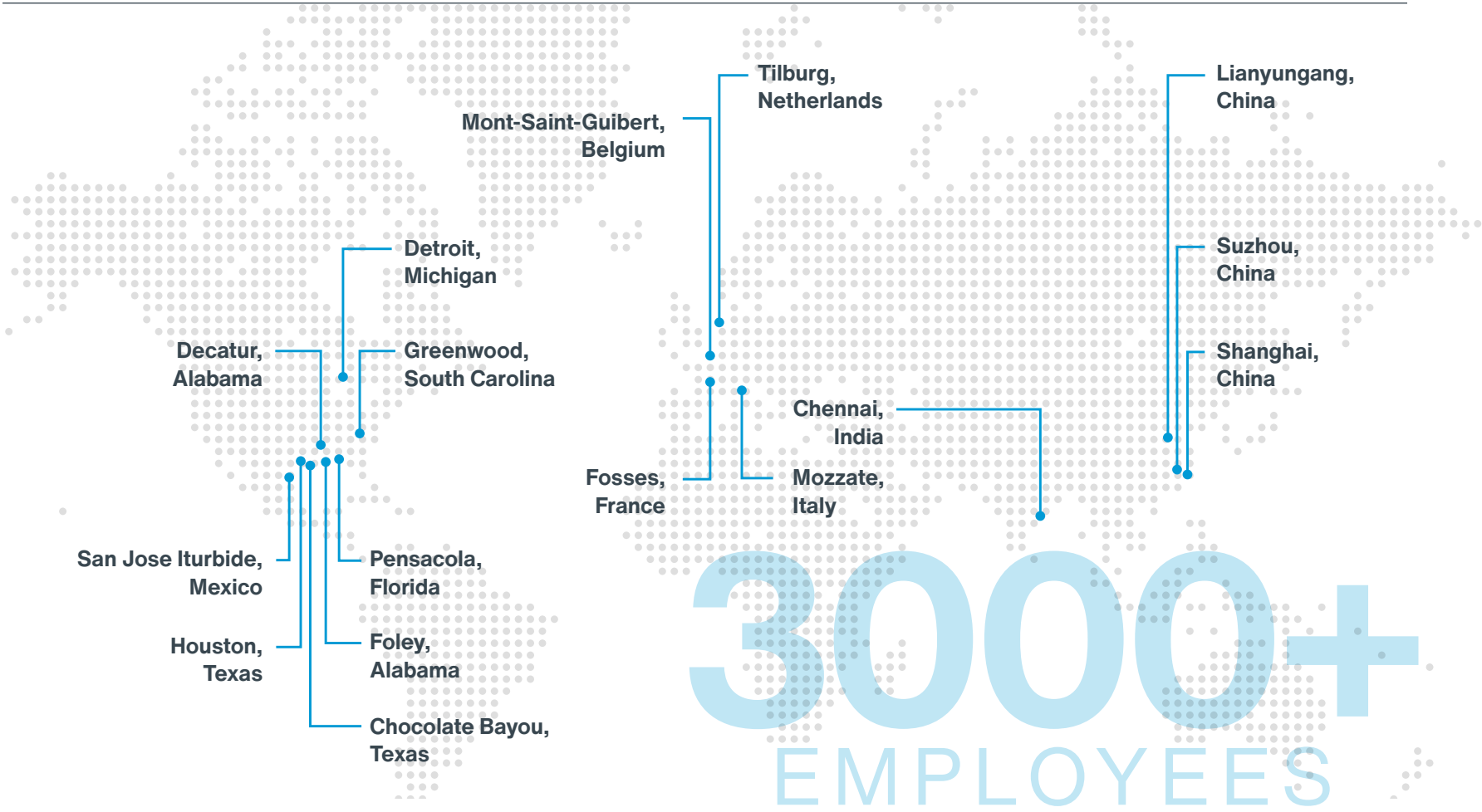


- OPERATING WITHOUT COMPROMISE
- Energy
 - Greenhouse gas emissions
 - Air quality
 - Water and wastewater
 - Waste and hazardous waste

At a Glance

We make high-performance materials for everyday essentials and new technologies. Our purpose is to improve the quality of life today and inspire a better tomorrow.

GLOBAL INNOVATION



OUR MARKETS

E-MOBILITY

AUTOMOTIVE

ELECTRICAL & ELECTRONICS

CONSUMER & INDUSTRIAL

CABLE MANAGEMENT

HEALTHCARE

TEXTILES & SAFETY SYSTEMS

SPECIALTY CHEMICALS

PARTICIPANTS IN

2030 Vision

We have a vision for the future that guides our sustainability efforts.
Our 2030 Vision establishes what we want to be as a company across our three pillars.



We want to be a company where:



In the interim, we intend to use the voluntary carbon market to monetize a portion of our emissions reductions, allowing us to reinvest to further our goals.

Progress measured against 2018 baseline



Empowering People

[COACH TRAINER SPECIALISTS →](#)

[FRONT-LINE LEADER TRAINING →](#)

[ASCEND CARES FOUNDATION →](#)



COACH TRAINER SPECIALISTS

When Bill Chidester introduced Hazard Recognition Plus (HRP) at our Chocolate Bayou site in 2018, he was hopeful that the tool would teach employees how to recognize hazards and empower them to stop unsafe work. However, he didn't know that HRP would help decrease the company's overall recordable injury rate by over 70%.

