

2021 Sustainability Report





TABLE OF CONTENTS

Introduction Letter from the CEO	4
About U.S. Silica Our Company	6
Our Core Values	9
Our Sustainability Strategy	10
Our Sustainability Reporting Framework	11
Governance Corporate Governance Oversight	13
Board Oversight	14
Business Ethics & Transparency	15
Product Innovation	16
Environmental Greenhouse Gas Emissions	23
Air Quality	25
Energy Management	26
Water Management	27
Waste & Hazardous Materials Management	28
Biodiversity Impacts	28
Social Diversity, Inclusion & Belonging	31
Workforce Health & Safety	34
Security, Human Rights & Rights of Indigenous Peoples	38
Community Relations	40
Labor Relations	44
Data Security	44
About This Report Forward Looking Statements	46
2021 SASB Index	48

Introduction



2021 proved to be a robust and successful year for U.S. Silica. We demonstrated our strength and resilience as a company while the global economy recovered from the impacts of the COVID-19 pandemic.

Social

Our business segments realized improved pricing and demand, and our energy business was supported by strong commodity prices and customer activity. We also improved upon our diversity, inclusion, and belonging efforts, reported record safety rates, expanded our product innovation, and advanced our sustainability reporting.

In line with our improved corporate culture, we expanded the diversity of our Board of Directors with the appointment of Sandra Rogers, established our first Employee Resource Group, announced our partnership with Junior Achievement, and increased our supplier diversity spend to nearly 10%. Altogether, these actions have demonstrated our unwavering commitment to building a diverse and inclusive environment, which we wholeheartedly believe has made our company and communities stronger.

Last year U.S. Silica achieved our safest year in Company history. Our dedication to training, along with our strong safety culture, are embedded in our values. As a result, we achieved a 13% improvement in our Total Recordable Incident Rate (TRIR) and a 6% improvement in our Lost Time Incident Rate (LTIR) year-over-year.

Through the use of technology, we endeavor to be a leader in the transition to a more sustainable future. Our research and development initiatives have led to new product innovations, aimed at reducing our company's and customers' carbon footprint, while further enabling the transition to renewable energy. To advance our participation in a circular economy, we continue to discover new and creative ways to reuse and recycle products. In 2021, 12% of our Industrial and Specialty Products revenues were generated by products that we consider sustainable and environmentally beneficial to society.

For this year's sustainability report, we have enhanced our disclosures and transparency by aligning our reporting with the Sustainability Accounting Standards Board's (SASB) recommended disclosure topics for the Metals & Mining and Construction Materials standards. Additionally, we revised our approach to monitoring emissions in a way that is in compliance with the Greenhouse Gas Protocol and are in the process of establishing baseline values for future reduction goals.

Finally, I'd like to thank our employees, customers, communities, and other stakeholders for their dedication and support over the past year. At U.S. Silica, we are committed to living our core values by practicing safe production and environmentally conscious and sustainable business practices. From the very beginning, this has been ingrained in our mission and will continue to serve as our guide in the years ahead.

Byzan A. Shin

Bryan A. Shinn Chief Executive Officer

About U.S. Silica

About U.S. Silica

Governance Er



About U.S. Silica

Social

Our Company

U.S. Silica (NYSE: SLCA) is a diversified global performance materials company and a leading producer of commercial silica used in a variety of industrial applications, including the oil and gas industry. Our core competencies include surface mining, processing, logistics, and material science with a rich 120+ year history. We operate two diverse business segments. Our Industrial and Specialty Product segment ("ISP") provides products that are used in renewable energy, building and construction, as fillers and extenders, for filtration, glassmaking, foundry, as absorbents, and in sports and recreation. Our Oil and Gas Proppants ("Oil & Gas") segment provides proppant and last-mile logistics to the onshore U.S. oil and gas industry.



51% of the company's total contribution margin came from the Industrial & Specialty Products segment in 2021

Social

Our company was founded on innovation, and over the years, we have been diligently growing our ISP portfolio. We offer a diverse range of products that not only promote sustainability in our own operations, but also extend sustainable benefits to our customers' operations and communities, by enabling the transition to cleaner energy sources and leaving a positive impact on the environment.



We offer **Solar Energy** solutions with our low-iron specialty silica, used to produce a glass that can better transmit the sun's energy to solar panel cells.



We enable **Wind Power** advancements with our ground silica product offering, a critical component in specialty fiberglass for wind turbine blades.



Our specialty-ground silica products are used to create products that **Lower Auto Emissions** in both personal and commercial vehicles.





The diatomaceous earth we supply is a key processing aid in the production of **Green Diesel**, a clean-burning, sustainable substitute for petroleum diesel. Our diatomaceous earth filtration products comply with the USFCC **Food Safety** standards which limits heavy metals in the food and beverage supply chain.



Our proprietary cool roof granules are used in roofing systems to increase solar reflectance, leading to **Lower Energy Consumption** for buildings.

Social

U.S. Silica Locations



As of December 31, 2021, we operated 24 active production facilities across the United States where we mine for and process commercial and high-quality silica, diatomaceous earth, clay, and perlite. Our geographic footprint and logistics capabilities also provide strategic transportation advantages as they afford us the ability to reach broader market segments.



Our Core Values

Our core values define the U.S. Silica culture and shape our business.



Respect

We treat each other with respect and dignity.

Empower employees to improve personal health and well-being

Create an environment of inclusion across our organization and throughout our supply chain

Safety

We ensure the safety of our people and the environment.

Maintain industry leading EHS programs and manager development

Achieve zero reportable and lost-time incidents

Minimize GHG emissions by reducing fuel and electricity usage at our plants



Integrity

We act with honesty and integrity.

Increase the number of sustainable product offerings

Protect air and water quality in and around our communities

Secure cyber networks to protect our employees, customers, and investors



Community

We operate in our communities as good neighbors.

Increase charitable donations to organizations that support our community

Actively seek opportunities for volunteering and community engagement

About U.S. Silica

Governance

Social

Our Sustainability Strategy

At U.S. Silica, we endeavour to be a leader in the transition to a more sustainable future. Throughout our organization, our efforts and initiatives take into consideration best practices related to environmental management across our footprint, the social welfare of our employees and communities in which we operate, and corporate governance.

Environmentally, we are focused on minimizing greenhouse gas emissions by reducing fuel and electicity usage at our plants. We strive to protect air quality and mitigate water usage in and around our communities, conserve habitats as well as execute customized reclamation plans. Socially, we are committed to maintaining industry-leading environmental, health,

and safety programs with the aim to achieve zero reportable and lost-time incidents through continuous and comprehensive safety training. Additionally, we pledge to emphasize diversity and inclusion throughout our workforce, Board of Directors, and supply chain.

Regarding our company's governance practices, we embrace our ability to innovate sustainable product offerings that promote the transition to clean energy and look to assist our customers in reducing their carbon footprint through offerings that increase their sustainability propositions. We recognize that our commitment to the management of environmental, social, and governance factors contributes to our company's long-term financial stability in addition to being a good corporate citizen.

CORPORATE RESPONSIBILIT Leading the Transition to a More Sustainable Future

- Minimize GHG emissions by reducing fuel and electricity usage at our plants
- **Protect air guality and mitigate** water use in and around our communities
- Conserve habitats and execute customized reclamation plans
- Maintain industry leading **Environmental, Health &** Safety programs with goals to achieve zero reportable and lost-time incidents through comprehensive safety training
- Focus on diversity and inclusion amongst our workforce, Board of Directors, and our supply chain
- Innovate sustainable product offerings that promote the transition to clean energy
- Assist customers in reducing their carbon footprint through offerings that increase sustainability propositions

Introduction

Corporate Sustainability Goals

We hold ourselves accountable to progress and work together to identify new opportunities for growth year after year. We define success from many different viewpoints, with our newly established short and longterm sustainability goals serving as the roadmap for the evolution of our company.

