

**EASTMAN** 



While the world faces enormous challenges, I'm optimistic about the future and confident in Eastman's ability to address them through strategic collaboration, responsible resource management and persistent innovation.

— **David A. Golden**Senior Vice President, Chief Legal & Sustainability
Officer, and Corporate Secretary

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# A message from the CEO

Over the past several years, Eastman has been on a transformational journey to becoming a specialty company. Whether it's through developing more efficient products and bringing innovative solutions to customers, collaborating with world-class scientific institutions to help solve significant global challenges, or working with community partners to have a positive impact, we are committed to enhancing the quality of life in a material way.



Through the company transformation, we have significantly increased our focus on innovating sustainable solutions and product applications to meet the needs of a changing world. I believe we have the most robust and compelling innovation portfolio in the company's history. The power of our innovation efforts is aimed at opportunities where disruptive, global macro trends align with our world-class technology platforms. To continue developing products that make a material difference in people's lives, we are leveraging our success and expertise in key platforms where Eastman has been a leader for decades.

To invest in innovation and growth, a company must also continually improve its operations and manage resources responsibly. Eastman is

no exception. We set aspirational goals to steer our efforts toward areas where we can actively make a difference and reduce our environmental footprint. To ensure support of these efforts at every level of the company, I along with other members of senior management include tracking sustainability-related goals such as energy intensity in our annual Personal Performance Commitments.

With the publication of this report, we are reaffirming Eastman's commitment to the 10 principles of the United Nations Global Compact as well as the global Sustainable Development Goals. Throughout the report, I hope you will see sustainability as a common thread woven through our company. Sustainability isn't something we do; it's part of who we are.

I can't talk about sustainability without mentioning the Eastman team. Our people are the reason we can continue to invest in innovation and positively impact our world. I'm proud of the foundation we've built, and I'm confident Eastman will continue to deliver shared value for decades to come.



Board of Directors Chair and Chief Executive Officer



# Eastman at a glance

# Eastman (NYSE:EMN)

Global advanced materials and specialty additives company that produces a broad range of products found in items people use every day

Named America's Most JUST Company in the chemical industry by JUST Capital and Forbes Magazine







Four consecutive vears as one of the World's Most Ethical Companies by Ethisphere Institute

Sixth consecutive **ENERGY STAR® Partner** of the Year award, fourth Sustained Excellence honor

**Serving customers** in more than 100 countries



Approximately 14,000 team members around the world



2016 revenue of approximately \$9.0 billion **\$ \$ \$ \$ \$ \$ \$ \$ \$** 



American° -Chemistry Council

> Recognized with Responsible Care® Energy Efficiency Awards from American Chemistry Council for energy efficiency improvements 24 years in a row, receiving eight awards in 2016

**Fibers** 

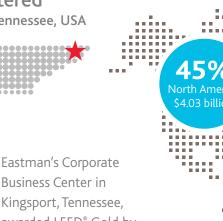


Recognized as a Glassdoor Employees' Choice "Best Place to Work" for three consecutive years

# 2016 sales revenue by region







6%
Latin America
\$515 million

20%

rope, Middle ast & Africa 2.31 billion Asia Pacific \$2.16 billion

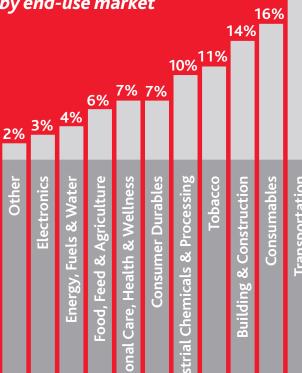


Business Center in Kingsport, Tennessee, awarded LEED® Gold by the U.S. Green Building Council





2016 sales revenue by end-use market



U.S. Department of Energy Better Project award for combustion turbine project at Longview, Texas, site

Indian Orchard operations and Ghent South operations recognized for reducing energy intensity at least 10% in less than five years











Recognized for **Transportation Safety** by two rail companies in 2016

Eastman's Toy F. Reid Employee Center named Top in Category for 2016 ENERGY STAR® National Building Competition: Bootcamp 14% energy savings

63

manufacturing sites\*

in **14** 

countries

\*Including joint ventures

# A message from the CSO

Why sustainability matters

Since becoming Eastman's Chief Sustainability

Officer, I have spent time asking, "What is the job
sustainability should be performing?" In other words,
why does sustainability matter? That may seem an odd
question from the company's sustainability steward,
but the answer to that question is exactly what a
company needs to define before it can set a vision and
strategy for creating value through sustainability.

The world is facing enormous complexity and challenges:

- How do we feed more people with less arable crop land?
- As fish have become the primary source of our planet's protein, what does that mean for natural fisheries and aquaculture?
- And how do we manage the estimated 80% increase in protein demand over the next 30 years?
- If it takes 35 gallons of water to produce a microchip or 100 gallons of water to produce a chicken egg, should we think about our water resources differently?
- If 40% of the world's population lives within 100 kilometers of a coastline and that percentage is increasing, what does this mean for coastal ecosystems, building and construction, and the increasing exposure of cities and populations to extreme weather events?
- How do we capture more of the 174 petawatts of solar energy that strikes the earth every day?
- How do we exponentially increase resource productivity and help ensure a sustainable future?

These are only a few of the many, many questions.

So how do we change the trajectory?

We know we must create far more value than the resources we use or the future is not sustainable. As we address these growing demands, we focus on driving resource productivity through improved processes that



protect the environment in the communities where we operate, as well as understanding the impact of our products. We help our customers and their customers do the same thing. We strive for continual improvement to manage our resources responsibly.

As we increasingly understand the challenges and issues our world is facing, we strategically focus our efforts on the right projects and initiatives with the greatest collective impact. Building and strengthening strategic partnerships and challenging ourselves to enable the most positive change leads to true, positive social innovation.

The key to all of this — innovation. Innovation is imperative.

Innovation happens at the intersection of the persistent problems facing the world and world-class technologies and expertise. Innovation steers a sustainable portfolio that brings solutions to wicked problems. Innovation drives disruptive change in the marketplace. Innovation changes the world.

That is how we change the trajectory. And that is how we define sustainability at Eastman — creating vastly more value than the resources we use — by steering a sustainable portfolio, driving resource productivity,



and rendering focused good acts by employees and the company for the simple sake of doing good.

As Eastman transforms toward becoming a specialty company, our strategy continues to evolve. The newly restructured Sustainability Council is leading the charge to assess our current focus areas, understand emerging issues, and establish a sustainability vision for the future.

While the world faces enormous challenges, I'm optimistic about the future and confident in Eastman's ability to address them through strategic collaboration, responsible resource management, and persistent innovation.

David A Golden

Senior Vice President, Chief Legal & Sustainability Officer, and Corporate Secretary



Eastman's Sustainability Council, established in 2010, continues to evolve and reflect the changing strategy and structure of the company. Reporting to the Council are three subcouncils designed to activate deeper integration of sustainability into the company strategy. The cross-functional leadership approach of the Council and subcouncils allows for a coordinated and integrated sustainability strategy that not only supports but influences the company's business objectives and drives the innovation platform.

# Stakeholders and value chain

While we have deep expertise and insight in a variety of areas, we recognize we can't solve the world's problems on our own. We value the importance of collaboration and transparency to drive change both internally throughout Eastman and externally along the value chain.

Historically, Eastman, like most companies, focused on its direct customers. However, to fully understand the value we create and the impact of our products, we must engage stakeholders and influencers along the entire value chain. We leverage insights from these engagements and interactions to identify the most important and relevant issues for our stakeholders so that we can not only prioritize our resources but also challenge ourselves to understand new and varying perspectives — ultimately driving collaboration to generate sustainable solutions and positive change. While we do not conduct a formal stakeholder assessment annually, we actively engage a diverse range of stakeholders through an ongoing process at the corporate, regional, and local levels to seek feedback on business performance, advance the company's strategy, understand relevant sustainability issues and macro trends, and ultimately create value for our stakeholders.

Stakeholder engagement varies in type and frequency by stakeholder group; however, we do not report specific details of all engagements. Examples are represented on page 9.

In preparation for our 2016
sustainability report, we assessed
sustainability-related issues that fall
within the standard environmental,
social, and governance (ESG)
framework. The assessments
involved secondary research of
publicly available information for
our leading customers and suppliers
as well as investors, nongovernmental
organizations, government entities,
and community partners with whom
we routinely engage.



Research included sustainability and annual reports, websites, and news coverage to gauge priority of sustainability-related issues and initiatives. We conducted surveys of employees and our Community Advisory Panels. Our goal was to identify, analyze, and prioritize relevant issues to inform our sustainability strategy and reporting.

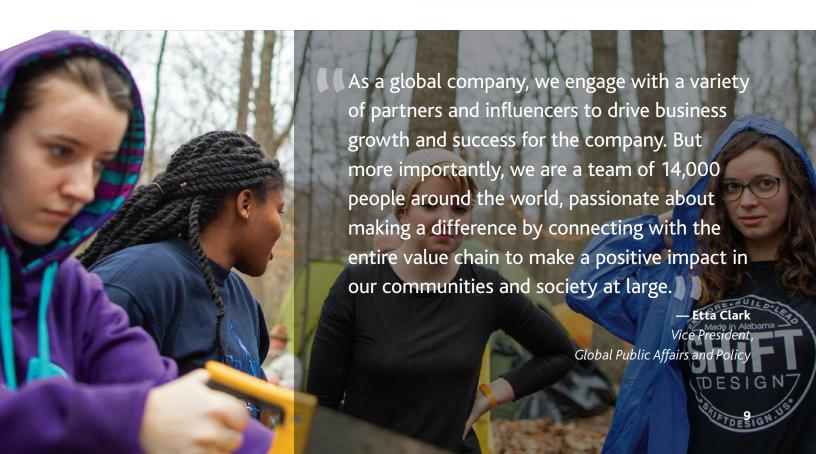
We also understand that we cannot drive a successful and meaningful sustainability strategy without understanding how the rest of the world defines and measures sustainability.

In our 2016 Sustainability Report, we committed to identify areas where our strategic priorities align with the UN Sustainable Development Goals (SDGs). Over the past year, we have mapped these global goals to our stakeholder priority assessment, aligning key areas of engagement to a common sustainability framework.

Going forward, Eastman's newly restructured Sustainability Council will drive prioritization of the company's sustainability strategy and SDGs, surfacing issues and trends from their respective areas of focus and influence that are relevant to Eastman and presenting opportunities to proactively engage.

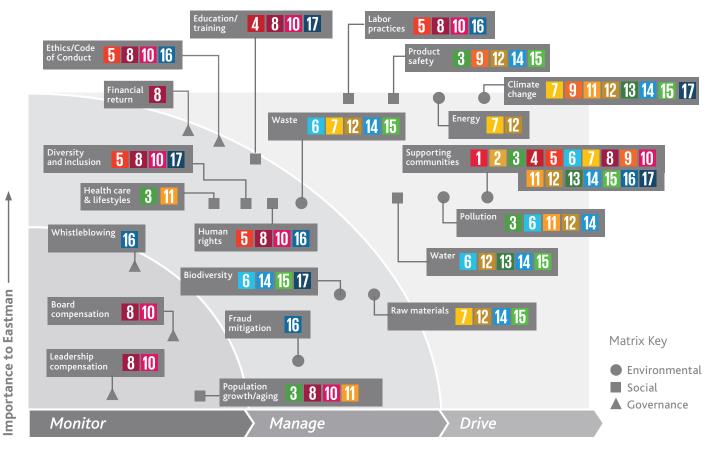
# Stakeholder engagement

Stakeholders	How we engage
Employees  Manufacturing	surveys, intranet, campaigns, events, training, participation in sustainability-focused teams/organizations
Direct customers Brands, original equipment manufacturers, and downstream customers Retail channel Suppliers	meetings, calls, conferences, surveys, collaborative projects, website, industry memberships
Consumers	website, social media, trade shows
Community	advisory panels, surveys, website, events, newsletters, collaborative projects



# Eastman stakeholder priorities

Strategic priorities align with United Nations' Sustainable Development Goals



Importance to Stakeholders \_\_\_\_\_

#### Key: Sustainable Development Goals



# Goals and progress

In addition to the transformational changes
happening at Eastman on a corporate level, we are in
the early stages of a transformational change in our
sustainability efforts under the leadership of our CSO
David Golden. With the relaunch of our Sustainability
Council, we are driving a new strategic vision, which
will help inspire new goals and programs.