"Early on, I was focused on introducing HRP at just Chocolate Bayou," says Bill. "However, the team realized pretty quickly that this could be beneficial across all our sites and we decided to take on the challenge of implementing it across our U.S. sites, hoping to make a change in the safety culture at Ascend."

Bill and his team wanted this tool to become a thought process that people would incorporate into their everyday work. As we trained HRP coaches across our sites in 2019, our safety numbers quickly improved.

By 2020, our company was closer than ever to achieving our Commitment to Zero with 10 injuries over the course of the year, effectively halving the number of overall injuries we see annually. In 2021, the number of injuries again was 10, even as the number of hours worked increased.

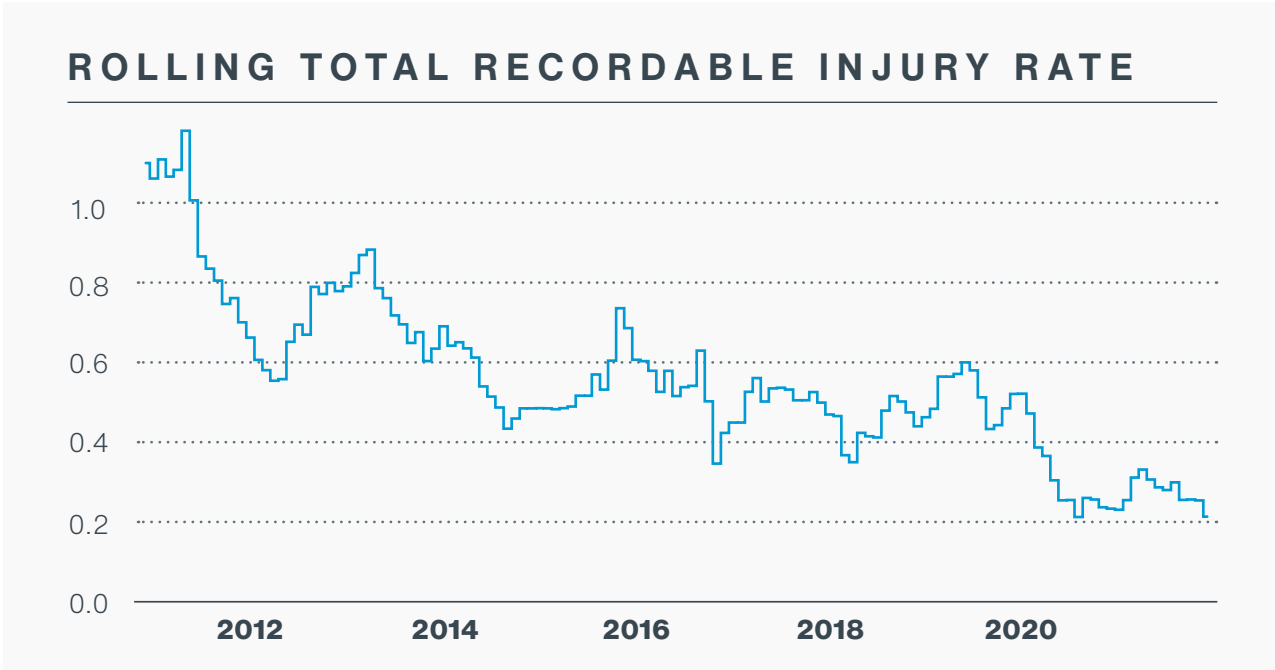
"With the decrease in recordable injuries, it would have been easy for HRP to lose momentum," says Bill. "So we developed a new tier of HRP knowledge called the Coach Trainer Specialist,"

The CTSes are employees well-versed in HRP, who understand the ins and outs of the tool, the benefits of it, and how to apply it in nearly every situation. As a CTS, they then put that knowledge toward training HRP coaches throughout Ascend.

In 2021, 15 Ascend employees were trained to become Coach Trainer Specialists. Since they began, over 40 new HRP coaches have been added at our Chocolate Bayou site alone with more being trained at our other sites globally.

"From the beginning, we knew that HRP wouldn't just be an initiative or a campaign," says Bill. "We were working to change our company's safety culture, which is a big task. But our people more than rose to the challenge. They were dedicated to keeping themselves and the people working beside them safe."

We are closer than ever to our Commitment to Zero. And, our success earned us the American Chemistry Council's 2021 Initiative of the Year award.



12-month rolling
total (2021)

0.21



“The end result is that each of our FLLs develop into empathetic, confident and inclusive leaders who feel empowered in their roles.”

Brittany Cooper
Global HR Program Manager



FRONT-LINE LEADER TRAINING

Brittany Cooper has always been drawn to jobs where she felt challenged. Since joining Ascend six years ago, she has served in various roles which were each diverse in their goals, skills and outcomes. In 2021, Brittany knew she needed a new challenge. What she didn't know, was that she was going to enter her most challenging, yet rewarding, role yet.

“When I was offered to lead the Front-line leader training program, I didn't immediately jump on it,” says Brittany. “There were so many moving parts, and it was intimidating. Ultimately, I decided to enter into the role because I felt like I could be a voice for these leaders and help them communicate what their needs were – that's where my heart is.”