About U.S. Silica

While our goals outline the company's vision to improve our environmental, social, and governance performance, our targets help us measure growth and plan for the years ahead.

Social

Report annual safety metrics that are 4x better than the OSHA industry average and 2x better than MSHA Metal/Nonmetal industry average (TRIR, LTR)

Double the amount of ISP revenue generated from products considered environmentally beneficial to society* by 2026

100% of U.S. Silica mine locations will be active participants in a local, state, or federal habitat conservation organization by 2026 Increase female and racial/ ethnic minority representation across management roles by 10% by 2026

Maintain supplier diversity spend levels above the national average and increase the number of diverse suppliers by 2% year-over-year

*Products considered environmentally beneficial to society include raw materials for wind turbines and solar panels, products that reduce energy and water consumption, filter aids for green diesel and particulate emission filters, lightweight fillers that reduce logistics carbon footprints, and waste products that are recycled and reused.

Our Sustainability Reporting Framework

In support of our ESG expansion efforts, in 2021 we began to align our sustainability reporting and disclosures with leading standards and framework organizations. We believe that aligning and engaging with leading sustainability organizations enables us to increase our ESG awareness and enhance reporting and protocols to evolving best practices, further advancing our sustainability impact.

Sustainability Accounting Standards Board (SASB)

This report follows the guidance of the Sustainability Accounting Standards Board ("SASB") and the recommended disclosure topics for the Metals & Mining and Construction Materials standards. The SASB standards provide a standardized, common reporting approach that yields decision-useful metrics, helps us track progress and enables comparability for our investors and other stakeholders.

To fulfill our commitment to transparency, we determined that a combination of the relevant disclosures in these two industry standards best reflect the topics deemed most relevant to our business operations. We also chose to enhance our disclosures with additional topics that may be considered important to our stakeholders.

When evaluating our disclosures in relation to the SASB standards, users in some cases will need to normalize the data to make meaningful comparisons. As such, we have included certain activity metrics to aid users in their evaluation. We refer readers to our SASB Index beginning on page 48, which highlights our responses to the suggested SASB Accounting Metrics and includes the appropriate activity metrics to assess our disclosed data in a meaningful context.



Introduction

About U.S. Silica

Governance

Environmental

Social

Corporate Governance Oversight

At U.S. Silica, our corporate governance structure is designed to promote high standards for integrity as well as the compliance of best practices across our organization. Our strong corporate governance includes being responsive to the shareholders and other stakeholders of our company. We are accessible and open to engaging with our stakeholders to discuss operational, financial, governance, environmental, safety, and social issues. Maintaining stakeholder trust and goodwill through our policies and performance, while adhering to our values, remain the primary objectives of our company.



Employees

We routinely engage with our employees and use surveys as well as town hall meetings to gain insight into their commitment, motivation, and passion for their work at U.S. Silica. Additionally, we encourage open communication by giving employees the opportunity to ask questions and share concerns during our quarterly townhall meetings.



Investors

Senior management meets with investors regularly. In fact, we contacted our **20** largest stockholders, representing more than **62%** of our outstanding common stock, to obtain their views on our executive compensation program. In the second half of the year, we met with **8** of these stockholders, representing approximately **24.7%** of our outstanding common stock.



Communities

Throughout this report, we have highlighted some of the many ways we engage our communities through volunteering, supporting local and national charities that impact our communities, open house events, educational offerings, and through mock disaster drills with local EMS. Additionally, we regularly attend local events to ensure open communication and involvement with our communities.



Government Agencies

We partner with federal, state, and local regulatory agencies to navigate regulatory paths, improving project efficiencies, and reducing negative impacts. Agencies include the Mine Safety and Health Administration (MSHA), Occupation Safety and Health Administration (OSHA), the U.S. Department of Transportation (USDOT), National Institute for Occupational Safety & Health (NIOSH), and numerous environmental regulatory agencies which foster relationships focused on new technologies and industry best practices that further advance our protection of the environment and our employees.



Customers

We use customer satisfaction customer surveys to measure and gauge our customers' overall experience. In addition to overall customer satisfaction, our plants and our research and development teams are consistently working with customers to identify new and creative ways to minimize waste products.

Based on monthly customer surveys, **92% of respondents rated U.S. Silica above average in** customer service and performance.



Suppliers

U.S. Silica partners with leading technology suppliers that are consistently engaged in our operations and business partnerships. We rely heavily on their experience and technology to assist us with optimizing our operational processes. They are an imperative asset to our entire U.S. Silica Team.

Social

Our Corporate Governance Guidelines provide principles for Board matters, including the requirements, responsibilities, and leadership structure of our Board. The respective committee charters, as well as a description of roles and responsibilities, for our Audit, Compensation, Nominating and Governance, and Executive committees can be found on our website at <u>ussilica.com</u>.

Additionally, we have Codes of Conduct that specifically apply to our Board of Directors, officers, employees, and vendors.

Our Board of Directors



Our Board of Directors is led by an independent Chairman, Charles Shaver. We believe that each board member exhibits an effective mix of skills, experience, diversity, and viewpoints that will enable them to make a significant contribution to the Board, the Company, and our stakeholders.



As part of our commitment to expand on Board diversity, Sandra Rogers was appointed to the company's Board of Directors in October 2021. She brings complementary and valuable operations and supply chain experience and has been asked to also devote incremental emphasis to our ESG program development.

With the addition of Ms. Rogers, we now have more than 30% female representation on our Board.

Board Oversight

U.S. Silica's Board of Directors recognize their responsibility of oversight and are committed to high standards of ethical conduct and corporate governance. The Board's core responsibilities include fostering our company's long-term success, overseeing the business and acting in good faith and in the best interests of our shareholders and other stakeholders. U.S. Silica's Board of Directors discusses and stays abreast of company environmental, social, and governance-related matters.

Internally, a dedicated ESG Steering Team is comprised of senior members of the corporate management team, including our CEO. The ESG Steering Team meets regularly to discuss progress related to our ESG goals and targets as well as to further identify and assess risks and opportunities for the organization's sustainability best practices and process improvements. Our CEO leads the internal ESG Steering Team and reports all ESG developments directly to the Board of Directors.

Board Highlights

Our director nominees exhibit an effective mix of skills, experience, diversity, and perspective.

GENDER DIVERSITY

33% Female board representation

Male •••• Female ••

RACIAL/ETHNIC DIVERSITY

17% 1 racial/ethnic minority

5 of 6

are independent

BOARD REFRESHMENT

new director added since 2020

INDUSTRY & OPERATIONAL EXPERIENCE

AVERAGE DIRECTOR AGE

62.5

AVERAGE TENURE

8 Years



Compensation

Our executive compensation programs are designed to support long-term corporate strategy and shareholder values. The Compensation Committee recognizes the importance of achieving an appropriate balance between rewarding executives for strong performance and establishing realistic but rigorous targets that continue to motivate and retain executives. We intentionally allocate a significant portion of total compensation to be at-risk and performance-based, combining company and business unit financial metrics as well as individual priorities in our short-term incentive plan, and relative performance metrics and time-based awards in our long-term incentive plan. Performance-based compensation motivates employees across the organization. Certain members of our senior leadership team, as well as all plant supervisors, plant managers, and business unit leaders, have portions of their short-term incentive compensation tied to the achievement of personal performance goals, several of which are in ESG areas. These goals include diversity, inclusion, and belonging initiatives, supplier diversity, cybersecurity, environmental, and employee safety goals.