While many of our priority focus areas will not change, we continuously evaluate the way in which we measure and report on those areas to ensure we are committing time and resources appropriately. One thing that hasn't changed is our unyielding commitment to make a measurable positive impact on our business, employees, customers, communities and the world. Our sustainability goals steer our efforts so we remain focused on the "big picture" targets of our strategy — areas where we believe we can create the biggest change. As part of our Responsible Care® commitment to continual improvement, we review our goals regularly and establish targets that challenge us to move the horizon forward.

This year, we continue to report on the aspirational goals and targets we've established as we look toward the 2020 horizon. As we've achieved goals or shifted our strategic focus in line with our corporate strategy and portfolio transformation, we have added and refined the goals to reflect our priorities. We removed goals achieved during our previous reporting period. We also note focus areas in transition with new long-term goals anticipated by 2018.

# **Goals Scorecard**



# Steering a sustainable portfolio

Growth: Deliver new business solutions from our world-class renewable technology platforms

Progress: On track

Innovation: Ensure all innovation projects are assessed against sustainability macro trends

Progress: Needs improvemen



# Driving resource productivity

Energy: Reduce energy intensity by 20% by 2020

Progress: Needs improvement

Greenhouse gas emissions: Reduce GHG intensity by 20% by 2020

Progress: On track

Water: Develop best practices for water conservation and reuse and assess manufacturing sites against these best practices

Progress: On track/in transition

Safety: Maintain our strong commitment to a zero-incident culture

Progress: Needs improvement



# Focused good for good

Engagement: Engage globally in impactful partnerships that elevate focus areas of Education, Environment, Empowerment, and Economic Development

Progress: On track

Health: Increase utilization of preventive health services by employees and spouses in North America by 15% by 2017

**Progress: Complete** 



# Steering a sustainable portfolio

Goal	Progress	Progress details
Deliver new business solutions from our world-class renewable technology platforms	On track	Delivering innovative products to meet unmet market needs is imperative to our successful transformation to a specialty company. We are increasing our focus on leveraging Eastman's renewable technology platforms to deliver sustainable growth. Approximately 20% of our new products commercialized in 2016 and first half of 2017 are part of our renewable technology platforms. There are several additional products in the development pipeline that meet this criteria, as well.  Steering a sustainable portfolio
Ensure all innovation projects are assessed against sustainability macro trends	Needs improvement	As we move forward with an increased focus on sustainable innovation, we are driving early-stage consideration of macro trends into our innovation and stage gate processes. We are currently implementing a Portfolio Sustainability Assessment, which will position us to standardize and deepen our assessment process of all innovation projects. In 2016, we piloted the assessment tool with targeted projects to allow us to learn, review and adjust to make improvements to the approach. The Sustainable Portfolio subcouncil is responsible for driving the adoption and execution of the new Portfolio Sustainability Assessment.

The solutions to the world's most significant issues will come on the molecular level. And because we have the capabilities and unique technologies to deliver those solutions, we have an obligation to commercially provide them. We have an obligation to be more than a chemical company — we have an obligation to be an innovation company and a solution provider. Being at Eastman isn't just about the bottom line. It's about making a material difference and enhancing the quality of life.

—Steve Crawford

— Steve Crawford
Senior Vice President and Chief Technology Officer



# Driving resource productivity

Goal	Progress	Progress details
Improve energy efficiency of operations by 20% by 2020 against the 2008 baseline	Needs improvement	Through 2016, energy intensity improved 10.1% compared to the 2008 baseline; year-over-year improvement compared to 2015 was 2.6%. We emphasized improved correlation between production and energy use to offset headwinds due to Eastman's strategic shift to specialty materials, which tend to be more energy intensive to manufacture.  See the energy section for more progress details.
Reduce greenhouse gas (GHG) emissions per unit of production (GHG intensity) by 20% by 2020 against the 2008 baseline <sup>1</sup>	On track	2016 greenhouse gas intensity decreased 14% compared to the baseline. <sup>2</sup>
Develop best practices for water conservation and reuse and assess manufacturing sites against these best practices	On track/ in transition	In 2014, we established a goal to develop a water conservation strategy for manufacturing sites in water-stressed regions by 2015.  After completing an initial assessment using the WBCSD Water Tool and Aqueduct Water Risk Atlas in 2014, a cross-functional team surveyed eight of our manufacturing sites considered to be in potentially water-stressed areas. Of the eight sites, we identified no significant gaps, with each site reporting either no scarcity, limited water use, or plans currently in place to reduce water use.  In 2016, we established a goal to develop best practices for water conservation and reuse and assess our manufacturing sites against these best practices. Eight North America sites completed assessments in 2016, with a target to complete all U.Sbased sites by the end of 2017.  With the restructuring of Eastman's energy management program to encompass natural resources more holistically and the relaunch of the Sustainability Council, we will continue to prioritize water management, conservation and reuse to determine long-term goals and strategy.  See the water section for more progress details.
Maintain our strong commitment to a zero-incident culture  Note: While we have specific annual targets for each safety metric reported, the ultimate goal is zero incidents from both a safety and environmental perspective. We will continue reporting our efforts while emphasizing Eastman's safety vision.	Needs improvement	Since introducing the ALL IN FOR SAFETY initiative in 2012, we've changed how we discuss and approach safety at Eastman. While we are making progress, we recognize the need to continue efforts to meet our safety targets and accelerate our journey towards the ultimate goal of no one getting hurt. In 2016, we focused our efforts on communicating our vision: "Because we CARE, we CHOOSE to ACT, so everyone is SAFE." Our vision establishes why we choose to act in developing our zero-incident culture and the expectation that our entire workforce actively cares.  Targets we continue to monitor and report:  2016 OSHA Injury and Illness Rate — 0.80 against target of 0.54  2016 Days Away from Work (DAW) Rate — 0.24 against target of 0.12  Process Safety Incidents as defined by American Chemistry Council in 2016 — 18 incidents against a target of 12  See the safety section for more progress details.

<sup>&</sup>lt;sup>1</sup> Baselines have been adjusted to reflect the acquisition of Taminco businesses in December 2014.

<sup>&</sup>lt;sup>2</sup> Over the last three years, we converted four boilers at two of our domestic sites from coal to natural gas combustion. We plan to convert two more boilers by the end of 2018 at our Kingsport, Tennessee, facility. The conversion from coal to natural gas at Kingsport is the most significant air pollution control project in Eastman's history. The conversion will enhance our emission reduction efforts and help us in our effort to attain this goal.



# Driving resource productivity (continued)

Goal	Progress	Progress details
Reduce nitrogen oxide $(NO_x)$ by 20% and sulfur dioxide $(SO_2)$ by 40% by 2020 against the 2010 baseline	On track	2016 $NO_x$ emissions decreased 7% compared to the baseline. <sup>2</sup> 2016 $SO_2$ emissions decreased 37% compared to the baseline. <sup>2</sup>
Reduce Volatile Organic Compounds (VOC) by 15% by 2020 against the 2010 baseline	Needs improvement/ in transition	2016 VOC emissions decreased 8% compared to the baseline.  Eastman is evaluating other metrics that assess the company's actions to protect and enhance air quality to provide greater visibility into the company's emission reduction efforts.
Reduce total number of reportable releases by 25% by 2020 against the 2010 baseline	On track	2016 reportable releases decreased 23% compared to the baseline.  Eastman has historically collected data for ACC Tier 1 process safety events as defined by RP-754. Starting January 2017, Eastman is now collecting data for process safety events that meet Tier 2 criteria (see page 29). Eastman continues to evaluate and prioritize metrics and processes to ensure we are focusing our efforts and resources appropriately to drive improvement and operational excellence.
Reduce Toxic Release Inventory (TRI) emissions to the air by 25% by 2020 against the 2010 baseline <sup>1</sup>	Needs improvement/ in transition	2016 TRI air emissions decreased 9% compared to the baseline. <sup>2</sup> Eastman is evaluating other metrics that assess the company's actions to protect and enhance air quality to provide greater visibility into the company's emission reduction efforts.
Reduce hazardous waste (indexed to production) by 15% by 2020 against the 2010 baseline	Needs improvement/ in transition	2016 hazardous waste indexed to production increased compared to the baseline.  Eastman is evaluating other metrics measuring the management of hazardous waste that provide greater visibility and transparency into how the company manages its waste and drives waste reduction.

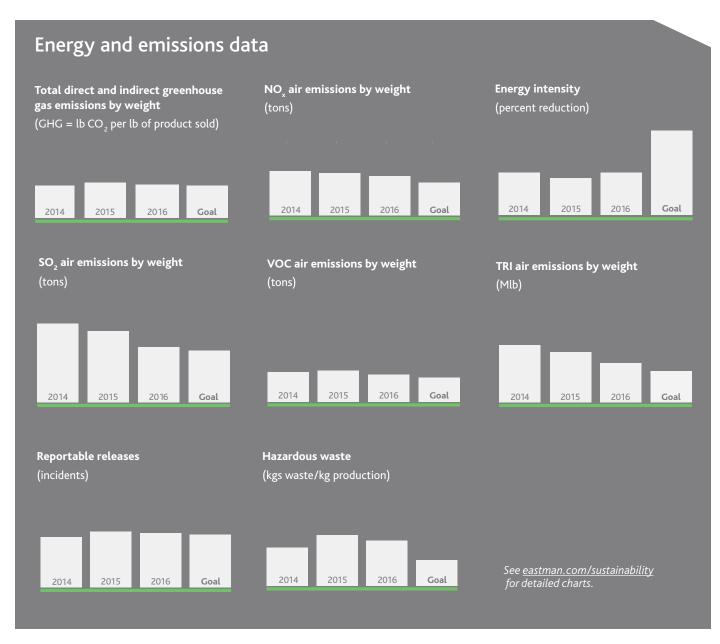
<sup>&</sup>lt;sup>1</sup> Baselines have been adjusted to reflect the acquisition of our Taminco businesses in December 2014.