The leaders Brittany refers to are Ascend's Front-line leaders (FLLs). FLLs are the first level supervisors for our operators, technicians and processors, meaning that they manage over half of our organization. A few years ago, these leaders and their development were highlighted as an area for growth. A challenging job that Brittany would take on in 2021.

“Our FLLs have some of the most difficult jobs in our organization and the responsibility that rests on their shoulders is heavy,” says Brittany. “There was an opportunity to develop these leaders by investing in specific training for them. Our goal was to encourage them in their role and make them confident in leading a diverse workforce.”

Brittany and the team took a phased approach with the training, which consists of four phases. After an initial bootcamp where leaders learn the foundational

elements to being a leader, they continue to attend training and forums where these foundational aspects are reinforced.

Eventually, they will be assessed by their managers using a tool that assesses each, individual FLL on specific leadership competencies, including developing others, informing, delivering critical feedback, motivating others, managing diverse teams, caring for your team, etc. After this assessment, each FLL continues through the program on a personalized development plan.

“The most unique and rewarding part of this program is that each FLL who goes through it receives a distinct development plan that is suited specifically for that leader and focuses exactly on the skills and areas that they need to grow in,” says Brittany. “The end result is that each of our FLLs develop into empathetic, confident and inclusive leaders who feel empowered in their roles.”

Brittany says that the success of this program will be measured in how Ascend is able to institutionalize it across our global sites. Finding a way to expand and sustain the program globally ensures that each FLL across our organization will have the opportunity to access tools that contributes to their success in a leadership role.

“We still have a long way to go before we get there,” says Brittany, “but as we grow together, it continually opens up new ways for us to learn.”

“I’m inspired by how our employees continue to shape Ascend Cares.”

Scotty Hall
Ascend Cares Board Member



Learn about our Ascend Cares Foundation at ascendmaterials.com/AscendCares

ASCEND CARES FOUNDATION

A lot can happen in ten years. The Ascend Cares Foundation celebrated a significant milestone in 2021 – one decade of helping others. Since its founding, Ascend Cares has grown from a pass-the-hat employee relief effort into a thriving global foundation impacting thousands of lives around the world.

Born from an effort to help 23 Ascend families impacted by a string of devastating tornadoes that struck Northern Alabama in 2011, Ascend Cares has always been about helping people. But ten years later, the scope of those efforts has broadened dramatically.

Over 70 thousand volunteer hours and nearly \$4 million have been poured into projects supporting nonprofit organizations in the communities around Ascend sites. 467 scholarships totaling over \$778,000 have been awarded to students of Ascend families. In 2021 alone, employee donations to the foundation reached \$900,000. Combined with the dollar-for-dollar company match, the foundation set a target to give \$2 million back to communities in 2022.

From humble beginnings, these statistics are astonishing. But despite its remarkable growth, Ascend Cares has always been driven by a simple premise – to help others in need. The ways of doing that, however, have expanded greatly, thanks to employees taking ownership of their service.

Employee leadership is the main driver of the foundation’s direction, says board member Scotty Hall. “I’m inspired by how our employees continue to shape Ascend Cares,” he says. “They don’t just volunteer, they get their families involved. They develop and lead projects, they give generously. It’s a clear reminder that our people really desire to make a difference.”

Employees make a difference in smaller ways, by connecting Ascend Cares Community Impact Grants with the causes they personally care about most, and in larger ways by directing site projects with hundreds of volunteer hours and tens of thousands of dollars.

Kenya Thompson, a 10-year employee at Ascend’s Houston headquarters, is the perfect example of how Ascend Cares can impact employees’ lives. As a volunteer, Kenya helped build the very first Habitat for Humanity home Ascend Cares constructed in 2012. Several years later, she was diagnosed with stage three breast cancer. The foundation was ready to help.

“Ascend Cares and my colleagues wrapped their arms around me and helped me through that period of my life, anticipating my needs before I even knew what I needed,” Kenya says. She has since made a full recovery and leads educational outreach in the Houston area while serving on the same Ascend Cares hardship committee that helped her.

“I was involved with Ascend Cares prior to my diagnosis, but after I recovered it became my personal mission to pour into the lives of others,” she says. “My experience makes my relationship with Ascend Cares feel supercharged.”

As the Ascend Cares Foundation begins a new decade, Ascend employees and their desire to give back to their communities are the driving force behind a foundation that is now a global force for good.

Innovating Solutions

[RECYCLING NYLON](#) →

[SUPPLIER ASSESSMENTS](#) →

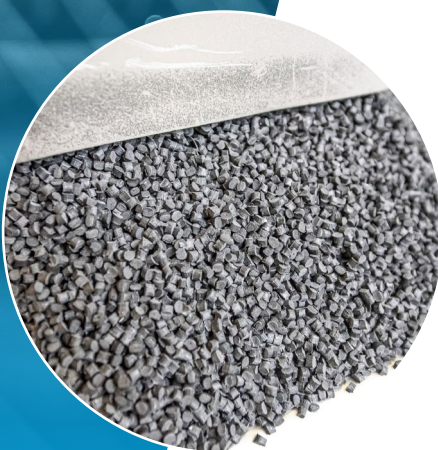
[DESIGN WITH SUSTAINABILITY IN MIND](#) →

[A BETTER SUPPLY CHAIN](#) →



“Our goal is to optimize all our resources to create the most sustainable nylon possible with good performance and reliability.”

