



# EMBRACING PROGRESS

2019 SUSTAINABILITY REPORT



Performance by design.  
Caring by choice.™

# Statement of Purpose

## A Note from Mark Lashier

For nearly two decades, we have shaped Chevron Phillips Chemical (CPChem) to operate as a premier petrochemical company with a reputation for safety, reliability and environmental responsibility. I am proud of the progress we have made in our sustainability journey, one that you will get a glimpse of in this Sustainability Report. Our success is attributable to the employees, contractors, customers and communities that trust us and drive our continued improvement.

Our products play an important role in a lower-carbon, sustainable future, and we are well-positioned to meet the evolving needs of our customers and society. Our sustainable growth is achieved by ensuring our employees and contractors, communities and environment are protected. Throughout 2019, we embraced progress on many initiatives while navigating unexpected challenges.

Last year, we announced two major growth projects that will add to our portfolio of assets and expand our capacity to provide products that make life better. The U.S. Gulf Coast II Petrochemical Project and the Ras Laffan Petrochemical Project, both joint ventures with Qatar Petroleum, are expected to create more than 20,000 new construction jobs and 1,100 new permanent positions as both projects begin to materialize. We are proud of this growth, which will help us continue to sustainably meet the needs of the world's growing middle class for decades to come.

We finished 2019 with our lowest-ever Process Safety Event Rate, showcasing impressive results that stem from our company-wide commitment to safety and environmental stewardship. We also saw reductions in our Energy Intensity at all our facilities across the globe, a true testament to our focus on managing resources responsibly. Additionally, 2019 was our best year ever in terms of employee safety. While we celebrate these successes, we also acknowledge the challenges we faced, including an increase in the Total Recordable Incidence Rate among our contractors in 2019. As a result of this, we initiated new programs targeted at enhancing the safety of these critical workers. As always, we remain dedicated to ensuring the safety of all people associated with our business.

In addition to our focus on employee and contractor safety, in 2019 we launched an enhanced diversity and inclusion initiative, ICARE 2.0 *for Impact*, which builds upon our original ICARE principles of Inclusion, Cooperation, Accountability and Respect Everyday to deepen employee engagement and celebrate differences across our company. Our workforce also participated in a culture survey that placed CPChem's employee culture in the top quartile of more than 900 global companies. This assessment provided valuable insights into our culture that will progress innovation, accountability and transparency across our company in the coming years.

Throughout the year, we activated initiatives to support a circular economy for plastics both locally and abroad.

Additionally, we invested \$15 million to the Circulate Capital Ocean Fund, the first investment fund dedicated to finding solutions to plastic waste in Southeast Asia. These projects will address the problem of plastic waste around the globe and are complemented by our Operation Clean Sweep® Blue pledge, which deepened our longtime commitment to eliminating pellet spills at our own facilities.

Developing solutions to eliminate plastic waste and to support a circular economy for our products will benefit our company and society. We are embracing progress in all areas of our business, striving to minimize negative impacts and maximize improvement opportunities. In a time of global uncertainty due to the COVID-19 pandemic, it is more important than ever that we focus on progress.

We remain firm on our commitment to proactively help the world find sustainable solutions and to improve our business along the way. I look forward to reporting progress on our contributions to a more sustainable future.



**Mark E. Lashier**

President and CEO,  
Chevron Phillips Chemical



# About Our Business

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## We Improve Lives

Chevron Phillips Chemical (CPChem) is a company that improves lives. We are one of the world's top producers of olefins and polyolefins and a leading supplier of aromatics, alpha olefins, styrenics, specialty chemicals and polyethylene piping, producing the building blocks for more than 70,000 consumer and industrial products.

Our company was founded on July 1, 2000, when Chevron Corporation and Phillips Petroleum Company, now Phillips 66, combined their worldwide petrochemical businesses, excluding Chevron's Oronite fuel additives and lubricants business as well as its GS Caltex chemical business. We now own nearly \$17 billion in assets and operate in seven countries around the world. Chevron and Phillips 66 and their wholly-owned affiliates each continue to own 50 percent of CPChem.

We believe that chemicals and plastics create value in society and that with responsible manufacturing, use and end-of-life management, these materials can improve lives for a growing population worldwide. We are committed to driving sustainable practices throughout all our businesses. We are highly invested in preserving natural resources, developing our employees, and caring for the communities in which we do business. Through our dedication to **People, Planet and Performance**, we are confident that CPChem will make life better now and in the future.



## Our Global Presence

Headquartered in The Woodlands, Texas, Chevron Phillips Chemical Company LLC operates at 30 manufacturing and research locations in seven countries with nearly 5,000 employees. In the United States, we operate 21 facilities producing chemicals, plastics and polyethylene pipe. With a presence in Europe since 1968, our Europe, Middle East and Africa region headquarters is located in Diegem, Belgium, with sales offices located throughout the region. Our operations in Asia are managed from a regional headquarters in Singapore.

### 1 NORTH AMERICA

#### Administrative Offices

**Global Headquarters**  
The Woodlands, TX

**Performance Pipe HQ**  
Plano, TX

#### Facilities

Allyn's Point, CT\*  
Baytown, TX  
Bloomfield, IA  
Borger, TX  
Brownwood, TX  
Conroe, TX  
Hagerstown, MD  
Hanging Rock, OH\*  
Joliet, IL\*  
Knoxville, TN  
Marietta, OH\*  
Orange, TX  
Pasadena, TX  
Pascagoula, MS  
Port Arthur, TX

Pryor, OK

Reno, NV

St. James, LA\*

Startex, SC

Sweeny/Old Ocean, TX

Torrance, CA\*

#### Research & Technology

Bartlesville, OK

Kingwood, TX

### 2 SOUTH AMERICA

#### Facilities

Cartagena, Colombia\*

### 3 EUROPE

#### Administrative Offices

Europe Headquarters

Diegem, Belgium

#### Facilities

Beringen, Belgium

Tessenderlo, Belgium

### 4 MIDDLE EAST

#### Facilities

Mesaieed, Qatar\*

Ras Laffan, Qatar\*

Al Jubail, Saudi Arabia\*

(S-Chem)

Al Jubail, Saudi Arabia\*

(SPCo)

### 5 ASIA

#### Administrative Offices

Asia Headquarters

Singapore, Singapore

#### Facilities

Jurong Island, Singapore\*



\* Denotes Chevron Phillips Chemical joint venture

## Our Joint Ventures

Business collaboration is critical to the long-term growth and success of our company. We value the strong relationships we have developed through our joint venture operations. These are located throughout the United States, the Middle East, Asia and South America.



For info on our joint ventures, visit [cpchem.com/locations](https://cpchem.com/locations)

## New Joint Venture Projects

In June 2019, CPChem and Qatar Petroleum (QP) announced plans to pursue development of a world-scale petrochemical plant in Qatar in the Ras Laffan Industrial City. Upon completion, this facility will produce ethylene and high-density polyethylene.

In July 2019, CPChem and QP also signed an agreement to jointly pursue development of a new petrochemical plant in the Gulf Coast region of the United States. The U.S. Gulf Coast II Petrochemical Project (USGC II) will include a 2,000 KTA ethylene cracker and two 1,000 KTA high-density polyethylene units.

The signing ceremony, hosted at the White House and witnessed by President Donald Trump and His Highness, Sheikh Tamim bin Hamad Al Thani, Amir of the State of Qatar, included CPChem President and CEO Mark Lashier and His Excellency Mr. Saad Sherida Al-Kaabi, Qatar's Minister of State for Energy Affairs, the President and CEO of QP.

### Ras Laffan Petrochemical Project

Will support up to 14,000 construction workers and approximately 550 permanent jobs.

### U.S. Gulf Coast II Petrochemical Project

Will support approximately 9,000 construction jobs and approximately 600 full time positions.



## Research & Technology (R&T)

Our long history of developing innovative technologies has positioned us with a competitive advantage, as we continue to produce materials safely and efficiently and create industry-changing advancements and process improvements. Our R&T teams work hand-in-hand with our customers to help them achieve their sustainability goals.

Laboratory/bench and pilot scale process, development, analytical and mechanical testing, patent support, and technical and service support for customers worldwide are only a few of our activities. CPChem holds more than 2,400 domestic and international patents and patent applications and employs nearly 120 individuals with engineering or chemistry degrees within the R&T organization who conduct a range of research activities.

Our company continues to build on a long history of scientific discoveries. Our proprietary MarTECH® loop slurry process is one of the most widely licensed

petrochemical processes for the production of high-density polyethylene and polypropylene in the world, with more than 80 commercial reactors using this technology. Other proprietary technological achievements include:



### Aromatics

- Aromax® catalyst and process technology for on-purpose benzene production



### Drilling Specialties

- First- and second-generation functional drilling fluids



### Normal Alpha Olefins

- On-purpose 1-hexene technology
- Full-range normal alpha olefins technology



### Polyalphaolefins

- Conventional and high viscosity polyalphaolefins technology



### Polyethylene

- Metallocene polyethylene technology



### Specialty Chemicals

- E-Series® acetylene reduction technology
- Methyl mercaptan process technology

**We are a company filled with innovators and problem solvers with a long history of developing solutions and technologies to meet the needs of our customers and society.**

## Collaborating to End Plastic Waste

When Renew Oceans, an Alliance to End Plastic Waste project partner, requested technical support for its OPTO22 process control system designed to turn plastic waste into fuel, our R&T team got to work.

We worked closely with Renew Oceans' contacts in India to design and deliver a robust, user-friendly interface in only two weeks. The entirely custom interface boasts enhanced graphics and real-time monitoring of process feedback on Renew Oceans' plastics-to-fuel reactor in Varanasi, India. Renew Oceans' system upgrade was created to be an intuitive tool that also streamlines training of new operators. The new interface is currently in operation at Renew Ocean's recycling and processing facility that converts post-consumer plastic waste along the Ganges basin into diesel fuel.



# Corporate Governance and Senior Leadership

## Board of Directors

Our company is governed by a Board of Directors comprised of eight representatives, under the terms of a limited liability company agreement. There are three voting representatives each from Chevron Corporation and Phillips 66; the Chief Executive Officer and the Chief Financial Officer of Chevron Phillips Chemical Company LLC are non-voting representatives.

## Senior Leadership

Our senior leaders are key to advancing our Sustainability strategy. In 2018, we added Sustainability as an executive function with the naming of Jim Becker as the VP Polymers and Sustainability. Additionally, many of our leadership team members are engaged directly in our internal and external sustainability programs and projects. Our senior leadership is 33% female, a 22% increase from 2016 and representative of our workforce.

**Mark Lashier**  
President & CEO

**Scott Sharp**  
EVP Projects & EHS&S

**Carolyn Burke**  
SVP & CFO

**Bryan Canfield**  
SVP Manufacturing

**Ron Corn**  
SVP Petrochemicals

**Mitch Eichelberger**  
SVP Polymers & Specialties

**Tim Hill**  
SVP Legal and Public Affairs  
& General Counsel

**Steven Prusak**  
SVP Corporate Planning &  
Technology

**Jim Telljohann**  
SVP Research & Technology

**Jim Becker**  
VP Polymers & Sustainability

**Maricela Caballero**  
VP Human Resources

**Peggy Colman**  
VP & CIO

**Darren Ercolani**  
VP Business Transformation

**Kate Holzhauser**  
VP EHS&S

**Michele Mahoney**  
VP Specialties

## Sustainability Guidance Review Team (GRT)

The Sustainability Group is led by the VP of Polymers and Sustainability and consists of seven employees who advance our sustainability strategy and manage company sustainability initiatives. The GRT is led by the VP Polymers and Sustainability, Jim Becker, and consists of three other senior leadership members, regional general managers and key decision makers. These leaders are key to giving direction on reporting practices, stakeholder engagement and company-wide sustainability issues.

## Global Sustainability Group

The Sustainability Group is led by the VP of Polymers and Sustainability and consists of seven employees that advance our sustainability strategy and manage company sustainability initiatives. Even though sustainability is part of every employee's job, we increased employees working directly on sustainability initiatives by 133% in 2019, a number that is expected to grow over the next five years as we embrace progress on key sustainability issues.

# Our Strategy and Values

Our tagline - *Performance by design. Caring by choice.*<sup>TM</sup>- tells the story of who we are as a company, one that is designed to deliver industry-leading performance and has an employee base that cares about each other, our work, our customers, our communities and our investors.

We responsibly manufacture chemicals and polymers the world needs, a key factor in achieving sustainable growth. Sustainable growth is representative of CPChem's broad view of sustainability, which encompasses our operational, environmental and financial performance, as well as the impact we have on our workforce and communities. To achieve our goals, we are aligned around four strategic elements that support our growth structure:



To learn more about our progress, view our online report at [cpchem.com/report](http://cpchem.com/report).



# Our Value Chain

To safely and efficiently manufacture and transport the chemicals and resins that are the building blocks for many consumer and industrial products, we work with over 7,000 suppliers.

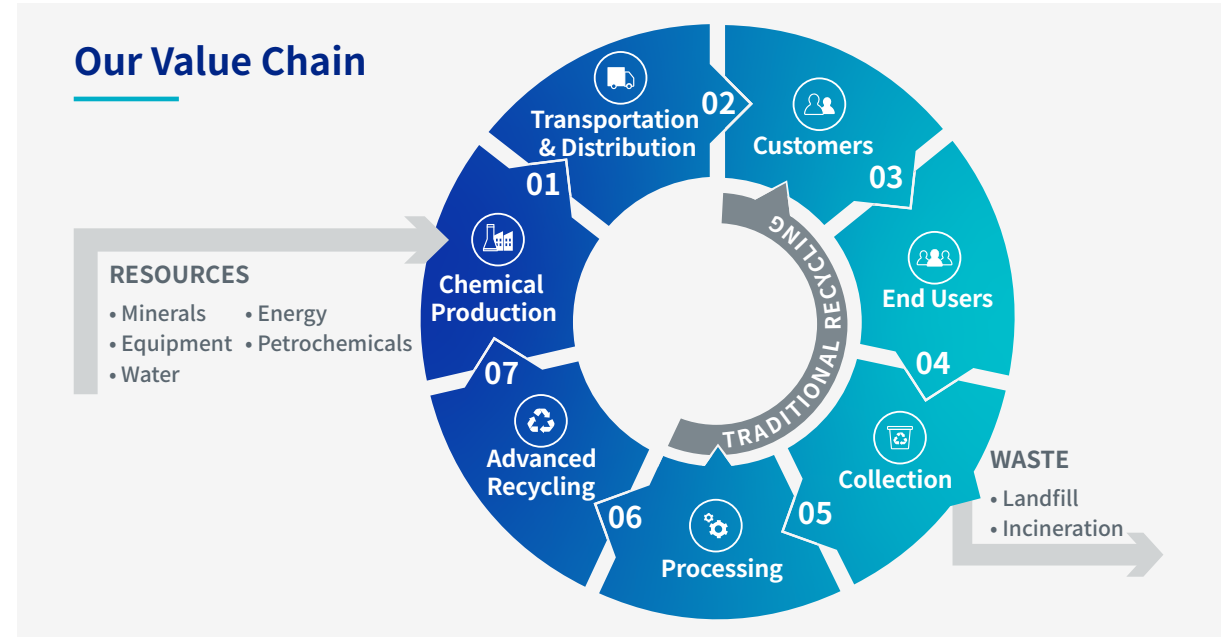
Hydrocarbons make up the major feedstocks that are processed through many stages to produce the diverse array of final products at our facilities. We also require water, natural gas, electricity and other materials throughout the manufacturing process. We supply customers in more than 140 countries who convert our materials into useful products, including our own Performance Pipe division.

## Circular Economy for Chemicals

The vision of a circular economy for chemicals is one that will require action across the value chain. The recycling of chemicals back into feedstocks will reduce waste, allowing reuse of valuable resources. Our engagement on impacts along the value chain and our actions to support a circular economy are presented throughout this report.

## Transportation and Distribution

Our Global Supply Chain group is dedicated to ensuring that products reach customers safely. Products are shipped via railcars, trucks, ocean vessels, ocean carriers and inland barges. We also work with warehouses and packaging facilities to distribute our Marlex® Polyethylene resin. We conduct regular business reviews with our third-party service providers and actively communicate with ports and terminals in which we operate on sustainability issues.



Due to the growing middle class in Asia, our exported materials increased substantially in 2019, challenging us to further improve our processes to meet this demand. From digitization to diversifying our shipping strategy, we regularly engage in activities throughout our value chain to supply the world with valuable chemical building blocks.

## Reducing Impacts in Transportation

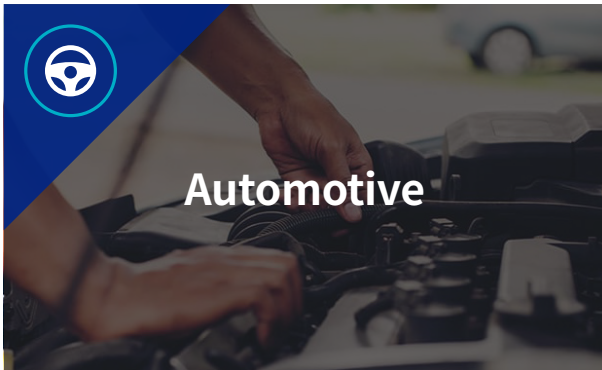
From using recycled materials within our railroad infrastructure to optimizing vessel washing time to reduce freshwater use, we seek opportunities to reduce our impacts during transportation. We work with our vendors and service providers to identify methods to improve logistics operations, decrease our emission and improve our resource efficiency.

# Our Products and Markets

At CPChem, we work to improve lives around the world. Our solutions include olefins, aromatics, drilling specialties, normal alpha olefins, polyalphaolefins, polyethylene, specialty chemicals and polyethylene piping systems that serve many industries including automotive, energy & chemical, food & agriculture, home & electronics, medical & pharmaceutical, personal care, recreational, and industrial.

The products we manufacture are essential building blocks to a wide variety of end products, including: bumpers and road shock absorbers to safeguard passengers; food containers and packaging to protect what we eat and drink; medical supplies and soaps that protect and save lives; solvents that clean our houses; and lubricants that boost vehicle performance.

**We are proud to produce the chemicals that become everyday products that improve life**



**Automotive**



**Energy & Chemical**



**Food & Agriculture**



**Home & Electronics**



**Medical & Pharmaceutical**



**Personal Care**



**Recreational**



**Industrial**

To see the industries we serve, visit at [cpchem.com/what-we-do/industries](http://cpchem.com/what-we-do/industries).

## Our Products Help Reduce Environmental Impact, Enhance Safety and Promote Health.

Plastics made out of the polyethylene resins we produce offer many benefits. They help preserve food quality and avoid waste thanks to performance packaging applications; they help lower the weight of cars and improve fuel efficiency; when used in insulation and building products, plastics boost energy efficiencies; and one-time use plastics such as surgical gloves, syringes or IV tubes help prevent the spread of dangerous diseases. Please see below for other examples or [click here](#) to visit our website to learn more about our products.

### Products that Help Reduce Environmental Impact

Our polyalphaolefins (PAOs) are found in virtually every area of transportation, from passenger cars and sport utility vehicles to heavy-duty trucks. They are used in making high-quality lubricants to protect engines under challenging conditions while meeting increasingly-stringent emissions standards. Thanks to their unique properties, PAOs enable lower friction for the vehicle's moving parts and increased performance for the engine and drivetrain, leading to higher fuel economies.

### Products that Improve Safety

The Performance Pipe 2600 Series and 2500 Series SD Flame Retardant Tubing products, manufactured at the Bloomfield plant in Iowa, are used in pneumatic instrument control applications, as well as sophisticated air monitoring systems. The pneumatic tubing, built using a unique flame retardant resin formula, helps monitor air quality in public spaces and includes early fire detection and instrument controls where flame retardant tubing is required. These innovative Performance Pipe tubes have been placed in many locations around the world like sport arenas, museums, indoor theme parks and hospitals to enhance the safety of visitors and patients.

### Products that Improve Health

We manufacture ETE - Ethylthioethanol at our Tessenderlo plant in Belgium and sell it to several pharmaceutical companies. This chemical is used to produce an antiprotozoal drug, a type of anti-diarrheal medication mostly used in India and developing countries. We are proud to help produce this drug that offers direct health benefits to people in need of this specialized medication.



# Our Approach to Sustainability

As a global provider of plastics and petrochemicals, we create valuable materials that benefit society. In this interview with Jim Becker, Vice President, Polymers & Sustainability, Jim discusses the company's view on sustainability, progress being made in this area and opportunities for current and growing sustainable actions.

**Q** With mounting global pressure on petrochemical companies to be more sustainable, what is CPChem doing to ensure the company is operating responsibly?

**A** Our corporate tagline, *Performance by design. Caring by choice.*™ illustrates the company's dedication to simultaneously operate as a leader in the petrochemical industry and serve as a steward of the environment and as a good corporate citizen. As a result, sustainable growth is embedded into our corporate strategy and we have human capital in place around the world devoted to addressing these important issues.