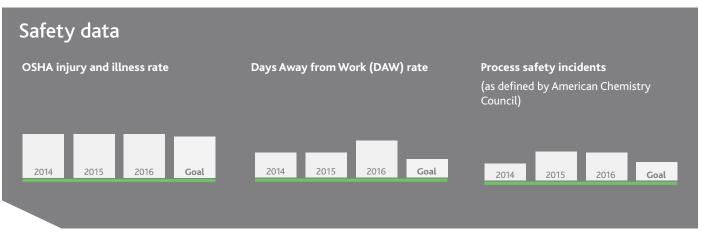
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# Focused good for good

Goal	Progress	Progress details
Increase utilization of preventive health services by employees and spouses in North America 15% by 2017	Complete	We have increased utilization of preventive health services in North America by 19% against our currently stated goal.  Through Eastman Wellness, we remind employees to take advantage of the Eastman health plan benefits with preventive services being covered at 100%. We also encourage employees to engage their personal physicians and Cigna health plan coaches. Additionally, we collaborate with local health service providers in communities where Eastman has a presence, to offer on-site services and screenings for our employees.
Engage globally in impactful partnerships that elevate  • Education  • Environment  • Empowerment  • Economic development	On track	Education: Strategic partnerships between business and education help ensure we will have a successful workforce in the future. We will continue to encourage innovative and productive thinking in cross-curriculum, real-world environments to enable students to excel. With a strong emphasis on STEAM education (science, technology, engineering, arts, and math), we continue to engage in strategic partnerships to create a sustainable model for educational initiatives in site communities. One key example of progress in 2016 is Eastman's launch of the inaugural ocean science capstone course for high school students and support of the National Ocean Science Bowl.  Environment: The Eastman team works hard to minimize our environmental footprint by conserving natural resources, inventing more efficient production methods, and developing chemistries that use renewable raw materials. We strengthen partnerships, obtain insights and deliver solutions that help reduce our footprint, support the blue economy and improve the quantity and quality of food sources for our growing population. In 2016, we continued to strengthen our partnership with the Woods Hole Oceanographic Institution as well as expand our network to deepen our understanding of the linkage between ocean and climate, including becoming a member of the Consortium for Ocean Leadership.  Empowerment: We are committed to building an engaging and dynamic work environment with a mind-set of equality and inclusion that fosters creativity, innovation and camaraderie across our global company. With a focus on gender equity, we are launching a signature program to promote equality and parity across our workforce.  Examples of progress in 2016 include Eastman's support of Room to Read in India and advancing women in leadership in collaboration with Women Leaders in College Sports (formerly NACWAA).  Economic development: We take our work seriously and believe that investing in communities builds trust, goodwill and long-term success for all. We support innovative and impac







# Steering a sustainable portfolio

Global macro trends drive the strategy and portfolio.

Sustainability and sustainable material solutions are at the heart of Eastman's innovation platforms and are a critical driver of the company's accelerating innovation strategy. The world faces a number of issues tied to disruptive macro trends, and solutions to those issues can be developed on the molecular level. To that end, we have identified four key macro trends aligned to our corporate strategy that we are leveraging to drive innovation: health and wellness, natural resource efficiency, emerging middle class, and feeding a growing population. We believe it is our responsibility to develop new molecules, products, and applications to address these trends — solutions that make a material difference in everyday lives and enhance the quality of life around the world.

We have substantively built our application development and market development capabilities so that when we are collaborating with our customers, we understand their markets and technologies to enable us to be valued as preferred innovation partners.

#### Macro trends drive innovation.

Macro trends

Trend examples

**Product examples** 

Health and wellness

BPA-free Reduced VOCs Microbial resistance Phthalate-free Eastman Tritan™
copolyester
Eastman Tetrashield™
protective resin systems
Eastman 168™ nonphthalate plasticizer
Eastman Omnia™ highperformance solvent

Natural resource efficiency

Lightweighting
Filtration
Efficient
manufacturing
Sustainably
sourced
Renewable raw
materials

Saflex® Q series advanced acoustic interlayer Eastman Cyphrex™ microfibers Eastman Naia™ ceullulosic yarn Eastman Treva™ engineering bioplastic

Emerging middle class

Higher quality
automobiles
Quality consumer
products

V-KOOL® window film
Llumar® window and paint
protection film
Eastman Tritan™
copolyester
Avra™ performance fibers
Saflex® head-up display
(HUD) interlayer
technology
Eastman Impera™
performance resins
Eastman Optifilm™
enhancer 300/400

Feeding a growing population

meats
Feed preservation
Traceable feed
ingredients
Crop protection

Eastman organic acids
Choline chloride

#### Macro trend spotlight: Health & wellness

# Eastman Tritan™ copolyester for medical devices

Health and wellness With a focus on patient safety, today's health care professionals are more motivated than ever to prevent hospital acquired infections (HAI). Reduced reimbursements for patients who are readmitted because of HAI provide even more motivation to use more effective disinfectants — and use them more often. In

today's health care, it is becoming more common to see medical devices that don't work satisfactorily. They are unable to do their job — or fail prematurely — because of stress cracking or other defects resulting from exposure to disinfectants and other cleansers. A medical device only safeguards patients and saves lives if it works.

Advantages of medical device housings made of Tritan include:

- Bisphenol A (BPA) free
- · Excellent chemical resistance
- Superior impact resistance and durability after disinfection, enabling longer use over the device's life cycle
- Reduced downtime and repair costs for hospitals
- · Less noise in devices where sound reduction is valued
- Halogen-free formulations









#### Macro trend spotlight: Natural resource efficiency

Natural resource efficiency Products made with Eastman's cellulose technology are derived from wood pulp which is sustainably sourced from trees grown in responsibly managed forests. These products are also produced in a near-closed-loop process in the United States where waste is either recycled, reused, or offered for resale. With an 80-

year history rooted in science and innovation, our scientists transform this natural resource into versatile solutions that become successful commercial applications. We are continuing to tune our chemistries to meet the latest challenges.



Trēva is a cellulose-based product that can offer both enhanced functionality and improved sustainability. It is chemically resistant and dimensionally stable and has excellent flow and low birefringence. In addition, it has the ability to enable reduced environmental impact, allowing for less material in use and creating durable products that will last longer.

# Eastman Naia™ cellulosic yarn

Naia is a new cellulose-based yarn that offers an inherently soft feel and improved performance compared to other fibers. Third-party tests show Naia is twice as breathable as nylon and has the ability to wick away moisture seven times better than polyester. Solvents used in the production of Naia are recycled back into the system for reuse. Water used in our processes is routinely tested before returning it to source streams to ensure we are returning clean and safe water to the local river.







Cellulose esters is a technology that extends way back in the Eastman history books, all the way back to the 1920s when Eastman began. Naia illustrates how we are constantly searching for new ways to innovate with our world-class technologies. We're able to do that because we have some of the brightest scientific minds — women and men who not only understand our own technologies but also collaborate more closely than ever with customers so that we can understand their needs and applications.

—Jennifer Stewart
Vice President, Corporate Innovation



#### Macro trend spotlight: Emerging middle class

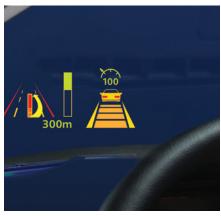
# Saflex® head-up display (HUD) interlayer technology

Emerging middle class Once reserved for fighter jets and luxury cars, HUD technology is finding its way into all sorts of vehicles. Traditionally, details such as speed, time, and remaining fuel have been located on the dashboard requiring drivers to glance away from the road. HUD technology allows information that a driver needs to be projected

onto a display area in the windshield. Thanks to advances in Saflex® polyvinyl butyral (PVB) interlayers — long known for bringing safety, security, improved acoustics and UV protection to laminated glass — HUD interlayers are made by a proprietary process that creates nonparallel surfaces to create a windscreen that provides optical correction, resulting in the highest quality projected image in the market.

#### Advantages include:

- · Safety and security
- · Crash avoidance
- Navigation
- Comfort
- Connectivity











### Macro trend spotlight: Feeding a growing population

# Eastman's nutritional optimization portfolio

Feeding a growing population

Projections show that by the year 2050 the world population will rise to nine billion. That's a lot of mouths to feed. And it's not just a question of quantity; food quality is as important. Eastman is developing solutions for the animal nutrition industry that can address current issues and ultimately affect the quantity and

quality of the end products that farmers offer. Our current portfolio includes solutions to combat some of the problems that can impact animals' well-being, such as environment-induced stress, and allow delivery of better quality food products. We also offer solutions to assure feed hygiene, preventing the growth of *Salmonella* bacteria in animal feeds to prevent transmission from pigs and poultry into the human food chain. As far as quantity is concerned, we offer solutions to improve the performance of pigs and poultry, allowing farmers to obtain greater yields with less feed. We will continue to expand our portfolio in animal gut health solutions and in feed preservation ingredients to improve feed conversion ratios and livestock conditions to feed the growing population.







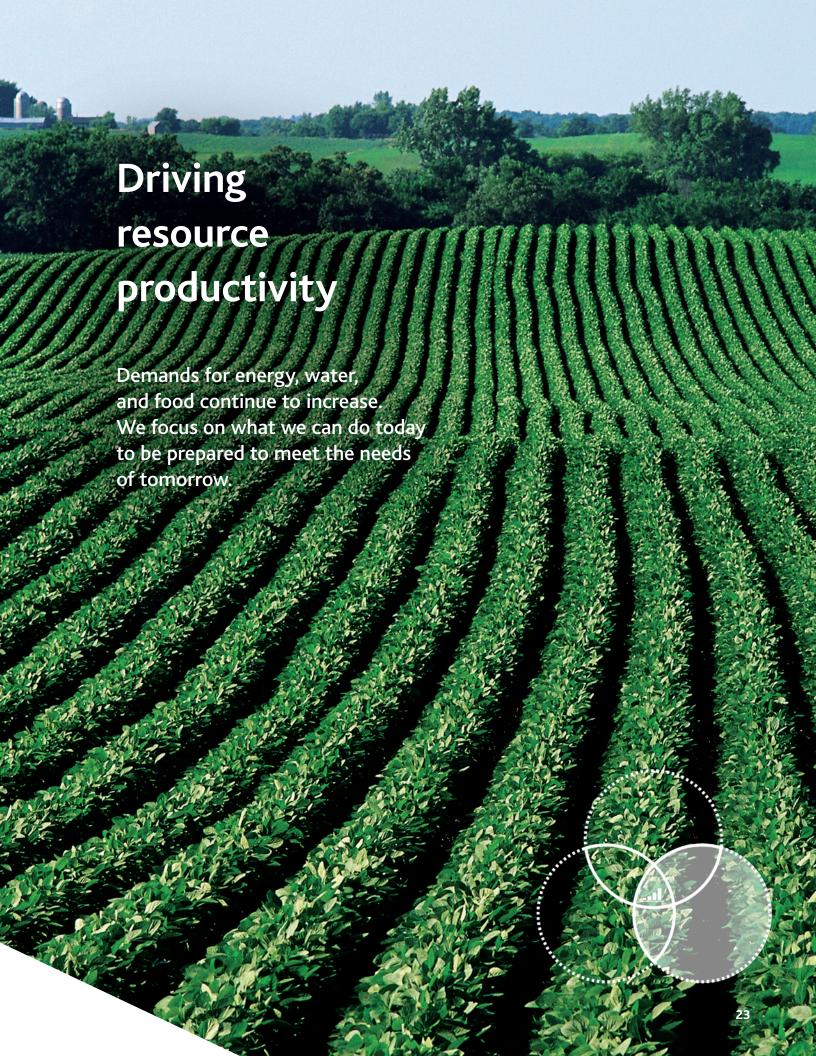






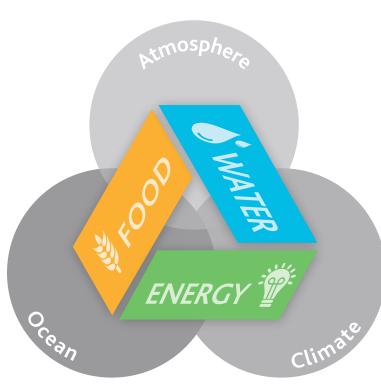


While we are currently focusing our innovation efforts on these four key macro trends, we recognize there are a number of emerging trends and technologies that are becoming increasingly relevant to our businesses. Throughout 2017, we are expanding the way we consider macro trends and integrating sustainability-focused trend sensing into our innovation and business platforms. If innovation is the solution to meet the needs of a growing and changing world, we realize that we must continually look to the future and anticipate the needs of tomorrow.



