Our Future, In Focus

2021 SUSTAINABILITY REPORT

PQ Corporation

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WELCOME FROM THE PRESIDENT & CEO

Dear Stakeholders,

I'm pleased to share with you PQ Corporation's inaugural sustainability report as an independent company, having previously comprised the Performance Chemicals Division of PQ Group Holdings. After 200 years in the industry, we spent much of the past year building a strong foundation for continued growth to achieve our goals with Our Future, In Focus.

Key highlights of the past year include: successfully establishing the operational and financial structure of our independent company; developing and engraining our core values of Integrity, Safety, People, Customer Focus and Sustainability into our company culture; and strengthening our commitment to safety to further reduce our total recordable incident rate. We are proud of how far we've come, and we're looking forward to a bright future.

An important part of our future is building on PQ's strong foundation of sustainability. Environment, Health and Safety (EHS) is engrained in everything we do as an organization, as we create products for a cleaner, safer world. We invested in our commitment to sustainability this year by hiring a new sustainability director and regional leads, who have helped to support PQ's stakeholder analysis, materiality assessment, the setting of formal sustainability goals and a roadmap to improvement.

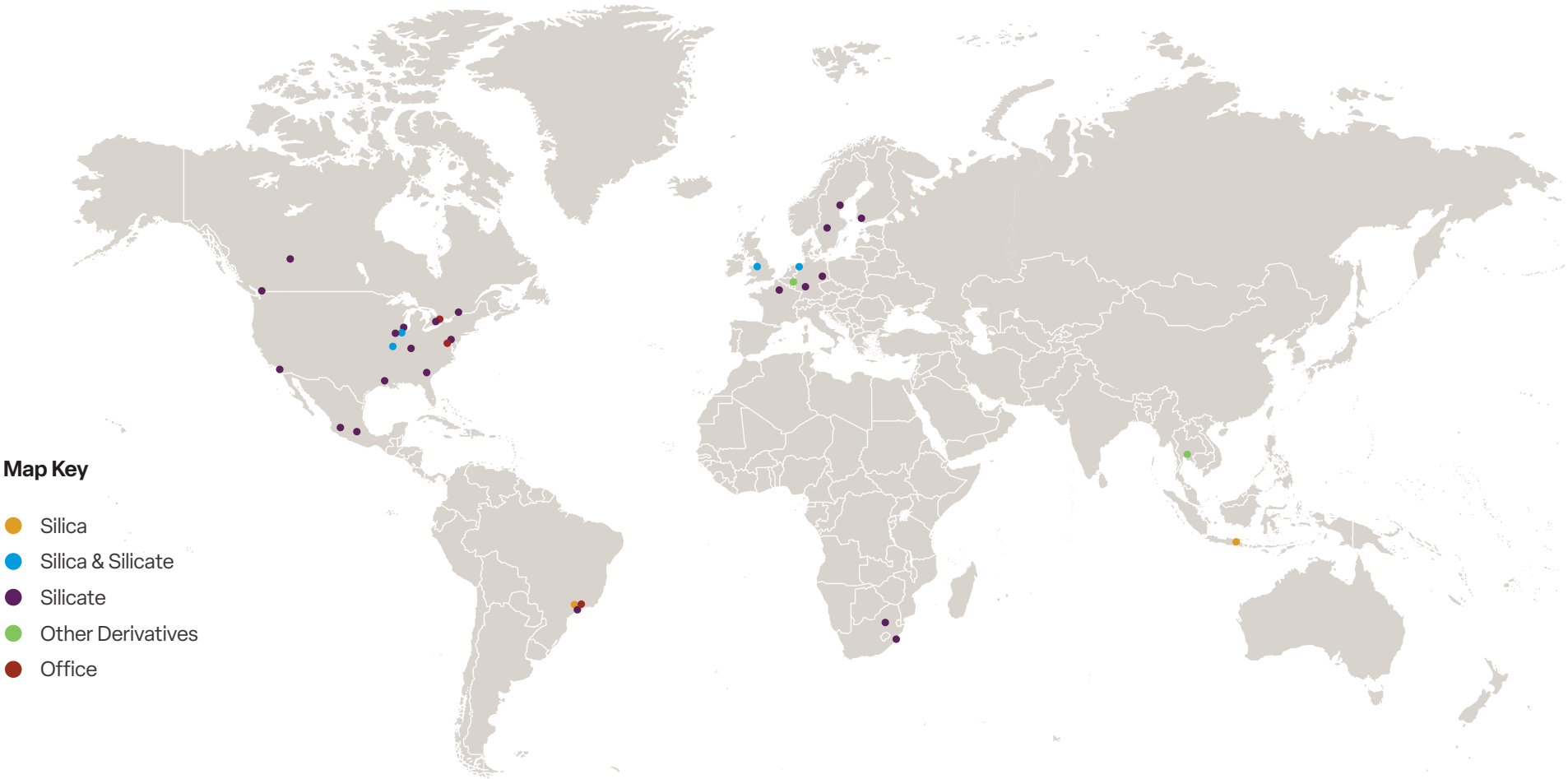
While PQ is more than two centuries into its journey as a global supplier of innovative and sustainable silicates, silicas, and derivative products, this report marks the start of an exciting new future in which we grow our impact as a safe, innovative, environmentally responsible company.

I look forward to continuing to update you on our progress in this journey.

Al Beninati

Al Beninati,
President & CEO

About Us



PQ by the Numbers

Roots dating back to
1815
in Warrington, UK, 1831 in Philadelphia

Annual sales greater than
$800M

Employs
1,500+
professionals

Operates
31
sites in 13 countries

Offering
25
product lines

Serving
13
end markets

What We Do

We are a 200-plus-year-old leading global provider of silicates, silicas and derivative products that enable environmental improvements, enhance consumer products, and increase personal safety. We have a global reach and a broad span of products that impact individuals in every industry, every day.

One of earth's most common resources—sand—is the fundamental building block for PQ's primary products. Soluble silicates are made by fusing sand and soda ash in a furnace, or through hydrothermal synthesis. Silicates are an extremely versatile class of inorganic chemical that can be used in a wide range of applications to enhance everyday life—from household laundry to toothpaste. They also serve as corrosion inhibitors and coagulant aids in water treatment and distribution systems. They are excellent binders and adhesives for laminating papers.