CPChem is focused on innovating sustainable solutions, and I am proud of the headway we have made through collaborative efforts with governments, NGOs, trade associations and other members of our industry. Documenting the company's initiatives and achievements in our annual Sustainability Report is an important tool that allows us to measure successes and address opportunities for improvement.

**Jim Becker**  
Vice President,  
Polymers & Sustainability

**Q** How is CPChem contributing to a sustainable future with plastics?

**A** Our products are already contributing to a sustainable future, as they help preserve food, make vehicles lighter, conserve energy and do many more great things for a fraction of the environmental cost of alternatives. However, unmanaged plastic waste in the environment is a critical issue. Our company has a vision for every piece of post-use plastic to be recycled, reused or repurposed. CPChem made significant contributions toward the future of sustainable plastics throughout 2019.

We are a founding member of the Alliance to End Plastic Waste and helped launch the Circulate Capital Ocean Fund, the world's first investment fund dedicated to preventing ocean plastic in South and Southeast Asia. Across our manufacturing facilities, we extended our commitment to eliminating pellet loss by advancing our Operation Clean Sweep® efforts across the globe. Looking ahead, the company is continuing its research of advanced, or chemical recycling, and exploring opportunities to employ this technology to bolster ongoing efforts to reduce plastic waste in the environment.

(Continued)

## Q Sustainability efforts often spotlight environmental issues. How does enhancing sustainable operations affect areas of your business not directly related to the environment?

A Our company approaches sustainability with a wide scope. We recognize that maintaining high levels of safety, generating positive social effects, and preserving our financial stability are paramount in ensuring CPChem's success is sustainable year after year. For that reason, this report is divided into three major sections, People, Planet and Performance as our sustainability efforts span far more than environmental impacts. Throughout this report you will get a glimpse into our efforts around Health and Safety, Social Enrichment, Product Responsibility, Integrity and Compliance and Economic Performance, each of which are critical focuses of our Sustainability Program.

## Q In a company with a workforce of nearly 5,000 people, what role do employees play in increasing a focus on sustainable operations?

A Our company is filled with problem-solvers who sincerely care about the environment and communities in which we operate. I have been particularly impressed by the hunger and interest among our employees for information about sustainability, where CPChem fits into this space and how can they help.

Our employees can also be important ambassadors in the community to help educate the public about plastics and how they fit in a circular economy.

Every member of our team plays an important role in the organization's advancement toward a better and more sustainable future. We want our business to reflect the innovative ideas, expertise and passions that make our employees unique.

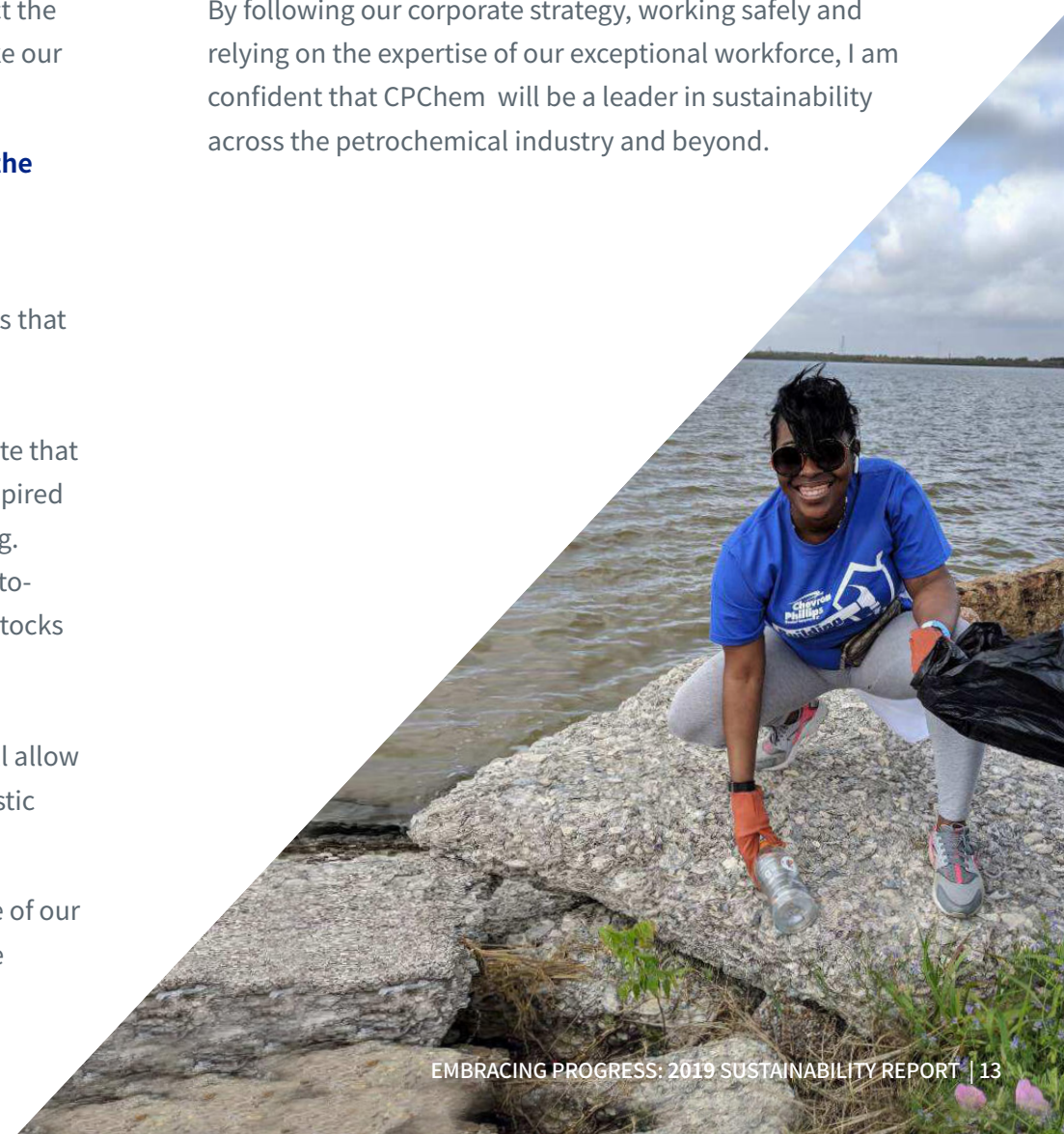
## Q What is on the horizon? What steps must the company take to advance in this area?

A CPChem will continue to be shaped by our remarkable employees and the communities that trust us to operate safely and reliably. Our future business operations will likely incorporate many solutions to environmental issues and plastic waste that we are developing right now. Specifically, I am inspired by the promise of our efforts in advanced recycling. Advanced recycling offers the ability to take hard-to-recycle materials and return them to usable feedstocks and then produce new plastic resin. Enhancing traditional mechanical recycling capabilities and utilizing newer advanced recycling techniques will allow our industry to reduce plastic waste and keep plastic materials from ending up in the environment.

We also need to stay engaged with people outside of our industry and maintain a healthy discussion on the

importance of our products and how we are all responsible for reducing plastic waste. Providing access to easy-to-digest educational material will remain a critical component in the public's understanding of our sustainable operations.

By following our corporate strategy, working safely and relying on the expertise of our exceptional workforce, I am confident that CPChem will be a leader in sustainability across the petrochemical industry and beyond.



# Key Issues

CPChem has leveraged assessments conducted with internal and external stakeholders to identify key issues to our business.

In 2014, we conducted our first issue assessment which led to the formation of our seven Sustainability Focal Points. In 2018, we leveraged online tools to reaffirm our initial issue assessment and we plan to conduct another issue assessment in the near future. Although our key issues have remained consistent, the importance to our stakeholders did change.

**Emissions & Waste, Health & Safety and Product Responsibility remain the top priorities for our stakeholders and align with our internal approach to sustainability.**

This assessment process has also highlighted many challenge areas for us as a company that we must address to achieve sustainable growth, including fresh water use and the diversity of our talent pipeline.

## Key Issue Assessment



## Stakeholder Engagement

Our stakeholders are important to us and our company’s sustainability efforts.

We identify our stakeholders as employees, communities, NGOs, governments, suppliers/ customers and the industry trade sector. These stakeholders were identified carefully through internal meetings and the support of advisors. We leverage different platforms to engage with each stakeholder group to receive feedback on key issues as it pertains to our business.

Creating dialogue with our stakeholders has given us valuable insight into the social, environmental and governance issues that face our company and industry. We have leveraged the feedback from stakeholders to assess how the company is allocating resources to ensure the most effective and impactful sustainability performance.

Our impact and engagement with key stakeholders are addressed throughout the Sustainability Report.

Stakeholder Group	Engagement Platform	Min. Frequency of Direct Engagement
<b>Employees</b>	Town Halls, Surveys, Employee Reviews, Emails, Social Media, Intranet, Videos, Newsletters, Best Practice Committees	Daily
<b>Communities</b>	Community Advisory Panels, Town Halls, Direct Mail, Public Website, Social Media, Local Emergency Planning Committees, Rotary Clubs, Chambers of Commerce, Various Boards and Committee Meetings	Monthly
<b>NGOs</b>	Partnerships, Voluntary Initiatives, Various Boards and Committees, Face-to-Face and Committee Meetings, Emails	Monthly
<b>Governments</b>	Consultation, Negotiation, Regulatory and Legislative Advocacy, Voluntary Initiatives, Grassroots Efforts, Site Visits	Monthly
<b>Industry Trade Sector</b>	Trade and Professional Associations, Benchmarking, Working Groups, Conferences, Various Boards and Committees of Industry Organizations	Monthly
<b>Suppliers And Customers</b>	Business to Business Relationships, Face to Face Communication, Site Visits, Surveys, Email, Benchmarking, Events, Social Media, Conferences	Daily

To learn more about our stakeholders, view our online report at [cpchem.com/report](http://cpchem.com/report).

## Analyzing Key Issues

Our Sustainability strategy encompasses the concerns and issues identified by our stakeholders and we are committed to addressing these issues.

Every year, our strategy is reviewed by our Sustainability Guidance Review Team and Leadership Team to ensure effective implementation and provide guidance on initiatives. The key issues raised by our stakeholders are summarized in our seven sustainability focal points which span our impacts on People, the Planet and the company's Performance.



To learn more about our key issues, view our [online report at cpchem.com/report](https://cpchem.com/report).





## PEOPLE

CPChem maintains a caring culture that thrives on the diversity of its employees, customers, and communities. Our people are the most significant contributors to the sustainability and success of our company. We are proud to be represented across multiple countries, a fact that underlines the exceptional uniqueness of the people of CPChem.

Over the next few pages of Embracing Progress, we explain the work required to secure the health and safety of the people and communities connected to our business. In this section, we showcase the progress on our commitments to social enrichment, diving into how we care for people and detailing programs in place that foster sustainable social growth.

We recognize our obligation and reputation in remaining a responsible company and environmental steward. As CPChem advances toward a sustainable future, we will continue to recognize, rely on and appreciate our most important asset, people.

# Health and Safety

We are a company that thrives by placing the health and safety of our employees, contractors, customers, and our communities at the forefront of everything we do. Our focus on safety builds trust, enhances transparency, and increases efficiency across our business. Safety is our company's top priority and one of our core values because we care about each other, our work, our customers, and our communities.

We consistently deliver top-quartile industry results in personal and process safety. Since 2002, CPChem has reduced its Combined Employee and Contractor Total Recordable Incidence Rate (TRIR), excluding Major Capital Projects, by 82%, showcasing how we have embraced progress over the last two decades.

## Our Environmental, Health, Safety and Security (EHSS) Strategy

*Our Journey to Zero*, introduced in 2016, is a blueprint to achieve what is already a clear objective for CPChem:

**To eliminate events that could inflict serious—or even fatal—injuries to employees or contractors, or result in severe process safety events.**

This imperative effort builds on the many successful initiatives already embedded in our safety culture, including the Life Saving Rules, Tenets of Operation and our Guiding Principles.

Our nine Life Saving Rules relate to activities that, if not executed correctly every time, have a high potential for serious injury or fatality. Our Tenets of Operation guide our decision-making every day and in every task. These ten statements provide a universal code of conduct to guide our decision-making every day and in every task. The Tenets are fundamental risk management practices that reduce risks in the workplace.

As we move toward zero, we ask our employees to take the time to do the job right every time, reduce their individual risk, understand and follow established procedures, speak up and keep learning.



## Operational Excellence System

CPChem takes pride in striving for Operational Excellence (OE), that is, to be the best company in our industry by doing the right things, the right way. We take care of our people, our assets, the environment, our customers, and communities where we operate, and engage in business activities.

**Our primary focus in these efforts is zero injuries and zero incidents throughout our global operations, including our affiliates.**

Our OE System is a risk management process that provides a global framework that aims to help CPChem standardize our efforts, continuously improve and raise the level of operational discipline in areas of Environment, Health, Safety, Security, Reliability and Quality. It is built upon expectations for involved and effective leadership, full employee participation, compliance with all regulatory requirements, and integration of OE into ongoing improvement of all business results.

The OE System includes five components: 1) Policy; 2) Principles; 3) Focus Areas; 4) OE Expectations, Global OE Standards, and Required Manufacturing Standards; and, 5) Verification of Compliance and Management System. These components comprise our management system.

Furthermore, the OE System is structured to fulfill American Chemistry Council (ACC) and the International Council of Chemical Associations (ICCA) Responsible Care Management System® (RCMS®) requirements.

The OE system covers many focus areas that will be mentioned throughout this report, including, but not limited to:

- Occupational Health & Safety
- Product Stewardship & Product Safety
- Process Safety
- Pollution Prevention
- Security
- Resource Conservation
- Emergency Preparedness and Response

### The OE System Components



## Operational Excellence Review Process

Our Corporate OE Review collects data relating to the various OE practices and regulatory compliance at individual facilities and identifies items or issues that will assist in continual improvement activities.

The process includes 10 Critical Operational Risk Systems and 6 Safety Culture Drivers. The purpose of the safety culture assessment is to determine both positives and vulnerabilities of day-to-day OE processes. This is accomplished by conducting cultural interviews of targeted populations of facility personnel. In addition, the revamped process now includes scoring for each Operational Risk System and Culture Driver.

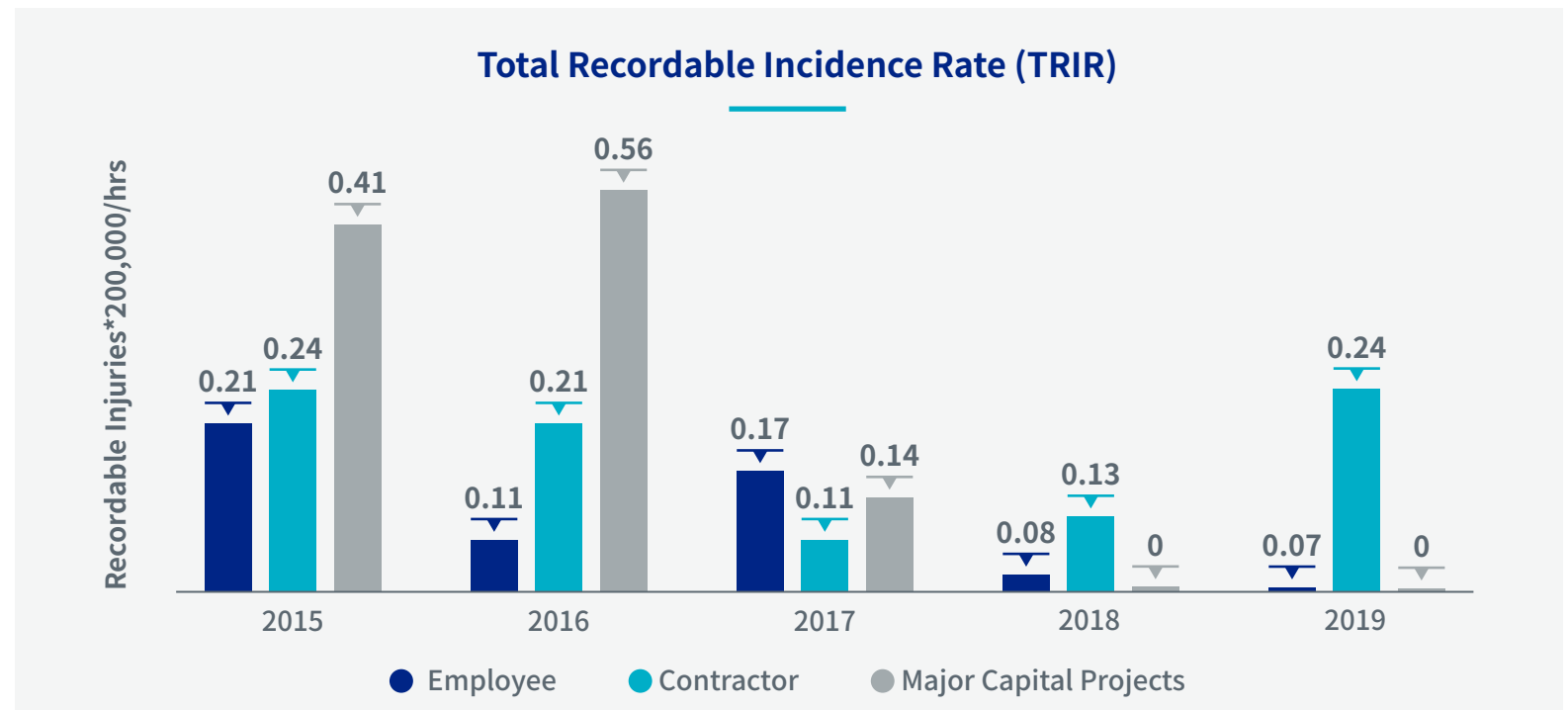
The primary purpose of the Corporate PSM/RMP Compliance Audit is to collect data relating to the implementation of the OSHA Process Safety Management (PSM) Standard and the EPA Risk Management Program (RMP) Rule's required elements at individual facilities to ensure continuing compliance. Domestic petrochemical facilities will have a combined OSHA PSM and EPA RMP Compliance Audit conducted concurrently.

While our international petrochemical facilities are not subject to OSHA's PSM Standard, each has voluntarily adopted the elements of OSHA's PSM Standard and are audited against those elements.

## Our 2019 Safety Performance

In 2019, we set a record-low Employee TRIR, 0.07, but due to an increase in Contractor TRIR, ended the year with a higher Combined (employee and contractor) TRIR than the two previous years. These results have led to increased focus on contractor safety which is addressed throughout this section of the report.

In 2019 we began tracking a new safety metric, Injury Severity Index, calculated based on a matrix that includes severity levels for certain injury types. Based off the severity level, CPCChem developed a weighted calculation to determine the injury severity index. This new metric was created to gain a better understanding of the severity of our injuries and evaluate progress. Our Injury Severity Index in 2019 was slightly higher than 2018, a statistic we will continue to track to help improve our safety performance. There were no fatalities at CPCChem facilities in 2019.



## Achievement of Voluntary Protection Program Star Status at all US Locations

With the addition of Performance Pipe's Plano office which earned Star Site designation in January 2019, all 18 of CPChem's eligible U.S. locations now hold Star Status, the highest Voluntary Protection Program (VPP) certification given by the U.S. Occupational Safety and Health Administration (OSHA).

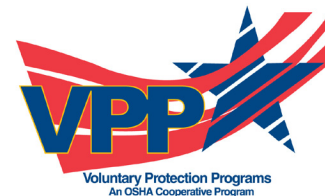
As OSHA notes, the “Star program is designed for exemplary worksites with comprehensive, successful safety and health management systems. Companies in the Star Program have achieved injury and illness rates at or below the national average of their respective industries. These sites are self-sufficient in their ability to control workplace hazards. Star participants are reevaluated every three to five years, although incident rates are reviewed annually.”

Performance Pipe's Plano office has operated for 13 consecutive years without a recordable injury. The accomplishment exemplifies the qualities OSHA seeks for designating its highest VPP certification.

“

“Thanks to Plano, we are now one of a handful of U.S. private employers with all eligible sites VPP Star certified.”

- Kate Holzhauser, Vice President, Environment, Health, Safety and Security



## High Consequence Incident Reporting Process

CPChem's High Consequence Incident Reporting Process, implemented in 2017, requires the assessment of incidents for severity potential. By increasing our focus on incident severity, we can prevent similar incidents that could result in a more serious outcome.

CPChem implemented a standardized incident investigation process that requires the application of a specific root cause analysis investigation methodology, commensurate with the Severity Level of the incident. Our company has trained Investigation Facilitators globally in the appropriate root cause analyses incident investigation methodologies.

As our production sites continue to focus more on investigating high potential incidents, we expect to observe an initial increase in the number of high potential incidents and this was true in 2019. There was a 14% increase in the reporting of high potential incidents in 2019 compared to 2018 (excluding our US Gulf Coast I Project in 2018), but fewer actual High Consequence Incidents.