# Driving resource productivity

The world faces complexity and challenges.
This drives us to evolve our thinking and not
only adapt but also better anticipate future
issues and trends.



While Eastman has a long history of working safely, meeting compliance standards and operating sustainably, we know today's performance isn't sufficient for tomorrow's demands and today's resources won't sustain us into the future if we don't do something differently now.

We challenge ourselves to ask tough questions and realize we cannot simply maintain the status quo. We also recognize the growing nexus of energy, water, and food.

Requirements for increased energy, potable water, and food will likely exacerbate the challenges in producing the requirements for our growing and developing world. How do we manage producing food without adding more challenges to our limited water sources? How can we provide energy to developing economies while balancing carbon emissions that will impact climate change? These are complex challenges that are even more complicated when we consider they are interrelated. As we address these growing demands, we focus on driving resource productivity through improved processes that protect the environment in the communities where we operate, as well as understanding the environmental impact of our products.

We also recognize that there is a higher degree of interest from different stakeholders in the company's strategy related to climate change. We realize the significance of climate change and the need to take action. We understand that even small actions can have lasting impacts. As we assess the long-term risks and opportunities relative to our business that climate change may represent, we are partnering with leaders in ocean science to better understand the ocean and its relation to climate change. We've established an environmental, social, and governance (ESG) council to monitor and manage these insights for the company.

With an eye to the future, we're building on a strong foundation of expertise, insight, and success.

# **Energy**

















In 2010, Eastman set an aspirational goal of 25% improvement in energy intensity in 10 years, with a baseline of 2008 — the year Eastman became an ENERGY STAR® partner. As reported in 2014, Eastman's Worldwide Energy Management team worked with the Department of Energy and the Oak Ridge and Lawrence Berkeley National Labs to develop a refined goal of 20% by 2020 that, while still an aspirational goal, takes into account our rich history of energy efficiency improvements. Through 2016, we've reduced energy intensity by 10.1%, making significant improvement of 2.6% year-over-year compared to 2015.

While Eastman's energy management program is global and encompasses a multitude of projects and improvement efforts, in 2016 the team emphasized performance improvement at Eastman's largest site in Kingsport, Tennessee, which uses almost 50% of the company's energy. Data from 2015 indicated that progress at this site had stalled. Work was done to optimize the Combined Heat and Power system at the site. In addition, we engaged an external consultant to evaluate plans to improve system efficiencies. We emphasized improved correlation between production and energy use to offset headwinds due to Eastman's



Two Eastman sites have achieved at least 10% energy intensity reduction in less than five years, earning the ENERGY STAR® Challenge for Industry recognition—Indian Orchard Operations in the U.S. and Ghent South Operations in Ghent, Belgium.









strategic shift to specialty materials, which tend to be more energy intensive to manufacture. As a result, the Kingsport site achieved a 2.8% improvement year over year.

In 2016, Eastman's Indian Orchard facility near Springfield, Massachusetts, completed installation of a solar photovoltaic system with a total electrical generation capacity of 2.5 megawatts. The system includes more than 7,500 individual solar panels and showcases state-of-the-art data monitoring capabilities. The solar electricity generated is expected to produce approximately 5% of the site's electricity demand.

With the company's increased focus on innovation, the energy team continues to implement innovative approaches to natural resource management, signified by the restructuring of Eastman's energy management program in 2016 to become the global natural resource management program. The scope of the program now includes not only an increased focus on renewable energy but further emphasis on water, recognizing the inextricable linkage between water and energy.

For more details about Eastman's award-winning energy management program, visit <a href="www.eastman.com/">www.eastman.com/</a> ENERGYSTAR.



We have a long history of responsible management of our resources. We operate sites that range from small facilities making one product to large, integrated facilities making hundreds of products every day. There is no one-size-fits-all solution for operating sustainably and driving continued improvement. It takes engagement and commitment at every level of the company to build a sustainability-minded culture and achieve long-term results.

— Mark Cox Senior Vice President, Chief Manufacturing, Supply Chain and Engineering Officer

#### Innovation highlight

# Eastman Tetrashield™ protective resin systems

As much as 50% of the energy spent to build a car in assembly plants is consumed in the paint shop. Tetrashield can be formulated at higher solids levels while maintaining excellent application parameters, allowing formulators to offer original equipment manufacturers (OEMs) a coating with a more efficient film build, faster film drying, and ultimately, a more efficient coating process. In some applications, Tetrashield's exceptional hardness and UV stability enable layer reduction, reducing energy usage and emissions while simultaneously increasing throughput and reducing cost. With Tetrashield, OEMs can coat more cars more efficiently and faster with less paint while using less energy, and staying compliant with environmental regulations. In addition, lab tests show that coatings formulated with Tetrashield reduce volatile organic compounds when compared to other coatings.





At Eastman, our water strategies encompass both conservation and reuse of water at our facilities as well as the impact of the ocean on our climate system. We have expanded the scope of our energy management program to include water and other natural resources. We established a goal to develop best practices for water conservation and reuse and assess manufacturing sites against those best practices. In 2016, eight North America sites completed assessments, with a target to complete all U.S.-based sites by the end of 2017. A water assessment pilot was conducted at Eastman's Indian Orchard operations in Springfield, Massachusetts leveraging insights from the site's strong energy program — to identify potential projects, develop a process for assessing opportunities, and identify knowledge gaps. The pilot also included training to enhance inhouse capabilities for study methodology. In 2017, we are evaluating and implementing the findings of that study and have initiated a second study evaluating the reduction of municipal water at the Kingsport facility. Looking to 2018, we will evaluate best practices for

applicability in other regions of the world and determine a path forward for assessments for all global sites.

The ocean covers more than 70% of the Earth's surface and is the source of approximately 97% of the water that eventually falls on land as precipitation. Because we understand that the ocean and ocean life are fundamental to our climate, atmospheric weather, food, and energy systems, Eastman and the Eastman Foundation are partnering in innovative ways to help develop, observe and measure ocean processes — and educating future generations about their importance. We continue to collaborate with leading scientists at the Woods Hole Oceanographic Institution (WHOI), the world's largest nonprofit oceanographic institution.

Through our corporate responsibility initiatives, Eastman and WHOI launched the inaugural ocean science capstone course for high school students in Kingsport, Tennessee. Learn more on page 33.

The Eastman Foundation continues to expand its support of ocean science through additional collaborations and strategic initiatives. Learn more on <u>page 35</u>.















#### Innovation highlight

# Eastman Omnia<sup>™</sup> high-performance solvent

Omnia has an excellent safety profile that enables formulators and end users to comply with increasingly stringent regulatory and market demands. Omnia is also readily biodegradable and nonflammable, helping ensure the safety of people and the environment.

- Meets California Environmental Protection Agency Air Resource Board and United States Environmental Protection Agency exemptions for low vapor pressure VOCs for regulated consumer products
- Listed by GreenBlue® on its CleanGredients® database

- Listed with the highest rating (full green circle) on the Safer Chemical Ingredients List
- Approved by EPA's Safer Choice for use in products that may be directly released to the environment, bypassing sewage treatment



# Food

As we learn more about the various challenges facing the world, the concern for crop land continues to build. We ask the question, "How can we feed 2.5 billion more people by 2050 when there is no more open land left to cultivate?" A growing world population, emerging

environmental concerns and long-term weather variability have challenged the agriculture market to develop innovative and targeted solutions that help ensure the success of crops and the land itself. With the addition of the alkylamines stream to our portfolio, we are developing effective products that protect crops against soil-inhabiting plant pathogenic

Can we feed

2.5
billion more people by
2050?

organisms such as nematodes, fungi and insects, while also serving to control weeds and their seeds. When carried out correctly, prior to seeding or planting, soil disinfection can create a favorable biotope that promotes healthy crop growth. This allows growers to start with a clean







field, protecting the crops from a very early stage. Increasing yield from existing land requires more productive plants. Eastman continues to work to develop new, sustainable crop-protection solutions, which will be key components to achieving greater yield with minimum crop loss.



# Safety

At Eastman, safety is a core value — never a priority that is to be juggled with other priorities on a day-to-day basis. We've worked hard to accelerate our journey toward a zero-incident culture where the right behaviors and attention to consistent processes drive the belief that all workplace incidents and injuries are preventable.

We introduced ALL IN FOR SAFETY in 2012 to heighten our emphasis on safety with our employees. Since that time, we've changed how we discuss and approach safety. In 2015, we introduced the vision statement: Because we CARE,



we CHOOSE to ACT so everyone is SAFE. The vision statement answers the question of why we make safe choices and establishes the expectation that our entire workforce actively cares — about their own safety and the safety of everyone around them — speaking up and taking action when anyone identifies a safer way to work.

In an effort to drive operational excellence and continue our focus on reducing potential for injury or incident, we are now leveraging globally accepted industry practices to build on our current processes for capturing and reporting data on injuries, near misses and process safety events.

In December 2016, we introduced a new metric and process related to injuries and near misses with increased focus on Serious Injury and Fatality (SIF) and Potential Serious Injury and Fatality (P-SIF) events to raise awareness and identify areas of improvement to mitigate potential risk of serious injuries. The emphasis on collecting all events deemed a SIF or P-SIF in one central database allows us to focus resources and efforts on the most critical conditions and behaviors. The data about P-SIF events will enable a more proactive approach to our traditional efforts.

Although we have historically collected data and reported Tier 1 process safety events through our internal reporting systems, we are now collecting and reporting data for process safety events that meet Tier 2 criteria as defined by the American Petroleum Institute's Recommended Practice 754 (RP-754). By incorporating Tier 2 events, we begin to evaluate leading process safety measures so that we can better understand and proactively address potential risks and areas of improvement.

Like our occupational safety processes, Eastman goes above and beyond to ensure we manufacture products that are safe for our employees to handle and for our customers to use. We also focus on innovating products with consumer safety in mind.

# Innovation highlight

### Eastman Impera<sup>™</sup> performance resins

As regulatory and safety standards increase, Eastman Impera™ performance resins can help tire brands deliver the desired balance of performance and safety without compromising the integrity of their manufacturing process.

Impera tire additives help optimize wet grip and rolling resistance without compromising other key performance characteristics or processing. Adding even a small amount of Impera fine-tunes performance, potentially avoiding more significant formulation changes or even tire redesign.

• Enhanced wet traction

- Responsive handling
- Improved balance of compound properties

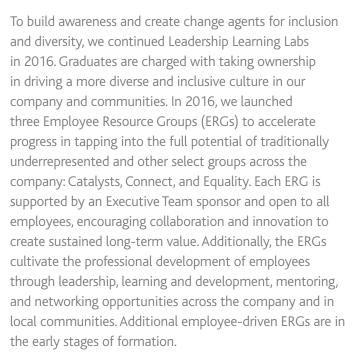






# Inclusion and diversity

Eastman's 14,000 employees worldwide use their unique skill sets to turn great ideas into materials that make a difference in everyday life. We support and encourage one another and believe that leveraging diversity in our thoughts and experiences allows us to excel in business. As we look ahead at the competitive pressures and innovation required for us to deliver, we must do all we can to enable everyone to contribute to their fullest potential and inspire talented people to innovate and drive growth.



# Collaborations for change

- · American Indian Science and Engineering Society
- DigiGirlz
- · Human Rights Campaign (HRC)
- · National Council for Women in Technology (NCWIT)
- · National Society of Black Engineers (NSBE)
- Paradigm for Parity®
- Society of Hispanic Professional Engineers
- · Society of Women Engineers (SWE)
- Tennessee Thrives











**Catalysts:** The Catalysts ERG focuses on the inclusion of women in achieving company goals that drive business results at Eastman.