PQ's primary materials have four simple components: silica, alkali (sodium, potassium, lithium), alumina and water. These raw materials are considered some of the safest industrial chemicals. Silica is one of the most abundant materials on earth and is a key component of the Earth's crust. Our products are non-toxic, non-flammable and non-volatile. Our products have a long shelf life, when packaged and cared for properly. We pride ourselves on our quality and ability to partner with our customers to solve challenges in the areas of free flow, agglomeration, pH management, moisture capture, abrasion, ion exchange, adsorption and advanced filtration. Our ability to manage chemical properties sets us apart as a product leader.

As PQ has continued to innovate, the company has developed high-value-added derivatives of soluble silicate products. We seek to address global issues that are often either the subject of significant regulations or are driven by consumer preferences, which we believe fuels our growth. Since our products are predominantly inorganic and carbon-free, we are proud to contribute to improving the sustainability of our planet.

Our Markets and Applications

Today the company's performance chemicals are crucial ingredients in a diverse set of industrial and consumer products. PQ offers innovative technologies and sophisticated chemistries that provide cutting-edge and environmentally sustainable solutions across a variety of markets. PQ's handprint, the benefit we provide to our customers' sustainability through their end products, can be seen now and well into the future.

MARKET	DESCRIPTION	SUPPORTING PRODUCTS
 **PAINTS & COATINGS** *Protecting and enabling low VOC*	Silicas are used as matting agents in numerous coatings such as wood, coil and leather. Our products support low VOC and UV curing coatings which are a key component of the environmentally friendly direction in which leading suppliers are moving. Sodium silicate is used as an inorganic binder in masonry coatings to protect buildings. PQ is a technically savvy supplier that works with leading manufacturers of coatings to innovate for the future.	→ Specialty Silicates → Precipitated Silicas → Silica Gels
 **PURIFICATION** *An evolving market for improving water quality and enabling biofuels*	Whether by recycling edible oils to develop sustainable fuels or cleaning drinking water, our products contribute to improving the environment. They can work as an adsorbent to aid in the clarification, filtration and purification process of edible oils like soybean, palm, coconut, olive and others, reducing process waste. As adsorbents, they can be used to clean waste oils and fats for use as consistent feedstocks in the production of biofuels, such as biodiesel. Clean, sustainable energy from renewable feedstocks helps reduce our collective carbon impact. In water treatment, our products help remove heavy metals for safe drinking and processing water.	→ Sodium Silicate → Zeolites → Precipitated Silicas → Silica Gel
 **SILICA & CHEMICAL MANUFACTURING** *Improving performance and replacing less environmentally friendly materials*	The primary end market for silicates is the production of amorphous silicas, which can take multiple forms. The largest single end use for silicas is as a precipitated silica that is used in green tires. By replacing carbon black with silica in tires it increases the strength of the tire, reduces roll resistance and enhances fuel efficiency while maintaining grip. Our products are also used to produce high-quality catalysts including fluid catalytic cracking (FCC) and hydrocracking (HCC) catalysts for the fuel industry, including new developments in renewable fuels and recycling. Sodium silicate is also a feedstock for colloidal silica sol, used in many applications including the production of semiconductors for electronics. Our products can also be used to stabilize pH in multiple chemical applications including paper recycling and de-inking.	→ Sodium Silicate → Specialty Silicates → Precipitated Silicas → Silica Gels → Zeolites

Our Markets and Applications

MARKET	DESCRIPTION	SUPPORTING PRODUCTS
 **CONSTRUCTION & DRILLING** *Reducing GHGs throughout the life-cycle*	Our products are used as binders to hold materials together in a briquette or pellet, an adhesive, a flame retardant and for producing high quality environmentally friendly roofing granules. Sodium silicate is used in the production of geopolymers, which can replace portland cement, provide a building material that holds up better against corrosion and reduces the carbon footprint of construction. PQ products are also used in the drilling space, with traditional oil drilling but also with the growing geo-thermal market, acting as a lubricant for the drill or as a superior plugging product during the closure of wells, mines and tunnels. Tunneling projects use our materials in annular grouting or filling in the space between the tunnel lining and the bore hole to support the structure. These challenging applications allow PQ's expertise to shine through with most major drilling companies in the world.	→ Sodium Silicate → Metasilicate → Specialty Silicates → Zeolites
 **PERSONAL CARE, NUTRITION, FOOD & BEVERAGE** *Friendly products for everyday use*	Cleaning agents for toothpaste and exfoliants for lotions, the small particles that scrub and remove debris, are often precipitated silicas or silica gels. PQ provides innovation in toothpaste by controlling the level of abrasion required to meet high levels of cleaning and maximize the benefits of time spent brushing. Spices and powdered beverage products often include our free flow aids to avoid clumping and caking. PQ adsorbents are used in processing beer to remove proteins, in a process called chill-proofing, to increase the clarity of the beer and extend the shelf life while not impacting color or flavor. Our products are also used to provide beneficial substances to plants in the form of soluble silica and potassium.	→ Sodium Silicate → Specialty Silicates → Precipitated Silicas → Silica Gels → Zeolites
 **CLEANING** *Support environmentally friendly cleaning*	We support both household laundry and institutional and industrial detergents. PQ products act as builders and allow end-product manufacturers to make environmentally friendly, specifically structured and high-performance products to clean thoroughly.	→ Sodium Silicate → Metasilicate → Zeolites

Our Core Values

Our company culture is based on five key core values that drive everything we do as an organization. They guide our employees through daily decision making, and set high expectations for those who represent our company.

We took a collaborative approach to the development of these core values. PQ's executive leadership team developed initial themes and terms, which were then shared with roughly 130 leaders within the organization for feedback and perspective. From there, we finalized the core values and shared them with the rest of the company.