Laurent Perra
Site Director



RECYCLING NYLON

In 2021, Ascend’s facility in Mozzate, Italy helped reclaim approximately 38 million pounds of waste material, recycling it into nylon 6, nylon 66 and other products for customers using a proprietary compounding process.

This innovative solution comes as a result of the acquisition of Poliblend in 2020, which brought with it expanded capabilities and capacities, including access to exciting new technologies around reprocessing of waste materials—re-extruding them with specialized additives to meet specific customer needs.

According to Laurent Perra, while not virgin material, after further processing the resulting ReDefyne™ line performs very well and is in demand by customers—as well as serving to keep tons of material out of landfills.

Benefits accrue across the board—reduced material sent to landfills, energy savings, water savings and more.

But, according to Laurent, these benefits—although considerable— are icing on a very sustainable cake.

Ascend is focused on delivering consistent, high performing products with a lower carbon footprint—significantly less than when processing virgin or even chemically recycled polymer.

“Our goal is to optimize all our resources to create the most sustainable nylon possible with good performance and reliability,” added Laurent. “We are very focused on reducing CO₂ emissions and recycling can be an excellent tool to make that happen.”

In fact, the overall benefits are so significant that we are currently investing in having plants around the world ship their production waste material directly to Mozzate to give it a “second life,” including Tilburg, Netherlands; Pensacola, Florida; and Foley, Alabama. The volume of recycling achieved in 2021 outpaced our goals by more than 20%.

The next step is to replicate the process at more of our sites and eliminate the need to transport the materials.

Laurent says that tools are being put in place to better understand the full extent of the sustainability benefits so far and going forward, but they also note that this effort is only the early stages of a far larger and even more beneficial one.

“So far, the technology is reclaiming only waste material generated by our own Ascend facilities and the ultimate goal is to be able to recycle post-consumer materials as well. That is, plastics already in products past their useful life, so we can reclaim them, disassemble them and reuse them,” explained Laurent. “This is the future and we are making great progress toward it.”

SUPPLIER ASSESSMENTS

When Danny Lee joined Ascend’s sustainability efforts as the procurement representative in 2020, he was given a tall order - put a process in place to improve sustainable procurement practices at the company. If you ask Danny about this project today, he’ll tell you that he prefers to start at the beginning.

In 2015, the United Nations adopted the Sustainable Development Goals (SDGs) as their plan to end extreme poverty, reduce inequality and protect the planet by 2030. This universal call to action began a domino effect for companies to implement more sustainable business practices.



Our procurement policies strive to adhere to the United Nations’ 17 Sustainable Development Goals.

“When companies began their sustainability journeys, one area they looked for improvements was their supply chains,” says Danny. “As other companies started looking at us, we began looking back and asking how we could make our supply chain more sustainable.”

Taking the environmental, social and governance performance of suppliers into consideration means that a measurable contribution to the SDGs is being made. Danny started by creating a sustainable procurement policy for Ascend that required all suppliers to adhere to a supplier code of conduct, which sets clear expectations regarding supplier performance regarding human rights, labor, environmental impact and governance.

In 2021, this code was added to every contract that Ascend sends to new suppliers and incorporated into renewal contracts. Eventually, 100% of Ascend’s contracted supply base will be covered and expected to adhere to the code.

This process will take time, adds Danny, but it’s a step in the right direction of creating a sustainable and responsible supply chain. “We want our suppliers to know that we are committed to this sustainability journey, and while we won’t get there tomorrow, we are inviting them to come along.”

The next step is to take a deeper look into suppliers and begin a process of working together to identify areas of improvement. After creating a list of strategic suppliers that make up 80% of Ascend’s supply chain exposure, Danny drafted a self-assessment for each company to fill out on their sustainable practices.

“The assessment gives us an idea on a supplier’s strengths and weaknesses, and it’s our responsibility to identify how we can learn from each other,” says Danny. “At the end of the day, we are all trying to build sustainable businesses that are here to stay.”

To Danny, progress will be made through transparency. As his team begins inviting suppliers to meet for continued conversations around sustainable practices, Danny’s hope is to find solutions for a more sustainable supply chain.

“Access to accurate environmental data allows us to see how we stand against each other and allows for an ongoing dialogue,” says Danny. “We need to move forward together. At Ascend, we believe that journey begins with us.”





“Change begins when you start asking the correct questions...”

Yantao Hughes
 Director of Strategy & Growth



DESIGN WITH SUSTAINABILITY IN MIND

Developing innovative products can appear to be a seamless process for those unfamiliar with what it takes to bring a product to market. For Yantao Hughes, the identification of a new market or project for Ascend to invest in means the beginning of a lengthy, but rewarding, process.

When first looking at a potential product, there are three things you look for, says Yantao, a strategy and growth director. “In the ideation stage, we are wanting to know if a product is a real business opportunity for Ascend. Next, we want to know if we can win with this project, and finally, is the win worth the time and effort? If the answer to all three is yes, then congratulations – now the real work begins.”

After this initial stage, the idea passes through a “gate” and spends the next months, or potentially years, making its way through Ascend’s stage-gate review. From market validation to manufacturing, the project moves through the review process until it passes through the final gate. Instead of just an idea coming out of the other side, a new product emerges and is added to our portfolio.