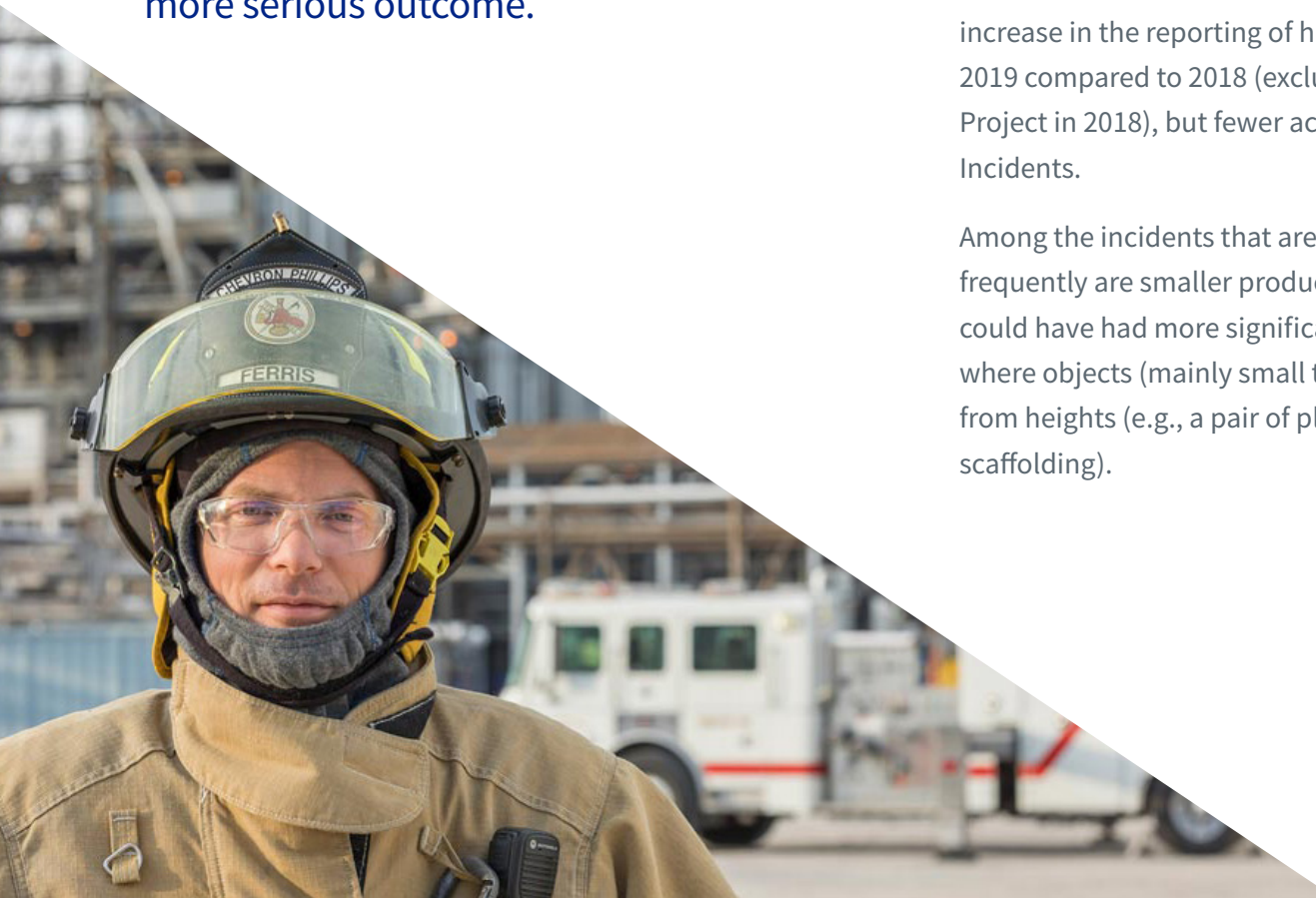
Among the incidents that are being investigated more frequently are smaller product releases that, on review, could have had more significant impacts and incidents where objects (mainly small tools) were dropped from heights (e.g., a pair of pliers being dropped from scaffolding).

**Our company views these incidents as opportunities to learn and a positive indicator of employee and contractor engagement.**

Plans are underway tailored specifically to lessons learned in 2019, including, contractor safety improvement initiatives, a “lessons learned” video series highlighting specific incidents, an improved risk workshop process to develop plant risk registers, development of Global OE Standards for Crane Safety and Falling Object Prevention and more.

## Safety Training

Safety training is essential to developing a safety mindset and to help employees and contractors adopt our safety culture, which leads to more effective performance. Our people need the right knowledge and tools to embrace our safety culture. We require training on *Our Journey to Zero*, Life Saving Rules, risk tolerance, Front Line Leadership, plant turnarounds and more. We also hold project safety and engagement workshops and seasonal campaigns like “Summer of Safety” to keep safety top of mind at all times.



## Refocusing on Contractor Safety

CPChem experienced 43 contractor injuries over the past three years and of those, 21 were in 2019.

“This number is not acceptable. However, during that same three-year cycle, there have been zero contractor injuries during turnarounds, where we have put additional efforts into field presence and engagement,” said Stan Zisman, Operational Readiness Manager.

A plan for 2020 includes a special emphasis on field presence and engagement with both employee and contractor supervision and leadership. Additionally, we are sponsoring full-day training courses designed to educate and train leaders in the skills necessary to achieve a more collaborative and safe work environment. We believe this will move the needle on our overall safety culture, especially with respect to the safety of our contractors.

## Contractor Safety Forum

CPChem hosts an annual Contractor Safety Forum which allows contractors, employees, and contract companies to share experiences, gain advice and provide critical learning outcomes. The Forum is also an opportunity to recognize and highlight the contributions of contractor companies to our safety programs and processes.

Holding an annual Contractor Safety Forum is one way to recognize contractor companies for their contributions and acknowledge exceptional safety performance. In 2019 the theme of the Contractor Safety Forum was focused on Sustainability and allowed contract companies to highlight their Sustainability efforts. Another unique session from this year's forum, presented by CPChem's EHSS Manager at Orange/Port Arthur, focused on Safety Coaching with Dignity and Respect for Maximum Safety Performance.

After the informative safety sessions, CPChem presented the Contractor Safety Awards for performance in 2018, including the Contractor Safety Excellence Award and the President's Contractor Safety Award for both large and small companies.

**As the Forum continues to grow each year, CPChem and its contractors become more aligned, stronger and more positioned to carry *Our Journey to Zero*.**



## Process Safety

CPChem’s Process Safety performance in 2019 demonstrated the results of our employees’ collective efforts on *Our Journey to Zero*.

The company completed the year with zero Tier 1 Process Safety Events (PSE) for the first time ever, achieved our best ever Tier 1 and 2 combined Process Safety Event Rate, and did not experience a single Recordable Injury associated with a PSE. These accomplishments were the result of increased focus over the last few years into areas including Conduct of Operations and Operational Discipline (COO/OD), Mechanical Integrity, Risk Assessment and Risk Management.

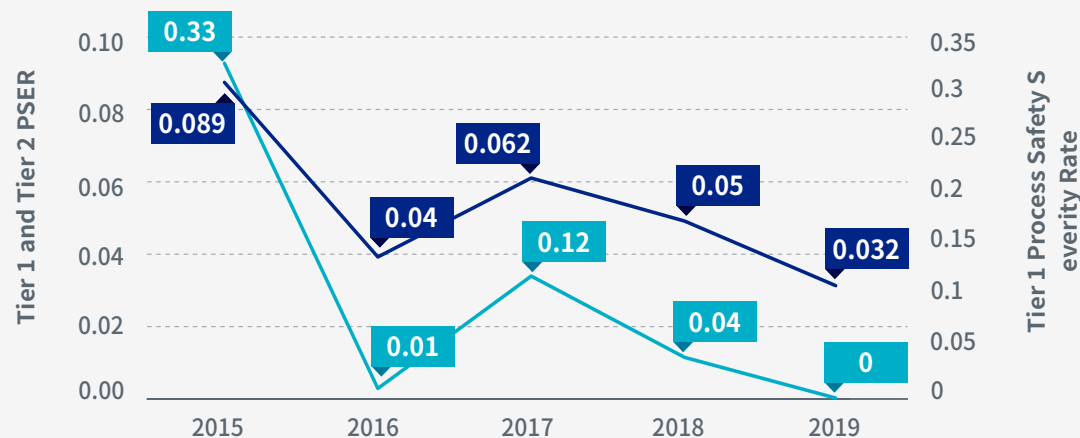
In the spirit of continuous improvement, recent efforts have focused on evaluating Tier 3 Process Safety Events and High

Potential Consequence Incidents. Emphasis on these leading indicators not only provides a larger data set for trend analysis, but also identifies root causes to help prevent larger events in the future. Additionally, we continue to evaluate the role that human factors play in incidents, and how we can best set our employees up for success in the field.

CPChem captures Process Safety Event Rate (PSER) data consistent with the industry-recognized API Recommended Practice 754 at 16 sites worldwide. These data represent the number of Tier 1 and Tier 2 Process Safety Events (PSEs) normalized for the work hours of employees and contractors. A Tier 1 PSE represents the most severe event and is defined as “a loss of primary containment with the greatest consequence” by an industry-recognized standard. A Tier 2 PSE is the next level of event and is defined as “a loss of primary containment with lesser consequence.”

### Tier 1 and Tier 2 Process Safety Event (PSE) Performance

- Tier 1 and Tier 2 Process Safety Event Rate
- Tier 1 Process Safety Severity Rate



“To continue our exceptional Process Safety performance, we need to leverage our Guiding Principles: Work safely or not at all; There is always time to do it right; and If it’s worth doing, do it better.”

- Travis Rogers, Process Safety Execution Manager





## Q-Chem Achieves Zero Process Safety Events

Q-Chem finished 2019 with a Process Safety Event Rate of zero and ended 2019 with 588 consecutive days without a Tier 1 or Tier 2 Process Safety Event (PSE). In addition, Q-Chem has completed more than six years without a Tier 1 PSE.

Over the last six years, we have driven consistent improvement in Tier 3 PSEs, a remarkable 80% reduction.

This success over the last six years has been attributed to improved focus on mechanical integrity and enhancements made to their safety program that involve senior management engagement on-site to listen to concerns and feedback of employees and contractors.

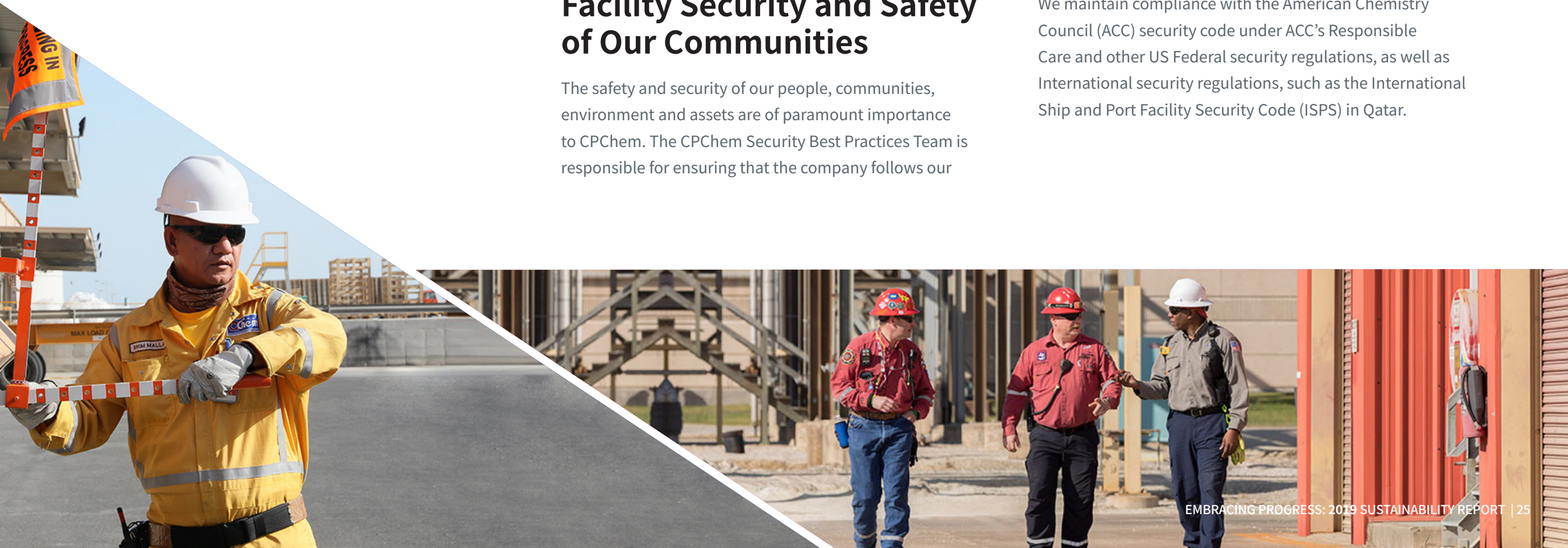
## Facility Security and Safety of Our Communities

The safety and security of our people, communities, environment and assets are of paramount importance to CPChem. The CPChem Security Best Practices Team is responsible for ensuring that the company follows our

OE processes to operate safely and in accordance with applicable regulations.

The CPChem Security Best Practices Team and the Chemical Facility Anti-Terrorism Standards (CFATS) working group, facilitated by the CPChem EHSS Global Security department, work to maintain compliance across sites regulated by CFATS. These groups also oversee compliance obligations under the Maritime Transportation Security Act (MTSA), which is applicable to two CPChem facilities.

We maintain compliance with the American Chemistry Council (ACC) security code under ACC's Responsible Care and other US Federal security regulations, as well as International security regulations, such as the International Ship and Port Facility Security Code (ISPS) in Qatar.





“Through careful monitoring and by prioritizing safety and security above all else, CPChem remains ever watchful and vigilant in the protection of its people and assets around the globe.”

- Rick Williams, Global Security Manager

Additionally, CPChem has implemented a Security Management System (SMS) that consists of seven program areas:



Each component of the CPChem SMS provides applicable security guidelines and global OE standards that are designed to achieve a consistently high-level of security performance across CPChem’s operations.

## Emergency Response

All CPChem facilities have Emergency Action and Accounting Plans which are governed by our OE Systems Manual. We pride ourselves on our engagement with our local communities on emergency preparedness. Emergency response teams, comprised of CPChem personnel, as well as local and regional experts, stay prepared to respond to incidents by undergoing frequent emergency response training that includes briefings and drills covering a wide array of scenarios including product spills, fires, explosions, natural disasters and security incidents. For details about our Emergency Management programs [click here](#).

# Social Enrichment

At CPChem, we are committed to empowering our employees by enhancing their abilities and showcasing the uniqueness of our workforce.

We believe our exceptional diversity and inclusion initiatives set us apart and create a culture that encourages and cultivates lasting positive change throughout our company and communities.

## Our Employees and Culture

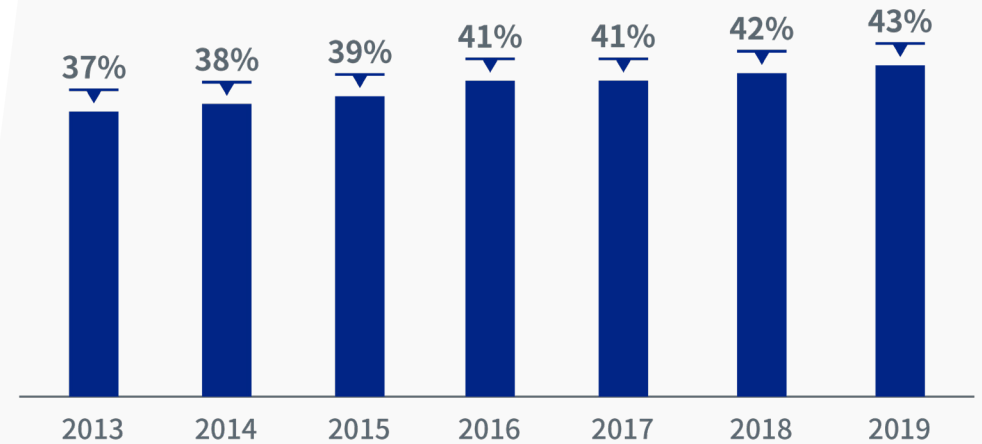
The people who work for our company are the most important component in driving CPChem's success. Organizational Capability is part of our business strategy, and we regularly evaluate and adapt our employee programs and benefits to match the evolving priorities and needs of the workforce we aim to attract and retain.

**At the end of 2019, we had 4,793 direct employees of which 21.2% were female and 27.8% were minority.**

Although there are U.S. federal government requirements for monitoring certain categories of diversity, such as gender and race, we believe it is imperative for us to value and respect all aspects of diversity to truly prosper as a company.

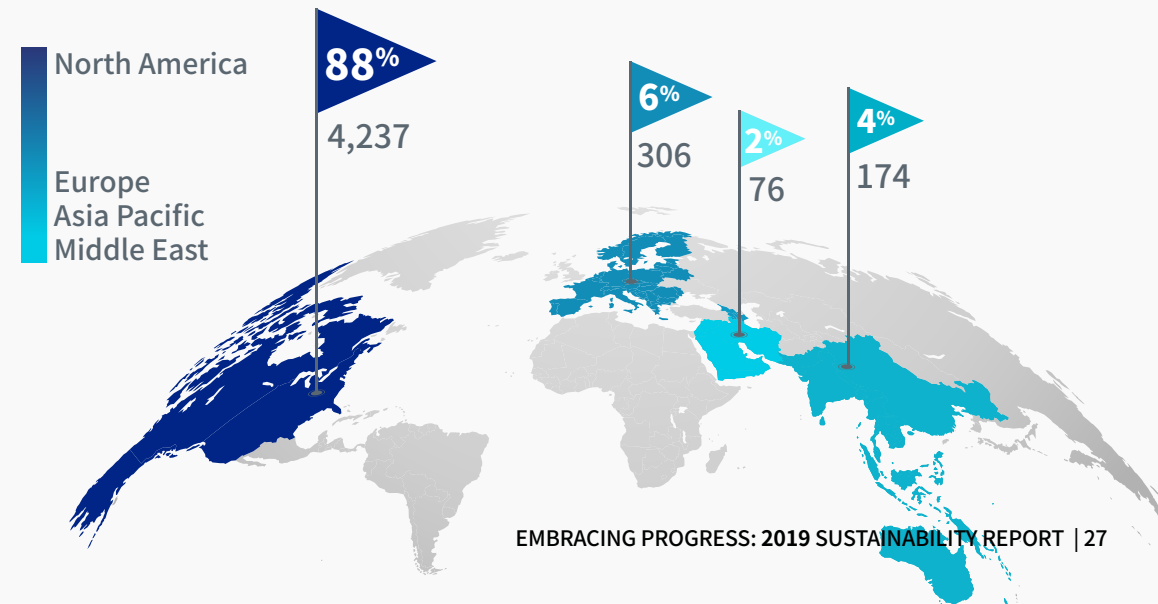
Nearly 80% of our employees perform their responsibilities within a plant environment. Over the past several years, our global headcount has remained geographically stable. While 88% of CPChem's employees are based in the United States, the company is represented across four regions.

### Visible Diversity %



Note: Chart represents all female and non-Caucasian males within the U.S. dollar employee population.

### % Headcount by Region

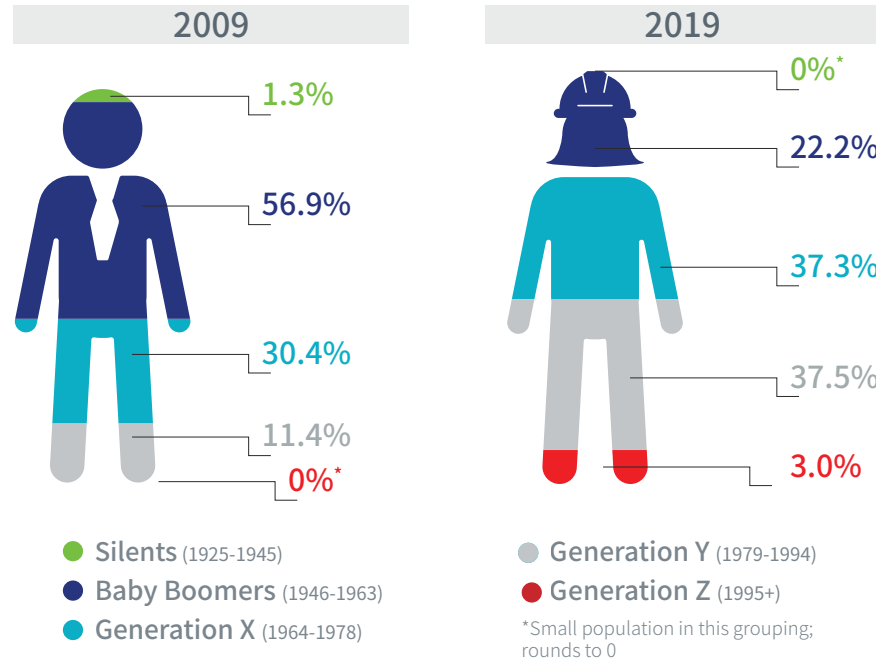


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“Organizational Capability is much more than reporting demographics of your workforce, it is about uncovering how to leverage an organization’s human capital through training, development, collaboration, and increasing overall satisfaction.”