WE EMBRACE DIVERSE PERSPECTIVES TO DELIVER EXCELLENCE

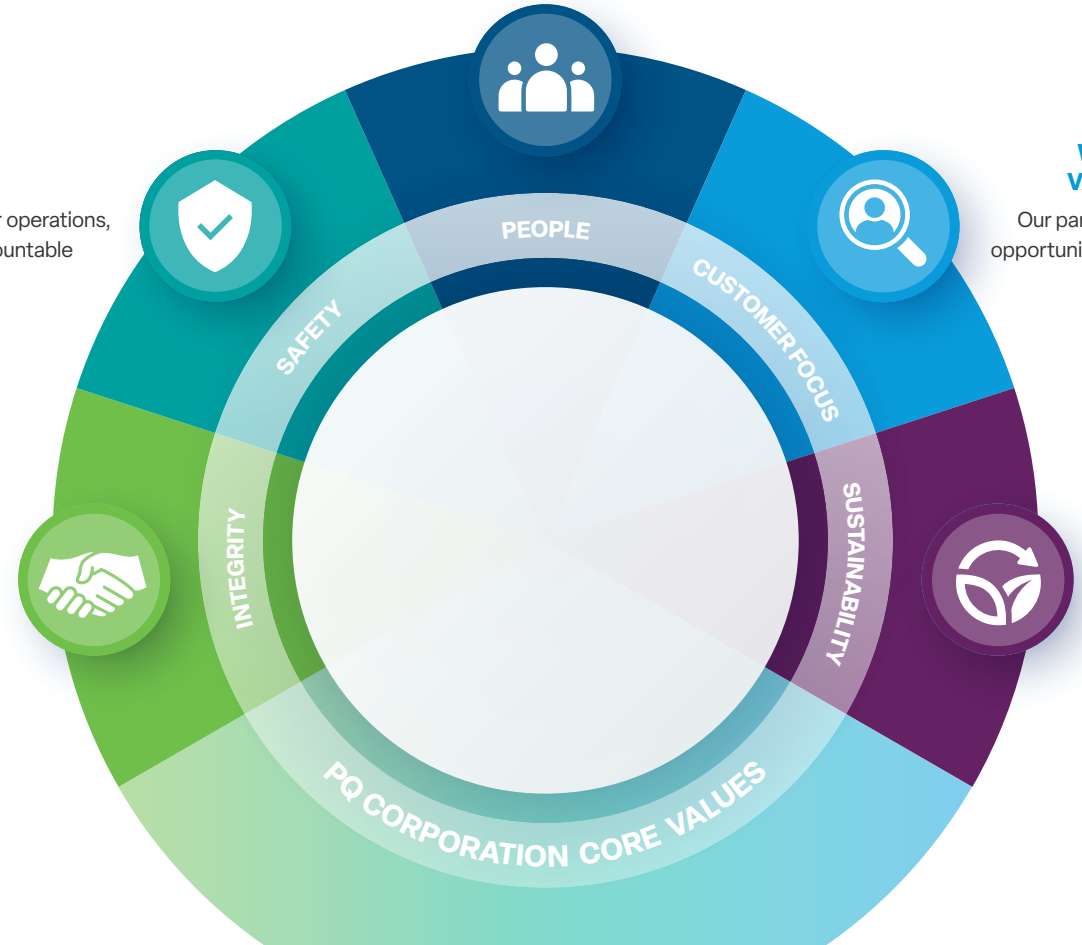
Our teams engage with and empower others, treating all with respect and empathy

WE OPERATE SAFELY OR NOT AT ALL

Our leaders drive health and safety in our operations, and our teams hold themselves accountable

WE DIFFERENTIATE OUR VALUE IN ALL THAT WE DO

Our partnerships with key customers lead to opportunities for innovation and profitable growth



WE ACT WITH THE HIGHEST ETHICAL STANDARDS

Our integrity is defined by actions we take when we think no one is watching

WE WIN WITH ENVIRONMENTALLY RESPONSIBLE SOLUTIONS

Our products are developed with impact to both handprint and footprint as critical drivers

Our Sustainability Foundation

OUR OPERATIONS

Introduction

PQ is grounded in sustainability, through our operations, our products and our people. We lean on this strong foundation as we work to develop our sustainability program as an independent company.

Our core values guide our approach to responsible operations, through customer focus, integrity, safety, people, and sustainability. We aim to manufacture, market and distribute our products responsibly to safeguard the health and safety of our employees, customers and communities.

Responsible Care®

PQ participates in the American Chemistry Council (ACC)'s Responsible Care, the chemical industry's world-class environmental, health, safety and sustainability initiative. Responsible Care is practiced in nearly 70 countries and protects the health and safety of people and the environment. Through this initiative, we work to advance the safety and sustainability of our employees, our facilities, and the communities in which we operate.

As part of our commitment to Responsible Care, we have implemented RC14001®/ISO14001 Standard at our sites across the United States and Canada. RC 14001 broadens the scope of the ISO 14001 Standard beyond the traditional Environmental Management System to include health and safety, security, transportation, outreach, emergency response and other Responsible Care requirements.

EHS Management System

Our comprehensive Environment, Health and Safety (EHS) management system promotes continual improvement of EHS performance. This approach includes a "Plan-Do-Check-Act" system to evaluate risk, plan for improvements, implement controls, monitor processes, and make corrections or other improvements.

This management system is aligned with the ISO14001 and chemical industry RC14001® standards and reflects the commitments established in our **EHS Mission and Guiding Principles**.

For over 15 years, our EHS management system has been certified to international standards. We continue to enhance our Plan-Do-Check-Act improvement process using these strategies.

EHS Perfect Days

At PQ, we strive for zero injuries or environmental incidents (i.e. Perfect Day). In response, we created our EHS Perfect Days metric to measure our progress toward that goal and to drive continual improvement in environmental, health, and safety performance.

We define an "EHS Perfect Day" as a day without:

- OSHA recordable injuries
- First aids requiring professional assistance
- Level 1 or greater releases
- Deviations from environmental permits and EHS legal requirements
- EHS Notices of Violation
- Life-Saving Behavior violations

As an organization, we have set annual Perfect Day and Total Recordable Incident Rate goals and targets that measure performance and drive accountability. We started tracking EHS Perfect Days in 2018. We track EHS Perfect Days by business and by total PQ, and we are above our target for each in 2022.

Total Recordable Incident Rate

Our goal is to become a leading company in EHS performance in all industries in which we operate by using ACC's Top Quartile as a benchmark. Our current YTD TRIR is 0.14 which is far better than the 2019 ACC Top Quartile benchmark of 0.38, which is our current benchmark.

Global Product Strategy

As part of our membership with ACC, we are also committed to the Global Product Strategy (GPS), which helps improve product stewardship actions, increase public awareness and confidence that chemicals are safely managed throughout their lifecycle.

This product stewardship program includes completing risk reviews for new products and characterizations for the materials we manufacture, prioritizing chemical risks, recommending risk management actions where needed, and making chemical health and safety information available to the public.

SILVER 2021 ecovadis Sustainability Rating

In 2021, PQ Group Holdings was awarded a silver medal from EcoVadis, a leading assessment platform for environmental, social and governance performance ratings for global supply chains.