“That worked for us for a while,” says Yantao, “but then we began wondering what could be added to make this process more inclusive, while also allowing our company to think critically about the projects that we were taking on. Specifically, the implications of those projects.”

At the beginning of 2021, different leaders at the company began voicing a desire to have a sustainability review added to the stage gate

process. The Design With Sustainability in Mind process was implemented to ensure new products and capital projects are aligned with the three pillars of our sustainability strategy.

“We want to make sure that the projects we dedicate time, money and other resources to aren’t harmful to people or the environment, so we made the easy decision and added DWSiM to our review process,” says Yantao.

Now, this additional conversation measures how the venture aligns with our company’s sustainability goals. If it doesn’t, the review process empowers the team to ask questions and find a solution. Something that Yantao believes is the highlight to the added process.

“When reviewing the sustainable implications of a new product, we are essentially asking dozens of different, important questions,” says Yantao. “Will manufacturing this product increase our emissions? Does it pose an increased safety risk to our workers for any reason? How much waste will, or will not, be produced during manufacturing?”

“Change begins when you start asking the correct questions. For us, it’s important that everyone who works on these projects knows from the beginning that we will not review a project without having a sustainability impact discussion.”

Ongoing improvements are estimated to reduce Ascend’s CO₂ emissions by more than 2,600 metric tons by the end of 2022.



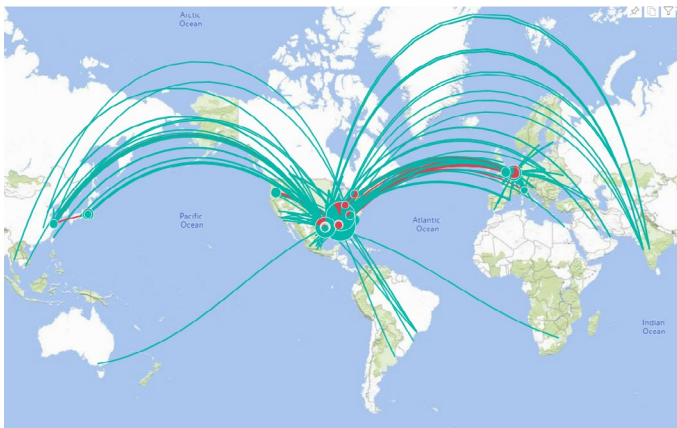
Andrew Mason
Business Development Lead

A BETTER SUPPLY CHAIN

“Reduce, reuse and recycle” sounds simple enough for someone trying to lessen his carbon footprint at home. But for a global manufacturer, the undertaking is more complicated, particularly if, like Ascend, it has set an aggressive goal of reducing its carbon footprint by 80% by 2030.

Supply-chain improvements have been one solution at Ascend. While companies typically examine these inefficiencies to minimize costs and maximize profits, these efforts are also reducing the company’s carbon emissions.

Projects identified by supply chain manager Madeline Yerby include renovating a warehouse in Suzhou, China so the company can store raw components and finished goods on site. The materials were previously shipped between the warehouse and the company’s Shanghai facility. Financial benefits aside, the move is projected to reduce Ascend’s carbon emissions by 453 metric tons annually.



Other supply-chain improvements include modifying how the company ships HMD internally (an annual CO₂ savings of 410 metric tons) and changing the way Ascend services select European customers. By delivering some products to a port at Cremona, Italy, rather than to Antwerp, Belgium, Ascend has reduced its emissions by 140 metric tons annually.

These and other improvements are estimated to reduce Ascend’s CO₂ emissions by more than 2,600 metric tons by the end of 2022. That’s the equivalent of taking 520 cars off the road for a savings of 6.6 million miles driven.

Yerby was able to figure these savings with the help of Andrew Mason, a continuous improvement specialist in the supply chain organization. Using a formula to calculate carbon emissions - considering factors like the amount of material shipped, how far it traveled and how it traveled, Mason created a website dashboard to report the financial and efficiency gains.

“It explains the types of projects she did: ‘I moved materials here, I closed this warehouse,’” Mason says. But the team quickly realized the site was also a good way to showcase CO₂ savings.

“We’re thinking a little differently about how we share our successes,” Mason says. “Yes, cost-savings are important. But we are actually changing the carbon footprint, so we’re highlighting that as well.

“We took the information out of an Excel spreadsheet and put it onto a website. We can go there and see the entire supply chain footprint, so we’re not just greenwashing,” he says.

Mason is in his second year of Ascend’s FUEL Development Program, which is designed to expand the operational knowledge of participants by rotating them through three one-year assignments at different sites.

A chemical engineer, Mason learned new skills using Celonis, a software program, to create the site. “It’s not something I would have learned in school,” he says.

Mason says the site is innovative in that it not only makes information easily accessible and understandable to more people, but it also contributes to Ascend’s sustainability mission.

“What’s really neat about it, is it’s a useful tool to find areas to work on. It’s given us all the visibility we need with the click of a couple of buttons.”



Operating Without Compromise

RECYCLING CARDBOARD →

COGENERATION IN DECATUR →

RENEWABLE ENERGY →





“We believe in being better every day.”

Tracy Baldwin
Senior Commodity Manager



RECYCLING CARDBOARD

Imagine a warehouse filled with cardboard boxes waiting to be sent to the landfill. Most would think of it as trash, but not Tracy Baldwin. He saw an opportunity to reduce waste.