- Cody Davis,  
Workforce Analytics Analyst

### % Headcount by Generation



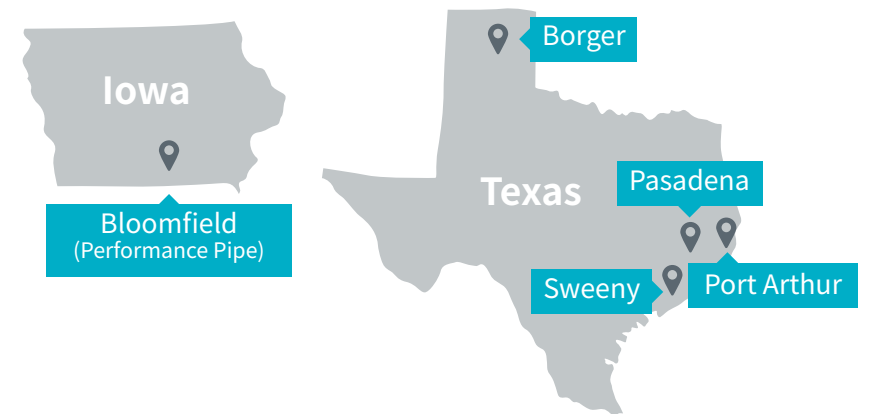
### Generational Representation

Over the past ten years, we have experienced a significant shift in the generational representation of our headcount. Since 2009, we have noticed a 34.7% decrease in Baby Boomers across our workforce as many of these employees retire. The ten-year movement in generational tides has opened opportunities for younger employees, a development responsible for an impressive distribution of age and experience across CPChem. As more Baby Boomers exit the workforce over the coming years, we will continue to develop methods that transfer the extensive experiential industry knowledge of Baby Boomers to younger generations.

### Our Represented Employees

CPChem prides itself on preserving strong relationships with its represented employees. We strive to negotiate agreements that foster cooperation and productivity, ensuring the continued safety and success of our company and employees. Our employees are represented by a range of unions, including the United Steel Workers, International Brotherhood of Electrical Workers, International Association of Machinists and Aerospace Workers, International Brotherhood of Boilermakers, United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry, and the International Union of Operating Engineers. We also have European employees who are represented by ACV Puls. As our company grows, we look forward to building on the established trust between CPChem, union groups and represented employees.

In 2019, 586 represented employees worked across the following domestic sites:



## Women Thrive

The inclusive environment of CPChem makes our company an excellent career choice for women.

**21.2%**

of our workforce are women, driving positive change within the CPChem community and beyond.

**33%**

of CPChem’s senior leadership is female.

We are proud of the steady increase of women in senior leadership positions within our company and the value that comes with it. We continue to strive to attract the best talent and create opportunities to utilize the experiences and potential of women at all levels of the organization.

## Women in Industry Conference

In 2019, CPChem sponsored the fourth annual Women in Industry Conference, hosted by the Community College Petrochemical Initiative (CCPI). High school, college and women in the workforce attended to learn about careers in the petrochemical industry. The conference featured many guest speakers who helped motivate attendees by sharing individual success stories and career strategies.

This event was born out of an idea from a community college to address the lack of women entering the petrochemical field. The 2019 conference sold out, with 1,400 attendees including high school and college students, along with women considering a transition into the industry, particularly in process operations and craft careers. CPChem sponsored 100 high school students who live near our manufacturing facilities to attend the conference.

“

**“I can see the future of our industry and it’s exciting to see so many women and so many people excited about joining the industry.”**

- Audra Smith, Operator, Cedar Bayou



# Diversity and Inclusion (D&I)

## Our Approach

Perhaps the most substantial assets of our approach to Organizational Capability are the robust diversity and inclusion initiatives in place across the company.

For years, we have prioritized and refined programs that celebrate differences among CPChem's extraordinary employees. Our ICARE principles - Inclusion, Cooperation, Accountability, Respect Everyday - reflect how we choose to practice D&I as a company. We view diversity as more than just one's country of origin, gender or race. Diversity is about the blending of experiences, cultures, talents, competencies, differing perspectives and decision-making styles. We strive to create a culture that respects unique differences and recognizes the perspectives of all our employees. Diversity in all of its dimensions is valued at CPChem. It is fundamental to the quality of our products and services and is crucial to our continued success.

## Executive Diversity Council

The Executive Diversity Council sits at the helm throughout our diversity and inclusion journey. This specialized council is comprised of members from senior leadership and other

leaders from across the company including representatives from the company's Asian and European locations. Working together, this important group provides leadership, guidance and direction in the advancement of CPChem's diversity and inclusion objectives.

## Diversity Ambassadors and Diversity Councils

Diversity Ambassadors and Diversity Councils form the core of organized grassroots support of the company's diversity and inclusion efforts. Selected by local management at each of our sites and approved by the Executive Diversity Council, ambassadors and council members play a key role in communicating principles and engaging the local workforce. Working in tandem with local management, ambassadors and council members engage in activities such as:

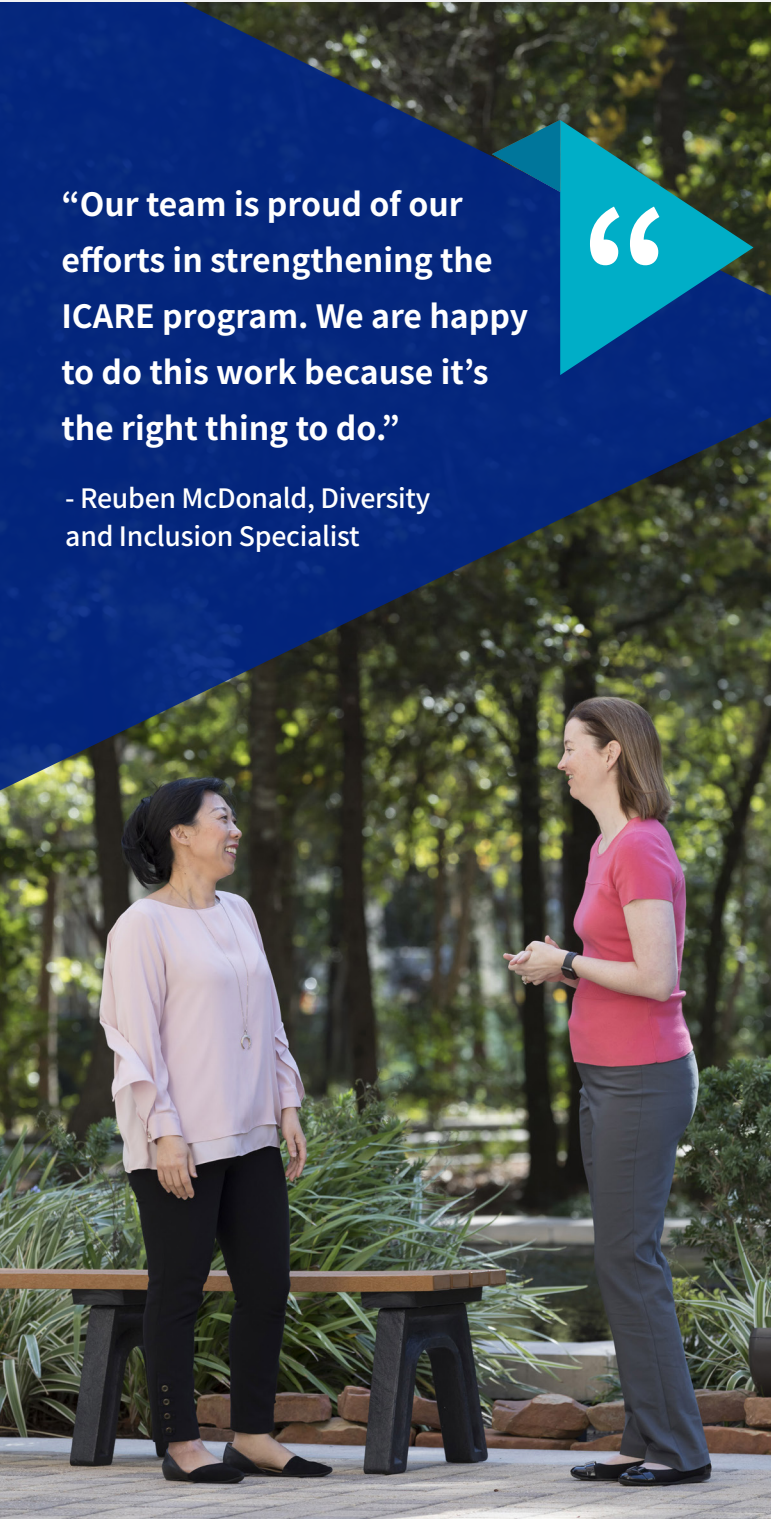
- Build awareness and understanding among employees and support positive workplace behaviors;
- Assist local leaders in addressing issues impacting diversity and inclusion;
- Model appropriate behaviors and act as agents of change for diversity and inclusion.



“Our team is proud of our efforts in strengthening the ICARE program. We are happy to do this work because it’s the right thing to do.”

“

- Reuben McDonald, Diversity and Inclusion Specialist



## From What to How – ICARE 2.0

Because our employees and business flourish on blends of experiences, cultures, talents, perspectives and decision-making styles, we developed a program called ICARE that strategically incorporates diversity and inclusion into all areas of CPChem.



Inclusion



Cooperation



Accountability



Respect



Everyday

Our ICARE principles – Inclusion, Cooperation, Accountability, Respect, Everyday – speak to who we are at CPChem and help foster a culture that enriches a high-performing workforce.

Since ICARE launched in 2012, we have worked hard to educate our workforce about each of the principles. Seeing great progress with this program, we recognized that it was time to elevate our efforts. That is why in 2019, we developed and implemented a brand-new enhancement - ICARE 2.0 *for Impact*.

ICARE 2.0 *for Impact* is designed to boost the effectiveness of the ICARE principles and introduce new concepts to the organization to enhance employee engagement, innovation and the overall employee experience.

The four cornerstones of ICARE 2.0 *for Impact* include:



We believe these improvements will foster an even more robust ICARE culture at CPChem.

## Cultivating a Culture of Inclusion and Success

The culture that we build for our employees is crucial to the success of our company. In 2019, we asked our employees to share their views on working for CPChem through a company-wide culture survey. The responses indicated that our employees view the company’s culture as one of the best in the world. Benchmarking the results of the culture survey against almost 900 organizations, the assessment places us in the top quartile of global companies. Two cultural attributes common among top-performing companies were particularly strong at CPChem, our employees’ understanding of our vision and mission, as well as our strong relationships with stakeholders.

After compiling the total global survey responses, four focus areas were identified to encourage forward momentum and help CPChem continue to meet our objectives in a changing world, including:



CPChem’s people have been building a strong culture since its formation and the company has a clear vision of how to stay healthy and sustainable for years to come. Our tagline – *Performance by design. Caring by choice.*™ – speaks to the work atmosphere we want to foster, one where our employees work together toward the same goals and care about each other, our work, our customers and communities.





## Compensation and Benefits Practices

CPChem offers competitive compensation and benefits packages designed to attract talent to bolster our position in the industry and celebrate successes.

A portion of employee compensation at CPChem is directly tied to the safety, sustainability and performance of the company. The Employee Incentive Program is a financial reward distributed based on key metrics related to our business' operation throughout the year. Every member of our team has a responsibility to do their part to move the company forward, and the Employee Incentive Program encourages and rewards high levels of performance across all areas of CPChem.

In 2019, we distributed a Global Rewards Survey. In this survey, we asked employees to offer their personal views on the compensation, benefits and HR policies at CPChem.

**We received over 9,000 comments on this survey, an impressive number that indicates our employees are comfortable and confident in expressing what they are looking for while employed by CPChem.**

In addition to leveraging feedback on decisions regarding Total Rewards, these responses are being used to generate action plans that guide recruiting and retention efforts of our ever-changing workforce.

We identify appropriate salary programs and benefits through Compensation, Benefits and Investment Committees established by the Board of Directors. The Compensation Committee meets at least three times each year, the Benefits Committee meets at least twice a year, and the Investment Committee meets at least four times a year to provide input and approvals for compensation and benefits programs to ensure these programs remain competitive within the petrochemical industry and aligned with the company's goals. An area that CPChem is particularly proud of is its pension program, a highlight within our benefits program portfolio that encourages employees to invest their time and experience in our company as we invest in them.

## Employee Benefits

We are proud to offer a host of benefits to our employees. As a result of responses received through 2018 U.S. Health Care Strategy focus groups, we implemented a number of programs that added to the healthy and growing collection of benefits available to the CPChem family. Our employees communicated their concerns, and we responded.

In 2018, we began issuing wellness gift cards to employees taking proactive approaches to adopting a healthy lifestyle. In 2020, we are adding two major initiatives to our medical plan, creating new avenues for CPChem employees to receive support for autism assistance and in-vitro fertilization. In 2019, we added parental leave to our host of benefits, intended to supplement medical leave for new mothers and to allow for bonding time for both new mothers and fathers for their adopted or newly born children.

A significant indicator of CPChem’s prosperous culture is the endorsement from leadership in establishing a work/life balance that promotes delivering results while recognizing the importance of pursuing personal interests. Offering flexible schedules and telecommuting options when appropriate, we are happy to provide our workforce with numerous opportunities to complete job tasks outside of a traditional work environment. We will continue to explore HR policies and benefit options that keep our workforce safe, happy, healthy and productive.

CPChem offers a comprehensive total rewards program that addresses our employees’ physical, mental and financial health.



Medical, dental, prescription drug coverage and vision discount plan



Life insurance, long-term disability, supplemental life, ADPL insurance and dependent life insurance



Health care and dependent care flexible spending accounts



Flexible work arrangements for qualified employees at many locations



Profit sharing



Pension plan



Bonus program



Matching 401(k)



Immediate rewards program



Merit program



Relocation assistance



Educational assistance/ tuition reimbursement



Education scholarships for dependents



9/80 work schedule at many locations



Matching charitable gifts for education and cultural organizations



Employee assistance program and behavioral health plan

## Recruitment and Training



Watch the  
Centralized Talent  
Acquisition Video

### Improving the Candidate Experience

CPChem employs experts in recruiting and utilizes this expertise to attract and hire the best candidates. We stay proactive, intently searching for people who will excel and thrive at our company. In 2019, we attracted 397 new employees to CPChem.

Our recruitment teams undergo hours of extra training in areas such as unconscious bias, diversity, and interview tactics to cast a wide net of candidate inclusion and ensure every candidate's experience is positive and engaging. We value our employees' contributions to the candidate recruitment process, as it not only gives us more access to employees' networks, but it also inspires employee engagement throughout the organization.

In 2019, the number of employee referrals resulting in successful hiring doubled compared to 2018. This highlights our performance in building an environment where employees are excited to invite others to work along with them.

Perhaps the biggest change to onboarding new talent in 2019 was a shift to a centralized recruiting process.

The strategic move to a centralized talent acquisition process has reduced the time from posting a position to filling that position by 48%, demonstrating the power of an efficient model.

Our dedicated recruitment team is now able to be more targeted and intentional in attracting the best candidates for every open position and give candidates a consistent and favorable experience.

### Building a Skilled Workforce

It is estimated that 10,000 Baby Boomers are retiring a day. In order to maintain continuity in our workforce, it is imperative to continue to leverage our relationships with higher education facilities like community colleges to fill gaps left by retirees. These relationships pave the way for industry partners to participate in curriculum advisory boards that shape the content and hands-on experiences covered during required degree course curriculum. CPChem is proud of the relationships it has built with local community colleges that serve a critical role in maintaining a constant pipeline of talented personnel ready to join the workforce.

The co-op program at several of our US facilities continues to build a strong partnership between the community colleges from which we recruit, as well as the students in the process technology program. The co-op experience is a proven way to prepare students for a dynamic career, expand their knowledge and build confidence in skills needed to be successful in their job fields. Experiences gained from the co-op program give students an edge when entering the workforce and continue to be a competitive advantage to attract top talent to CPChem.

## Training for Success

Training and continuing education remain cornerstones of employee development at CPChem.

As a result of feedback from employees in previous Global Employee Surveys, we have focused heavily on increasing the amount of high-quality learning and development opportunities throughout the company. All employees undergo regular training in areas within and outside their job role based on their defined training plan. In 2019, employees completed more than 236,799 in-person and online courses, including plant-specific training classes.

Last year, we conducted an extensive review of all training programs. Given the stark differences noticed in responsibilities required of those working in office or plant roles, a new centralized training system was launched. This centralized training system utilizes online modules to offer extensive learning opportunities and empowers and authorizes managers to dictate appropriate programs based on site-specific needs and requirements. Through technology, we offer effective, consistent instructional programs that are more efficient and minimize time away from core job responsibilities.

The online system has been a valuable tool that supplements our existing hyper-specialized instructional programs already in place around the company.

## Cultivating Employee Development

To deepen the knowledge base of our workforce, employees are required to submit personal development objectives that reflect their personal interests. Every submission is carefully reviewed to identify potential opportunities for that employee's further enhancement of skills. Employees are allotted an additional budget for professional development every year and are encouraged to seek internal and external opportunities to achieve their development objectives.

**100% of employees receive regular performance reviews and supervisors are trained to work closely with employees to foster growth throughout their time at CPChem.**



## Learning as Leaders

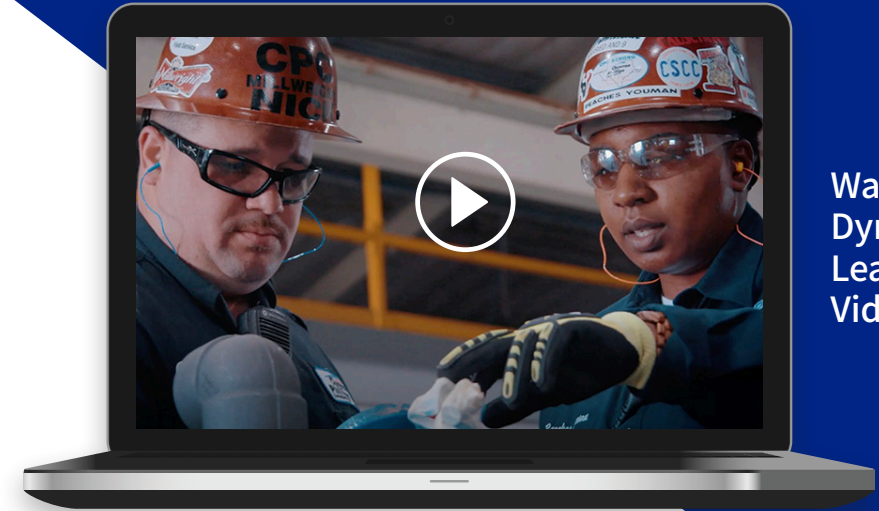
At CPChem, a leader is not defined by the number of people the leader manages. All employees are expected to demonstrate leadership attributes. We view leadership as a collaborative process requiring proficiencies in leading people, delivering results and serving as a thought leader.

Expertise across these areas often shows a command of the ability to inspire and motivate individuals and teams to successfully and safely achieve our goals and objectives. Each employee's career journey is tied to our Leadership Elements, which focus on building competencies in Self Leadership, Results Leadership and Thought Leadership. Leadership elements and building competencies are part of our strategy to continually invest in talent, by helping each employee achieve his/her full potential. Clearly defined expectations about how employees get work done at CPChem will help sustain our competitive advantage through fostering a culture that makes CPChem a great place to work.

**We believe that creating strong leaders requires a strong support structure. CPChem employs multiple leadership programs that cultivate confidence and reinforce the attributes of admirable leaders.**

Our First Level and Mid-Level Leader Development programs are multi-year development opportunities built upon the foundation of our Leadership Elements and ICARE principles. These leaders directly reach more employees than any other leadership level in the company. They play a key role in executing the core elements of CPChem's Business Strategy and serve as critical role models in many areas such as safety and OE. The programs focus on equipping leaders with the tools they need to encourage employee growth and knowledge development.

Additional programs exist for senior leaders and people at the highest levels of the organization to implement our business strategy, harness their influence, solve organizational challenges and access resources to successfully navigate and implement CPChem's Succession Planning and Development process. Further, these leaders have a direct influence on the innovation and advancement of our company.



Watch the  
Dynamic  
Leadership  
Video

Through these programs, our leaders are taught to work with their teams to inspire and extract ideas that generate process improvements throughout CPChem.

## Polyethylene Technical Training

Since 2010, the Global Polymers Applications Group has been conducting Annual Technical Training at our Plastics Technical Center in Bartlesville, OK. This comprehensive training covers several technical and business areas, such as polymer science, processing, plastics sustainability, manufacturing technologies, product nomenclature and end-use market applications.

A group of nearly one hundred highly skilled subject matter experts organize and conduct this training over four days of in-class instruction and laboratory demonstrations. This technical training is designed to strengthen CPChem's talented workforce and inject the company with knowledgeable people who are "best in class" assets of CPChem.