*2021 ACC top quartile performance was 0.34, we set our benchmark against the 2019 number of 0.38.

Our Products

Safe & Environmentally Friendly Silicas in Toothpaste

The controlled structure of PQ's Sorbosil® dental silicas supports a range of toothpaste varieties and gels, differentiated by abrasion, cleaning power and refractive index. High purity Sorbosil® dental silicas offer positive compatibility with functional additives suitable for all platforms, which help consumers to keep teeth clean and gums healthy, while preventing cavities and tooth sensitivity.

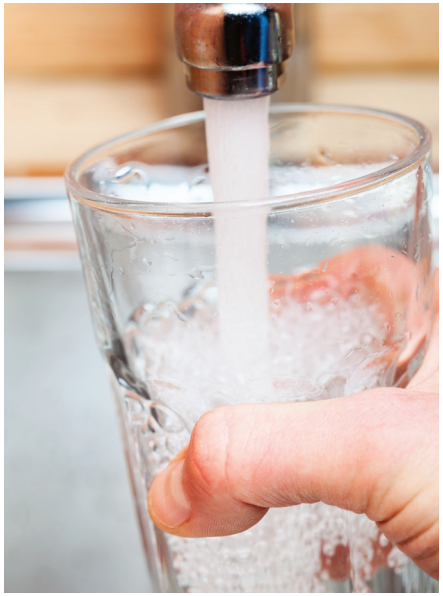
Our dental silicas are ECOCERT certified for their natural formulations, and they are manufactured to EFCI GMP standards and are both Halal and Kosher. They're FDA permitted for use in food, drugs, cosmetics and toothpaste. They have low metallic oxides, no present heavy metals, and are free of microbiological activity.

Treating Raw Waste Waters with PQ® Soluble Silicates

In wastewater treatment applications, PQ's soluble silicates are used as activated sol coagulant aids, for decreasing and controlling corrosion in water treatment systems and stabilizing iron and magnesium levels in the water. PQ silicates usage in wastewater treatment increases equipment functionality, improves output and enhances the end desired product.

Using activated silica sol in water throughout the coagulation process effectively lowers the content of silica in treated water. With the use of an alum activated sol, along with alum as the primary coagulate, filter runs in industrial processing plants saw significant improvement in efficiency and productivity. Installing activated silicate treatment increases equipment capacity and reduce the need for customers to invest in plant expansion.

Usage of PQ products aids in the separation and removal of solids in sewage. This decreases the need for biological digestors found in plants and enables them to function more effectively.



Silicates Lower Lead Levels in Drinking Water

When used for corrosion control in water treatment, PQ silicates help reduce lead and copper in drinking water. **Studies conducted in the United States** indicate that when silicates and systems are utilized, the lead levels in drinking water decreased as did residential complaints of "red" water, a sign that indicates higher levels of lead.

PQ silicates also control the corrosion of drinking water distribution systems, lengthening the lifespan of the equipment used in the process, and reducing the need for frequent replacement of the systems.

Silicates Support Grout with Lower GHG Emissions

PQ soluble silicates, which have been used successfully in grouting and geotechnical applications for many years, reduce greenhouse gas (GHG) emissions during production and decrease the waste of valuable environmental resources. At the same time they contribute to the success and longevity of earth moving projects.

As an inorganic product, soluble silicates have many advantages: they produce the highest-strength grouts, are low toxicity compared to existing chemical grouts and are low in cost as compared to organic setting agents. The production of PQ soluble silicates yields a significantly lower amount of GHG as compared to standard grout production processes.

PQ sodium silicates function as rapid-setting additives for cement and cement-clay grouts and, unlike many setting accelerators, silicates are not corrosive. This alleviates issues caused by cement grouts, such as separation due to excessive water bleed, which can cause equipment or manpower to be idled while waiting to cure. In flooded environments, surrounding water can dilute the grout and prevent it from settling; that is not the case with sodium silicate.

Silica Products Designed for Low VOC UV-Cured Coatings

PQ offers a pure and versatile way to a matte finish through GASIL UV silica which is used in coatings for furniture, plastics, and flooring.

Volatile organic compound (VOC)-free ultraviolet ray technology is expanding in several sectors of the coatings and inks industry to support the setting of a liquid formation into a solid coating. UV-cured coating films do not shrink during curing, unlike solvent based coatings. They therefore require specially designed matting agents to create maximum micro-roughness on the film surface to scatter light. PQ offers a range of silica matting agents in UV-curable coatings, eliminating exposure to VOCs and creating a better, safer end product.

Silicates Replaced Phosphates in Detergents for Better Water Quality

PQ sodium silicates and zeolites offer an environmentally friendly replacement for phosphates in detergents, leading to better water quality. Silicates act as water softeners by bringing together calcium and magnesium ions, which supports optimal performance of the detergent, even in hard water.

PQ's sodium silicates clean and protect a variety of items with strength and power but are gentle enough to be used on everything from the finest dishware to the clothing we wear.

Tire Ingredients to Save Fuel, Increase Mileage

PQ's sodium silicate is a key component in the production of precipitated silicas used in the manufacture of "green tires". By reducing rolling resistance, the use of precipitated silica in green tires improves vehicle fuel efficiency and reduces greenhouse gas emissions.

Precipitated silica also improves tire traction which can shorten braking distances on wet roads without having a negative impact on durability. Tires with large treads, such as those used for SUVs, particularly benefit from silica active fillers and reinforcing materials.

"Green tires" support auto makers in meeting stringent regulatory demands while improving performance and increasing the level of vehicle safety.

Gels and Adsorbents for Edible Oil Refining & Biofuels Production

PQ's SORBSIL® silica hydrogels can be used in the processing of edible oils and fats for the removal of soaps, phospholipids and trace metals to enhance the quality of the refined product and reduce water consumption, effluent and waste. Silica hydrogels reduce costs and losses while enhancing filtration performance and throughput. The product can be applied to most refining processes, without affecting taste, and is not chemically reactive. The products are certified for use in organic food processing.

Silica hydrogels are also used in the biodiesel industry for the treatment of waste oils and fats. Our products enhance the quality of these waste streams making them suitable for production of renewable diesel. This approach helps producers meet increasing fuel specification demands in a cost-effective way.

Environmentally Friendly Fertilizers

The PQ Agriculture Potassium silicate, AgSil®, provides a water-soluble source of silicate and supplementary potassium for plants, offering growers performance benefits in many agricultural applications. The benefits of utilizing silicate include reduced disease pressure, resistance to mineral stress, and a reduction in climate stress.