Tracy is no stranger to reducing waste. In 2020, he saw wooden pallets being discarded after a single use and led a project to reuse pallets still in good condition and recycle those that were worse for wear into mulch and playground surfaces. To date, over 7 million pounds of wooden pallets have been diverted from going to waste.

In 2021, he saw again how we could make a significant impact, this time with the 50-pound cardboard boxes we use to ship materials between our sites and to our customers.

When the previous recycling company went out of business, the boxes began to pile up. “The easy answer is to just send them to the trash,” said Tracy, a principal production engineer at our Pensacola site.

“After the success with the pallets, I began to look at ways to do more. The boxes were piling up and we looked for ways to reduce what we send to the landfill,” said Tracy.

Tracy reached out to companies possibly interested in partnering with Ascend to divert the waste. “The company we buy boxes from was interested in buying back or finding a new use for the used boxes and a local paper producer is always looking for cardboard to recycle in their process. It was a good solution for everyone involved,” said Tracy.

According to the U.S. Environmental Protection Agency’s latest data, approximately a quarter of waste sent to landfills, or over 67 million tons, is paper and paperboard products. Every month, Tracy’s cardboard recycling project keeps approximately 12 tons of paper waste from going to the landfill.

“We believe in being better every day,” said Tracy. “The two recycling projects I’ve been a part of are just the beginning for us – they showed us what’s possible. Now, we’re looking for more opportunities to reduce our landfilled waste.”

COGENERATION IN DECATUR

As senior site director of Ascend’s Decatur, Alabama plant, Hal McCord understands that when the facility encounters a problem - big or small - the buck stops with him.

Say the facility runs out of steam - literally. It’s an expensive problem that used to plague the site.

But Hal no longer has to worry about steam outages since three new cogeneration units were built at the end of 2021. Not only will the units provide a reliable steam supply for the plant, they have also slashed its carbon footprint.

Hal says the site has already seen cuts in both pollutant and greenhouse gas emissions, and when the units are fully operational reductions are expected to be around 80% and 40%, respectively.

“From a performance perspective, cogen will do exactly what we need it to do: reduce our emissions and reduce our reliance on coal. We’ve eliminated the burning of coal at the site.

“These units have very sophisticated emission controls,” he adds.

The cogen project is the largest capital investment in Ascend’s history. It’s paying off, Hal says, since it not only dramatically improved the plant’s environmental impact, but also increased its reliability.

The Decatur plant is a critical link in Ascend’s production chain, producing adiponitrile, or ADN, an important component for the company’s polyamide 66. It’s a power-intensive, electro-chemical process, requiring more electricity than typical plant lights and pumps. It also requires steam, because many of the raw materials freeze at room temperature.

“The big thing for us as a site, is the stability that this provides. We need a stable steam supply because without steam we can’t do anything.”

Hal says Ascend’s coal assets were unreliable because of their age and outdated technology, which led to steam interruptions. Each interruption typically had a four-day impact on the facility, which then affected supply continuity throughout the company.

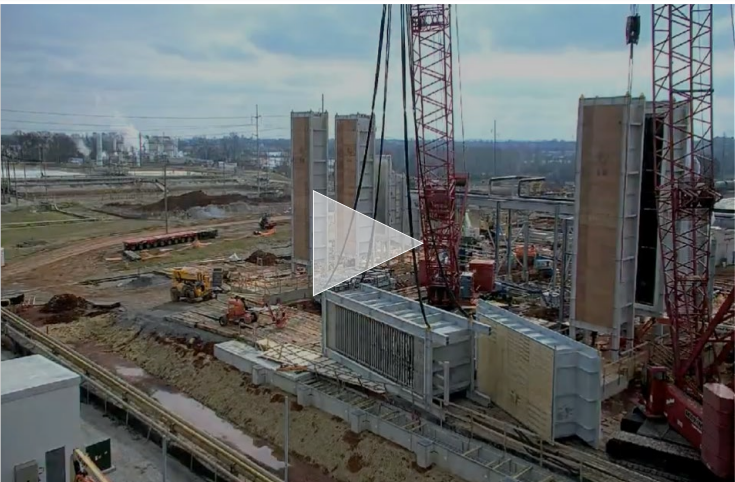
“If you can imagine, every site was impacted: from Chocolate Bayou, which is upstream from us, to Pensacola and our compounding sites, which are downstream,” he says.

Hal says the key to the project was sizing the cogeneration system to provide the steam the plant needs, rather than sizing it to the facility’s electrical requirements, which is often typical. The plant now uses all the electricity provided by the cogeneration units and Ascend is working with the local utility to incorporate more renewable energy sources on the grid to supply the remaining power needed.

Hal considers the project’s success a growth opportunity for Ascend. A fourth unit can easily be added to accommodate increased demand at the plant, and, perhaps more significantly, the project could be a model for other sites.

“This project has shown that Ascend can execute large, technically complex, transformational projects, which opens up opportunities across the sites,” he says.

“It’s a big step in our sustainability.”



 [Watch a time-lapse of the construction of our cogen units.](#)



“Supporting renewable energy not only for our own use, but also for our communities is a long-lasting change that will benefit people well into the future..”