Business Ethics & Transparency

At U.S. Silica, we are committed to operating our business with integrity, honesty, and in accordance with the law. We believe that our <u>Code of Business Conduct and Ethics for Employees</u> and our <u>Vendor Code of Conduct</u> are important tools for helping us meet these commitments. Our mines and processing facilities are located in the United States of America, and we require vendors to comply with all applicable laws, rules, and regulations as they relate to anti-bribery and corruption.

Additionally, we have made available the following governance documents on our website for stakeholders to have a comprehensive view of our programs:

- <u>Corporate Governance Guidelines</u>
- Policy on Insider Trading
- <u>Supplier Diversity Program</u>
- Human Rights Policy

- Clawback Policy
- <u>Code of Conduct for the Board of Directors</u>
- <u>Audit Committee Policy on Complaint Procedures</u> for Accounting and Auditing Matters

Stockholders and interested parties who wish to communicate questions or concerns to the Board of Directors may do so by contacting the Corporate Secretary's office at:

Corporate Secretary U.S. Silica Holdings, Inc. 24275 Katy Freeway, Suite 600 Katy, TX 77494



Product Innovation

We are constantly evolving our business to expand the current boundaries and uses of minerals, including ways to recycle and reuse our waste products. Our product innovation provides us with organic growth opportunities into new, sustainable industries while improving the effectiveness and competitive advantages of our customer offerings. A robust pipeline of new innovations is aimed at reducing both our company's and our customers' environmental footprints. Each year, we identify new sustainability opportunities and invest in profitable solutions to protect and enhance the communities in which we live and work.

Research and Development

We regularly research, develop, and bring new products to market with the aspiration to create value for both our customers and our company. New products are typically developed based on customer needs for alternatives to carbon-intensive raw materials, to replace more costly input products, or to improve the performance of their existing end products. Our technical and commercial teams bring centuries of combined experience, which give us the ability to evaluate new product opportunities quickly and effectively.

We have two main corporate labs, located in Berkeley Springs, West Virginia, and Reno, Nevada, along with numerous quality labs located alongside our manufacturing and production facilities across the country. Customer interest and feedback are sought early in the development process. This valuable input helps guide the alignment of fit-for-purpose products and increases our chances for commercial success. We manage a portfolio of research and development projects that range in duration from less than one year to more than five years in commercial delivery time. Many new products are already trialed and qualified with customers before full-scale production begins. More recently, we have focused on high-value industrial mineral offerings that are essential for the transition to cleaner energy and help our customers meet their ESG goals. Several new products have already been commercialized and continue to gain greater customer adoption. In 2021, we filed six new U.S. and 23 foreign patent applications. Likewise, in 2021, six U.S. patents and 24 foreign patents were granted based on previously filed applications.

Last year, **12%** of our ISP segment's revenues were generated by products that we consider environmentally beneficial to society, such as raw materials for wind turbines and solar panels, products that reduce energy and water consumption, filter aids for green diesel and particulate emission filters, lightweight fillers that reduce logistics carbon footprints, and waste products that are recycled and reused.

Our target is to double the amount of revenue generated from products classified as environmentally beneficial to society by 2026. We plan to achieve this through the commercialization of new products that we have in our pipeline, as well as through continued customer adoption of already available environmentally beneficial products.

Our target is to double the amount of revenue generated from products classified as environmentally beneficial to society by 2026.

Introduction

Building Products- Offering a more sustainable solution

About U.S. Silica

Governance

Environmental

With our state-of-the-art production facility in Millen, Georgia, we're able to domestically manufacture products like WhiteArmor® cool roof granules and EverWhite™ cristobalite, which were previously available to customers primarily via import from Europe or Asia. By sourcing domestically, companies can reduce their fuel consumption, greenhouse gas emissions and negative impact on air, land, water, biodiversity, and these stronger, more sustainable geological resources from the importing process. By expanding our operations to serve as a domestic source for these dynamic products, we are supporting the use of domestic resources and reducing the environmental impacts that result from excessive, unnecessary transportation.

Sustainable product pipeline priorities

technology to enable the production of pozzolans, a next generation range of additives that produce stronger, more durable concretes to enable greater infrastructure efficiencies. These concretes allow for a more effective use of fewer resources, ensures the preservation and

U.S. Silica is investing in new

restoration of surrounding ecosystems, and produces longer-lasting pavements.

Limestone was previously considered a waste byproduct of our mining operations at our Berkeley Springs, West Virginia location. We are now repurposing limestone for roadbase, which is used in asphalt, and is being utilized for local road and highway infrastructure projects. This limestone deposit meets several sustainability goals, as it reduces our customers' transportation-related carbon footprint for nearby construction projects and allows for us to repurpose waste while efficiently utilizing reserves. We are excited about the successful repurposing of limestone at Berkeley Springs and are looking to expand this opportunity at other locations.

Advancing cool-roofing technology

Social



requirements in commercial buildings. Cool roof granules help reduce the rising heat island effect in cities, which commonly see higher temperatures due to the large concentration of buildings with flat, dark roofs. By using cool roof granules, communities can reduce ambient air and surface temperature, while also guarding against negative impacts on air and water guality.

Reducing our partners' environmental footprints



In addition to cool roof granules, our Millen facility also allows customers the ability to reduce their supply chain footprint with domestic sourcing of cristobalite, a key ingredient in high-end quartz countertops for homes and businesses. Strategically located near seven of the top ten U.S. quartz countertop manufacturers, our Millen

17

facility has the ability to produce more than 200,000 tons of cristobalite per year as we expand its share in many highvalue, growing markets and create a more efficient supply chain for our customers.

Glass

U.S. Silica operates at the forefront of renewable energy as a key mineral supplier, and we look to support new developments that increase the ability to produce renewable energy more readily and with greater accessibility. Introduction About U.S. Silica Governance Environmental Social About This Report 2021 SASB Index

Low-Iron Silica Sand

U.S. Silica possesses unique low-iron specialty silica reserves. Our products, which are processed to meet specific criteria and standards, are used to produce a glass that can better transmit the sun's energy into solar panel cells, offering enhanced solar energy solutions for customers. Our low-iron silica sands are currently found



in 15-20% of the newly installed solar panels in the U.S., which supported the 58% growth in U.S. solar installations in 2020–2021 and are now used in approximately 50% of U.S. solar glass production. In 2021, the U.S. solar industry achieved record growth with solar installations, expected to quadruple by 2030.

Specialty-Ground Silica



Wind power's share of U.S. electricity generation increased from **8.8% in 2020 to 10% in 2021.**

Our specialty-ground silica products offer unique combinations of particle size, chemistry, and consistent quality, rendering them ideal critical components in highvalue fiberglass products for wind turbine blades. Additionally, we are the sole supplier to most facilities in the U.S. that produce composite fiberglass for the purpose of wind

turbine blades and estimate that our products are used in more than 80% of domestic wind turbine blades.

Filtration

The diatomaceous earth ("DE") and clay products we supply are ideal for many applications. U.S. Silica actively explores the unique characteristics and natural filtration and absorption capabilities across emerging growth markets such as pharmaceuticals, sustainable fuel production, and stringent food safety concerns.

Exploring high-value applications in the pharmaceuticals sector



We are growing our investments in a small but rapidly developing market using high-purity DE to filter blood plasma. Blood plasma is a vital component of several life-saving therapies and treatments, and it is essential to use high-purity products for the filtration of plasma during the manufacturing process for various medical end-uses. Recognizing

the market potential for continued growth, U.S. Silica initiated research and development to bring a new filtration aid to market. In 2020, we fully commercialized our blood plasma filtration aid and are currently in product qualifications with the major blood plasma companies across the globe. Today, we are one of only a few companies in the world to produce an ultra-high purity filter aid that meets the increasing demands of blood plasma customers.