## Enriching Our Communities

Contributing to the communities where we live and work continues to be a top priority for CPChem. Our company is honored to donate time, money and resources to worthy causes that improve the lives of our neighbors.

We focus resources where the company can make a lasting and positive impact, in areas identified as strategic to our culture and aligned with our business strategies. Our primary focus areas include workforce development, social enrichment, health and safety and sustainability.

**Since 2000, we have contributed more than \$35 million, with \$6 million in 2019, to improve our communities. This includes annual grants to 18 colleges and universities totaling \$355,000 per year.**

We leverage those resources through the engagement of CPChem volunteers. Volunteering is an important element of our company culture. Around the globe, our employees donated approximately 20,000 volunteer hours in 2019. To reward our employees for their compassion and to further ingrain volunteering as a staple of CPChem's culture, the company launched a volunteer time-off policy that provides US payroll employees two paid days of company time to volunteer. We began this program in 2019 and believe it will reinforce our view that giving back to the community will be a mainstay within CPChem's priorities now and in the future.



## Workforce Development

Through Workforce Development investments, we seek to enhance K-16 education and pique students' interest in science, technology, engineering and math careers. CPChem works to bring nationally recognized and innovative programs to communities where we operate.



## Local Communities

Investing in the development of our communities where we operate demonstrates CPChem's commitment to remain as a neighbor of choice. We see this as a direct means to support local issues facing our communities.



## Community Health and Safety

The health and safety of our personnel is a core value of our company. These values carry over into our relationships with our communities, as seen in our community involvement initiatives, such as support to local first responders and health-related nonprofit organizations.

## Sustainability and Environmental Stewardship

Sustainability and Environmental Stewardship are exciting focuses for our community engagement at CPChem. Our philanthropic support is targeted to enhance efforts to clean up our environment, improve infrastructure for managing waste, and educate our neighbors about sustainability issues and solutions.

To learn more about our activities, view our online report at [cpchem.com/report](http://cpchem.com/report).



## PLANET

We strive each day to conduct our business in a safe, secure and environmentally responsible manner. CPChem cares deeply about the environment and monitors all parts of our operations to make optimal use of the resources we consume while reducing emissions and waste.

The products that we make contribute to a sustainable future for a fraction of the environmental cost of alternatives. Through technical advances and our employees' dedication to preserving the natural world, CPChem is well-positioned to endure as a high-performing, environmentally conscious business.

As our company grows, we will advance sustainable solutions, continuing to explore and share best practices in our industry to guide CPChem's sustainability strategy and create a better future.



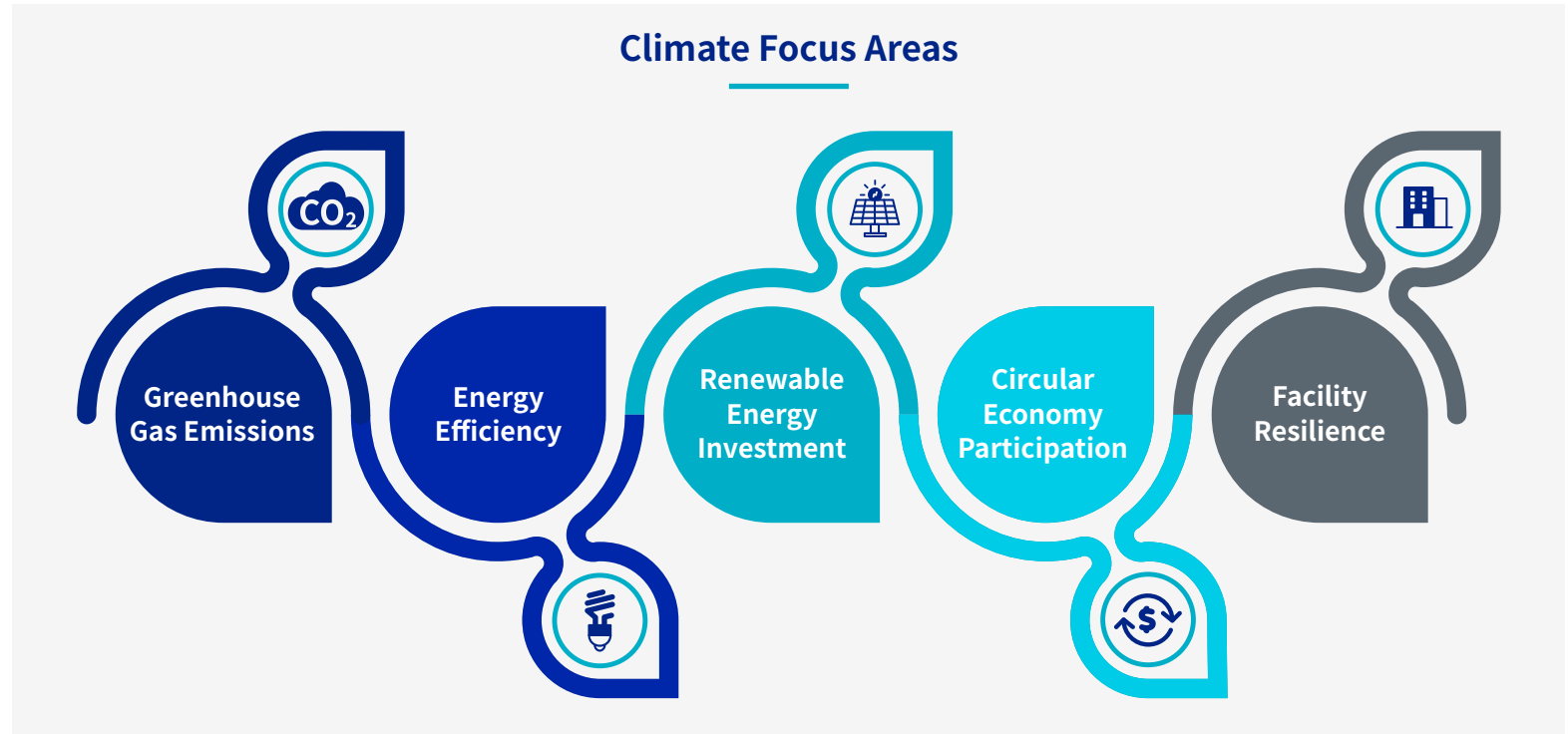
## Climate

We recognize that climate change is a critical global issue that will require action from all segments of society. We believe that managing climate risk is key to our success as a business and to our vision to be the premier chemical company.

Chevron Phillips Chemical products play an important role in a lower carbon future. The company has recognized that energy use and emissions are key issues and has incorporated them into our Sustainability Strategy. Our five internal focus areas related to climate risk are Greenhouse Gas Emissions, Energy Efficiency, Renewable Energy Investment, Circular Economy Participation and Facility Resilience. This section of the report will discuss our performance in Energy Efficiency and Emissions in 2019. To learn more about our Circular Economy Participation, visit the [Product Responsibility](#) section of this report.

## Our Approach to Environmental Management

Our OE System is structured to fulfill American Chemistry Council (ACC) and the International Council of Chemical Associations (ICCA) Responsible Care Management System® requirements.



Additionally, our facilities in Qatar and Belgium leverage ISO-14001 to certify their environmental management systems.

CPChem’s OE Manual specifically directs how we manage and address our environmental impact. This detailed document clearly defines standards that dictate expectations and outlines procedures aimed at reducing our footprint via company-wide metrics, goals and milestones in focus areas like pollution prevention and resource conservation and productivity.

Emphasizing these specific areas in our OE Manual is evidence of our focus and commitment to reducing the environmental footprint of our facilities and business activities locally and abroad.

**We promote pollution prevention, minimization of waste, and conservation of energy and other critical resources at every stage of the life cycle of our products.**

## Managing Risks in Facility Design

The OE framework also guides our efforts in the design of facilities. At the heart of the OE framework for facility design are CPChem's project planning, phased gate execution and operational readiness practices. Large complex projects start with a team of subject matter experts (SMEs), including project professionals, manufacturing, environmental, health & safety, process safety SMEs, project engineers, project managers, and decision executives who collectively develop the project scope definition and objectives and begin identification of associated risks. As the project matures through the phases, risks are continually identified and assessed through this team, with the support of additional SMEs and third-party experts, as necessary or appropriate. Operational Readiness (OR) reviews begin before final project decisions are made.

These OR reviews assess different aspects of project readiness including process safety, health & safety, environmental, security, operational preparedness and enterprise readiness. A key target of the OR review is assessing identified risks and progressing the mitigation or elimination of that risk. The initial basis for determining and prioritizing CPChem's individual and societal risk criteria is based upon the theory of the risk criteria established by the UK Health & Safety Executive.

The OE framework also takes into account the experiences and lessons from events like Hurricane Harvey, which inform our risk management process and are built into the design and operating procedures for existing and new facilities. For example, we incorporate weather-related scenarios into both the Process Hazard Analysis and the Layer of Protection Analysis in new facility design. Managing these risks in the design of new facilities is critical to ensuring we remain a supplier and neighbor of choice for our communities while protecting our people, our assets and the environment.

## Green Teams Launched to Help Reduce Our Impact

In 2019, we began launching Green Teams at our US facilities to increase education and improve onsite recycling processes, as well as support site-level resource efficiency and waste reduction projects. These teams exemplify our employees' commitment to CPChem's sustainable growth and their investment in working towards the solution. Green Teams engage with employees and their local communities - visiting schools, rotary clubs and city councils - to enhance recycling efforts and support sustainability projects that ultimately benefit the local community. We will continue to expand the use of Green Teams at our facilities to support our ability to increase positive impacts within the company and communities in which we operate.

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**“Green Teams are an important part of CPChem, which focus on our recycling programs, enhancements and sustainable solutions at each site.”**

-Troy Bretz, Process Engineer

# Resource Efficiency

The responsible consumption of resources to manufacture our products is critical to meet our commitment to be known as the employer, supplier, neighbor and investment of choice.

All facilities are required through our OE System to maintain programs that promote the continual improvement in resource consumption and efficiencies. These programs focus on our management and use of critical resources, such as, energy, water and materials.

## Energy Efficiency and Conservation

Our facilities monitor and trend energy use and efficiency. Nearly 13 years ago, we established energy baselines for each of our facilities and local Energy Best Practice Teams at each unit to monitor usage, improve energy performance and initiate energy reduction projects at each site. The corporate energy team is composed of a representative from each local team who participates on the corporate energy team as well as a corporate team lead. This team focuses on sharing successes and establishing corporate energy goals.

“

**“By tracking and analyzing our energy usage data, we can develop insights to further improve our energy efficiency and bring us closer to a sustainable future.”**

- Shauheen Noorani, Process Monitoring Engineer

## Energy Consumption and Intensity

The energy consumption for CPChem’s wholly-owned assets in 2019 was 160 trillion Btu compared to 159 trillion Btu in 2018. Although our total energy consumption increased slightly in 2019, all CPChem facilities achieved reductions in their Energy Intensity (EI) or their Energy Intensity Index (EII) compared to 2018.

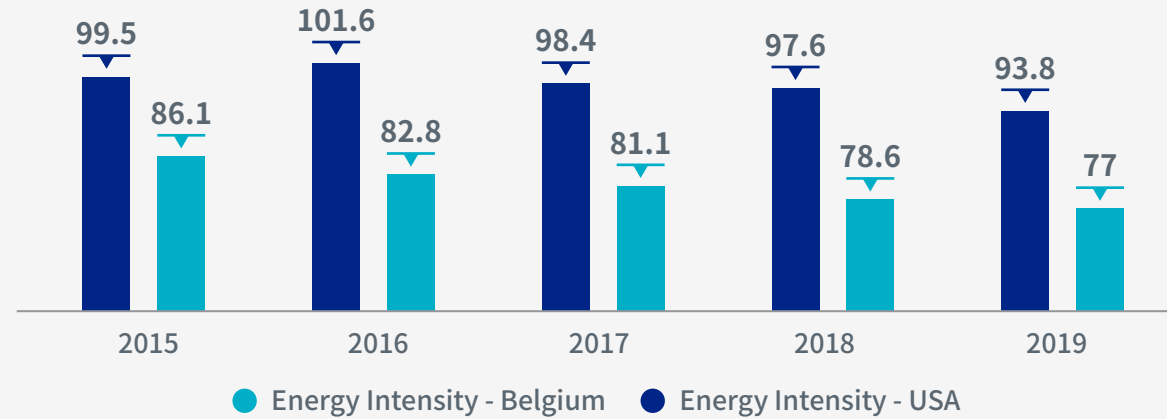
**Our combined US facilities achieved their best-ever EII, 93.8, which was 3.9% lower than in 2018.**

Additionally, CPSC achieved their best-ever EII, 89.6, which is 2.8% lower than the previous year. In our Belgium facilities the Energy Intensity Index was 77.0, which is 2.0% lower than 2018. QChem achieved a 12.1% EI reduction and SChem achieved a 5.6% reduction in their EII.

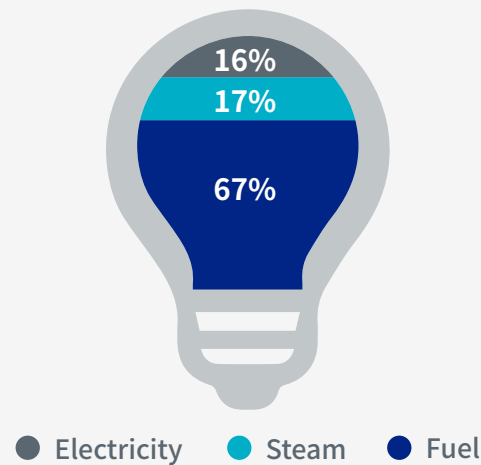
At the beginning of the year, the Energy Best Practice Team set goals to perform energy assessments across the facilities. The reduction in Energy Intensity Index was accomplished in part by achieving 100% of the 2019 Energy Best Practice Team goals and implementing operational enhancements. These enhancements included improved reliability of assets, cooling tower improvements, heat exchanger surveys, air and nitrogen leak surveys, steam balance audits, and boiler feed water assessments. The energy savings in the US alone equated to 6.5 trillion BTU of electricity, steam, and fuel gas. The reduction in net GHG emissions was over 377,000 tons of CO<sub>2</sub> equivalent.

### Manufacturing Energy Intensity

(wholly owned assets; actual energy consumed divided by expected energy consumption)

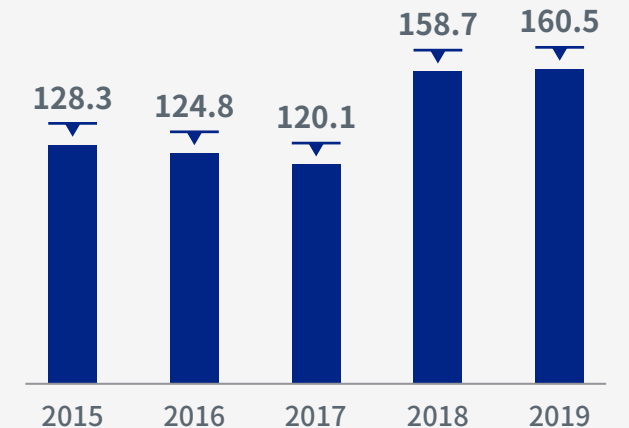


### 2019 Energy Consumption Breakdown



### Total Energy Consumption (mmBtu)

(wholly owned assets)



## Port Arthur Makes Sustainable Cooling Tower Improvements

In 2019, Port Arthur made improvements to the plant's primary cooling tower to get more efficiency from the turbine for the same amount of steam. Port Arthur's ethylene unit is typically limited by the cracked gas compressor later in a turnaround cycle. The compressor is powered by a steam turbine that is limited by cooling water temperature. After completing a cooling tower survey, the site was able to determine optimal operation by re-distributing water to different cells, maximizing heat recovery and rejection. This zero-cost improvement increased the cooling tower duty by approximately 5.0 MMBTU/hr, or 0.5% of the total tower duty.

"Maximizing heat removal from our cooling tower allows us the most efficient use of the steam we make to run our turbines," said Michael Richmond, Process Engineer. "More efficient steam usage means more sustainable production."

## Steam Reductions in Singapore

Steam accounted for a significant percentage of total energy consumption at our facility in Singapore. Through the local team's efforts, CPSC developed and implemented action plans to improve the steam efficiency to target minimization of undesired steam loss to the environment allowing them to achieve a 20% reduction of steam consumption per pound of product produced compared to 2016 performance.

This reduction in steam consumption resulted in an overall annual energy savings of 12.7%. To achieve this reduction, the CPSC team provided tagging for every steam trap on site, increased the frequency of third-party steam trap surveys and established field checks by operators to identify and upgrade underperforming steam traps in critical areas of the facility. Additionally, the facility implemented a daily monitoring tool that allows them to track utility efficiencies live to ensure that they are on track to beat their targets or otherwise quickly identify issues. This monitoring, the standardization of trap types and other models, has enhanced reliability, minimized downtime, and reduced our energy footprint.

## Exploring Off-the-Grid Possibilities Through Solar Power

The 6,400 sq. ft. solar security canopy installed at our Cedar Bayou security checkpoint is paving the way for future power solutions at CPChem thanks to its fully integrated solar power system. The 54 solar panels on this outdoor canopy provide more than enough electricity for eight high-powered fans to bring a refreshing breeze to our security officers. At night, electricity stored in batteries from the previous day powers multiple LED lights that shine at 20,000 lumens each. The solar panels will generate 32,850 kilowatt-hours each year, which is enough to meet the annual power needs of three U.S. homes.

**"Any way that we can maximize the utility of our energy resources reduces the footprint of our products."**

- Stuart Bell, Lead Energy & Optimization Engineer



## Water Use

Water is a shared resource and our interactions with water is a concern to our stakeholders. The management and conservation of freshwater are critical to the sustainability of our business, our communities and our future.

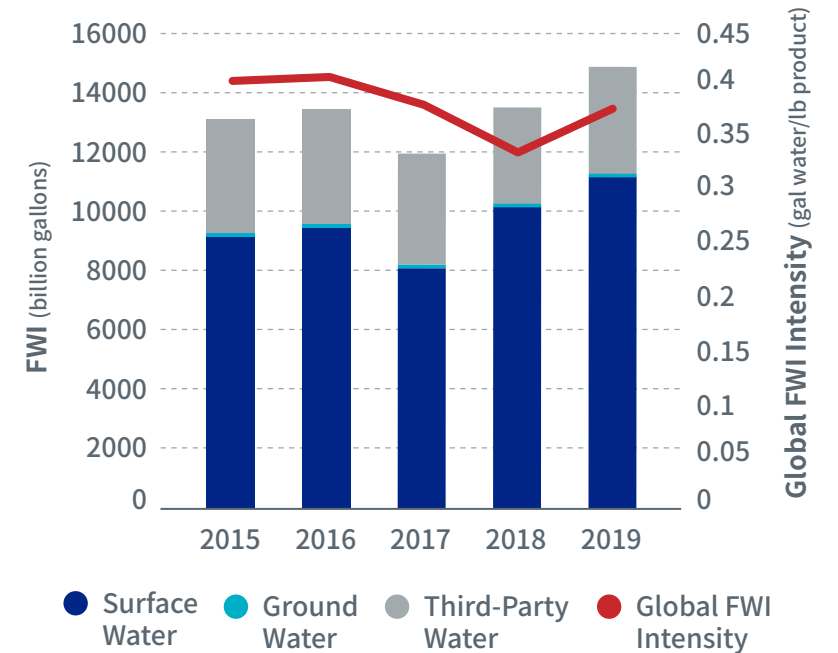
We utilize water at our facilities primarily for cooling and steam production, as well as consumption in processes and disposal of effluents. Surface water represents most of the water that we utilize followed by third-party purchased water. Nearly all CPChem facilities partner with neighboring third-party manufacturing plants to share and recycle water for multiple uses, thus reducing the overall water consumption used by the industry.

In 2019, our total freshwater withdrawal increased compared to 2018. Our global freshwater withdrawal intensity also increased, but remained lower than the ten years prior to 2018. We are committed to continuously improving our management practices to conserve and protect this valuable resource.

## Water Quality

We manage our water discharge and water quality according to our permitted limits. Our facilities are reviewed regularly for the potential to adversely affect groundwater. These reviews and other provisions are incorporated into our OE System, which is utilized to ensure compliance with all water discharge requirements.

## Fresh Water Intake (FWI) and Intensity



After process water has been used for steam, cooling or other processes, it gets sent to wastewater treatment for treatment. Most CPChem facilities operate their own wastewater treatment plant or are co-located with another facility that treats wastewater for the facility. Water is de-contaminated to remove organic carbons and then sent to clarifying tanks to remove solids and sediment. Samples are collected for testing, and biomonitoring is periodically performed to test the toxicity of the water discharging to nearby bodies of water.

# Emissions and Waste

We track and work to reduce emissions generated throughout the life cycle of our products and believe that our products play a valuable role in a lower carbon future.

We continuously implement tools to improve energy efficiency and reduce emissions of our operations. Our OE System addresses pollution prevention and establishes expectations for the monitoring and minimization of air emissions from our facilities during all operations.