**Connect:** The Connect ERG has a mission to facilitate the inclusion of African American and Black team members in achieving corporate objectives that drive innovation and targeted business results at Eastman.



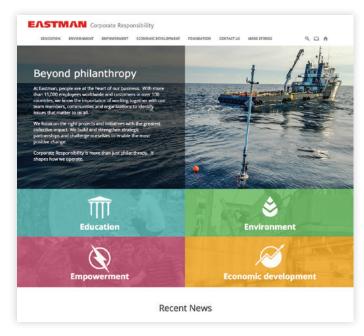
**Equality:** The Equality ERG has a mission to enable Eastman to be a company where lesbian, gay, bisexual, and transgender (LGBT) employees and their allies are visible, fully accepted, valued, and free to be authentic in all aspects of employment across the company.





# **Focused** good for good

At Eastman, corporate responsibility is more than just philanthropy. It shapes how we operate. We call it "good for good" because we truly believe in the power of doing good for the simple purpose of doing good in the world.



Up-to-date news about Eastman and Eastman Foundation's work in education, environment, empowerment, and economic development is presented at responsibility.eastman.com.

We focus on catalytic and transformative projects and initiatives with the greatest collective impact, combining our resources, expertise and influence to drive social innovation. We build and strengthen strategic partnerships and challenge ourselves to enable the most positive change through the lens of four priority areas education, environment, empowerment, and economic development — concentrating our efforts on projects and partnerships that cross multiple priorities.



# **III** Education

We believe in creating educational opportunities that help prepare and inspire students to excel. By leveraging our resources and strategic initiatives, we can maximize the collective impact of educational initiatives focused on science, technology, engineering, arts, and math (STEAM).



#### **Environment**

We focus on initiatives that help promote and drive environmental awareness, environmental stewardship, and energy conservation. Our strategic community investments communicate our commitment to being a responsible steward of our natural resources.



# **Empowerment**

We are committed to building an engaging and dynamic work environment with a mind-set of equality and inclusion. We understand that a diverse and inclusive workforce fosters creativity, innovation, and camaraderie.



# Economic development

We support innovative and impactful economic development initiatives that directly benefit residents and improve quality of life. We leverage our resources to enable infrastructure efforts and purposefully use local and regionally owned businesses and talent as appropriate.

# Bringing ocean science to the classroom







Through our ongoing partnership with the Woods

Hole Oceanographic Institution and Dobyns-Bennett High School at the company's global headquarters in Kingsport, Tennessee, students are being challenged to apply cross-disciplinary learnings to real-world issues and problems in a unique capstone course focused on ocean processes. By interacting with some of the world's top ocean scientists on active research projects, students are exposed to experiences that will give them a competitive advantage while continuing their education and entering the workforce. Exposure to a capstone course in ocean processes is a unique experience for students, and Dobyns-Bennett is one of only a few select high schools in the United States offering such a program. The school also entered its first competitive team in the National Ocean Sciences Bowl — Regional Blue Heron Bowl in Wilmington, North Carolina. The all-female team finished in the top 5 out of 14 teams, competing against North Carolina's top performing high schools in math and science.



Dobyns-Bennett High School's National Ocean Sciences Bowl team.





#### Room to Read







Room to Read, a global nonprofit organization,

envisions a world in which all children can pursue a quality education, reach their full potential and contribute to their communities and the world. Eastman shares that same philosophy. In 2016, we began supporting five school libraries in India — Delhi (2), Maharashtra (2), and Telangana (1). The libraries provide a child-friendly learning environment that enables children to develop the skills and habits of reading early in life, encouraging them to become life-long, independent, readers. Room to Read's involvement includes ensuring the school has a quality library with books in the children's local language, as well as teachers/librarians who are trained in the best practices of library management. Ensuring that families, communities, and governments are all engaged in the transformation of the school and committed to its success is fundamental to the program.

#### **IDEAcademy**

In 2016, Eastman and East Tennessee State University's College of Business and Technology launched IDEAcademy, a free leadership development series designed to bring TED-Talk style leadership training to our communities. The inaugural event featured entrepreneur and author Randi Zuckerberg. As founder and CEO of Zuckerberg Media, she shared her insights as a social media pioneer with audiences of community leaders, students and professionals. The event also boasted a dozen regional speakers, ranging from educators and business leaders to storytellers and innovative designers.





# Living better locally

In partnership with Appalachian Sustainable Development (ASD), Eastman supports and promotes improved access to healthy, garden-grown foods and sustainable agriculture and forestry in areas of Tennessee and Virginia. With numerous programs in place, ASD empowers and educates multiple generations of community members and provides tools needed to fight poverty, revitalize communities, and protect natural resources. This includes a rural food hub, called Appalachian Harvest, that connects farmers to large wholesale markets and distributes local produce from Maryland to Georgia.



#### Women in athletics

When it comes to empowering women, Eastman and Women Leaders in College Sports (formerly the National Association of Collegiate Women Athletic Administrators) share the same philosophy. The nonprofit organization has 3,000 members nationwide and encourages the advancement of women through leadership education, networking and career guidance. Eastman collaborates with Women Leaders to effectively reach and empower women and girls to improve their well-being and future development.

Since 1997, Eastman has played a major role in the Women's Basketball Hall of Fame (WBHOF) in Knoxville, Tennessee. Over the years, the WBHOF has inducted more than 150 honorees and welcomes more than 100,000 visitors annually. When the WBHOF was built, Eastman played a major role in the creation of the life-sized sculpture that greets visitors as they walk in the door. The sculpture, depicting a player from the past, a present day player, and a young player representing the future of the game, is referred to as the Eastman statue and highlights the Hall of Fame's commitment to honoring the past, celebrating the present, and promoting the future of women's basketball. A smaller version of the sculpture is presented to each of the inductees.

# **EASTMAN**FOUNDATION

# Good for Good

The Eastman Foundation serves as a private charitable foundation that supports initiatives that serve and strengthen communities around the world. Directed by board members who represent all areas of the company, Eastman's Chief Legal & Sustainability Officer serves as President of the Foundation, driving alignment of the Foundation's mission to Eastman's Corporate Responsibility efforts and focus areas.

Over the past year, the Eastman Foundation has refined its approach to philanthropy, strategically investing in opportunities and partnerships that reflect its mission of doing good for good. The Foundation's approach extends beyond financial support and embraces opportunities that can truly impact our changing world. In 2016, Eastman and the Eastman Foundation provided funding and in-kind donations totaling approximately \$3.2 million to support public/private partnership initiatives. The reach of Foundation efforts, however, extends far beyond dollars to include time, talents, and partnerships.

Learn more at <u>eastmanfoundation.com</u>.

# Understanding the ocean that connects our world

The Eastman Foundation joined forces with forward-thinking businesses, industry groups, scientists, governments and ocean advocates to support the 2017 World Ocean Summit.

WORLD

S U M M I T February 22nd 2-9n 2017 - Boll Indonesia

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The Foundation also sponsors the National Ocean Sciences Bowl

competition, an interdisciplinary ocean science education program of the Consortium for Ocean Leadership based in Washington, DC.

In December 2016, the Eastman Foundation approved a multiyear commitment to support the establishment of a new Center at the Woods Hole Oceanographic Institution (WHOI) focused on observing, understanding, and modeling the connection between the ocean and the atmosphere. The energy, water, heat, and gases that the ocean and atmosphere exchange drive the atmospheric circulation, weather, and climate but remain some of the least-measured and most poorly represented components of our weather and climate models. This new Center will bring together world-class scientists, new technology development, and cutting-edge observational and modeling techniques to drive understanding through increased public/private partnerships. It will also provide new educational initiatives aimed at producing the next generation of specialists prepared to lead the scientific community in improving our ability to understand and predict our global environment.



The Woods Hole Oceanographic Institution (WHOI) focuses on observing, understanding, and modeling the connection between the ocean and the atmosphere.

# Scope of report

Eastman's 2017 sustainability report focuses on our progress and challenges over the past year and includes quantitative data for the year ending December 31, 2016, unless otherwise noted. The report covers Eastman's wholly owned operations, including Taminco businesses acquired in December 2014. We are committed to including information on newly acquired sites within three years of acquisition. This report follows the Global Reporting Initiative's (GRI) G4 framework and meets requirements for the United Nations Global Compact Communication of Progress. Based on our stakeholder mapping assessment, we identified the topics of significance and indicators that are most relevant to our internal and external stakeholders and their alignment to both our strategy and the SDGs. We also examined our business opportunities and risks and evaluated external trends related to our business.

The data used in this report were collected through several information management processes, including instrumentation, monitoring, sample collection and analysis, engineering estimates, material balances and other methods. Eastman has rigorous internal policies and practices to ensure the content of this report is accurate. Additionally, Eastman's internal auditors assess the information in conformance with standards set by the Institute of Internal Auditors (U.S.). Internal auditors assessed the information contained in the report to ensure appropriate supporting documentation exists. Many of the financial data included are taken from the consolidated financial statements contained in the Eastman 2016 Annual Report.

# Other reports of interest





2016 Annual Report: a world of innovation

2016 Databook: a world of innovation



2016 Sustainability Report: Leadership. Innovation. Impact.



2015 Sustainability Report: Gaining momentum



2014 Sustainability Report: Moving forward together



2013 Sustainability Report: Positive progress



2011 Sustainability Report: Connecting science and sustainability



2009 Sustainability Report: Our sustainability journey



## Global Reporting Initiative content index

This report aligns with the GRI G4 Guidelines. Eastman self-declares the 2016 report as "In Accordance-Core."

The information included also serves as Eastman's Communication of Progress as a member of the United Nations Global Compact (UNGC).

 $\textit{UNGC} = \textit{United Nations Global Compact requirements} \cdot \textit{SDG} = \textit{Sustainable Development Goals}$ 

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-1	3, 6	Statement from the most senior decision- maker of the organization about relevance of sustainability to the organization and its strategy			CEO message CSO message
G4-2	10	Description of key impacts, risks and opportunities			Stakeholder engagement and priority matrix 2016 10K report, part II, item 7

#### Organization profile

G4-3	4	Company name			Eastman at a glance
G4-4	4	Principal brands, products, and services			Eastman at a glance Eastman brands
G4-5	4	Location of headquarters			Kingsport, Tennessee, USA
G4-6		Countries where the company is established			Locations
G4-7		Nature of ownership and legal form			Eastman is a publicly traded company. Total shares outstanding as of December 31, 2016 was 146,488,924.  10K Report
G4-8	4	Markets served with geographic breakdown			Eastman at a glance Markets
G4-9	4	Scale of organization			Eastman at a glance  10K Report
G4-10	52	Employment by contract type, work time and gender	6	8	<u>Appendix</u>
G4-11		Percentage of employees covered by collective bargaining agreements	6	8	Collective bargaining agreements cover 4% of Eastman's global workforce.
G4-12	8	Organization's supply chain			Value chain
G4-13		Significant changes in the reporting period			2016 10K report, part II, item 8 Note 2, acquisitions; Note 16, asset impairments and restructuring changes
G4-14		Position regarding the precautionary principle and its application			Sustainability governance

#### $\textit{UNGC} = \textit{United Nations Global Compact requirements} \cdot \textit{SDG} = \textit{Sustainable Development Goals}$

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-15		Adherence to charters, principles and other external initiatives			Responsible Care Memberships Product safety
G4-16		Membership of associations, including trade bodies			<u>Memberships</u>