With various usages and forms, this environmentally friendly supplement supports the growth, strength, and amount of the vegetation to which it is applied.

Geopolymers as a Low Carbon Cement Alternative

Geopolymers, enabled by PQ silicates, provide a low carbon and high durability alternative to portland cement as a building material. Geopolymers are formulated utilizing recycled materials like fly ash, metakaolin, calcined clays, zeolites, and other alternative pozzolanic materials combined with a silicate activator. Annually cement production creates over 8% of the worlds CO_2 emissions, or about 2.9 billion tons of CO_2.

Geopolymer durability comes from improved physical and chemical properties, which include bond strengths, corrosion and heat resistance, and self-healing properties. Geopolymers do not require water for curing, reducing usage, and often set faster than portland cement.

Permanent Seals for Well Plug & Abandonment

Every year a significant number of the estimated 30 million abandoned oil and gas wells worldwide require plugging to reduce greenhouse gas emissions. The plug and abandonment process involves the filling of the wellbore with plugging material to permanently eliminate the migration of fluid or gas to the surface.

PQ silicates, in the form of geopolymers, can be used to provide an effective seal and prevent gas leakage. Geopolymers provide superior plugs to traditional portland cement due to their low permeability, higher stability, ability to handle harsh conditions and self-repairing qualities.

PVC Stabilizer to Reduce Heavy Metals

PVC or polyvinyl chloride piping has become a staple in household and industrial construction due to its inertness and long-life stability under many conditions. Today, in some parts of the world, PVC is stabilized utilizing heavy metals such as lead. Lead exposure can cause serious illness and environmental risks.

PQ has developed cost-effective zeolite-based stabilizers that reduce the demand for dangerous heavy metals. Zeolites are environmentally safe and do not pose a significant risk to human health in processing.

Bio-Based Silicas for Use in Adhesives, Toothpaste, Cosmetics, Paints & Coatings

Our R&D group is constantly seeking and evaluating innovative technologies to provide customers with new products to reduce carbon emissions compared to conventional production methods.

One of the areas we innovate is in bio-based natural silicas that can be harvested from rice hulls, a co-product of the rice milling process. Rice hulls are a renewable farmed resource that naturally contain 18% amorphous silica.

Rice hull silica offers a positive alternative to precipitated or fumed silica. It offers bright white color, flexible particle size to suit customer needs, and is non-nano and non-GMO.

Our People

PQ is built on core values and a company-wide culture of safety and ethical behavior. We are committed to doing the right thing for our customers, our employees and the communities in which we operate. This strong value system provides the backdrop for our company's work ethic, commitment to excellence, dedication to EHS, and our deep appreciation for our global workforce.

Our multicultural company has production in 13 countries which creates a natural diversity of experience and perspective. The global nature of our business creates an environment that is challenging, stimulates innovation and enables growth in the local communities where we operate.

The quality of our employees differentiates us. We believe in investing in our people by providing training and development opportunities. We then capitalize on those new skills globally. This results in a loyal and knowledgeable employee population that contributes to the long term sustainability of a 200-plus-year-old business.

We are passionate about attracting and developing talent that believes in our core values.

Commitment to Diversity

PQ is firmly committed to Equal Employment Opportunity (EEO) and to compliance with all national, federal, state and local laws that prohibit employment discrimination on the basis of age, race, color, gender, national origin, religion, disability, protected veteran status and other protected classifications. This policy applies to all employment decisions including, but not limited to, recruiting, hiring, training, promotions, pay practices, benefits, disciplinary actions and terminations.

We recognize that through diversity we maximize our potential to grow and innovate in a changing world. We gain deeper understanding of both our customers' needs and the environment in which we operate. Diversity supports a richer and more fulfilling employee experience.

Professional Development Through Training and Education

PQ team members believe in our mission and are committed to our core values. Professional development opportunities are offered to all team members and are centered around both our core values and the roles and responsibilities of each employee.

- Our sales and customer-facing leadership participate in **Corporate Account Management training** to learn various communication styles, interpersonal skills, and soft skills such as self-awareness, learning agility, effective communication, motivating others, and influencing outcomes.
- Our **Integrated Business Management training** addresses what it takes to align product, demand, supply, and financial plans in addition to providing insights on the decision making process to close gaps between the latest plans and our business strategy and goals. IBM training adds discipline and process to our planning, to align short-term and long-term goals.

Performance Sharing Plan (PSP)

Introduced this year, the PQ Performance Sharing Plan allows all employees to share in the success of our company. Trackable metrics are set for safety, perfect days and financial targets to align to the total company success. This was designed to expand the number of employees in a bonus program, ensuring that everyone participates in the company's success. This plan provides clear financial incentives for local, regional, business, and company goal attainment for every PQ team member.