Erica Kim
Sustainability Engineer

RENEWABLE ENERGY

In December 2021, the Titan Solar Farm in West Texas began generating the electricity that will power Ascend’s acrylonitrile plant in Chocolate Bayou, Texas. Over the course of a year, the farm will generate about one-third the electricity needed to power our production from the grid.

“We’re very proud to be powering our facility with clean energy,” said Greg Blanchard, senior site director at our Chocolate Bayou plant. “This was a great way to support renewables and meet our energy needs well into the future.”

In 2019, our procurement team was approached by Calpine about the power purchase agreement that would help fund the Titan Solar Farm. They crunched the numbers and realized that the deal was not only financially feasible but would help reduce the carbon footprint for the entire Texas power grid.

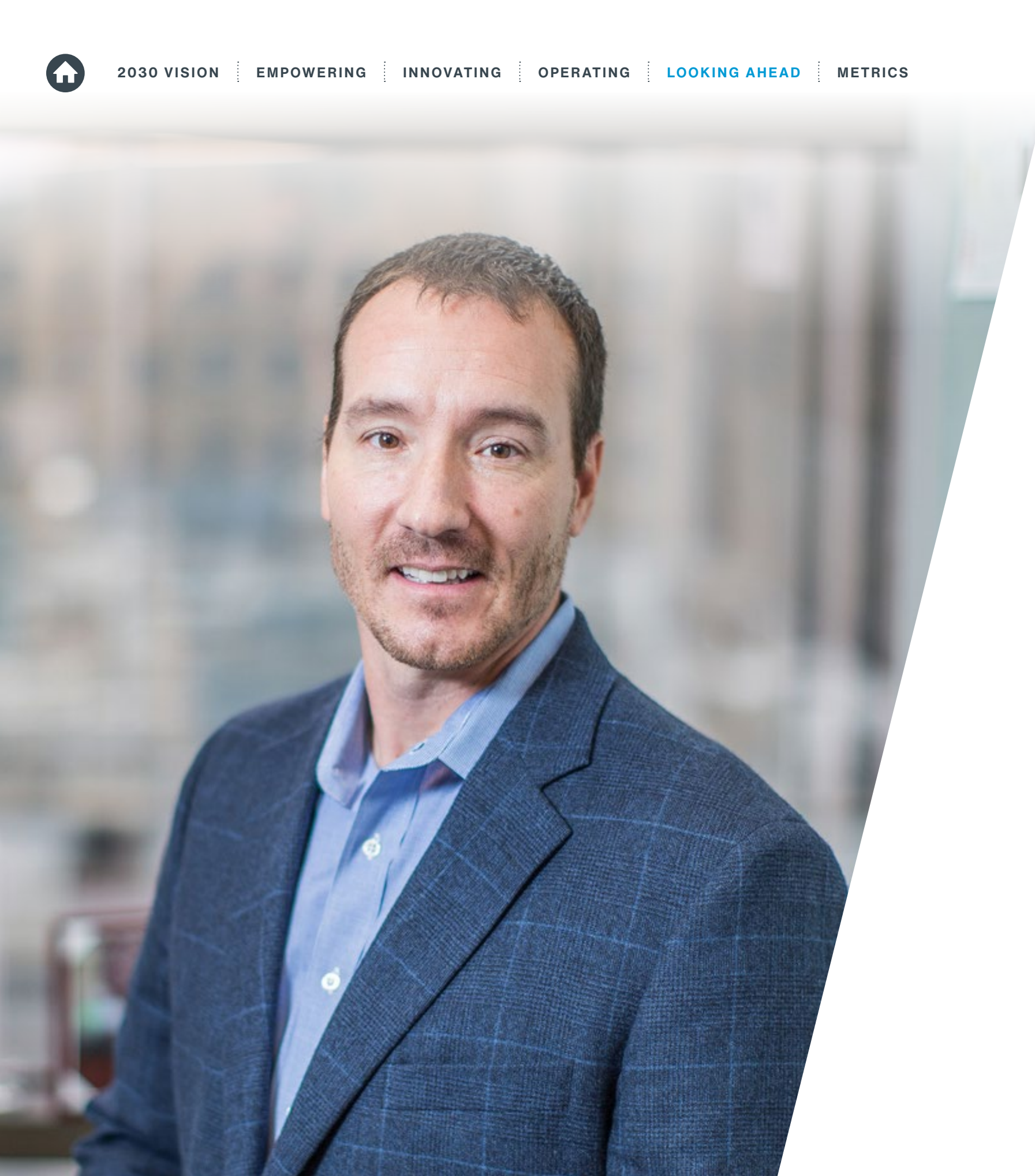
“For our Chocolate Bayou site, this one project’s emission reduction is equivalent to 3,250 fewer cars on the road a year,” said Erica Kim, sustainability engineer at Ascend. “The success of this project prompted us to look for other opportunities with renewable energy at all of our sites.”

In 2022, Erica, working with our procurement organization globally, will take on offsetting the scope 2 emissions of all our compounding facilities in North America, Europe and Asia, a first for our industry.

Part of our 2030 Vision is to have 90% of our operations support or be powered directly by renewable energy. Thanks to the Titan Solar Farm, we’ve seen that we can power our operations with clean energy without compromising the other things that are important to us, such as safety, reliability or cost.