## Greenhouse Gas and Global Emissions Inventory

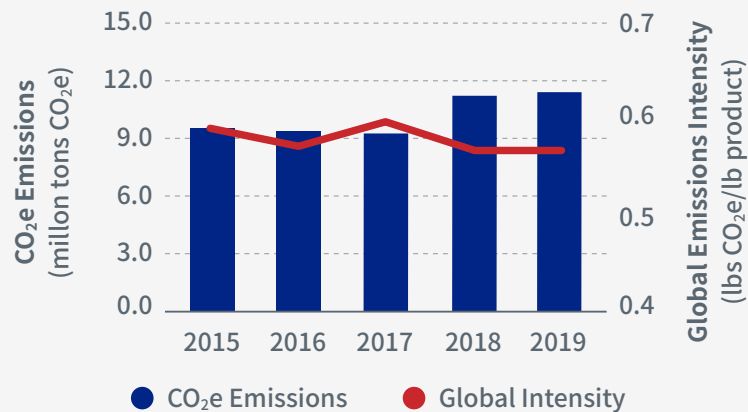
As CPChem continues to grow we require the additional usage of resources and energy, which can lead to an increase in greenhouse gas (GHG) emissions and criteria pollutants such as, NO<sub>x</sub>, SO<sub>2</sub>, CO, VOC and PM. The majority of emissions from our operations result from the production of ethylene. In 2019, our GHG emissions were 0.57 pounds of CO<sub>2</sub> equivalent emissions per pound of product manufactured, which represented a slight increase in our total GHG emissions but remained in-line with our 2018 global GHG intensity performance.

**We had a 17% reduction in our emissions of criteria pollutants in 2019, leading to a record low Global Emissions Intensity of 0.242.**

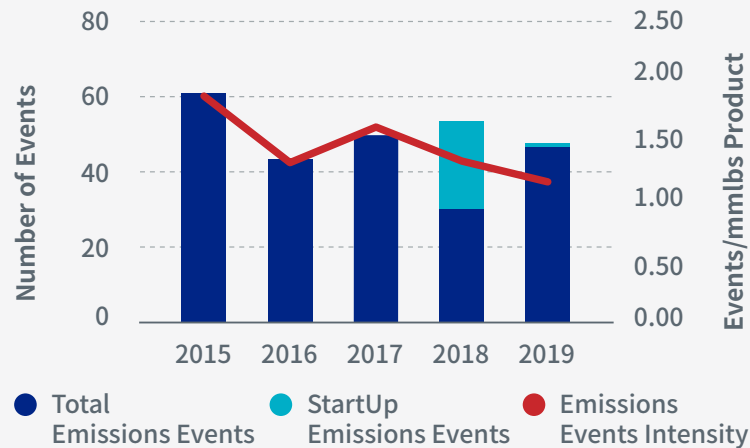
We monitor and investigate emissions events globally in an effort to minimize our environmental impact. In 2019, we achieved a record low Reportable Emission Events Intensity Rate, which represented a 63 percent reduction over the last 10 years. We continuously work to improve our emissions performance and have internal goals to reduce our environmental reportable events.

### Greenhouse Gas Emissions and Intensity

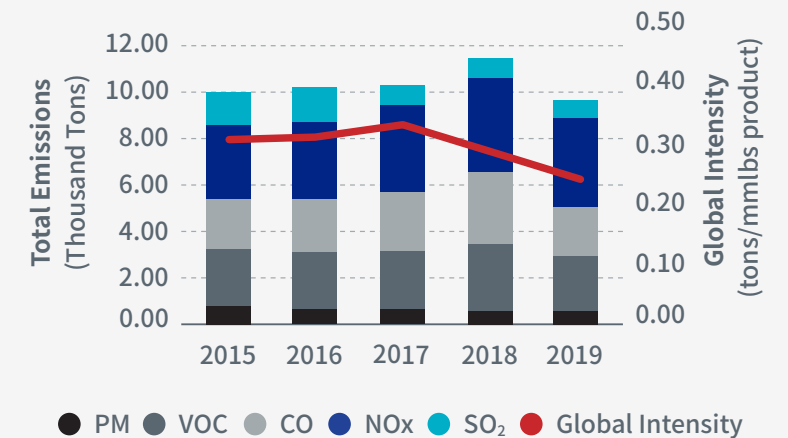
(direct and indirect)



### Reportable Emission Events



### Global Emissions Inventory



## Leak Detection and Repair Program

CPChem's Leak Detection and Repair (LDAR) Program ensures compliance with regulatory and CPChem Operation Excellence (OE) System requirements. An LDAR program is the system a facility uses to monitor and promptly repair the thousands of facility piping components (valves, pumps, connectors, compressors, and agitators) that could potentially leak small quantities of hydrocarbon if unmonitored. Each of our facilities has a well-trained LDAR coordinator who is responsible for the day-to-day operation of CPChem's LDAR program and is accountable for implementation of the LDAR regulations and the CPChem OE System LDAR requirements at their facility. In addition to internal quality control of our LDAR program, a third-party LDAR audit is conducted at least once every three years.

## Cogeneration Project Approved in Belgium

In 2019, our Tessengerlo facility in Belgium approved a project to build a cogeneration of heat and power unit that will generate electricity and steam on a gas turbine. The new unit will reduce primary CO<sub>2</sub> emissions at the facility by an estimated 11% in addition to a 23% reduction in NO<sub>x</sub> generation. Several smaller projects at our Tessengerlo facility have been implemented in the previous years aimed at reducing our emissions. The cogeneration project is one of several planned to be implemented in the coming years to further reduce our carbon footprint.

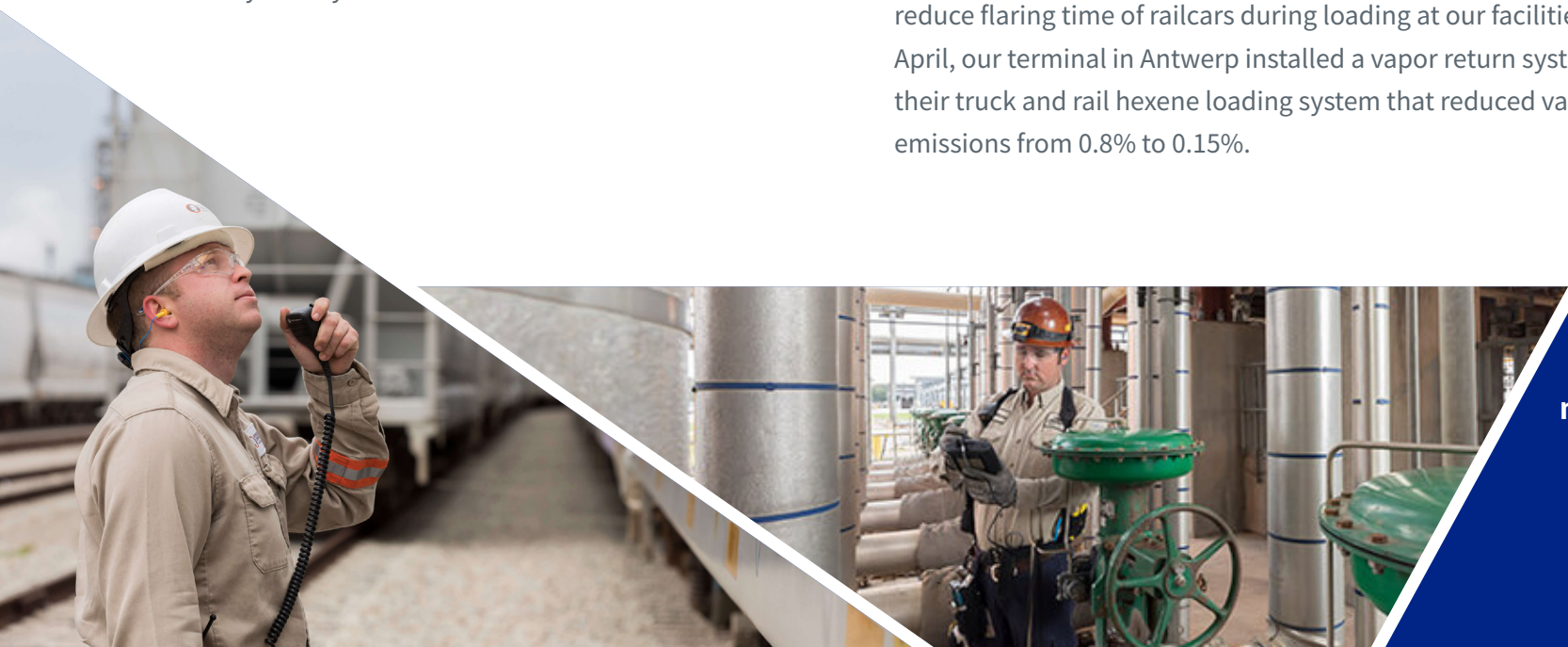
## Reducing Emissions in Transportation

In 2019, we engaged in efforts to reduce idle time at our terminals leading to reduced emissions and worked with customers to reduce flaring time of railcars during loading at our facilities. In April, our terminal in Antwerp installed a vapor return system on their truck and rail hexene loading system that reduced vapor emissions from 0.8% to 0.15%.

It is estimated that this reduced hexene vapor routed to the flare system by over 100 MT/yr (220,000 lbs/yr) leading to substantially lower emissions. We are continuously looking for opportunities to reduce the impacts of the transportation of our products and are engaging in strategic discussions with transportation providers to find ways to reduce our emissions.

## Flaring

The efficient operation of flares at our facilities is critical to the safety of our employees, communities and the environment. We have global standards that set expectations and ensure compliance with regulatory requirements on flare operation at our facilities through our OE System. Relevant employees complete training on flare operation via an online learning platform. Last year we made progress on projects at several facilities to automate steam and natural gas control to our flares, further improving our combustion efficiencies and ensuring optimal natural gas usage.



**“We can only continue to operate with the approval of our neighbors. Through less noise, less energy, higher compliance and proven safety we can be that good neighbor.”**

- Jerry Jarboe, Senior Environmental Engineer





# Waste and Recycling

At CPChem, we first aim to reduce the amount of waste generated from our processes, then determine valuable reuse opportunities for streams, and, lastly, maximize recycling.

## Waste Management

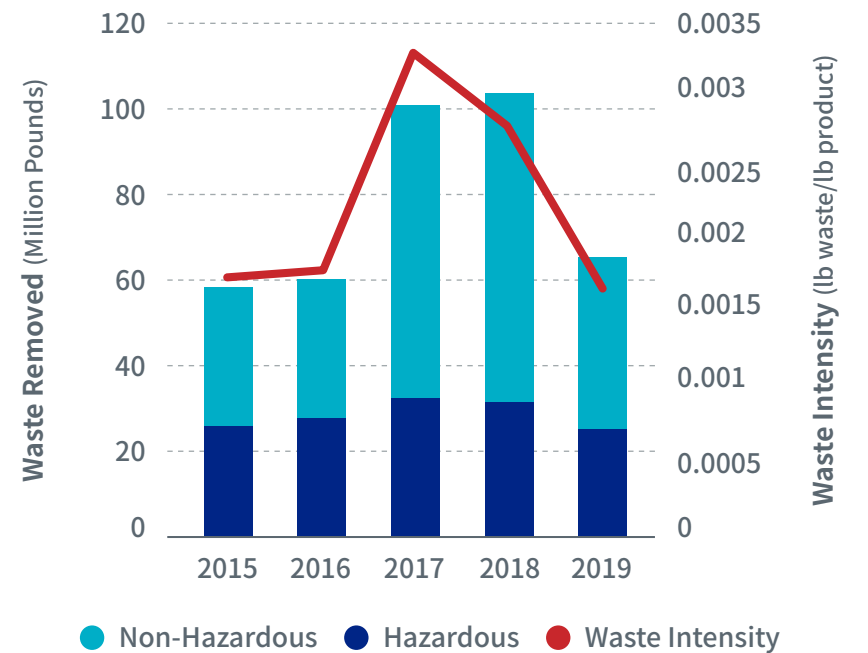
At our facilities, we produce ethylene, specialty chemicals, polyethylene and polyethylene pipe. The production of these products creates several waste streams. In addition to maintaining strict adherence to local regulations on waste disposal, our management of waste is governed by our OE System which sets requirements for all facilities to follow regarding the disposal of wastes.

Facilities are required to maintain procedures for waste management methods, document characterizations of all waste streams, perform an annual evaluation of waste management practices and maintain waste minimization procedures. We maintain an internal Waste Disposal Contractor Review and Approval Procedure, as well as a list of approved waste disposal facilities, to ensure that waste is disposed properly off-site. Facilities are also required to have Spill Prevention, Control and Countermeasures Plans, and Hazardous Waste Contingency Plans, where applicable, for emergency response planning.

In 2019, the total waste disposed from our facilities was 67.97 million pounds, a decrease of 37.5 million pounds compared to 2018. Of the waste generated in 2019, 63% was non-hazardous, while 37% was hazardous.

Fluctuations in waste generation from year to year depend greatly on major project work at facilities. We will continue to explore opportunities for waste reduction, valuable reuse opportunities, and recycling options to minimize the footprint of the production of our products.

**Total Waste and Intensity**



## Ramping Up Our Recycling Efforts Worldwide

Through concerted facility efforts and our Materials Management Best Practice Program, we have continued to enhance our efforts to increase recycling of streams throughout the manufacturing process. We recycle streams such as plastic, paper, metals, cardboard, pallets, drums, wood, soil, spent catalyst, used oil and more. In 2019 we identified new recycling opportunities for several streams at our facilities which diverted those streams from landfills, and we will continue to identify and assess viable recycling opportunities for major waste streams over the coming years.

**Many of our sites experienced successes in increasing the total materials sent for recycling. For example, our QChem facility increased recycling weight by 18.12% last year alone.**

Many of our facilities were challenged in 2019 to maintain basic consumer goods recycling programs due to local recycling facility closures. Despite these closures, we were determined to ensure that recycling access was available for our employees and our facilities. At our Orange and Port Arthur facilities we began offering employees the ability to bring their recyclables from home due to the termination of the recycling services in certain surrounding neighboring communities.

## Minimizing Plastic Waste

As part of the manufacturing process, our polyethylene resin manufacturing facilities and polyethylene pipe production facilities occasionally produce off-specification or scrap plastic materials. Although we aim to minimize the volume of this material generated, we have long-standing relationships with recyclers that recycle or repurpose this material for appropriate products. Our facilities are continuously working on efforts to reduce the amount of scrap generated in the process. Additionally, several of our facilities that had not already moved to a “Zero-landfill” approach for scrap plastic materials achieved this in 2019.

## Plastic Film Recycling

In November 2019, CPCChem’s Woodlands, Kingwood and Sweeny locations kicked off a plastic film and bag recycling program. Since its launch, our employees have showcased an impressive commitment to recycling and frequently bring their films and bags from home to recycle at work. We are proud of our employees and their dedication to recycling, providing a second life for these valuable materials, which in turn keeps plastic bags and films out of landfills.

“Our goal is to educate and encourage employees to make a meaningful difference with recycling at work, our homes, and within our communities.”

- Melissa Alexander,  
Customer Account Coordinator



## Operation Clean Sweep

Ensuring that valuable plastic pellets are not released into the environment is not only the right thing to do, but crucial for the plastic industry.

### Revamping Our Program

In 2018 our stakeholders shared their concerns about marine debris and plastic waste. As a response, we deepened our commitment to pellet management practices in 2019 by committing to Operation Clean Sweep® (OCS) Blue. We launched OCS® teams, which are led by an OCS® Site Champion, at all our US facilities and Chevron Phillips Singapore Chemical (CPSC). These teams performed facility-wide gap assessments at our sites in 2019 to identify areas of focus for improving our internal plastic management program. In addition to our continued commitment of designing our facilities to ensure zero-pellet loss to the environment, we are implementing more robust training requirements for employees and audits for facilities. We also increased our efforts across the globe by engaging on this critical issue throughout our value chain.

### Engaging Our Supply Chain

Loss of pellets to the environment is a critical concern for our industry and it will take collaboration from the entire value chain to successfully address. In 2019, we continued efforts to engage with service providers, customers and peers on effective plastic management practices. We provide tools, share best practices, recommend procedures and even offer training and site assessments for customers.

### Operation Clean Sweep® by the Numbers

**29.2 MM LBS**

of pellets and flake were recycled from our US plastic resin manufacturing facilities in 2019.

**<0.02 LBS**

of pellets were reported to be released into the environment from our facilities.

This achievement was due in part to an increased focus on reducing pellet loss. Our facilities, depending on site requirements, observe water discharges for plastic loss either twice daily, daily or weekly.

### CPSC Supports SCIC to Become OCS® Program Administrator for Singapore

On September 20, the Singapore Chemical Industry Council (SCIC), announced their adoption of OCS®. CPSC was instrumental in bringing this program to Singapore, facilitating discussions between the American Chemistry Council and SCIC that would lead to the SCIC's adoption of OCS®. This new commitment and the hard work of our Singapore team serve as great examples of how we are working to end plastic pellet loss throughout the value chain and globe.

**“Joining OCS® was an easy choice, as it showcases the dedication of our employees in Singapore in reducing pellet loss and reinforces our expanding sustainability efforts.”**

**- Sherry Ramphal,  
Plant Manager, Chevron Phillips Singapore Chemicals**



## PERFORMANCE

Our success is not only measured through financial performance, but also in monitoring and reducing the potential impacts of our products.

The products we develop and manufacture serve a myriad of beneficial purposes across a global platform and improve the lives of customers and consumers.

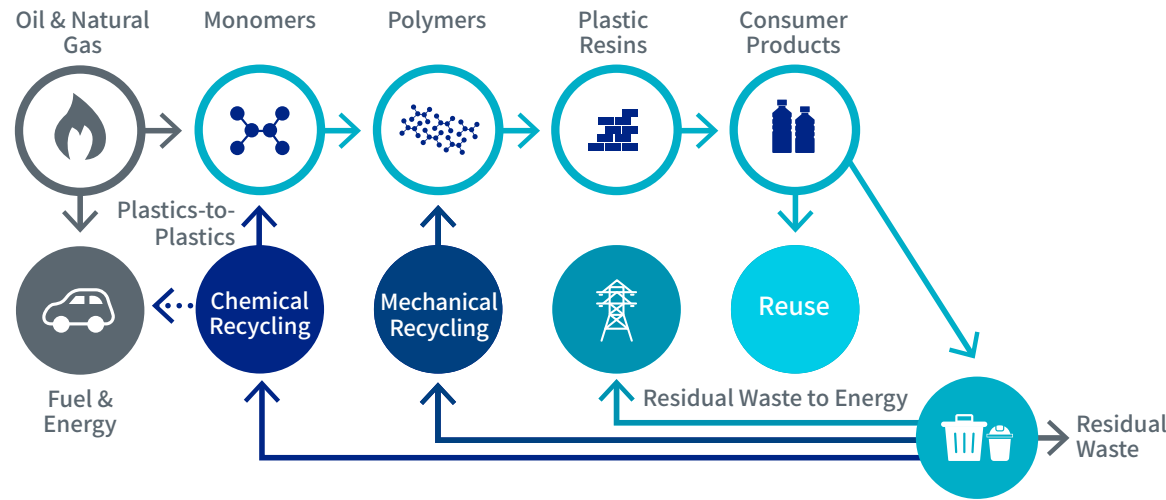
We placed our sustainability focal points of Product Responsibility and Integrity and Compliance within the Performance section of Embracing Progress because we believe that our responsible business practices are tied to the performance of CPChem. We are committed to serving as a responsible company and good steward of the environment.

# Product Responsibility

We understand the responsibilities we have as a global chemical company, and we are proud of the way we conduct business.

We carefully test our products and communicate health, safety and environmental impact information of our products, including factors such as intended use, expected product lifetime, durability, reuse, recyclability and beneficial disposition.

In addition to these health, safety and environmental tests, a major priority of our Sustainability Program involves the life cycle of our products. In line with feedback from our stakeholders, we have continuously increased our focus on ending plastic waste in the environment. CPChem has a vision to create a fully circular economy for plastics, where every piece of post-use plastic is recycled, reused or repurposed. By adopting such high standards, including advancing industry circular economy goals, we look forward to maintaining our reputation as a trusted and respected manufacturer of chemicals and plastics that benefit society.



## Supporting a Circular Economy for Plastics

Developing a circular economy for plastics will involve complete value chain engagement. In addition to working directly with our customers on product specific solutions, we are supporting initiatives across the globe to develop circular economy solutions, expand plastics recycling, develop innovative chemical, or advanced recycling technologies and identify new end market opportunities

for mechanically recycled plastics. Over the last year we have committed to being part of this solution through our support of, and participation in, several industry commitments and declarations. Between 2018 and 2019, we supported the American Chemistry Council and Plastics Europe pledges that 100% of plastic packing will be re-used, recycled or recovered by 2040 and committed to the Circular Plastics Alliance goal toward the use of 10 million tons of recycled plastics to make new products in the EU by 2025.