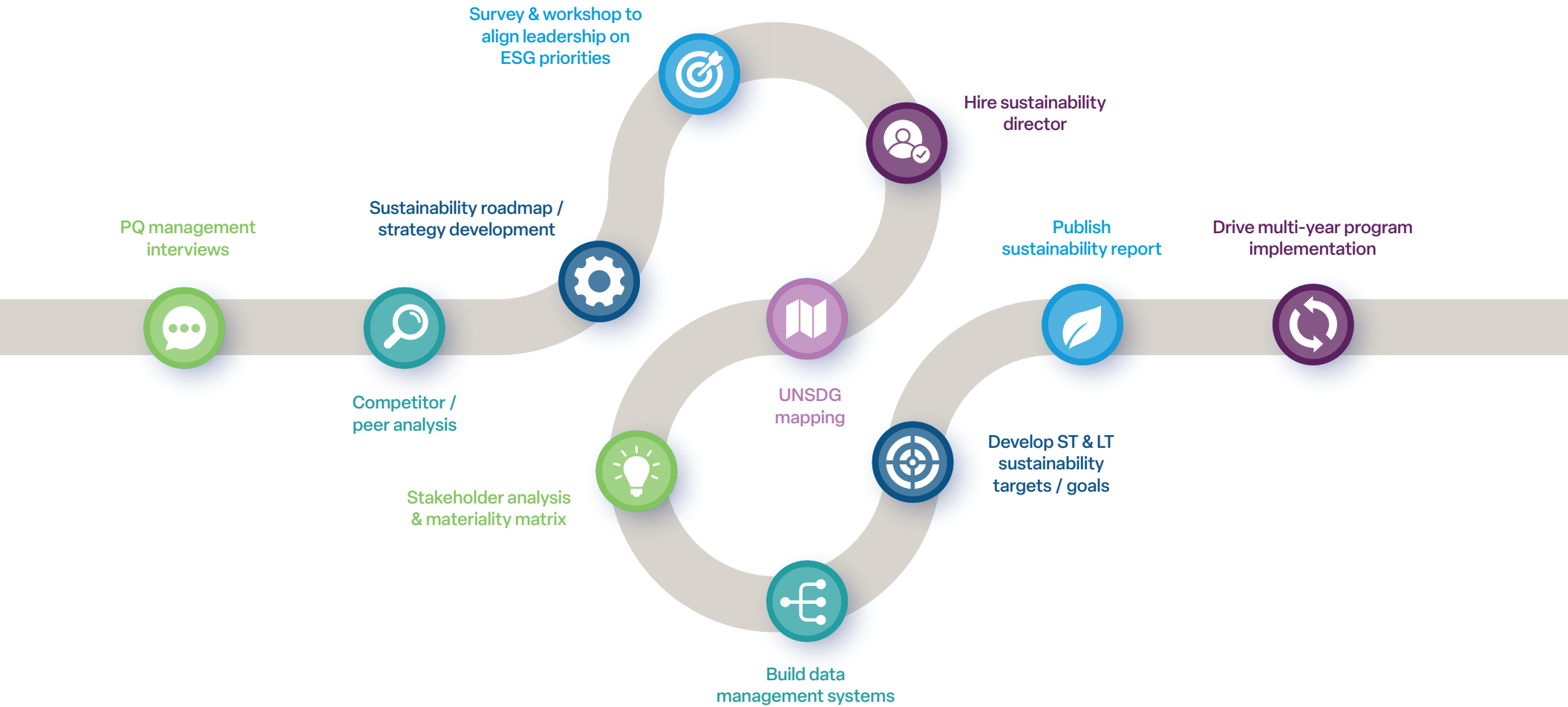
Rewards and Recognition

In addition to the Performance Sharing Plan, PQ is currently developing rewards and recognition (R&R) opportunities to provide additional accolades to individual team members. Currently PQ team members are nominated by the executive leadership based on individual's contributions that tie back in to PQ core values. The goal of the R&R program is to not only acknowledge outstanding individuals but to keep and retain future and current leader.

Growing Our Sustainability Commitment

SUSTAINABILITY PROGRAM TIMELINE

In 2021, we launched a process to formalize and strengthen PQ's commitment to sustainability through the development of a robust sustainability program, beyond our ongoing focus on sustainable products. This process included an in-depth discovery phase, the hiring of a sustainability director, and steps to analyze material impacts and develop sustainability goals.



SUSTAINABILITY DIRECTOR ANGELA KNIGHT

Angela Knight was hired as the PQ Sustainability Director in January 2022, bringing with her more than two decades of experience in EHS at The Dow Chemical Company and Corning Incorporated; where she most recently served as America's Manager for Global Environment and Sustainability. Angie has a BS in Chemical Engineering from Penn State University and is a certified Six Sigma Black Belt.

> "I'm proud to use my experience to help build on the strong foundation of sustainability that PQ has created over the past 200 years. Sustainability has long been at the core of our business, but our ongoing efforts will help to elevate the discussion further around our environmental and social impact."

UNSDG Mapping

The United Nations Sustainable Development Goals (UNSDGs) are key to forming global alignment to achieve a more sustainable future. PQ's business and operations align with many of the UNSDGs, which are being used as a touchstone in our goal setting and public reporting around sustainability and corporate responsibility.

Part of PQ's sustainability program development was mapping the UNSDGs to our business and operations. This helped us identify which goals are most relevant to PQ, and where we can help grow in our impact. We prioritized and mapped these SDGs based on business and operations review, as well as our stakeholder and materiality analysis.

We identified six SDGs that are most relevant to PQ, its business and its operations:

#6 Clean Water and Sanitation: PQ products can be used in purifying drinking water and reducing lead. PQ uses water, maintains water permits and operates water treatment plants.

#7 Affordable and Clean Energy: Silicate production is very energy intensive.

#8 Decent Work and Economic Growth: We market and produce sustainably beneficial products and innovate for sustainable solutions that protect the environment and improve human health.

#9 Industry, Innovation and Infrastructure: PQ products are used in a wide range of industries and infrastructure and enable innovative downstream industries.

#12 Responsible Consumption and Production: This SDG is relevant for PQ in several ways:

- The shift toward sustainable consumption and production is an area of interest for PQ's customers and value chain. Some PQ products are safer/healthier alternative ingredients that can replace toxic chemicals in consumer products.
- Efficient use of natural resources also links to PQ because the company uses natural resources such as sand, soda ash, and fossil fuels in the manufacture of its products.
- As a Responsible Care company, PQ is committed to improving its environmental performance, especially as it relates to waste and chemical releases.
- We are embracing sustainable practices, setting goals and we have plans for public reporting of sustainability information. This includes strengthening our sustainable procurement program, which is important to many PQ customers.

#13 Climate Action: Silicate production is very energy intensive and produces greenhouse gas emissions. At the same time, our products contribute to more climate friendly customer products and solutions.

Stakeholder Analysis

PQ prioritizes transparent dialogue across a variety of stakeholders, with a focus on engagement, feedback and collaboration as it relates to our sustainability program and our continued success as a sustainable organization.

In developing our sustainability program, we identified stakeholders who have an interest in PQ and with whom the company has regular interaction. Six stakeholder groups were identified, along with the specific expectations each group has around PQ's operations and sustainability activities. PQ's key stakeholder groups are: Investors/owners, employees, customers, local communities, government and regulatory bodies, industry and trade associations.

Our engagement with these stakeholders, particularly customers, has influenced our approach to sustainability in various ways, including increasing our conversations about sustainability needs, investing more in technology innovation around products with improved sustainability profiles and benefits, and developing plans for life cycle analysis for our products and operations. We have increased our dialogue with customers about how PQ's products can help them achieve their sustainability goals.

Transparency is an area of interest for all our stakeholders, which we are addressing through the publication of this sustainability report. We also have identified opportunities to increase engagement with the stakeholders listed in the future.

Materiality Analysis

In 2022, we developed PQ's first-ever materiality matrix to evaluate the priorities that our stakeholders placed on key sustainability issues, and the relative importance for PQ.