Demand for blood plasma is rising at a rate of more than 6% per year. Pharmaceutical companies around the globe continue to add capacity to their operations and product lines to meet demand. About U.S. Silica

Governance

Environmental

Min-U-Sil® Fine-Ground Silicas

Our Min-U-Sil® Fine-Ground Silicas are used to create gas and diesel particulate filters that lower

Min-U-Sil® usage in automotive emissions lowering technology continues to grow globally. We added new customers in 2021, increasing our market share in this industry.

automotive emissions in both personal and commercial vehicles. These new technologies have seen an increase in adoption due to global regulations such as Euro VI and China 6 emissions standards.

Diatomaceous earth and clay products play key roles in turning oil waste into green diesel



Green diesel is a fuel that is chemically similar to petroleum diesel but is 100% sustainable and derived from renewable and recyclable resources such as natural fats, vegetable oils, and greases. Our DE and clay products are used to pretreat the waste agricultural products and begin the conversion process to green diesel. By using

green diesel, trucking fleets can substantially reduce their carbon emissions and petroleum use, contributing to improved air quality, without sacrificing performance. Based on announced projects in the sustainable fuel production sector, demand for DE and clay products are projected to quadruple by 2025. U.S. Silica is expanding its opportunity to contribute to this innovative

Fuel of the Future: **Demand for green** diesel is projected to increase by more than 100% by 2025.

technology by exploring better ways to produce more efficient products and continue to lower the carbon footprint.

Bleaching Clay Adsorbents and Filter Aids support the most stringent food safety standards



Our DE and bleaching clay products are complimentary to one another and serve to purify everyday food and beverage products. As global edible oil consumption continues to grow, there is an increased need for highquality adsorption and filtration methods derived from natural sources. Bleaching is an important

step in edible oil production as it removes toxic substances and protects flavor, color, and quality. Our bleaching clays are used in the purification process to remove color bodies and unwanted contaminants, and

then our DE is used to remove the bleaching clay particles, the wax that is created after the oil cools, and to clarify the oil.

From 2015 to 2020, alobal edible oil consumption increased by 14%.

In 2021, we expanded the use of our high purity DE products

to new food and beverage customers in the juice and flavoring industry. Our products are contributing to improved health and safety in this market and we plan to implement this same product performance in other industries.

Performance Aggregates and Natural Powders

At U.S. Silica, we are committed to innovating, creating, and manufacturing revolutionary new products from DE, perlite, sand, and clay. We actively partner with our customers to develop new and custom products, understanding that every business has unique needs.

Increased customer demand: Organic food sales have nearly doubled in the U.S. over the last decade, from \$24 billion to \$56 billion.

Introduction

About U.S. Silica

Governance

Environmental

Social

Organic product sales continue rapid growth



U.S. Silica's investment in the OMRIregistered DEsect® insecticide, commonly used in the production of organic crops, has allowed us to expand our presence in the commercial agriculture business. DEsect® is a natural DE powder that kills insects mechanically through dehydration, thereby increasing its effectiveness and eliminating the possibility for immunity

to its action, unlike chemical insecticides.

Improving the soil structure from personal gardens to professional stadiums

U.S. Silica also produces AXIS®, a lightweight soil amendment which helps with moisture retention, thereby reducing the amount of water necessary for places like golf courses, parkways, and rooftop and commercial gardens. AXIS® dramatically accelerates germination by maintaining ideal moisture and oxygen levels in the seed bed and by promoting a healthy population of beneficial soil microbes. A pest-free, chemical-free, all-natural product, AXIS® provides U.S. Silica customers with an environmentally friendly soil conditioner that can contribute up to 8 LEED points as certified by the U.S. Green Building Council.

Benefits include:

- Allows up to 50% reduction in irrigation needs
- Reduces run-off rates by increasing on-site permeability and infiltration and reducing contaminant discharge
- Improves microbial growth necessary for wastewater filtration and decomposition in bio-retention areas, rain gardens, and bioswales
- Encourages higher moisture retention and better evaporative cooling
- Reduces wastewater generation while increasing the local aquifer recharge



AXIS® was shown to improve the performance of USGA-specified golf greens and save up to 30% on turf watering needs. At the University of Florida, AXIS was shown to increase the vigor of Hibiscus plants in containers, resulting in a 40% increase in size versus plants in standard potting mix.



Supporting one of the fastest growing trends in resilient retail products

We recently partnered with a leading consumer brand to provide the base material for a new lightweight pet litter. Our lightweight litter is half the

density of conventional pet litter, enabling logistical efficiencies and contributing to a reduced carbon footprint on behalf of the producer. Due to the weight and volume reduction, the producer can increase the number of cartons shipped by up to 175% and use 30% fewer trucks to transport this product when compared to conventional alternatives.



Additives, Fillers & Extenders

We take great pride in our innovative history, and when it comes to our fine-ground silica products, no one matches the fine particle size grinding that we are capable of. U.S. Silica manages a compelling product pipeline in this space. For example, we are investing in proprietary technologies for a new portfolio of Reinforcing Fillers. This high-performance range of products can increase the strength and durability of polymer-based products. Our Min-U-Sil® products, a natural, fine-ground silica, allow us to support several different applications. Fine-Ground Silica is a critical additive for a variety of large, diverse end markets:

- Silicone and Other Industrial Rubbers
- Industrial and Architectural Coatings
- Epoxies & Urethanes

Social

- Ceramics
- Specialty Cementitious Products

Participating in the Circular Economy

We also partner with our customers to assist them in their own waste reduction and look for new and creative ways to recycle products and participate in the circular economy. While still under development, we expect to offer products made from natural sources and 100% post-consumer recycled content in the future.

Governance

Environmental

Social



Environmental

We believe climate change presents real risks for the communities where we work and live, and that it may pose significant business disruption risks to our operations. Severe weather conditions may negatively impact our facilities and equipment or prevent personnel from accessing our job sites. It may delay or curtail the delivery of products or services. It may also interfere with our customers' operations which could reduce demand for our products.

Therefore, we endeavor to be a leader in the transition to a more sustainable future through our efforts and initiatives related to environmental management across our footprint. It is our priority to innovate new products and approaches that combat climate change and improve our operational efficiency.

Greenhouse Gas Emissions

Monitoring both our energy consumption and greenhouse gas (GHG) emissions is critical to working to reduce them in the short and long term. As responsible, committed community partners, it is important for us to be transparent and collaborative as we work to reduce our impact on the planet.

To conform with the Greenhouse Gas Protocol on emissions reporting, in 2021 we revised our approach to monitoring emissions through the work of a third-party emissions expert. They conducted a comprehensive analysis of both Scope 1 and Scope 2 GHG emissions across all of our locations. The 2021 data will be the first year of a three-year collection process that will establish a baseline value for average total emissions. This baseline analysis will be used on a continuous basis to set and track ambitious reduction goals.

At many of our plants, GHG emission reductions are already underway, with the implementation of new tools to enhance existing sustainability practices, increase operational efficiency, and reduce fuel usage.



Scope 1 & 2 Greenhouse Gas Emissions

(metric tons CO₂e)

Introduction About U.S. Silica

Governance

Environmental

Moisture reduction decreases fuel usage

Throughout the mineral journey, from raw ore to final refined product, the ability to control moisture content is crucial. Once a product is mined, it may require transportation offsite for further processing. By prioritizing onsite moisture reduction, we can avoid transporting unnecessary water weight and utilize fewer transportation units.