#### Identified material aspects and boundaries

G4-17	36	All entities included in the organization's consolidated statements		Scope of report
G4-18	36	Process for defining report content, aspect boundardies and GRI principles		Scope of report
G4-19	10	Material Aspects identified in the process for defining report content		Stakeholder engagement and priority matrix
G4-20	10	Boundaries of material aspect within the organization		Stakeholder engagement and priority matrix
G4-21	10	Boundaries of material aspect outside the organization		Stakeholder engagement and priority matrix
G4-22	10	Explanation of the consequences of any changes in the boundaries of the report		Stakeholder engagement and priority matrix
G4-23	10	Consequences of the changes in the scope and aspect in the boundaries		Stakeholder engagement and priority matrix

#### Stakeholder engagement

G4-24	8	Stakeholders group considered		Stakeholder engagement
G4-25	8	Basis for identification of stakeholders		Stakeholder engagement
G4-26	8	Approaches to dialogue with the stakeholders		Stakeholder engagement
G4-27	10	Stakeholders' concerns		Stakeholder engagement and priority matrix

#### **Report profile**

G4-28	36	Reporting period for the information provided		Scope of report
G4-29	36	Date of most recent previous report		Scope of report

 $\textit{UNGC} = \textit{United Nations Global Compact requirements} \cdot \textit{SDG} = \textit{Sustainable Development Goals}$ 

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-30		Reporting cycle			Annually
G4-31		Contact persons			David A. Golden, Senior Vice President, Chief Legal & Sustainability Officer, and Corporate Secretary sustain@eastman.com
G4-32	37	Table identifying the location of the Standard disclosures in the report and External Assurance report			<u>GRI index</u>
G4-33	36	External validation			Scope of report

#### Governance

G4-34	Governance structure		Corporate Governance
G4-35	Process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees		Corporate Governance
G4-36	The positions with responsibility for economic, environmental, and social topics report directly to the highest governance body.		<u>Corporate Governance</u>
G4-37	Processes for consultation between stakeholders and the highest governance body of economic, environmental and social topics	16	<u>Corporate Governance</u>
G4-38	Composition of the highest governance body and its committees	5, 16	Board of Directors
G4-39	The Chair of the highest governance body is also an executive officer.	16	Board of Directors
G4-40	Nomination and selection processes for the highest governance body and its committee	5, 16	<u>Corporate Governance</u>
G4-41	Processes for the highest governance body to ensure conflicts of interest are avoided and managed	16	<u>Corporate Governance</u>
G4-42	The highest governance body's and senior executives' role in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.		Corporate Governance

 $\textit{UNGC} = \textit{United Nations Global Compact requirements} \cdot \textit{SDG} = \textit{Sustainable Development Goals}$ 

GRI					
Element	Pages	Title	UNGC	SDG	2017 Answer
G4-43		The measure taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics			<u>Corporate Governance</u>
G4-44		Evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics			<u>Corporate Governance</u>
G4-45		The highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities.		16	<u>Corporate Governance</u>
G4-46		The highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.			Sustainability Governance
G4-47		The frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities			Sustainability Governance
G4-48		The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material aspects are covered			Sustainability Governance
G4-49		Process for communicating critical concerns to the highest governance body			Corporate Governance Guidelines
G4-51		The remuneration policies for the highest governance body and senior executives			Corporate Governance Guidelines Proxy Statement
G4-53		Report how stakeholders' views are sought and taken into account regarding remuneration, including results of votes on remuneration policies and proposals, if applicable		16	Corporate Governance Guidelines Proxy Statement
G4-54		Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees in the same country			This is considered business confidential.

 $\textit{UNGC} = \textit{United Nations Global Compact requirements} \cdot \textit{SDG} = \textit{Sustainable Development Goals}$ 

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-55		Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees in the same country			This is considered business confidential.

#### **Ethics and integrity**

G4-56	Organization's values, principles, standards and norms of behavior such as codes of conduct and code of ethics	10	16	Values Code of Business Conduct
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior and matters related to organizational integrity such as helplines or advice lines	10	16	Code of Business Conduct
G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines	10	16	Code of Business Conduct

#### **Economic**

G4-DMA	6	Economic performance		2016 10K report, Corporate Overview
G4-EC1		Direct economic value generated and distributed	2, 5, 7, 8, 9	2016 10K report, part II, item 8
G4-EC2	52	Financial implications, risks and opportunities due to climate change	13	Appendix
G4-EC3		Coverage of the organization's defined benefit plan obligations		2016 10K report, part II, item 8, note 11 Benefits at Eastman
G4-EC4		Financial assistance received from government		None
G4-DMA	6	Market presence		2016 10K report, Corporate Overview
G4-EC6	52	Proportion of management hired from the local community at significant locations of operations		<u>Appendix</u>

 $\textit{UNGC} = \textit{United Nations Global Compact requirements} \cdot \textit{SDG} = \textit{Sustainable Development Goals}$ 

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-DMA		Indirect economic impact			Eastman Corporate responsibility  Eastman Foundation
G4-EC7	52	Development and impacts of infrastructure investments and services supported		2, 5, 7, 9	Appendix
G4-EC8	53	Significant indirect economic impacts, including extent of impacts		8, 10, 17	Appendix
G4-DMA		Procurement practice			<u>Suppliers</u>
G4-EC9	53	Proportion of spending on local suppliers		12	<u>Appendix</u>

#### **Environmental**

G4-DMA	53	Materials			<u>Appendix</u>
G4-EN1	53	Materials used by weight or volume			<u>Appendix</u>
G4-EN2	53	Percentage of materials used that are recycled input materials			<u>Appendix</u>
G4-DMA	25	Energy			Energy ENERGY STAR®
G4-EN3	54	Energy consumption within the organization	7, 8	7, 8, 12, 13	Appendix
G4-EN4		Energy consumption outside the organization	8	7, 8, 12, 13	In 2016, Eastman used about 37 trillion Btu (40 million gigajoules) of indirect energy, in the form of purchased steam and electricity to produce our products.
G4-EN5	25	Energy intensity	8	7, 8, 12, 13	Energy
G4-EN6	25	Reduction of energy consumption	8, 9	7, 8, 12, 13	Energy
G4-EN7	25	Reductions in energy requirements of products and services	8, 9	7, 8, 11, 12, 13	<u>Energy</u>
G4-DMA	27	Water			<u>Water</u>
G4-EN8	54	Total water withdrawal by source	7, 8	6	Appendix

 $\textit{UNGC} = \textit{United Nations Global Compact requirements} \cdot \textit{SDG} = \textit{Sustainable Development Goals}$ 

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-EN9	54	Water sources significantly affected by withdrawal of water	8	6	Appendix
G4-EN10		Percentage and total volume of water recycled and reused	8	6, 8, 12	Eastman recycles/reuses approximately 400 thousand megaliters of water per year.
G4-DMA		Biodiversity			Biodiversity
G4-EN11		Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas			<u>Biodiversity</u>
G4-EN12		Description of significant impacts of activities, products, and services on biodiversity in protected areas or areas of high biodiversity value outside protected areas			Biodiversity
G4-EN13		Habitats protected or restored	8	6, 14, 15	Biodiversity
G4-EN14		Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk			Biodiversity
G4-DMA	23	Emissions			Driving resource productivity
G4-EN15		Direct greenhouse gas (GHG) emissions (Scope 1)	7, 8	3, 12, 13, 14, 15	Emissions Our 2016 direct greenhouse gas emissions using the ACC methodology were approximately 5.8 million metric tons.
G4-EN16		Energy indirect greenhouse gas emissions (Scope 2)	7, 8	3, 12, 13, 14, 15	Emissions Our 2016 indirect greenhouse gas emissions using the ACC methodology were approximately 2 million metric tons.
G4-EN17		Other indirect greenhouse gas emissions (Scope 3)	7, 8	3, 12, 13, 14, 15	<u>Emissions</u>
G4-EN18	13	Greenhouse gas emissions intensity	8	13, 14, 15	Emissions Goals and progress Environmental performance
G4-EN19	13	Reduction of greenhouse gas emissions	8, 9	13, 14, 15	<u>Emissions</u>

UNGC = United Nations Global Compact requirements • SDG = Sustainable Development Goals

GRI					
Element	Pages	Title	UNGC	SDG	2017 Answer
G4-EN20	54	Emissions of ozone-depleting substance (ODS)	7, 8	3, 12	Appendix
G4-EN21	14, 16	$NO_x$ , $SO_2$ , and other significant air emissions	7, 8	3, 12, 14, 15	Goals and progress Environmental performance
G4-DMA	23	Effluents and waste			<u>Driving resource productivity</u>
G4-EN22	54	Total water discharge by quality and destination			<u>Appendix</u>
G4-EN23		Total weight of waste by type and disposal method	8	3, 6, 12	Waste management
G4-EN24	14, 16	Total number and volume of significant spills	8	3, 6, 12, 14	Goals and progress Environmental performance
G4-EN25	14, 16	Weight of transported, imported, exported, or treated waste deemed hazardous			Goals and progress  Environmental performance
G4-EN26		Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff			<u>Biodiversity</u>
G4-DMA		Products and services			<u>Life cycle assessment</u>
G4-EN27	23	Extent of impact mitigation of environmental impacts and services	7, 8, 9	6, 8, 12, 13, 14, 15	Driving resource productivity
G4-DMA		Compliance			<u>Appendix</u>
G4-EN29	54	Fines for noncompliance with environmental regulation	8	8,16	Appendix
G4-DMA		Transport			<u>Suppliers</u>
G4-EN30	54	Significant environmental impacts of transporting products and other goods and materials for the organization's operations and transporting members of the workforce	8	11, 13	Life cycle assessment

UNGC = United Nations Global Compact requirements • SDG = Sustainable Development Goals

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-DMA		Supplier environmental assessment			Supplier excellence Together for Sustainability
G4-EN31		Total environmental protection expenditures and investments by type			Environmental expenditures in 2016 including construction, operating, development and mandated remediation was approximately \$263.7 million.
G4-DMA		Environmental grievance mechanisms			Code of Business Conduct Environmental policy
G4-EN34		Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms			The company and its facilities and businesses are subject to complex environmental laws and regulations. From time to time, Eastman and its operations are parties to, or targets of environmental investigations and proceedings that are handled in the ordinary course of business.