“We want our sustainability efforts to be meaningful and long-lasting,” said Erica. “Supporting renewable energy not only for our own use, but also for our communities is a long-lasting change that will benefit people well into the future.”

 [See the entire Titan Solar Farm in action.](#)



LOOKING AHEAD

“Every improvement we make is to benefit people: our employees, their families, our neighbors, our customers or millions of people who rely on our materials to make their lives a little better or a little safer.”

Chris Johnson
Director of Sustainability





LOOKING AHEAD (CONTINUED)

When I look at the next few years of sustainability at Ascend, I see continued investments in reducing the environmental impact of our operations, growth in our portfolio toward new products that improve safety and reduce impacts, and more people engaged in making the world better.

We know achieving our 2030 Vision will require constant progress and, even when we do achieve our targets, we will need to develop new targets.

As I wrote in our last report, the Ascend value I relate to most in my job is better every day. While that remains true, as I've talked to our people I have come to realize there is another Ascend value especially related to our efforts: we care.

Every improvement we make is to benefit people: our employees, their families, our neighbors, our customers or millions of people who rely on our materials to make their lives a little better or a little safer.

To remind ourselves of this, we will begin using Advancing for All as a motto for our sustainability efforts.

Advancing for All

For us, sustainability isn't a box to be checked to meet wall street investors' expectations or a marketing tool to get more customers to buy our products. It's the right thing to do for people.

Advancing for All is a simple phrase that serves as another guidepost for our work. It's a reminder that sustainability doesn't end; we constantly have to push forward and advance. It's also a reminder that our progress has to benefit people today and well into the future. Reducing our greenhouse gas emissions, diverting waste from landfills, operating safely, protecting people and creating meaningful careers aren't theoretical exercises – they have real impacts on people's lives.

What to Expect from us in 2022 and beyond

The targets in our 2030 Vision will give you a good indication of where we're focused for the foreseeable future. But targets are not action.

In terms of empowering people, we intend to continue evolving our use of Hazard Recognition Plus to eliminate safety incidents. We are also working on bolstering our career development programs so they serve everyone at Ascend. In our communities, our focus will turn more toward hands-on involvement because we know that a check won't solve every problem.

For innovating solutions, we have some exciting efforts underway for new products. In 2022, we debuted new materials that serve the growing transition to electric vehicles and we launched ReDefyne, our portfolio of sustainable materials. We are also eliminating our scope 1 and 2 emissions from our compounding facilities through improvements, carbon offsets and renewable energy credits.

Finally, our efforts to operate without compromise will remain focused on reducing our greenhouse gas emissions, waste and water consumption. We hope to hit a major emissions reduction milestone in the next year or two.

I look forward to reporting on our progress in our 2022 Sustainability Report.

Chris Johnson
Director of Sustainability

ESG METRICS TABLE

	2018	2019	2020	2021	REFERENCE INDICES
ENERGY					
Total energy consumption (MWh)	2.4M	1.7M	1.5M	1.8M	GRI 302-1
EMISSIONS					
Total GHG emissions	3.05	2.04	3.15	2.43	GRI 305-5
Scope 1 (mton)	12.87M	7.8M	10.3M	9.7M	GRI 305-1
Scope 2 (market-based) (mton)	304k	295k	292K	319K	GRI 305-2
Renewable energy	20%	20%	19%	21%	
Air emissions intensity					GRI 305-7
NOx (Lbs/MLb product)	614	637	655	596	
Sox (Lbs/MLb product)	345	272	229	193	
WATER					
Water consumption (Mgal)	7,405	6,849	6,946	8,217	GRI 303-5
WASTE					
Total Waste Generated: Haz+ Non Haz + TRI (lb)	92M	78M	68M	75M	GRI 306-3
Waste recycled (%)	14%	18%	34%	15%	GRI 306-4

	2018	2019	2020	2021	REFERENCE INDICES
SOCIAL					
WORKFORCE HEALTH AND SAFETY					
Work-related Injuries (#)		23	10	10	GRI 403-9
Lost time injury frequency rate		.565	.460	.420	GRI 403-9
Total recordable incident rate	0.45	0.52	0.23	0.21	GRI 403-9
Direct employees	0.52	0.57	0.15	0.24	
Contractors	0.28	0.43	0.37	0.16	
TRAINING AND EDUCATION					
Training (average hours per employee)				74 Hrs	GRI 404-1
Employees receiving regular performance and career development reviews (%)				2651 employees 100% of full time	GRI 404-3
Environmental Training (%)				93	GRI 403-5

Continues on following page.

ESG METRICS TABLE

(CONTINUED)

SOCIAL	2018	2019	2020	2021	REFERENCE INDICES
ETHICS AND HUMAN RIGHTS					
Discrimination incidents (#)	0	0	0	0	GRI 406-1
Employees trained on business ethics issues (%)	100	100	100	100	GRI 205-2
RESPONSIBLE SUPPLY CHAIN					
Suppliers that have received the Supplier Code of Conduct (%)				100% of our top selected supplier	
Suppliers with contracts that include CSR requirements (%)	We did not have any renewed contracts in 2021. We will start in 2022				
Suppliers that have gone through a CSR audit (%)				Audits will start in 2022	GRI 414-1
New suppliers that were screened using social criteria (%)					GRI 308-1
Suppliers that have gone through a CSR assessment				33%	GRI 414-2



Thank you.



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