“To transition to a circular economy, we must develop both conventional and advanced recycling technologies; our scientists and engineers are up for the challenge.”

– Ron Abbott, Ph.D.,  
Sustainability Technical Manager



# Ending Plastic Waste in the Environment

## Alliance to End Plastic Waste

In 2019, CPChem intensified its environmental stewardship focus by becoming one of the founding members of a new, unprecedented consortium of over 40 top global companies: The Alliance to End Plastic Waste (AEPW).

With a goal of investing \$1.5 billion over five years to eliminate plastic waste in the environment, AEPW is the sustainability-focused organization with the most comprehensive membership across the entire plastics and consumer goods value chains.

Within the first year of its launch in 2019, AEPW approved support for more than ten major projects, all dedicated to addressing plastic in the environment, particularly in high leakage areas that require urgent action.

In addition to providing financial capital through the AEPW, CPChem has invested human capital, such as, providing our technical expertise for projects and participating in strategic planning and on project team governance. CPChem's President and CEO, Mark Lashier, currently serves as an active member of the Board Executive Committee and Board Compensation Committee of the AEPW.

In December 2019, CPChem successfully hosted the first AEPW member and staff meeting in Singapore, led by newly appointed CEO, Jacob Duer. The three-day event was attended by over 80 member-company representatives and staff representing 24 of 42 member companies. We will continue to actively support and advance the AEPW efforts across the globe, focusing on Infrastructure, Education and Engagement, Innovation and Clean Up.

## Ocean Fund

CPChem committed \$15 million to the Circulate Capital Ocean Fund (CCOF) in 2019. This is the world's first investment fund dedicated to incubating and financing companies and infrastructure that prevent waste plastic from entering the ocean in South and Southeast Asia. CCOF will provide financing to companies and projects to build lasting circular supply chains that can deliver and re-capture resources at scale while preventing the flow of plastic pollution into waterways in South and Southeast Asia.

## Community Clean Up Events

In 2019, CPChem employees around the world advanced our efforts to eliminate unmanaged waste in the communities where we operate. To see how we worked to improve our communities throughout 2019, [click here](#).

“

**“Our company has always been focused on innovation and problem solving, and we look forward to collaborating with Alliance members on breakthrough solutions to tackle this enormous global issue.”**

- Mark Lashier, President and CEO



## Education

Education and engagement with our stakeholders on sustainability issues are imperative to our success.

CPChem hosts and participates in many engagements for our employees, communities and the public. From videos with key leaders discussing issues, to employee events focused on the sustainability, we will continue to prioritize the educational opportunities for our employees, their families and our communities.

In addition to sustainability events, presentations are hosted throughout the organization to engage employees on CPChem sustainability programs, bringing in special guests to provide information on key sustainability issues. The Sustainability Group and other key leaders present at conferences, schools and civic organizations across the globe on topics such as, circular economy of plastics, advanced recycling, benefits of plastics and petrochemicals, plastic waste impacts and many other important sustainability issues.

### Product Ambassador Toolkit

CPChem employees want to communicate the value of plastics to communities across the world in relatable terms to many audiences: schools, businesses, communities, families of employees and more. In 2019, we developed a **Product Ambassador Toolkit** showcasing easy-to-understand infographics and presentations explaining how plastics are valuable, the benefits of plastics over alternatives, the importance of recycling and what CPChem is doing to help end plastic waste and develop a circular economy. The toolkit includes **presentations for adults** and **children** in five languages, as well as other educational materials.

Our facilities around the globe have used these materials in presentations for internal and external company events, with schools, customers and at community events. CPChem will continue to fine-tune this toolkit to clearly communicate the value of plastics and the strides CPChem is making to help end plastic waste.



### Expanding Local Recycling Education

CPChem is proud to be part of the efforts to enhance the recycling systems in the areas we operate. Education is a critical part of the solution. Our employees visit schools, city councils, rotary clubs, places of worship and other venues across the globe to educate their neighbors on recycling.

The “Recycle Right Team” at our Sweeny/Old Ocean facilities visited the Sweeny, West Columbia, and Bay City Rotary Clubs to talk about the importance of plastics to our everyday lives, as well as the importance of recycling. Using the Product Ambassador Toolkit, the team explained the value of plastics and the concerted effort toward educating children in local communities. The team facilitated a community meeting about recycling with a local waste management company, the local school district, Friends of the San Bernard River, and three local municipalities to bring the entities together as a community and discuss how to bring recycling to a rural area.

## Product Integrity and Quality

CPChem's OE System continually drives us to provide quality products in a safe and efficient manner. Ensuring that our customers are highly satisfied is critical to the long-term success of our company.

All CPChem manufacturing facilities are certified according to ISO 9001 in addition to meeting any industry, product or customer specific quality requirements that may go beyond ISO 9001.

**We strive always to manufacture, handle, and transport our products in a safe, secure, and environmentally responsible manner.**

Further, we work with our carriers, distributors, and contractors to ensure they share these goals. We continually monitor the performance of our third-party service providers. Bulk terminals, warehouses and box delivery providers are audited or reviewed on a yearly basis to assure product integrity and quality procedures are in place and being followed.

## Regulatory Compliance

CPChem remains vigilant in its compliance with regulatory requirements throughout the world. CPChem has registered under REACH all our substances contained in our products imported/ manufactured in the EU in quantities greater than one metric ton. In the U.S., CPChem has been supportive of efforts to modernize the Toxic Substances Control Act (TSCA) to enable our industry to safely innovate and grow, create jobs and maintain the trust of our employees, customers, communities and stakeholders. The company is poised to comply with amendments to TSCA.

Each of CPChem's polyethylene production facilities utilizes Good Manufacturing Practices (GMP), as outlined in US 21 CFR 174.5 and EU Commission Regulation (EC) No 2023/2006, when manufacturing Marlex® polyethylene products designed to meet requirements of use in the fabrication of articles that come in contact with food.





## Product Safety and Practices

Because we produce the building blocks of products used to meet the everyday needs of modern life, the safety of our products is also one of our critical focus areas.

CPChem remains vigilant in its efforts to comply with applicable regulations related to product quality and labeling, and shares information on the health, safety and environmental impact of our products with customers and consumers. 100% of our commercial products are assessed against our OE System's product stewardship guidelines. Chevron Phillips Chemical's product portfolio review is prioritized based on a weighted composite score of environmental outcomes, end use, physical and human hazards, regulatory profile, distribution exposure, production volume, public perception and marketing.

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“Relying on advanced technical qualifications and the world-class experience of our employees, CPChem excels in ensuring the optimal health and safety of our products.”

- Bill Utley, Product Safety and Toxicology Manager

Annual reviews of associated hazard communication documents, transport options, customer feedback, regulatory and technical data are also completed by every product line. Our Product Risk Management Teams proactively provide an additional level of diligence to ensure that any changes to processes do not pose risks to the safety and compliance of our products.

We are proud to comply with applicable international, federal, state, local and foreign regulations for product quality and labeling. In addition to complying with applicable regulations, CPChem, based on the Responsible Care® initiative's Product Safety Code, also evaluates, demonstrates, and continuously improves its product safety performance throughout its product portfolio. Information is readily accessible via downloadable Safety Data Sheets (SDS) and Product Stewardship Summaries on our corporate website - [www.cpchem.com](http://www.cpchem.com).

CPChem provides timely information to deepen understanding about the safety of our products and to assure that they provide their intended benefits while protecting human health and the ecosystem. We actively participate in common sense advocacy efforts, chemical testing programs and children's health initiatives.

## Customer Satisfaction

To ensure our customers' right to privacy, we use stringent internal controls, as well as third-party audits to protect the integrity of our customers' sensitive data. Our commitment to providing outstanding customer service has led to the development of customer satisfaction programs to ensure rapid response to concerns and complaints. One of the concrete methods that we use to measure customer satisfaction is the Mastio Customer Value and Loyalty Study, where CPChem consistently achieves top scores in customer service and loyalty.



# Integrity and Compliance

Our license to operate is ensured by the integrity with which we meet our compliance obligations and the level of ethics to which we hold our employees, suppliers and customers.

CPChem’s reputation is built by the actions we take every day. We pride ourselves on our strict adherence to applicable laws and regulations. Our core values of safety, respect, integrity and drive are indicative of our approach to maintaining our respected reputation with our stakeholders.

**CPChem’s vision is clear: to be the premier chemical company known as the employer, supplier, neighbor and investment of choice.**

Integrity is part of who we are, and as we continue to grow as a company, it is more important than ever that we conduct our business safely, lawfully and ethically.

## Governance

Conducting our business with integrity requires an organizational structure that encourages ethical behavior. Our ethics and compliance program includes roles for a cross-section of stakeholders, from our Board of Directors to front-line supervisors and employees.

This program is managed by the Ethics and Compliance Office, which is part of the Chevron Phillips Chemical Legal Department, reporting to our Chief Compliance Officer, Tim Hill. The Ethics and Compliance Office is responsible for providing guidance on compliance matters, training personnel, investigating compliance concerns, and reviewing compliance provisions in contracts.

## Enterprise Risk Management

Our company utilizes a robust Enterprise Risk Management (ERM) process to identify risks to our business and assets. We seek to identify and mitigate risks that have significant potential to affect our business. We also evaluate how we can create business opportunities. In 2019, sustainability was integrated into our ERM process. Certain physical risks are also integrated into our ERM process. Sustainability, access to capital, antitrust, product liability, loss of primary containment, margin, hurricane, geopolitical risk, major project, and systemic trade violation are among the risks that have been identified through our ERM process.



## Regulatory Risk Assessment Process

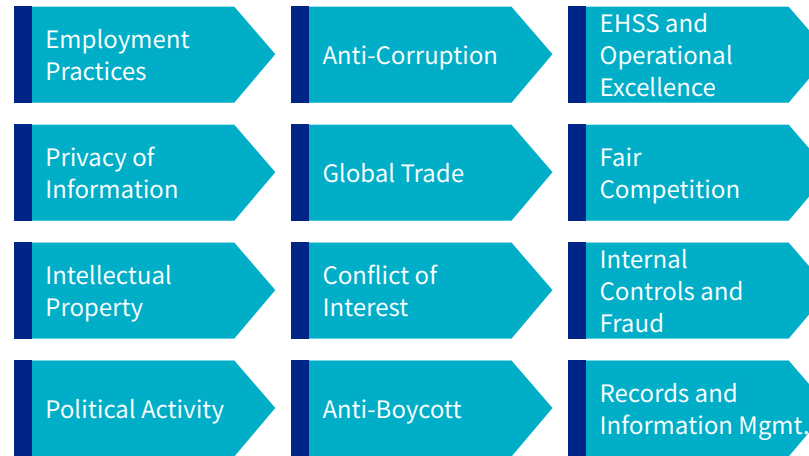
Our regulatory risk assessment process is managed by our Ethics and Compliance Office. Risk assessments are completed every two years at our facilities worldwide, spanning 15 risk areas to determine factors that could impact compliance with relevant regulations and laws. Once a risk is identified we may leverage policies, training, communications, audits or other existing models to mitigate.

## Code of Conduct

Chevron Phillips Chemical maintains its own Code of Conduct (“Code”), which reflects our core values and highlights the principles that guide our conduct. This Code applies to Chevron Phillips Chemical’s employees and the employees of its wholly-owned or controlled subsidiaries; further, 100% of employees are required to complete training and review and certify compliance with the Code annually. The Code highlights our ethical standards and informs our employees where they can find more information, such as directing employees to our detailed policies and procedures, and it includes detailed information as to how to report a concern. We believe our Code reinforces the standards to which we hold ourselves and those doing business on our behalf.

In addition to annual Code trainings, employees and managers are required to complete additional trainings on specific compliance areas where their job requires.

Our Code includes, but is not limited to, the following topics:



In addition to inclusion in the Code, all the topics listed above have policies or procedures that detail expectations, provide relevant reporting requirements and establish roles and responsibilities.

## Ensuring Compliance

We operate in accordance with relevant laws and regulations applicable to us, including but not limited to, those concerning labor, employment, the environment, health and safety. Our OE System includes expectations and requirements to ensure compliance with environmental, health, safety and security laws, regulations and internal policies. Facilities, Corporate Groups, Product Lines and Administrative Offices are required to complete annual self-audits and are subject to regular corporate and third-party audits to ensure compliance with the standards outlined in our OE System.

## Responding to Concerns

We work hard to ensure that our employees and people associated with our company feel comfortable voicing their concerns, and we have made strong efforts to provide multiple avenues for all people to submit questions or comments about how we operate.

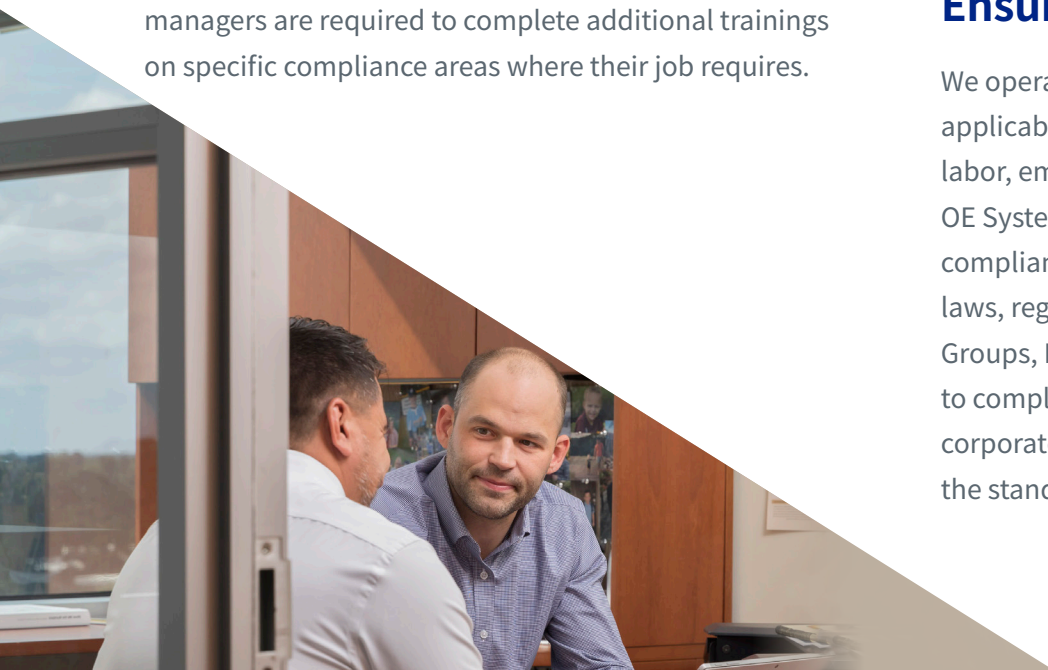
As outlined in our Code, employees are encouraged to reach out to their local management, Human Resources Business Partner, or Ethics & Compliance representative, to contact the Ethics & Compliance Office directly, or to call or email the Ethics & Compliance Hotline to report any grievances.

The Hotline provides a confidential means for employees, contractors, suppliers, customers or the general public to voice their concerns anonymously. The Hotline is managed by a third party and is available 24 hours a day, 7 days a week. We respond to 100% of submissions of concerns submitted through the Hotline.



**+1-800-356-2590 (United States) or  
+1-503-619-1804 (toll free)**

Our Non-Retaliation Policy outlines clear requirements for supervisors, managers and employees on responding to good faith reports of misconduct. We do not tolerate any retaliation and this behavior is subject to immediate dismissal.



## Continuous Improvement

Our Ethics and Compliance Office seeks to improve our policies, practices and training to adapt to the ever-changing regulatory and compliance environment. Continuous improvement through our risk assessment process allows us to identify areas of focus in our integrity and compliance practices. For example, the risk assessment process led to an increased focus on identifying and mitigating the risk of human rights violations within our supply chain. Additionally, outside of our Ethics and Compliance Office, we approach continuous improvement through a Plan-Do-Check-Act cycle, as defined in our OE System Manual.

## Responsible Supply Chain

CPChem seeks to do business with suppliers, contractors, service providers, distributors and customers who are committed to responsible business practices. We work with over 7,000 suppliers and service providers to manufacture and distribute our products to more than 140 countries around the world.

## Procurement Practices

In accordance with our Global Procurement Policy and Practice Manual, before we conduct business with new external suppliers, our Global Procurement Group has the responsibility to ensure suppliers are evaluated and assessed to verify that they meet our criteria for qualified suppliers. We are creating sustainable procurement guidelines that integrate criteria for protecting the environment and society, while also balancing quality, availability and cost considerations.

The goal of the guidelines is to make economically and technically sound procurement decisions with consideration for the conservation of natural resources, waste reduction, environmental impacts, support of recycling markets and reduction of toxics. We are developing a supplier code of conduct but do not currently audit suppliers on social and environmental criteria.

## Third-Party Management System

As a growing global company, we sometimes rely on third-party intermediaries for the sales and distribution of our products around the world. Third parties performing work on CPChem's behalf are expected to conduct their business in a manner consistent with CPChem's expectations on ethics and compliance. Our Third-Party Management Program provides a process and guidelines for the engagement, retention, and monitoring of our third parties. Third parties are required to undergo a risk evaluation process, receive annual code of conduct training, provide certification and are audited for compliance.

## Human Rights

We are committed to human rights, anti-human trafficking efforts, and ensuring that CPChem's supply chains reflect values and respect for human rights and anti-human trafficking efforts. Personnel with primary responsibility for procurement receive awareness-raising training on the issues and laws related to slavery and human trafficking, however, CPChem supply chain personnel do not currently receive training on mitigating the risks of human trafficking. Although we do not currently audit suppliers on anti-human trafficking measures, we recently began adding human rights representations to procurement and transportation contracts.



## Political and Association Engagement

CPChem has policies in place that govern interactions with all levels of government. We are not part of a Federal Political Action Committee but are part of a State Political Action Committee in Texas. We support legislation and industry groups that aim to advance sustainable solutions in society.

The associations with which we have significant involvement include:



## Supporting Advanced Recycling in Texas

In May of 2019, Rick Wagner, Sustainability Policy and Program Manager, testified at the Texas Legislature to pass legislation, HB 1953, to promote advanced plastics recycling and recovery technologies to convert more post-use plastics into valuable raw materials. A recent report by the American Chemistry Council found the potential economic impact of expanding advanced plastic recycling and recovering technologies, also called chemical recycling, in the United States to be nearly \$10 billion. It is critical that we support the advancement of legislation to facilitate the recovery of plastics, attracting new businesses to invest in recovery facilities.

”

**“Plastics are valuable materials that should be used and reused. By expanding chemical recycling facilities, we can repurpose more plastics and meet the growing demand for recycled plastics.”**

- Rick Wagner, Sustainability Policy and Program Manager



# Economic Performance

## Sustainable Growth

CPChem focuses on sustainable growth to fulfill its vision. That means investing in our company's and society's future by proactively helping the world find sustainable solutions and growing earnings and returns.

In 2019, market volatility amid global trade rifts affected demand growth and, along with industry capacity expansions, compressed margins for our products. These market dynamics drove earnings lower than 2018, a result that nonetheless reflects our ability to compete throughout business cycles and ensure long-term success.

Despite lower margins, we are focused on our long-term growth, as exhibited by our announcements of two major projects in the U.S. Gulf Coast and Qatar. Additionally, our financial contributions to initiatives and projects aimed at developing a circular economy for petrochemicals, specifically plastics, showcase our efforts to invest in the future of our business, industry and society.

CPChem's financial strength builds upon a long history of growth where feedstock is plentiful and competitively priced. Our North America and Middle East manufacturing centers benefit from competitive ethane feedstocks. Further, our flexible logistics can quickly adjust to trade disruptions through our global marketing network.

## Supply and Demand - A Look Ahead

Sales volumes increased through 2019; however, global market uncertainty is expected to slow long-term growth at a moderate pace, and challenges in 2020 with COVID-19 are hampering global markets. In this environment, we continue experiencing lower margins amid oil-price declines and supply/demand disruptions.

**While the economic impact of the COVID-19 pandemic is evolving, our long-term view on demand for plastics and our other products remains unchanged.**

Our materials will be central to meet the needs of the growing global middle class for decades. Compared to alternatives, plastics are a sustainable, efficient solution that reduce energy use and emissions. Our announcements of two major projects in the U.S. Gulf Coast and Qatar reflect this overall view and follow our strategy of building assets in regions with abundant, competitively priced feedstocks.





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**“More than ever, we need to be innovative as we continue to grow our asset base, stay competitive in a changing world, and work to attract, develop and retain the best people.”**

- Steve Prusak, SVP Corporate Planning & Technology

## Performance by Design

CPChem continues the legacy of innovation, industry leadership, cost discipline, and operational excellence that was instilled in us when our company was formed in 2000. Over the past 20 years, we have made significant improvements and are preparing for the next 20 years.