#### Labor practices and decent work

G4-DMA		Employment			Careers at Eastman
G4-LA1	55	Total number and rates of new employee hires and employee turnover by age group, gender and region	6	5, 8	Appendix
G4-LA2		Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation		8	Benefits at Eastman
G4-LA3		Return to work and retention rates after parental leave, by gender	6	5, 8	We do not report in detail on the return to work and retention rate after parental leave by gender.
G4-DMA		Labor and management relations			Careers at Eastman
G4-LA4	55	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	3	8	Appendix
G4-DMA	29	Occupational health and safety			Safety Benefits at Eastman
G4-LA5	29	Percentage of total workforce represented in formal joint management/worker health and safety committees that help monitor and advise on occupational health and safety programs		8	Safety Process safety

#### UNGC = United Nations Global Compact requirements • SDG = Sustainable Development Goals

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-LA6	14	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender		3, 8	Goals and progress
G4-DMA		Training and education			<u>Careers at Eastman</u>
G4-LA9	55	Average hours of training per year per employee by gender, and by employee category	6	8	Appendix
G4-LA10		Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings		8	Careers at Eastman
G4-LA11		Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	6	5, 8	We do not report on the percentage of employees receiving regular performance and career development reviews, by gender and by employee category.
G4-DMA	30	Diversity and equal opportunity			Inclusion and diversity
G4-LA12	55	Indicator of diversity	6	5, 8	Appendix
G4-DMA	30	Equal remuneration for women and men			Inclusion and diversity
G4-LA13		Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	6	8, 10	Eastman establishes and administers compensation based on business needs and external market competitiveness without regard to gender.
G4-DMA		Supplier assessment for labor practices			Supplier Code of Conduct
G4-LA14	56	Percentage of new suppliers that were screened using labor practices criteria		5, 8, 16	<u>Appendix</u>
G4-LA15	56	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken		8, 16	Appendix

#### Human rights

G4-DMA		Investment		Code of Business Conduct
G4-HR1	56	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	2	Appendix

 $\textit{UNGC} = \textit{United Nations Global Compact requirements} \cdot \textit{SDG} = \textit{Sustainable Development Goals}$ 

GRI					
Element	Pages	Title	UNGC	SDG	2017 Answer
G4-HR2	56	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	1		<u>Appendix</u>
G4-DMA		Nondiscrimination			Code of Business Conduct
G4-HR3		Total number of incidents of discrimination and corrective action taken			Eastman does not publicly report the total number of such incidents or any of their corrective actions.
G4-DMA		Freedom of association and collective bargaining			Code of Business Conduct
G4-HR4		Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	3	8	Eastman complies with all laws designed to preserve the right to exercise freedom of association and collective bargaining. Eastman has not identified any operation at which those rights are at significant risk.
G4-DMA		Child labor			Code of Business Conduct
G4-HR5		Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	5	8, 16	Code of Business Conduct
G4-DMA		Forced or compulsory labor			Code of Business Conduct
G4-HR6		Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	4	8	Code of Business Conduct
G4-DMA		Security practices			Security
G4-HR7		Percentage of security personnel trained in the organization's human rights policies	1	16	Security
G4-DMA		Indigenous rights			Code of Business Conduct
G4-HR8		Total number and percentage of operations that have been subject to human rights reviews or impact assessment	1		As of December 2016, no incidents of violations involving the rights of indigenous peoples were known to the company.
G4-DMA		Supplier human rights assessment			Supplier Code of Conduct
G4-HR10	56	Percentage of new suppliers that were screened using human rights criteria	2		<u>Appendix</u>

#### UNGC = United Nations Global Compact requirements • SDG = Sustainable Development Goals

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-HR11		Significant actual and potential negative human rights impacts in the supply chain and actions taken	2		Eastman is not aware of any significant impacts in our supply chain with respect to the environment, labor, human rights, or societal issues that occurred in 2016.
G4-DMA		Human rights grievance mechanisms			Code of Business Conduct
G4-HR12		Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms			Eastman does not publicly report the total number of such incidents or any of their corrective actions.

#### Society

Society					
G4-DMA		Local communities			Corporate responsibility
G4-SO1	56	Percentage of operations with implemented local community engagement, impact assessments, and development programs	1		Appendix
G4-DMA		Anticorruption			Code of Business Conduct
G4-SO3		Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	10	16	Eastman conducts an annual risk assessment of 100% of our businesses, which includes risks relating to corruption.
G4-SO4		Communication and training on anticorruption policies and procedures	10	16	In addition to our Code of Business Conduct, Eastman has internal policies that include training on anticorruption.
G4-SO5		Confirmed incidents of corruption and actions taken	10	16	Where any incident of corruption was identified, appropriate disciplinary action was taken in conformance with applicable laws. In addition, Eastman has internal policies that include training on anticorruption.
G4-DMA		Public policy			Corporate governance
G4-SO6	57	Total value of political contributions by country and recipient/beneficiary	10	16	<u>Appendix</u>
G4-DMA		Anticompetitive behavior			Code of Business Conduct
G4-SO7	57	Total number of legal actions for anticompetitive behavior, antitrust, and monopoly practices and their outcomes			Appendix

 $\textit{UNGC} = \textit{United Nations Global Compact requirements} \cdot \textit{SDG} = \textit{Sustainable Development Goals}$ 

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-DMA		Compliance			Corporate governance
G4-SO8	57	Monetary value of significant fines and total number of nonmonetary sanctions for noncompliance with laws and regulations		16	Appendix
G4-DMA		Supplier assessment for impacts on society			Third Party Code of Conduct  Together for Sustainability
G4-SO9	57	Percentage of new suppliers that were screened using environment, labor, human rights, impacts on society criteria			Appendix
G4-SO10		Significant actual and potential negative impacts on environment, labor, human rights, or society in the suppy chain and actions taken			We do not report in detail on the negative impact on society determined during supplier evaluation. We give details on the areas in which corrective measures were defined.

#### **Product responsibility**

G4-DMA		Customer health and safety		Product safety
G4-PR1		Percentage of significant product and service categories for which health and safety impacts are assessed for improvement		Life cycle assessment
G4-DMA		Product and service labeling		Product safety
G4-PR3		Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	12	Product safety
G4-PR4	57	Total number of incidents of noncompliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	16	<u>Appendix</u>
G4-PR5	58	Results of surveys measuring customer satisfaction		Appendix
G4-PR6	58	Sale of banned or disputed products		<u>Appendix</u>

#### UNGC = United Nations Global Compact requirements • SDG = Sustainable Development Goals

GRI Element	Pages	Title	UNGC	SDG	2017 Answer
G4-PR7		Total number of incidents of noncompliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship			Eastman is unaware of any significant fines in 2016 concerning marketing communications.
G4-DMA		Customer privacy			Third Party Code of Conduct
G4-PR8		Total number of substantiated complaints and breaches of customer privacy and losses of customer data			Eastman is unaware of any complaints regarding breaches of customer privacy or loss of customer data in 2016.
G4-DMA		Compliance			<u>2016 10K report</u> , part I, item 1, page 19
G4-PR9		Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services		16	Eastman is unaware of any significant fines in 2016 concerning the provision and use of our products and services.

## Global Reporting Initiative appendix

**G4-10 • Employment by contract type, work time and gender** 

Total Workforce	Employment Type	Employment Contract	Region
	Full-time: 97.3%	Permanent Contract: 95.5%	North America: 73%
14,388 employees as of December	Part-time: 2.7%	Temporary Contract: 4.5%	Europe, Middle East and Africa: 15%
31, 2016			Asia Pacific: 9%
			Latin America: 3%

## G4-EC2 • Financial implications, risks and opportunities due to climate change

Chemical manufacturing by its very nature is energy intense and can result in substantial carbon emissions. While Eastman's operations are energy intense, its use of combined heat and power at its two largest sites uses up to 40% less fuel, produces significantly fewer emissions and therefore has less impact on air quality. Eastman's use of cogeneration therefore helps reduce the carbon emissions that would otherwise be required to operate these facilities. Eastman is no more at risk from climate change regulation than other energy-intensive industries. Regulatory constraints on carbon emissions can impact the development of new processes and facilities for Eastman, as well as our customers and suppliers.

Emission standards or uncertainty about future standards may delay investments by our customers and, as a result, impact our future business opportunities. The direct impact of controlling  ${\rm CO_2}$  emissions from electric power generation may impact the cost of electric power supplied to Eastman manufacturing facilities, our customers and our suppliers. On the other hand, climate change may represent opportunities for Eastman with regard to the development and use of materials that enable or enhance efforts to mitigate or adapt to the effects of climate change. For example, use of window films to enhance energy efficiency, use of interlayers in window glass to provide strength for storm resistance, and development of coatings

for extreme exposures represent potential opportunities. The company has diversified product offerings, serves broad markets and regions and attempts to mitigate our exposure to swings in energy and raw material prices. These diversified product offerings and diversified customer base mitigate potential commercial impact to Eastman.

Eastman complies with current regulations of GHG emissions in those countries where GHGs are regulated with minimal financial impact. Proposed legislation and regulations are evaluated and the impact on Eastman is estimated. We engage policymakers directly and through trade associations with the objective that any climate change legislation or regulation enacted will not have an adverse impact on the economy or create a competitive disadvantage.

## G4-EC6 • Proportion of management hired from the local community at significant locations of operations

Eastman has a large geographic footprint within the U.S. and globally. Talent strategies are developed to align with business strategy to attract, acquire and retain talent. Talent is sourced proactively and reactively at the local, regional, national and international levels. Although a majority of talent is acquired at the local level, we as a company do relocate well over 100 new hires globally each year to Eastman facilities to begin their employment with the organization.

Eastman uses a number of different approaches for identifying talent for the organization. Some of the more effective methods are social media, employee referrals, career fairs, visitors to Eastman.com, and job postings. The company then puts the candidates through a rigorous selection process to assess their level of capability, competencies and alignment with the organizational vision and culture.

## **G4-EC7** • Development and impacts of infrastructure investments and services supported

Eastman Foundation board members represent all areas of the company. Eastman and the Eastman Foundation provided funding and in-kind donations totaling approximately \$3.2 million in 2016 to support public/private partnership initiatives focused on our corporate responsibility focus areas of education, environment, empowerment, and economic development. Eastman employees are afforded opportunities and encouraged to be good corporate citizens by participating in volunteer opportunities in their respective communities.

In 2016, Eastman employees contributed approximately 100,000 hours of volunteer service to a variety of community efforts. *Based on current reporting mechanisms; not representative of all global sites*.

## G4-EC8 • Significant indirect economic impacts, including extent of impacts

Eastman's educational and workforce development efforts create significant indirect economic impacts to our site communities.

We partner with the Center for Advanced Film Manufacturing in Martinsville, Virginia, to deliver skills training in advanced film production. Similarly, Eastman partners with the Regional Center for Advanced Manufacturing in Kingsport, Tennessee, to develop and equip the 21st century manufacturing workforce. Our commitment to public/private partnerships in the areas of education, environment, economic development, and empowerment all encourage innovative and productive thinking to create positive change in our site communities and around the world.

#### G4-EC9 • Proportion of spending on local suppliers

Eastman's policy is to procure products and services based on total value for the company. Factors that Eastman considers when making purchasing decisions include competitive pricing, quality of work and materials, timely and trustworthy performance. Procurement strategies are continuously being developed and implemented to provide assurance of sources for goods and services necessary to the company's operations. Procurement strategies may include the development of a local supply based on business needs.

#### G4-EN1 • Materials used by weight or volume

Eastman is an integrated manufacturing company, purchasing basic feedstocks to feed three primary streams: olefins, polyesters and acetyls. Basic raw materials include ethane/propane for the olefin stream, paraxylene for polyesters, and coal as a major building block for acetyls. These building block materials are processed through various downstream processes to yield products that are sold as finished goods. In 2016, major raw materials purchased, including feedstocks and materials consumed as fuel, were nearly 56.5 million tons. Eastman is beginning to implement and, in the future, will look to use fuel sources with lower emissions. At our Kingsport, Tennessee, facility, we have begun converting a powerhouse that

provides approximately 50% of the steam and electricity for site manufacturing from coal to natural gas combustion.

## G4-EN2 • Percentage of materials used that are recycled input materials

Eastman manufactures a large number of products, most of which are sold as feedstocks for our downstream customers. With integrated manufacturing streams, internal recycling of materials and developing value-up opportunities for coproduct streams are critical to minimizing waste and maximizing value creation. Opportunities to purchase materials with recycled content are limited due to our vertical integration to basic commodity raw materials and currently represent a relatively small percentage of total purchases. However, Eastman is committed to value added recycling and has many examples of the use of recycled material including:

- Recycled acid: Eastman purchases recycled acid for use as an internal feedstock or for resale as a feedstock to other manufacturers.
- Recycled Saflex\*: Eastman assets associated with Saflex production recover waste Saflex sheets in the U.S. and European regions through a toll agreement with Soca.
- Catalyst recycling program: When possible, Eastman replaces spent catalysts with fresh catalysts, both of which contain varying amounts of precious metals. As the spent catalyst becomes available, the material is sent to catalyst refiners who extract the precious metals from the spent material for reuse in the production of fresh catalysts. This recycling program helps reduce the amount of precious metals mined to satisfy global demand.
- Other purchased materials made with recycled materials include drums (steel, plastic, and fiber), bulk boxes, plastic liners and plastic and steel pails. In addition to purchasing feedstocks with recycled content, our Special Materials Team oversees the sale of Eastman's waste streams to manufacturers who recover and convert these materials into useful products.