At our plants in Lovelock, Nevada, and Vale, Oregon, moisture analyzers were added to build on the success of our 2020 efforts that prioritized natural heat and sunlight to initiate the drying process. Moisture analyzers ensure the product has sufficiently dried naturally and is ready to go in the kilns, providing more data and control over the drying process. This has enabled us to be more efficient by moving greater amounts of naturally dried product through the kilns, thereby reducing our overall drying fuel usage.

At our plant in Crane County, Texas, a vacuum pad was installed to pull moisture out of the sand before it enters the dry side of the plant. This pad's vacuum action can remove up to 600 gallons of water per minute, providing numerous benefits for our production and sustainability practices. Not only does it save fuel during the drying process by reducing the moisture level of products before they enter the dryer, but it also enables the reuse of water in other parts of the plant.

Efficiently loaded trucks make fewer trips

At our Lovelock and Vale mines, we also began using load cells to weigh trucks and ensure they are precisely loaded for maximum efficiency and in compliance with state trucking laws. Before implementing the load cells,

truck load weights had a high variability of ±8%. Since implementing load cells in July, the Vale site has run 110 fewer loads, which saved 2,000 gallons of diesel fuel.

> fewer truck loads 2,000

Reduced idle time saves fuel and emissions

We have installed GPS tracking devices on trucks in Lovelock and Vale to conserve fuel by tracking drivers' routes, distances, and idle times. Idle time, whether spent at a stop light or during the loading or unloading process, burns 0.8 gallons of diesel per hour.

At Lovelock, trucks spend 30 to 36% of their time idling. By turning off the truck's engine during loading and unloading, the plant is targeting a new, reduced idle time percentage of

In Vale, when idle time was reduced from 22% to 16%, CO, emissions were 17,000 pounds lower.

15% and anticipating upwards of 2,000 gallons of saved diesel fuel. In Vale, where they have already reduced idle time from 22% to 16% in the fourth quarter of 2021, CO_2 emissions have been reduced by about 17,000 pounds.

As our GHG emissions data collection evolves, we will further manage and improve our emission mitigation efforts to ensure a safe and healthy planet for us all.







Air Quality

We are committed to monitoring and reducing our air emissions—including carbon monoxide, oxides of nitrogen, oxides of sulfur, particulate matter, mercury, lead, and volatile organic compounds—in compliance with or exceeding industry best practices and regulatory standards. We take seriously the potential human health and environmental impacts of these pollutants and work diligently to mitigate these risks. We are proud to offer products that help our customers reduce their carbon footprints as well.

Air Emissions of the Following Pollutants (metric tons)*	2021
СО	631.9
NOx (excluding N ₂ O)	1,582.1
SO _x	504.5
Particulate Matter (PM ₁₀)	658.3
Mercury (Hg)	0
Lead (Pb)	0
Dioxins/Furans	0
Volatile Organic Compounds (VOCs)	221.2
Polycyclic Aromatic Hydrocarbons (PAHs)	0
Heavy Metals	0

* Air emissions are inclusive of mobile equipment

About U.S. Silica Governance

Neutralizing carbon emissions

In the process of extracting quartz sandstone at our mine in Berkeley Springs, West Virginia, we also uncover limestone that went previously unused. In 2021, we began exploring ways to reuse this natural resource and have found the limestone to be an effective contributor to reducing carbon emissions at coalpowered plants. The limestone contains a favorable level of calcium that neutralizes the carbon emissions in flue gas when introduced into the combustion stream of coal-fired power plants. The limestone can either be ground and injected into the coal burner, or left in pebble-sized pieces and blended with the coal before being fed into the burner. We plan to commercialize this new product offering in 2022.



Moderating air emissions by using local materials

The limestone in Berkeley Springs can also be used as a construction aggregate and base coating for local roads. More than 1,300 tons of Class 1 Modified Limestone was used to build an entrance road at a nearby processing plant in the fall of 2021.



American-made cristobalite

In 2021, U.S. Silica surpassed a European supplier and became the top domestic supplier of cristobalite. By shortening the transportation distance from thousands of miles to mere hundreds, we are assisting in greatly reducing our customers' carbon footprint.



Lowering automotive emissions worldwide

Our Min-U-Sil® Fine-Ground Silicas are used to create particulate filters that lower automotive emissions in both personal and commercial vehicles.

Energy Management

Across our footprint, we are prioritizing the use of natural or renewable energy sources where available, and we continually evolve and adapt to improve the energy efficiency of our facilities and operations to further reduce our overall energy consumption.

As the access and availability of renewable energy improves, U.S. Silica will continue to evaluate our ability to purchase greater amounts of renewable energy when presented with more than one option for energy providers. Per the SASB standard, we are restricted from reporting renewable energy consumed that is not under our direct control. However, we do monitor and promote our electricity vendors to source renewable energy where appropriate. In 2021, an average of 8.13% of our grid electricity sourced by our vendors was from renewable energy sources.

Energy Consumption	2021
Total energy consumed (Gigajoules (GJ))	1,335,816.11
Percentage grid electricity	100%
Percentage renewable	0%*

*Per SASB 4.3.3, the renewable portion of the electricity grid consumed that is outside the control or influence of the entity is excluded from the scope of reported renewable energy.

About U.S. Silica

Social

In 2021, U.S. Silica's WhiteArmor® Cool Roof Granules (CRG) technology, an area equivalent to 1,110 football fields.



Water Management

Water is a critical part of our operations, and we have a serious responsibility to prioritize water conservation for the protection and enrichment of our planet and its resources. To achieve this, we are enhancing water conservation and recycling efforts across our footprint, ensuring that drawing, using, and discharging fresh water is done responsibly and in compliance with water management regulations and standards.

In 2021, we recycled 102.8% of our water based on our ability to recycle our water multiple times before leaving the process. The 2021 data will be the first year of a three-year collection process that will establish a baseline value for average water usage. This baseline analysis will be used on a go-forward basis to set and track ambitious reduction goals.

Water Usage (thousand cubic meters (m³)	2021
Total fresh water withdrawn	84,640
Total fresh water consumed	30,977
Percentage recycled	102.8%
Percentage in regions with high or extremely high baseline water stress	3.4% of total water withdrawn; 7.0% of total water consumed

Mindful water reuse

The vacuum water pad installed in Crane County, Texas, previously discussed in the Greenhouse Gas Emissions section, does not just help reduce emissions. It also allows for the collection and reuse of water at the plant. In 2021, we recycled 67 million gallons of water collected from the vacuum water pad. This is critically important to the West Texas area and particularly where our facility is located, which suffers from a scarcity of water. It is important to us, as a trusted community partner, to do all that we can to reduce the water impact on the West Texas region.



IN 2021, WE RECYCLED

67 million gallons of water collected from the vacuum water pad

U.S. Silica 2021 Sustainability Report

Improving the quality of local water

As we mine for raw materials, we remove tailings (ultra-fine materials like clay and silt) and deposit them into a tailings basin to settle. Once the tailings have settled and the water in the basin reaches an appropriate level of total suspended solids (TSS), the water is recycled back through the processing system or discharged to the local watersheds.

Our facility in Ottawa, Illinois, has the highest discharge rate of any U.S. Silica facility and contributes discharge water to the Illinois River that is nine times higher quality than the receiving water in the river (100 parts per million). By dredging the Ottawa basin further, we have been able to increase the tailings settlement rate. By December 2021, the discharge water had a TSS level of less than 4 parts per million—a 500% improvement from 6 months prior. This means that, due to best-in-class tailings management, the discharge water is improving the quality of the Illinois River.