In the second half of 2019, we introduced Performance by Design, an effort aimed at proactively unlocking value for CPChem through fresh perspective, innovation and a continuous improvement mindset. We assembled a cross-functional team to lead this effort and focus on identifying, prioritizing and executing targeted phased actions that will help the company maximize value in 2020 and beyond. The near-term objective of this team is to tap into the diversity of ideas, develop a recommended execution plan, and secure management’s endorsement of that plan.

We see the greatest opportunities in our Manufacturing, Procurement, Supply Chain, Information Technology and Finance organizations. Performance by Design will help CPChem achieve its vision to be the premier chemical company and execute on its business strategy, ultimately positioning the company for long-term sustainable growth.

## Resilience

A critical aspect of maintaining sustainable operations at CPChem is our Emergency Management Program. CPChem has a long history of operational success and mature processes that support continued operations during challenging situations.

**The focus of the Emergency Management Program is protecting people, the environment, our assets, our stakeholders, and the security of our organization.**

Contingency planning is incorporated into our business practices through our Emergency Response and Incident Management Teams at our manufacturing facilities and the Corporate Crisis Management Team at our Headquarters. The Corporate Crisis Management Team provides strategic guidance through events and works to reduce recovery time. Our manufacturing facility Emergency Response Teams are trained on the U.S. All Hazards National Incident Management Systems (NIMS) and the U.S. Incident Command System (ICS). These trainings are key to aligning internal and external response operations, increasing response resource availability and reducing recovery duration.

Another important element of our Emergency Management Program are Business Continuity Plans (BCPs). The priority of our BCPs are to maintain normal business operations and secondly, to facilitate the orderly resumption of impacted business during any event that threatens the sustainability of our organization. BCPs include viable and well-maintained procedures to support continued business operations, support the timely and effective recovery of interrupted operations, enable the company to satisfy obligations to stakeholders throughout an event, minimize adverse impacts to the company and, most importantly, keep our employees and communities safe. Regular and routine training and exercise programs are in-place to ensure effectiveness of all emergency response processes.

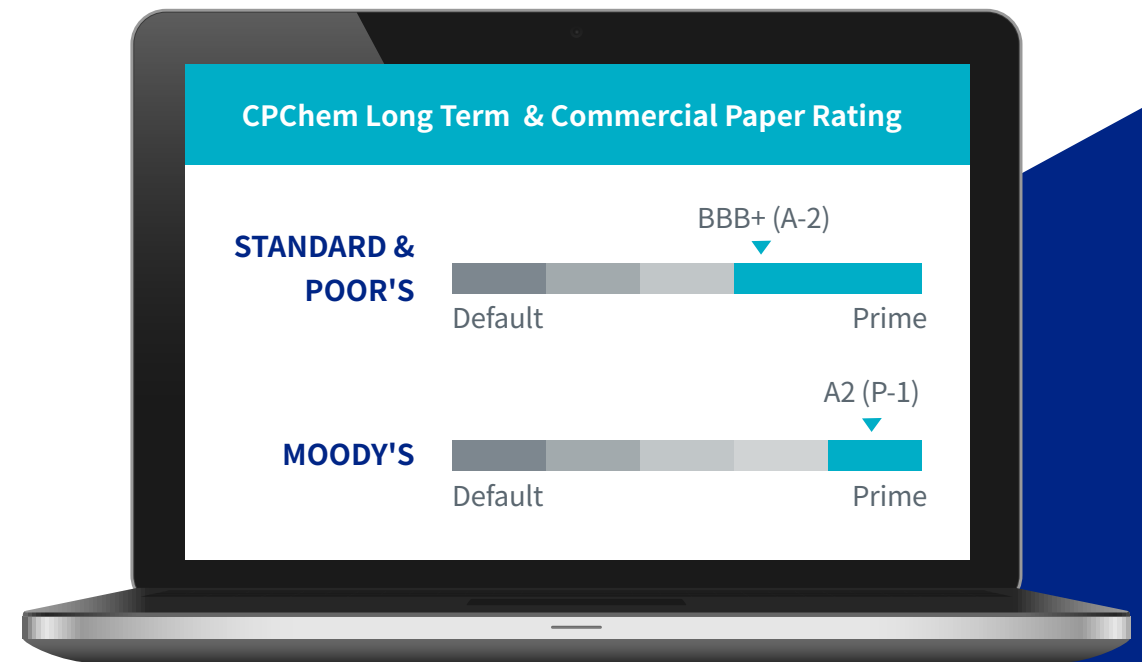
## Major Capital Expenditures

Major capital spend in 2019 was focused on growth projects, specifically advancing our projects on the US Gulf Coast and Qatar. Another major focus of our capital expenditures in 2019 included projects targeted at improving safety or reducing our environmental footprint.

## 2019 Selected Financial Data, in millions of dollars:

Select Financial Data	2019	2018	2017
Annual Sales and Other Operating Revenues	9,333	11,310	9,064
Total Revenues & Other Income	9,443	11,696	9,378
Net Income	1,760	2,069	1,446
Current Assets	2,554	2,820	2,944
Total Assets	16,868	16,610	16,767
Current Liabilities (Excluding Debt)	1,247	1,281	1,439
Total Liabilities	4,421	4,173	4,371
Total Members' Equity	12,447	12,437	12,396
Debt-to-capital ratio	16%	16%	16%
Capital Spend	795	553	1,477

CPChem has received the following debt ratings from Standard & Poor's Ratings Services and Moody's Investors Service, Inc.:



General information concerning CPChem is available through Dun & Bradstreet under DUNS number 03-891-2866. Further questions can be addressed to the Treasurer at (832) 813-4114 or by e-mail at: [FinancialStatements@cpchem.com](mailto:FinancialStatements@cpchem.com).



# About This Report

[Go to GRI Content Index](#) 

The 2019 Sustainability Report, Embracing Progress, contains detailed information on Chevron Phillips Chemical's environmental, social and economic performance throughout 2019. Our goal is to communicate a transparent account of our sustainable growth business strategy, operations and progress in areas deemed significant by our stakeholders. Embracing Progress demonstrates our commitment to dialogue with stakeholders to better address their concerns, which contributes to continuous improvement in all areas of our business.

Our first Sustainability Report was produced for the 2011 calendar year. Any reference to previous year's performance is provided for context only. This report includes information on wholly-owned operations as well as joint venture operations where pursuant to contract, CPChem employees participate in the operations and/or management of the facilities. Where indicated, some data or management approaches for specific topics may only be provided for wholly-owned operations.

This report is prepared in accordance with the Global Reporting Initiative (GRI) Standards – Core option. For a comprehensive list of disclosures within this report, please refer to the GRI Content Index. Previous reports were prepared following GRI 3.1 Guidelines.

In the effort to produce a report that meets the GRI Standards, new disclosures have been included in this report compared to previous reports. No material restatements of previously disclosed data were made in this reporting cycle. Disclosures of performance data presented in graphs or tables in the report are contextualized in the GRI Content Index and referenced with an active link to navigate to that relevant disclosure. We continue to improve the quality and transparency of the information provided through our Sustainability Report and relevant disclosures.

Report boundaries and measurement methods are consistent with previous reports unless stated otherwise. Experts for each of our key issues are engaged throughout the report preparation

process to ensure accuracy and completeness of information disclosed. We provide context of our impacts for each key issue throughout the report and in the accompanying GRI Content Index.

This report, additional information and previous reports can be found at [www.cpchem.com/sustainability](http://www.cpchem.com/sustainability). Questions and comments are welcomed and encouraged regarding our environmental, health and safety, and social responsibility policies, programs and performance.

## Danielle Gore

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Certain statements in this presentation are forward-looking statements that are subject to risks and uncertainties. These statements are not guarantees of future performance and actual outcomes and results may differ, perhaps materially, from what is expressed herein. Forward-looking statements relating to the operations of Chevron Phillips Chemical Company LLC are based on management's expectations, estimates and projections, their interests and the chemical industry in general on the date this presentation was prepared. Actual results could differ materially, based on a number of uncertainties, factors and risks (collectively, "the Risks"), many of which are outside the control of the presenter or Chevron Phillips Chemical Company LLC and its affiliates, employees, directors, or officers (collectively, "Chevron Phillips Chemical"). Any or all of the Risks could cause results to differ materially from those referred to in this presentation. Recipients of this information are cautioned not to rely on these forward-looking statements. Chevron Phillips Chemical undertakes no obligation to update or revise any forward-looking statement, whether as a result of new information, future events, or otherwise.

# GRI Content Index

This report was prepared in accordance with the GRI Standards: Core option. The GRI Content Index is intended to supplement the information provided throughout the report. This index includes the page in which disclosed information or data may be located within the report

if it is not directly stated within this index. This index also includes contextual information regarding the disclosures and their boundaries or any stated omissions.

## General Disclosures

GRI Standard	Disclosure Description	Page(s)	Response or Omission
<b>GRI 102: General Disclosures 2016</b>			
102-1	Name of the organization	1	
102-2	Activities, brands, products, and services	10	
102-3	Location of headquarters	4	
102-4	Location of operations	4	
102-5	Ownership and legal form	5	<a href="https://www.cpchem.com/who-we-are/financials">https://www.cpchem.com/who-we-are/financials</a>
102-6	Markets served	10	
102-7	Scale of the organization	4	
102-8	Information on employees and other workers	27-28	
102-9	Supply chain	9	
102-10	Significant changes to the organization and its supply chain		No significant changes to the organization and its supply chain in 2019.
102-11	Precautionary Principle or approach	57	
102-12	External initiatives	39 & 54	
102-13	Membership of associations	61	
<b>Strategy</b>			
102-14	Statement from senior decision-maker	2	
<b>Ethics and integrity</b>			
102-16	Values, principles, standards, and norms of behavior	8	
<b>Governance</b>			
102-18	Governance structure	7	
<b>Stakeholder engagement</b>			
102-40	List of stakeholder groups	15	
102-41	Collective bargaining agreements	28	
102-42	Identifying and selecting stakeholders	15	

GRI Standard	Disclosure Description	Page(s)	Response or Omission	
102-43	Approach to stakeholder engagement	15		
102-44	Key topics and concerns raised		Previous materiality was not designed for individual issue segmentation. Future assessments may include this capability.	
<b>Reporting practice</b>				
	102-45 Entities included in the consolidated financial statements	64	Chevron Phillips Chemical Company is a privately held company and does not make its financial statements public, however, select financial information is provided in this report.	
	102-46 Defining report content and topic Boundaries	65		
	102-47 List of material topics	14		
	102-48 Restatements of information	65		
	102-49 Changes in reporting	65		
	102-50 Reporting period	65		
	102-51 Date of most recent report	65		
	102-52 Reporting cycle	65		
	102-53 Contact point for questions regarding the report	65		
	102-54 Claims of reporting in accordance with the GRI Standards	65		
	102-55 GRI content index	66		
	102-56 External assurance			This report is not externally assured.

## Topic Specific Disclosures

GRI Standard	Disclosure Description	Page(s)	Disclosure, Comments or Omission
<b>Economic Topics</b>			
<b>201 Economic Performance</b>			
	Management Approach	62	
201-1	Direct economic value generated and distributed	64	Chevron Phillips Chemical Company is a privately held company and does not make its financial statements public, however, select financial information is provided in this report.
201-2	Financial implications and other risks and opportunities due to climate change	41	Chevron Phillips Chemical Company is a privately held company and does not make its financial statements public, however, select financial information is provided in this report.
<b>203 Indirect Economic Impacts</b>			
	Management Approach	38-39	
203-1	Infrastructure investments and services supported	39	
203-2	Significant indirect economic impacts	38	
<b>205 Anti-corruption</b>			
	Management Approach	59	
205-1	Operations assessed for risks related to corruption	58	
205-2	Communication and training about anti-corruption policies and procedures		100% of employees are required to complete the Code of Conduct Training which includes anti-corruption.

GRI Standard	Disclosure Description	Page(s)	Disclosure, Comments or Omission
<b>206 Anti-competitive Behavior</b>			
	Management Approach	59	100% of employees are required to complete the Code of Conduct Training which includes fair competition.
<b>Environmental Topics</b>			
<b>301 Materials</b>			
	Management Approach	40-41	
301-1	Materials used by weight or volume		Other than feedstocks, not all materials are aggregated and tracked by weight or volume as this is not an insightful metric for the company.
<b>302 Energy</b>			
	Management Approach	43-44	Chevron Phillips Chemical tracks energy consumed from fuels as a by-product and the energy purchased and consumed (purchased fuel, electricity and steam) for its manufacturing facilities. This excludes administrative offices. The compilation of our energy consumption data is consistent with the methods used by American Chemistry Council for the ACC Energy Efficiency and Greenhouse Gas Annual Survey. For plants where CPChem has partial equity ownership, the reported energy consumption and production data represent the equity stake.
302-1	Energy consumption within the organization	44	Energy consumption is represented for wholly-owned facility assets. This data does not include joint venture operations or administrative offices.
302-2	Energy intensity	44	Because Chevron Phillips Chemical is a diversified chemical company operating a variety of process plants, the company monitors energy reduction progress using an Energy Intensity Index that establishes a baseline expected energy consumption per pound of product for each unit. The baseline was established in 2008 for the U.S., Belgium and Singapore facilities and is used as the comparison point for each subsequent year. The Energy Intensity Index is a ratio of the actual energy consumed over an expected baseline energy number.
302-3	Reduction of energy consumption	44-45	References to emission-saving equivalents due to energy efficiency improvements were calculated using EPA's Greenhouse Gas Equivalencies Calculator ( <a href="https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator">https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator</a> ) revision dated May 31, 2016.
<b>303 Water</b>			
	Management Approach	45	
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	45	
	303-2 Management of water discharge-related impacts	45	
	303-3 Water withdrawal	45	The Fresh Water Withdrawal graph presents the sum of measured and estimated fresh water intake at all our facilities worldwide, including purchased desalinated water. This data does not include water that is treated and transferred to another party. This data does not include seawater that is used for cooling at our facilities in Singapore, Qatar and Saudi Arabia to help preserve fresh water resources. Seawater data may be disclosed in future reports. For plants where CPChem has partial equity ownership, the reported water intake data represent the equity stake.
	303-4 Water discharge		Not currently disclosing water discharge, but may disclose this in the future.
	303-5 Water consumption		Not currently disclosing water consumption, but may disclose this in the future.

GRI Standard	Disclosure Description	Page(s)	Disclosure, Comments or Omission
<b>305 Emissions</b>			
	Management Approach	41 & 47	The CO <sub>2</sub> Equivalent (CO <sub>2</sub> e) Emissions graph includes the total emissions of greenhouse gases (GHG), direct and indirect, expressed in tons of CO <sub>2</sub> e and summed separately for the domestic and international plants. The compilation of our emissions data is consistent with the methods used by American Chemistry Council for the ACC Energy Efficiency and Greenhouse Gas Annual Survey. For plants where Chevron Phillips Chemical has only partial equity ownership, the reported emissions and product data represent the equity stake.
305-1	Direct (Scope 1) GHG emissions	47	Emissions data aggregates direct and indirect emissions following the methodology stated above. In the future, CPChem plans to report Scope 1 and Scope 2 emissions separately. The Reportable Emission Events graph provides data on the number of total reportable emission events by year. All reportable emission events are reported based on specific country, state or local regulations. A reportable emission event includes air, water or land releases above the Reportable Quantity (RQ), exceedance of a water discharge limit (permit and regulatory), and emissions events as defined in local regulations or permit conditions that require immediate agency reporting. All reportable emission events, including those resulting from activities such as startup from the new construction and events beyond facility control (e.g. weather, power and feed interruptions) are represented.
305-2	Energy indirect (Scope 2) GHG emissions	47	Emissions data aggregates direct and indirect emissions following the methodology stated above. In the future, CPChem plans to report Scope 1 and Scope 2 emissions separately.
305-4	GHG emissions intensity	47	The Global GHG Intensity is a ratio of the greenhouse gases emitted (pounds of CO <sub>2</sub> e) divided by the products produced (pounds of product).
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	47	The Aggregated Emissions graph includes the total aggregated criteria pollutants (NO <sub>x</sub> , CO, VOC, PM <sub>10</sub> , SO <sub>2</sub> ) emitted from each of the plants grouped by location. The data only includes permitted emissions from each source collected from the Emissions Inventory. The Global Emissions Inventory Intensity is a ratio of the aggregated pollutants emitted (tons of emission) over the products produced (million pounds of product). For plants where Chevron Phillips Chemical has partial equity ownership, the reported emissions and production data represent the equity stake.
<b>306 Effluents and Waste</b>			
	Management Approach	49	
306-1	Water discharge by quality and destination		Not currently disclosing water discharge quality, but are working to disclose this in the future.
306-2	Waste by type and disposal method	49	Waste data includes non-hazardous and hazardous waste by weight transported off site for disposal. Currently disposal method is not disclosed, but we are working to include this information in future reports. For plants where Chevron Phillips Chemical has partial equity ownership, the reported waste data represents the equity stake.
306-4	Transport of hazardous waste	49	Hazardous waste reported in total waste data represents waste deemed hazardous by region specific definitions. No US generated hazardous wastes are shipped internationally for disposal.
<b>307 Environmental Compliance</b>			
	Management Approach	59	
307-1	Non-compliance with environmental laws and regulations		Eight orders and penalties resulting in \$570,761 total penalty amount in 2019.

GRI Standard	Disclosure Description	Page(s)	Disclosure, Comments or Omission
<b>308 Supplier Environmental Assessment</b>			
	Management Approach	60	
308-1	New suppliers that were screened using environmental criteria		We are developing a supplier Code of Conduct, but do not currently audit suppliers for social and environmental criteria.
<b>Social Topics</b>			
<b>401 Employment</b>			
	Management Approach	35	
401-1	New employee hires and employee turnover	35	In 2019, 397 employees were hired into the organization. Not currently disclosing turnover or new hires by gender, age and region, but may disclose this in the future.
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	34	Health care and life insurance benefits are provided to part-time employees working at least 20 hours per week and temporary employees. Part-time employees are eligible to participate in the 401(k) plan. Other benefits may be adjusted based on work schedule, and all benefits are subject to change at the company's discretion at any time.
401-3	Parental leave	34	We currently do not track metrics for entitlement for parental leave. Not currently reporting parental leave utilization because 2019 was the first year that the policy was utilized but may report this metric in the future.
<b>402 Labor/Management Relations</b>			
	Management Approach	28	
402-1	Minimum notice periods regarding operational changes		Minimum notice periods are included in part of our collective bargaining agreement process.
<b>403 Occupational Health and Safety</b>			
	Management Approach	18-20	
403-1	Occupational health and safety management system	18-20	
403-2	Hazard identification, risk assessment, and incident investigation	18, 20, 22	
403-3	Occupational health services	21	
403-4	Worker participation, consultation, and communication on occupational health and safety	20	
403-5	Worker training on occupational health and safety	22	
403-6	Promotion of worker health	34	
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	18-20	
403-8	Workers covered by an occupational health and safety management system		All employees and contractors are covered by the occupational health and safety management system.
403-9	Work-related injuries	20	We follow the OSHA Standard (29 CFR 1904) on Recording and Reporting Occupational Injuries and Illnesses for classifying and reporting all injuries/illnesses occurring at facilities globally. Recordable Incidence Rate is defined as the number of recordable injuries/illnesses per 200,000 hours worked (or approximately 100 full-time workers) annually. TRIR for employees and contractors exclude Major Capital Project (MCP) hours. 2018-2019 data for MCP is low due to lack of MCP work in these years.

GRI Standard	Disclosure Description	Page(s)	Disclosure, Comments or Omission
<b>404 Training and Education</b>			
	Management Approach	36	
404-1	Average hours of training per year per employee	36	Training is assigned based on job category. Training opportunities are required and made available to all employees regardless of gender.
404-3	Percentage of employees receiving regular performance and career development reviews		All employees are required to receive regular performance reviews regardless of gender or job category.
<b>405 Diversity and Equal Opportunity</b>			
	Management Approach	30-31	
405-1	Diversity of governance bodies and employees	27-29	
405-2	Ratio of basic salary and remuneration of women to men		CPChem conducts annual pay reviews to ensure that pay practices are assessed and adjusted as needed. CPChem also leverages a 3rd party to perform pay analyses on a regular cadence to identify any gaps in its compensation practices. Not currently reporting ratio but may report this metric in the future.
<b>406 Non-discrimination</b>			
	Management Approach	27-28	
<b>413 Local Communities</b>			
	Management Approach	15 & 39	
<b>414 Supplier Social Assessment</b>			
	Management Approach	60	
414-1	New suppliers that were screened using social criteria		Suppliers are assessed for Healthy and Safety criteria. We are developing a supplier Code of Conduct, but do not currently audit suppliers for other social and environmental criteria.
<b>415 Public Policy</b>			
	Management Approach	61	
415-1	Political contributions		Not currently disclosing political contributions, but may disclose this in the future.
<b>416 Customer Health and Safety</b>			
	Management Approach	56-57	
416-1	Assessment of the health and safety impacts of product and service categories	57	
<b>417 Marketing and Labeling</b>			
	Management Approach	57	
<b>418 Customer Privacy</b>			
	Management Approach	57	



Performance by design.  
Caring by choice.™

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