#### Global Reporting Initiative appendix (continued)

#### **G4-EN3** • Energy consumption within the organization

Eastman used about 101 trillion Btu (107 million gigajoules) in 2016 to produce products. About 53% of this direct energy was produced from purchased natural gas and coal, and about 20% was recovered fuel from feedstock. Eastman currently meets essentially all steam and more than 85% of our global electricity needs with cogeneration, which uses up to 40% less fuel, produces significantly fewer emissions and therefore has less impact on air quality. As a result, our direct energy consumption is 63% of our total energy consumption.

#### G4-EN8 • Total water withdrawal by source

For Eastman facilities, the majority of water for manufacturing use consists of withdrawals from adjacent surface waters. Purchases of water from utilities, third parties and groundwater withdrawal account for a less significant portion of total use. An estimated 705 thousand megaliters (ML) of water was withdrawn, purchased or pumped in 2016, and greater than 90% of that water is returned to the source. The primary use of the water is for noncontact cooling.

## G4-EN9 • Water sources significantly affected by withdrawal of water

Eastman's withdrawals do not significantly affect any water source. Comprehensive river studies conducted by the Academy of Natural Sciences of Drexel University, formerly known as the Philadelphia Academy of Natural Sciences at our largest manufacturing facilities in Kingsport, Tennessee, and Longview, Texas, confirm that these rivers provide thriving habitats for wildlife communities.

## G4-EN20 • Emissions of Ozone-depleting Substances (ODS)

Eastman has a written policy that requires all Eastman facilities, subsidiaries and majority-owned joint ventures that operate equipment containing ozone-depleting substances to develop and maintain an inventory of all ODS equipment including an identification of the equipment and type and quantity of refrigerant.

### G4-EN22 • Total water discharge by quality and destination

Eastman discharges process wastewater in accordance with applicable permits, licenses and agreements. The wastewater is either treated in Eastman-owned treatment facilities and discharged directly to surface waters, or it is treated in Eastman-owned pretreatment facilities and conveyed to third-party providers (utilities, municipalities, etc.) for additional treatment and/or discharge, or it is conveyed directly to third-party providers (utilities, municipalities, etc.) for treatment and/or discharge.

## G4-EN29 • Fines for noncompliance with environmental regulations

Eastman uses an internal reporting mechanism to ensure that all fines and penalties associated with noncompliance with environmental laws and regulations are captured in one place. This system applies globally and includes all fines and penalties of any size. For 2016, the company is not aware of any nonmonetary sanctions that should be reported. The company paid \$85,493 in 2016 for fines and penalties, which does not include amounts paid for supplemental environmental projects. The company spent \$91,045 in supplemental environmental projects in 2016. These expenditures may have included projects for pollution prevention, support of local emergency response providers, education activities and similar projects that could benefit public welfare and the environment.

## G4-LA1 • Total number and rates of new employee hires and employee turnover by age group, gender, and region

Attrition	Attrition	Attrition by
by Gender	by Age	Region
Male	Less than	North America:
employees: 9.4%	30 years: 10.8%	10.0%
Female	30 to 50 years:	Europe, Middle East
employees: 11.4%	6.5%	and Africa: 8.4%
	Greater than 50 years: 14.4%	Asia Pacific: 12.5%
		Latin America:

Hires by Gender	Hires by Age	Hires by Region
Male employees: 6.3%	Less than 30 years: 26.1%	North America: 5.6%
Female employees: 6.7%	30 to 50 years: 5.3%	Europe, Middle East and Africa: 5.5%
	Greater than 50 years: 1.0%	Asia Pacific: 13.6%
		Latin America: 8.5%

## G4-LA4 • Minimum notice periods regarding operational changes, including whether these are specified in collective agreements

In the event of operational changes that involve a change in staffing levels or otherwise affects employment, the company engages in significant planning to ensure affected employees are treated with the utmost respect and dignity. Labor, as well as employment law requirements, including but not limited to reasonable employee notice of job loss, and requirements under collective bargaining agreements are carefully assessed in every global location.

## G4-LA9 • Average hours of training per year per employee by gender and by employee category

Employee category	Hours
Professional/Management	24
Nonexempt (nonoperations)	13
Nonexempt (operations)	70
Technicians/technologists	22
Average	44

#### **GA-LA12** • Indicator of diversity

Gender	Age	Ethnicity*
Male: 75.3%	Less than 30 years: 12.7%	Minority: 12%
Female: 24.7%	30 to 50 years: 51.0%	White: 88%
	Greater than 50 years: 36.2%	

 $<sup>*</sup>U.S.\ population\ only-self\ reported$ 

## G4-LA14 • Percentage of new suppliers that were screened using labor practices criteria

We do not report on the percentage of new suppliers screened using labor practices criteria because these data are not available. We report on the procedure used for assessment. We send our suppliers our third-party Code of Business Conduct which includes our expectations regarding labor practices, human rights, etc.

## G4-LA15 • Significant actual and potential negative impacts for labor practices in the supply chain and actions taken

We do not report in detail on the negative impact on labor practices determined during supplier assessment. We give details on the areas in which corrective measures were defined.

#### Global Reporting Initiative appendix (continued)

# G4-HR1 • Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening

Eastman has an established process within our Corporate Development organization that prescreens potential mergers and acquisitions against criteria with respect to all three dimensions of sustainability — economic, environmental and societal. Eastman is committed to conducting business activities in accordance with the highest legal and ethical standards. To that end, Eastman's Code of Business Conduct includes provisions against child labor, forced labor, fraud, and discrimination, among others. These same expectations are assessed as part of Eastman's due diligence process on any potential investment.

# G4-HR2 • Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained

Each year, 100% of regular full-time and part-time, limited term and Eastman-paid employees worldwide are required to complete online training, which is comprised of a single course on the Eastman Code of Business Conduct as well as additional courses that focus on specific topics within the Code. These additional courses may be assigned by managers to their employees based on job relevancy, development, or for other reasons. On average, employees receive between five and eight hours of training through this system. New employees receive training on the Eastman Code of Business Conduct, which governs our human rights policy.

## G4-HR10 • Percentage of new suppliers that were screened using human rights criteria

We provide our third-party Code of Business Conduct to our suppliers, which defines our expectations for conducting business with Eastman. We desire the same ethical behavior of our suppliers and hold them accountable by annual supplier surveys.

## G4-SO1 • Percentage of operations with implemented local community engagment, impact assessments, and development programs

Eastman involves Community Advisory Panels (CAPs) at all of our largest global operating sites. Our panels' objective is to provide citizens living in site communities with the opportunity to open dialogue with company leaders. As a Responsible Care® company, we also operate a Care Line phone number at company headquarters that community members can call for inquiries. We have a global compliance line that provides a confidential way for employees and others to ask questions about Eastman policies as well as seek guidance or report concerns that may involve illegal activity or any other violations of the Company's Code of Business Conduct. In addition, Eastman facilitates community engagement efforts at all its global sites, via site managers, HR managers, and public affairs team members.

## G4-SO6 • Total value of political contributions by country and recipient/beneficiary

Eligible U.S. employees may contribute voluntarily to EastmanPAC, the Political Action Committee of Eastman. The Advisory Council of EastmanPAC approves an annual budget proposed by the company's director of government relations. The Advisory Council meets annually and is made up of employees from U.S. sites, as well as at-large company representatives. EastmanPAC supports candidates who:

- Support business friendly laws and regulations
- Represent a state/district where an Eastman facility is located
- Are members of key committees
- Hold a leadership position within Congress or a state legislature In 2016, EastmanPAC contributed \$188,750 to state and federal candidates in the U.S. No political contributions are made to entities outside the U.S. Eastman works with an outside vendor to file all reports and to make sure all contributions comply with state and federal campaign finance regulations. All of EastmanPAC's Federal Election Commission (FEC) filings are available online at www.fec. gov. State disclosure reports are also available by visiting the state campaign finance websites in Alabama, California, Massachusetts, Tennessee and Texas. In states where the law allows corporate contributions, Eastman supports state candidates. Corporate contributions to state candidates in Louisiana, Tennessee and Virginia totaled \$39,250 in 2016. The federal government requires all registered lobbyists to report personal campaign contributions semiannually. Each year, Eastman employees who meet the requirements file the necessary reports. These reports are available online at <a href="http://lobbyingdisclosure.house.gov/">http://lobbyingdisclosure.house.gov/</a>. Eastman's political activity policies and guidelines are located on its website: Eastman Political Activity.

## G4-SO7 • Total number of legal actions for anticompetitive behavior, antitrust, and monopoly practices and their outcomes

Any legal actions that are material for anticompetitive behavior, antitrust or monopoly practices would be disclosed in Eastman's filings with the Securities and Exchange Commission, and all such actions would generally be a matter of public record.

## G4-SO8 • Monetary value of significant fines and total number of nonmonetary sanctions for noncompliance with laws and regulations

Any fines or nonmonetary sanctions regulations that are material for noncompliance with laws and would be disclosed in Eastman's filings with the Securities and Exchange Commission and all such fines and sanctions would generally be a matter of public record.

## G4-SO9 • Percentage of new suppliers that were screened using environmental, labor, human rights, and impacts on society criteria

We do not report on the percentage of new suppliers screened using criteria for impacts on society because these data are not available. We report on the procedure used for assessment. We send our suppliers our third-party Code of Business Conduct which includes our expectations regarding labor practices, human rights, etc.

# G4-PR4 • Total number of incidents of noncompliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes

All of our product safety data sheets and labeling comply with regulatory requirements for hazard communication in all countries and regions. In 2016, we implemented the Globally Harmonized System for Classification and Labeling (GHS) process to define, classify and communicate chemical hazard and safety information for all of our products.

#### Global Reporting Initiative appendix (continued)

## G4-PR5 • Results of surveys measuring customer satisfaction

At Eastman, quality is at the core of our success. It is an important part of our legacy, culture, and brand. We strive to run all processes reliably and to the desired targets while avoiding the costs of poor quality. Eastman team members are committed to doing it right the first time, every time. Customer satisfaction is a core principle to our quality processes. We strive to meet all customer requirements with Eastman's products and services. We get feedback from customers through a variety of sources, including customer service representatives located within the customer's respective region, customer visits and audits, customer complaints, etc. Eastman has a world-class customer complaint handling system that ensures proper investigation of all complaints using skilled investigators. Where required by customers, Eastman processes meet or exceed certification requirements from external registrars, including ISO 9001. For more on Eastman's quality program, visit www.eastman.com.

#### **G4-PR6** • Sale of banned or disputed products

Marketing materials in all formats originate in the business organizations and are reviewed by attorneys and experts in Global Product Stewardship and Regulatory Affairs within Eastman's Law Department. The team carefully reviews the content of the marketing materials to ensure compliance with applicable advertising laws and regulations as well as Eastman's Code of Business Conduct. When necessary, reviewers seek input from fellow Eastman experts or third-party consultants.



## **EASTMAN**

The results of **insight**™

#### Eastman

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