Waste & Hazardous Materials Management

At U.S. Silica, we are dedicated to the prevention of pollution resulting from our operations through strict waste and hazardous materials management. We employ pollution prevention measures, such as increased operational efficiency and the reuse and recycling of materials, to minimize the impact of our activities on the environment.

We also seek to minimize risks to our employees and the surrounding communities by employing safe operating procedures, utilizing advanced monitoring technologies, and by incorporating environmental process controls and emergency preparedness practices into our operating approach.

In 2021, we began reporting our waste numbers. This data will be collected over a three year period to establish baseline levels of annual waste, allowing us to set reduction goals for the future.

Waste (metric tons)	2021
Non-hazardous waste	14,368.48
Hazardous waste	0.76
Recycled waste	2,795.47

Tailings data

Social

We recycle or reuse 100% of our tailings. Materials such as silt and clay that are removed from the sand during mining, are used for land reclamation or can be re-processed into new products.

Recycling glass for quartz countertops

We not only seek to reduce our own waste, but to also help our customers do the same. The customers who use our sand to make glass typically generate a large amount of wasted glass byproduct that was previously sent to landfills. In 2021, we began reprocessing this glass, turning it into high-value minerals that can be used to make quartz countertops. Not only does this recycle previously wasted glass, but it also eliminates the need for virgin minerals.

We plan to commercialize this new recycled product offering in 2022 as part of our intent to participate in a circular economy. A circular mining economy will encourage greater responsible mining practices, reduce waste and emissions, and increase product reuse and recycling.

Biodiversity Impacts

We have a responsibility to preserve the planet and its natural environment in everything we do. Across all of our operations, we take precautions to protect and enhance the flora and fauna of the communities in which we operate.

Our mines have developed customized reclamation plans unique to the natural habitat, environment, and ecosystem of the area, and conduct annual evaluations of policies, procedures, and programs related to habitat conservation.

Concurrent reclamation in Berkeley Springs

Ongoing mine reclamation practices allow natural habitats to rebound and flourish. In Berkeley Springs, West Virginia, for example, tailings and sand stockpiles serve as a key part of the concurrent reclamation process. These materials are natural byproducts of our operations and are readily onsite and available for reuse, allowing for concurrent reclamation as soon as we are done mining, rather than handling the material multiple times. By reclaiming the land in parallel, we are able to maintain a more natural habitat while also reducing transport emissions by half.

28

Introduction



Providing bluebird habitats

The bluebird has experienced habitat loss throughout North America due to land clearing for development, depriving them of their natural nesting cavities. In addition, predators and increased competition for nesting space from other bird species have jeopardized the bluebird population.

At our sites in Mauricetown, New Jersey, and Ottawa, Illinois, we have partnered with neighbors and local chapters of the North American Bluebird Society to provide safe nesting boxes, food, and other habitat management measures to support the bluebird populations in these areas.

In early 2021, we donated labor and materials to Mauricetown for the installation of 6 bird boxes which were designed and installed according to the strict criteria established by the New Jersey Bluebird Society. By the end of the Spring, we had nearly 30 bluebird hatchlings out of the 970 total for all of Cumberland County. One of our team members worked with a passionate neighboring resident and the bluebird society to band the babies so they could be identified and monitored into adulthood.

Protecting against invasive plant species

In Rockwood, Michigan, we own 95 acres of wetland in the Pointe Mouillee State Game Area, a protected wildlife habitat at the mouth of the Huron River at Lake Erie. A rare, flowering plant called the Sagittaria Montevidensis, or "giant arrowhead," grows on this land and is threatened by an invasive weed called Phragmites Australis, or "common weed," which creates dense stands that damage the wetlands and crowd out native species.

Since 2016, we have partnered with the U.S. Fish and Wildlife Service to conduct invasive species management, protecting the giant arrowhead and the broader native biodiversity of the wetlands. We are proud of this longtime partnership and the improvements made to the land's biodiversity.

Surveying for Dunes Sagebrush Lizard habitat

The Dunes Sagebrush Lizard is a rare species found only in southeastern New Mexico and areas of West Texas, near our Crane County facility. The lizards are habitat specialists, meaning they live only in small, specific regions with certain environmental conditions. Construction and other habitat disruptions have dramatically lowered the lizard population, causing it to be listed as endangered by the New Mexico Department of Game and Fish. It is also a candidate for listing under the Endangered Species Act by the U.S. Fish and Wildlife Service.

Despite no recorded sightings of a Dunes Sagebrush Lizard in Crane County since the 1960's, we have been proactive and conducted full habitat surveys in 2018 and 2021 to determine the habitat suitability of our land. We remain committed to monitoring our land and ensuring our operation is not adversely impacting the species.



Introduction

About U.S. Silica Governance

Environmental

ital Social

About This Report 2021 SASB Index



Diversity, Inclusion & Belonging

U.S. Silica fosters a strong culture and sense of belonging through a diverse and inclusive workplace. In 2020, a comprehensive Diversity, Inclusion, and Belonging framework was implemented to deepen our commitments to this initiative across the company. The efforts begin with our hiring process and thread through every aspect of our company's operations. We aim to create an inclusive company culture where diverse perspectives are heard and valued. We appreciate diversity not only in our workforce, but in our customers and suppliers as well. We recognize that a diverse mix of backgrounds, skills, and experiences drive new ideas, products, and services and provides us with a sustained competitive advantage. This diverse mix of voices makes our company, our partners, and our communities stronger.

All employees play a critical role in fostering a diverse, respectful workplace at U.S. Silica. We regularly update our Code of Business Conduct and Ethics compliance trainings, as well as provide unconscious bias training for salaried employees, to encourage our workforces to help improve and live our core values of Respect, Safety, Integrity, and Community daily with one another and in our communities.

Through our diversity, inclusion, and belonging initiatives, we are focused on the development and advancement of our under-represented talent. Included in this year's report, we are disclosing greater diversity detail related to our workforce's race, ethnicity, and gender broken out by members of management and all other company employees. We believe that a diverse workforce makes our company stronger, and we will continue to focus our

efforts on expanding our diverse and inclusive team and corporate culture.

Our goal is to increase female and racial/ethnic minority representation across management roles by **10%** by 2026.

2021 Racial/Ethnic Group Representation

About U.S. Silica

Governance

Introduction







0.7% Not specified

Social

Environmental

1.2% Asian

9.0% Black or African American Two or more races

66.9[%] White

19.6% Hispanic or Latino

1.5% American Indian/Alaskan Native

0.9%

0.2% Native Hawaiian/Pacific Islander

2021 Gender Representation



ALL OTHER EMPLOYEES



*Members of Management defined as Supervisors, Managers, Directors, Vice Presidents, and C-suite

Introduction About U.S. Silica

t U.S. Silica Governance

e Environmental

Compensation, benefits, and employment practices

U.S. Silica recognizes that our employees are our greatest asset. We offer competitive compensation and benefits packages to all employees and regularly assess our total rewards through industry benchmarking and local market comparison groups. We work to hire, retain, and promote local and remote employees throughout our organization, and believe it is important to invest in our workforce's personal and professional growth by providing learning and career development opportunities, as well as tuition reimbursement.

Employee Resource Group (ERG)



In 2021, we established an Employee Resource Group that we named "US, Together." This group is intended to cultivate a workplace to help employees feel empowered to bring their authentic selves to work. With this initiative, we also intend to

April

amplify our underrepresented employees' voices and provide a greater sense of community, while also supporting personal and career development opportunities. Some of the offerings provided by this group include educational workshops, networking opportunities, community service, mentoring, professional development, and leadership opportunities, in addition to monthly themed programming.