This analysis resulted in the following key material topics:

- **EHS:** Expanding our commitment to environment, health and safety
- **Climate:** Reducing our greenhouse gas emissions, impacting climate change
- **Energy Efficiency:** Enhancing energy efficiency across our footprint
- **Product Sustainability:** Developing sustainable solutions, chemistry and materials
- **Responsible Operations:** Reducing environmental impact including chemical, water and waste emissions, minimizing unplanned events
- **Social:** Developing more positive interactions within the communities we serve

Sustainability Goals

Based on our sustainability development process to date, we have developed the following sustainability goals:

EHS

By 2028, achieve > 90% "perfect day" performance*

Climate

By 2028, reduce scope 1 and 2 greenhouse gas emission intensity by 15% vs 2022 baseline

Water

By 2028, reduce net water usage intensity by 15% vs 2022 baseline

Sustainable Products

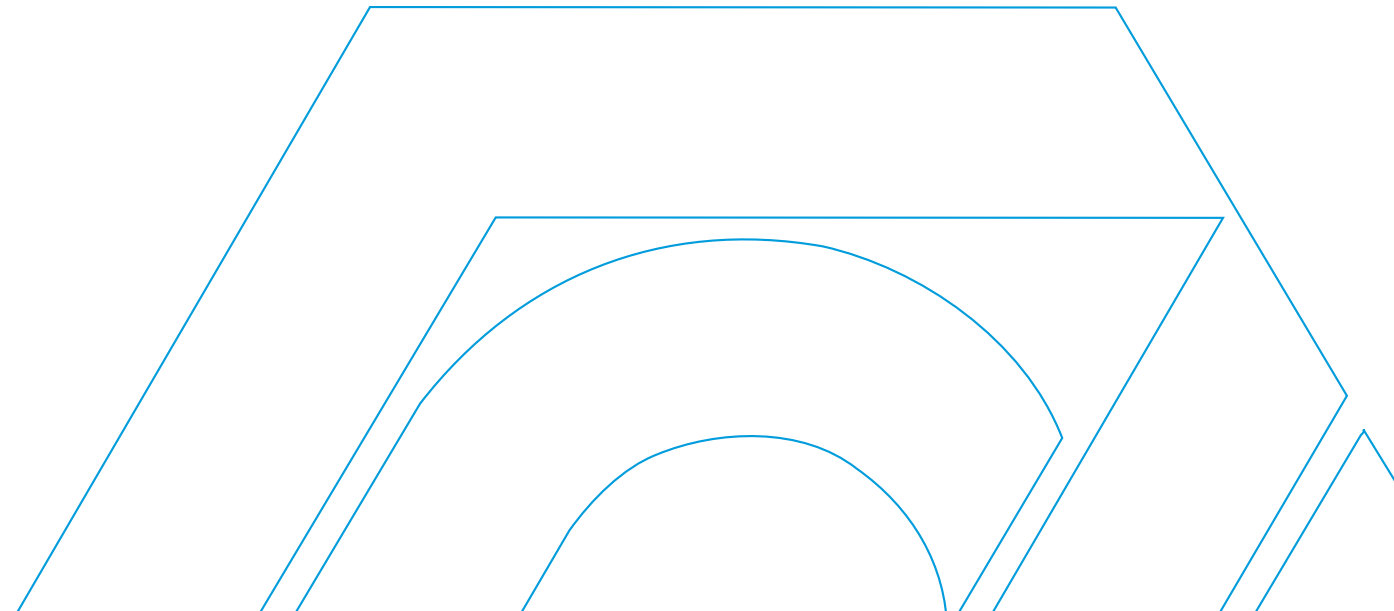
By 2028, 90% of research, development, technology, and innovation will target sustainable solutions

Sustainable Procurement

By 2025, implement a sustainability due diligence program for key suppliers

Social

By 2025, establish a community awareness campaign to facilitate positive interactions with the community



*Refer to page 12 for Perfect Day definition

Approach, Policies & Reporting

MANAGEMENT APPROACH & METHODOLOGY

This PQ sustainability report covers the operations of the organization across its entire footprint.

The report focuses on progress and opportunities in 2021 and early 2022. Quantitative data in the report covers January 2021 to December 2021, unless otherwise noted.

This marks the first report developed by PQ as a new, independent company. A more comprehensive sustainability data management system is currently being built, and will allow further sustainability disclosures in future years, as well as tracking and reporting progress on the company's sustainability goals.

GOVERNANCE AND POLICIES

PQ's commitment to EHS and sustainability is led by company President and CEO Al Beninati, Vice President of EHS Ryan Macleod, Chief Operating Officer Brian Pinkerton and General Counsel, Secretary and Chief Human Resources Officer Stuart Boyd.

Our Environmental, Health and Safety Mission is as follows: Our highest priority is to manufacture, market and distribute products in a responsible manner that protects the environment and safeguards the health, safety and security of employees, contracts, and customers in the community.

We work to realize this mission through a series of guiding principles, which foster a safe and responsible workplace, with a focus on continued improvement and sustainable innovation.

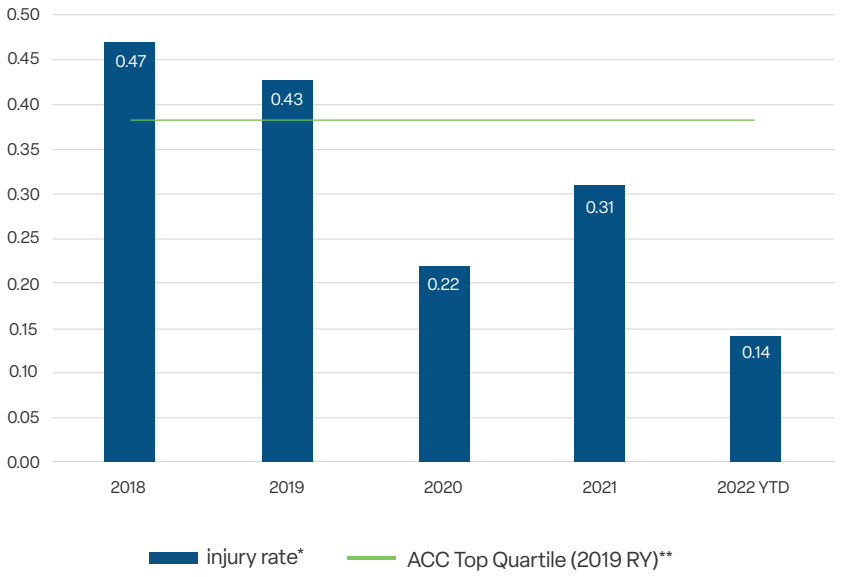
PQ Policies:

- → **Human Rights**
- → **Modern Slavery**
- → **Code of Conduct**
- → **Related Code of Conduct Policies**
- → **EHS Mission and Guiding Principles**

ESG DISCLOSURES

Safety

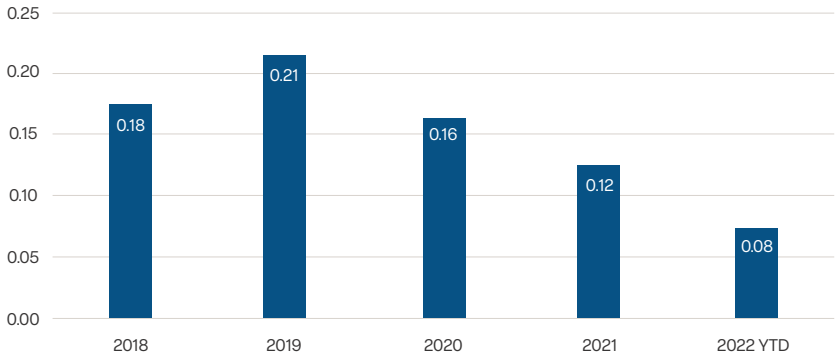
Total Recordable Incident Rate



* Total recordable incident rate (TRIR) is a measure of occupational health and safety based on the number of safety incidents reported against the number of workers present and the number of hours worked

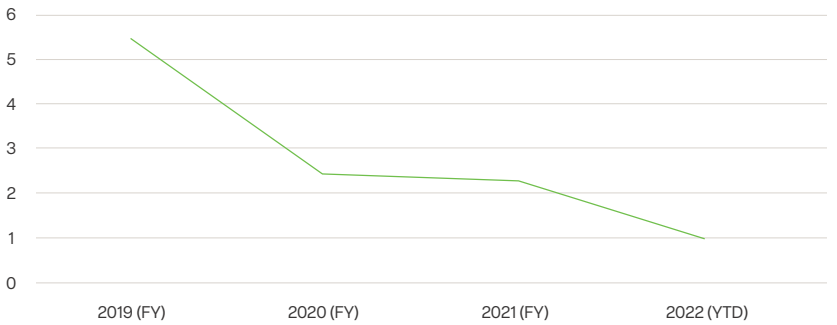
** ACC top quartile benchmark in 2021 is .34

Days Away from Work Rate



Days away from work are described as any employee day away from work resulting from an on-the-job injury or illness

Deviation & Notice of Violations Events

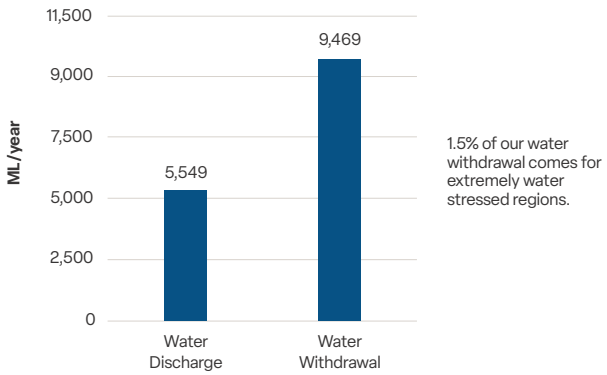


2022 YTD represents a 65% improvement over 2021

ESG DISCLOSURES

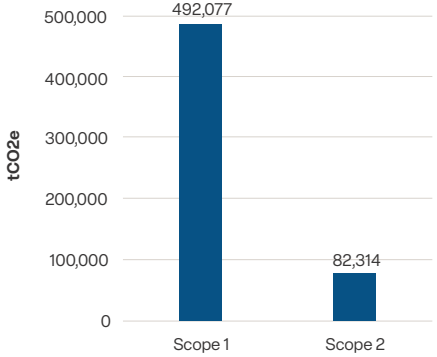
Environment

Water Use

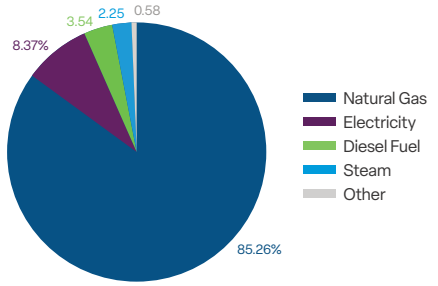


1.5% of our water withdrawal comes for extremely water stressed regions.

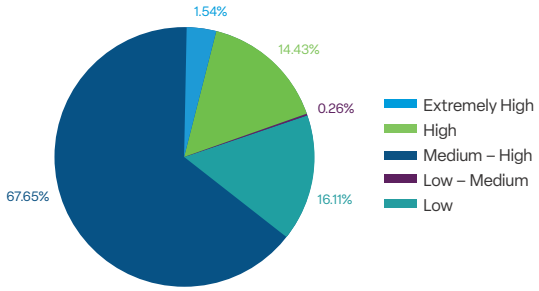
GHG Emissions



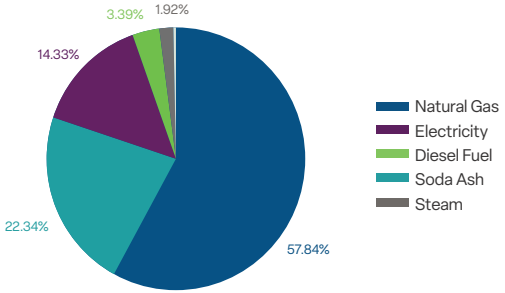
Energy Consumed By Type



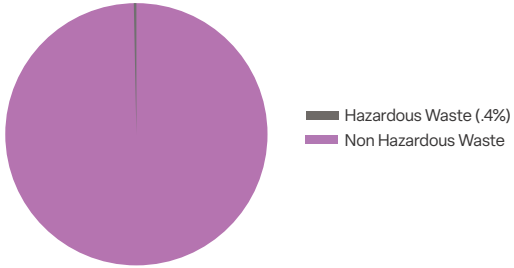
Net Water Withdrawn per Water Stressed Region



GHG Emissions by Energy Type



Waste Generated



**All emissions on this page are from 2021