At the end of 2021, **7% of our employees were enrolled** in our ERG, and participation continues to grow.

HONORING	MONTH		HEBITAGE MONTH
Мау	June	July	August
ASIAN	⇒ićator	AMAFENSS	AGEISM
September	October	November	December
HISPANIC	DISABILITY AWARENESS MONTH	NATIONAL NATIONAL AMERICAN	

Supplier and business diversity

As part of our Diversity, Inclusion, and Belonging framework, our company is also committed to increasing its supplier diversity through building new relationships with a variety of businesses. Such organizations include women, veteran, minority-owned, and small businesses, which comprised nearly **10%** of our supplier spend in 2021. Following an in-depth analysis of the use and spend with diverse-owned businesses, **we are committed to maintaining** *our business diversity spend above the national average of 5.9% and grow the number of diverse suppliers by 2% year-over-year.* We pledge to both increase the number of diverse suppliers and maintain above average supplier diversity spend in 2022.

Workforce Health & Safety

At U.S. Silica, we take the responsibility for the safety of our employees, our company, and our communities seriously. Through safety training, continued education, and workshops, we ensure a safety-first mentality remains the top priority for all employees across our footprint. In 2021, we confirmed our belief-based safety culture was effective and achieved the best safety performance in our company's history.



Lowest TRIR (0.67) and LTR (0.10) in the history of U.S. Silica

5-year consecutive reduction in TRIR and LTIR 95% locations without a lost-time incident in 2021

DUBBERLY SEES 37 YEARS OF SAFETY

Our plant in Dubberly, Louisiana, has not had a lost-time accident—an employee injury that prevented them from returning to work the next day—in 37 years.

This outstanding safety record does not happen by chance, but instead is the result of authentic connection, a deeply ingrained culture of safety, and a shared commitment to working safely. The team operates with the motto "Nobody gets hurt today," and is always on the lookout for ways to maintain and improve plant safety. They achieve this through team debriefs before, during, and afte projects, as well as through consistently evaluating their processes and tools for improvements.



Introduction About U.S. Silica Governance Environmental Social About This Report 2021 SASB Index

Championing a culture of safety, everyday

We are committed to maintaining a productive, safe, and healthy workplace by minimizing the risk of accidents, injury, and exposure to health risks. We seek to protect our employees, products, materials, equipment, systems, and information, by complying with all applicable regulatory requirements and implementing programs

In 2021, we hosted over 46,100 hours of training, approximately 29 hours per field employee and contractors, on U.S. Silica's Environmental, Health and Safety curriculum. and processes to achieve greater protection, where appropriate. As industry practices evolve, so do our efforts to educate and train employees on the latest health and safety rules and regulations provided by Occupational Safety and Health Administration (OSHA) and Mine Safety and Health Administration (MSHA).

Continuously improving our operations

Across our footprint, our core values are engrained into daily operations. Through regular safety trainings, partnerships, conferences, and continuing education courses, we customize safety resources to ensure they reflect our own core values of Respect, Safety, Integrity, and Community.

U.S. Silica employees were encouraged to participate in Belief-Based Safety/Core Values workshops, where attendees discussed the evolution of safety and how by championing the belief "Nobody Gets Hurt Today," U.S. Silica can further promote safe habits and behaviors in the workplace.

The workshops challenged each employee to conduct a "Core Conversation" with colleagues, a one-on-one dialogue wherein the manager discusses safe work habits, the risks and potential impacts of unsafe work behaviors or conditions, and the "ripple effect" an injury can have on an individual's personal and professional community. By personally addressing and enforcing our Core Values and Belief-Based safety culture among employees, and by creating a positive peer pressure of safety, we minimized risks and significantly decreased safety-related incidents across our footprint.

2021 U. S. SILICA CORE VALUES ACTIONS

57 Core Values workshops were held across 28 locations

> 1,220 people received training

5,252 workshop hours were logged

2,776 Core Conversations were held



U.S. Silica 2021 Sustainability Report



About U.S. Silica

Governance Environmental

Social

About This Report 2021 SASB Index

VIRTUAL REALITY TRAINING

We are also pioneering the development of customized virtual reality (VR) training for our mining sites. The VR team in Rockwood, Michigan, created and piloted a VR safety training designed to mimic the site's tunnel belt. Miners put on an Oculus Quest 2 VR headset and move virtually from the end of the tunnel belt to the entrance, encountering five obstacles and safety risks along the way. Miners are judged on their ability to identify and mitigate the hazards, which include a cinder block along the path, broken lights, and boulders along the path. These VR trainings are extraordinarily valuable in improving safety by giving miners real-life previews of the environments they will be working in.

We plan to expand the VR training program to other locations in 2022.

<image>

Prioritizing employee health and safety

The health and safety of our employees is of paramount importance. We take numerous precautions onsite to ensure the correct management of silica dust during operations. The engineering controls at our locations include dust collectors, exhaust hoods, proper ventilation, water, mist, and fog sprayers to control fugitive dust. Employees are required to wear properly fitted respirators and wear other personal protective equipment, as appropriate, and utilize housekeeping and maintenance best practices to reduce or eliminate dust exposures. U.S. Silica has a robust silica dust sampling program to ensure our engineering and administrative controls are effective and our employees are protected. Our plant and mine employees are enrolled in a medical surveillance program and undergo regular screening to ensure they are capable of safely carrying out their responsibilities.

In our oil and gas segment, one of the benefits of SandBox containers is that they minimize employee exposure to crystalline silica dust and are a safer solution for sand delivery, as well as being compliant with OSHA respirable silica standards.





Ensuring a safe environment and protecting the well-being of our employees is a priority. Throughout 2021, we are proud to have been recognized by multiple organizations for our commitment to maintaining a safe workplace.

"Nobody Gets Hurt Today!"

We hold safety in the highest regard. As a testament to that commitment, BNSF Railway recently presented our Mill Creek, OK plant with the "Stickler for Safety Award" in appreciation of our team's involvement with the community and confidence in the safe conditions we provide for employees and area residents.



Lovelock, NV and Fernley, NV teams receive awards from the Nevada Mining Association



Mill Creek, OK team receives award from BNSF Railway



U.S. Silica 20







Security, Human Rights & Rights of Indigenous Peoples

In line with the UN Guiding Principles on Business and Human Rights, U.S. Silica recognizes our corporate responsibility to respect these principles and we commit to maintaining and improving systems and processes to avoid complicity in human rights violations related to operations, supply chain, and products and services. Our employees are expected to treat co-workers, customers, and suppliers with dignity, and we are committed to providing a workplace free of any form of harassment or unacceptable treatment of workers. These fundamental human rights, freedoms, respect, and standards of treatment are rooted in our values and are consistent with our dedication to enriching our workplace, partnering with our supply chain, preserving the environment, and supporting the communities where we do business.

It is our promise to regularly assess human rights-related risks and potential impacts, review policies and management processes, and seek input from stakeholders and the communities where we operate on our approach.

We respect the rights and diversity of indigenous peoples, acknowledging the unique and vital interests that they have in the land, waters, and environment, as well as their history, culture, and traditional ways. We regularly engage with local communities and seek to better understand the social, cultural, environmental, and economic implications of our activities in order to be responsive to any concerns. We promise to work to optimize benefits and reduce negative impacts, both for the local community and the overall economy.

Being in community with Indigenous peoples

Our mining facility in Sanders, Arizona, is located in the Navajo Nation, which spreads across northeastern Arizona, northwestern New Mexico, and a small portion of Utah. We are proud to have a positive and constructive relationship with the Nahata Dziil (New Lands) chapter of the Navajo Nation. We work diligently to be collaborative community partners and good stewards of their land. Additionally, our contractors in Sanders are committed to hiring Navajo-only teams, bringing well-paying, quality jobs to the nation. U.S. Silica representatives interact with the chapter several times each year to discuss local issues. In 2021, we discovered that a product from our mining operations was important to the Navajo people. We were able to donate calcium bentonite clay for the chapter to use in culturally important purposes. On a separate occasion, we provided approximately 30 truckloads of additional clay to help shore up and line the chapter's ponds.

We are also fortunate to have personal relationships with local chapter elders as well. During the holiday season, we partnered with the Nahata Dziil Senior Center to provide a Christmas meal of turkey, ham, and various side dishes.





Truckers Against Trafficking

We partner with Truckers Against Trafficking, a non-profit organization that educates, equips, empowers, and mobilizes members of the trucking and energy industries to combat human trafficking. We strongly believe in Truckers Against Trafficking's mission and recognize that, due to the nature of our industry, we have an opportunity to take a stand against these crimes. As part of our onboarding and orientation processes, we actively support and promote Truckers Against Trafficking's educational resources and materials to ensure all employees are informed of the warning signs of human trafficking and how they can assist law enforcement in the recognition and reporting of illegal activity. In 2021, more than 700 U.S. Silica affiliated truckers were registered as having completed the Truckers Against Trafficking training programs.



Our truck fleet logged over 31 million miles in 2021.

We recognize that our most substantial human rights risk is witnessing human trafficking.



Introduction

About U.S. Silica

Governance Environmental

Community Relations

U.S. Silica is committed to making a meaningful difference by supporting the communities where we live and work and by encouraging our employees to actively engage in service projects. Our commitment to our core values and stakeholders grows stronger every year and we wholeheartedly believe that regular engagement is a key component to maintaining positive relationships.

In 2021, our company implemented and began providing employees with eight hours of employer-paid time off from regularly scheduled work or business hours to support volunteer activities at an organization and/or charity of their choice. We believe that this is an exciting opportunity that is guided by our core value of "Community: We operate in our communities as good neighbors." We recognize our team members' passion for volunteerism and charitable efforts and look forward to enhancing and serving the communities where we live and work.

Partnering with Junior Achievement

In late 2021, U.S. Silica announced its partnership with Junior Achievement. Junior Achievement's core purpose is "to inspire and prepare young people to succeed in a global economy" with key focus areas in financial literacy, work and career readiness, and entrepreneurship. U.S. Silica will support 16 local Junior Achievement area offices in the spring and fall of 2022 through monetary donations as well as employee volunteer participation. Our company's commitment to Junior Achievement is representative of our dedication to be a positive role model in our communities, provide support and encouragement to young people and help them understand the importance of academic and economic skills.



Introduction

About U.S. Silica

Governance Environmental

Making Wishes Come True

At U.S. Silica, our employees go above and beyond, not only for our customers but also for the individuals we impact in our communities. For the past couple years, Vice President of Purchasing, Wendy Samp, has collaborated closely with United Airlines and the Make-A-Wish Foundation to convert points accumulated through U.S. Silica's travel contracts into 500,000 MileagePlus Miles for Make-A-Wish recipients. A cause that's close to home, Wendy took this initiative even further and collaborated with Corporate Purchasing Manager, Jerolyn Blazquez, to support a local 10-year-old Make-A-Wish recipient, Melinda, as she battled brain cancer. Turning her bedroom into an art gallery, Melinda realized her dream of becoming a famous artist during the pandemic. Melinda worked with local artist Edgar Medina to develop her skills and passion. As part of the Make-A-Wish reveal, the two artists curated a breathtaking exhibit of 13 pieces titled "Moments Through Seasons" displayed at Melinda x Edgar Medina gallery showing and silent auction in September 2021. Jerolyn and her son Max purchased two of Melinda's pieces on behalf of U.S. Silica, which now proudly hang at our headquarters in Katy, Texas.



U.S. Silica 2021 Sustainability Report



About U.S. Silica G

Governance Environmental



Carrying on the Tradition

Sunrise Elementary School (De Soto, MO) welcomed Environmental Health Safety Coordinator Danny Dattoli to speak with the students during their 2021 Missouri Heritage Days. As a community built on mining, Danny educated the students on the industry, its connection to Missouri's history and also explained the wide variety of job opportunities available in their local community.

Giving Back

Long-time area local Chelsey Barron, a Human Resources Generalist for U.S. Silica's Lamesa, Texas plant, has been a dedicated employee and active community member for many years. Chelsey is service-minded and has been instrumental in rallying U.S. Silica employees to join her in giving back. Working with other team members, Chelsey has led annual efforts to better serve area youth, including packing snack bags and goodies for Crane County's Youth Center and leading the Boys & Girls Club Annual Golf Tournament, which supports over 160 kids throughout the summer. In addition, she led the company's initiative to donate funds to Parents Who Care, which allowed Lamesa High School to put on a post-prom casino night that fosters safe and healthy fun for the students. "Being born and raised here, it's exciting to give back to my community."



(left-to-right) Rachel Gonzalez, Kaylee Sena, Chelsey Barron



(left-to-right) Amanda Brackeen, Chelsey Barron, Savena Sanchez





Open Doors, Open House

In October 2021, we hosted our neighbors in Rockwood, Michigan, for an Open House event at the plant. It was an important moment to share our story with the local community, who have been partners to the site since it became a silica mine in the 1940s. In addition to sharing our equipment and products, we hosted a local Boy Scout troop as they received their geology merit badge, offered bus tours of our facilities, and ate delicious tacos from a local taco truck. We had about 100 community members attend, including the local Chief of Police. About U.S. Silica G

Governance Environmental

Social

We support our communities as part of our commitment to being good neighbors and reliable partners

All U.S. Silica locations are encouraged to partner with their local Emergency Medical Services (EMS) providers to perform random mock disaster drills on an annual basis. These mock disaster drills benefit our onsite teams by strengthening their relationship with the local EMS providers and developing a more comprehensive understanding of emergency preparedness. Emergency planning ensures our teams are prepared for any situation. In addition, the drills provide invaluable onsite training for first responders and deepen their familiarity with the U.S. Silica facility layout and employees.

Supporting first responders as they protect the health and safety of our communities is not only important to us – it's also a priority for our employees.

At our Mill Creek, OK plant, we turned a reclaimed quarry into a training venue for the Johnston County Emergency Rescue and Recovery Dive Team, a team comprised of volunteer members from 3 local fire departments. Led by the Red River Scuba instructor and Colbert Fire Department Dive Team and Water Rescue Chief, Bob Marks, U.S. Silica has aided area fire departments in their critical emergency response training for several years, allowing them to utilize our sites to practice water rescues and recovery.



Dive Team (L-to-R) Eric Coll, Cade Shackelford, Clifton Lindsey, Danny Walker, Amanda Smith, Jason Bryant, Bob Marks

Charitable Contributions

In addition to employees donating their time through volunteering, U.S. Silica regularly makes financial contributions to various organizations across the country. Supported by the improved macroeconomic environment of 2021, we increased our monetary donations by over 150% year-over-year to \$269,000.



Introduction

About U.S. Silica G

Governance Environmental

ital Social

Labor Relations

As of December 31, 2021, we employed a workforce of 1,819 employees, the majority of whom are hourly wage plant workers living in the areas surrounding our mining facilities. Approximately 29% of our hourly employees were represented by labor unions that include the Teamsters Union; United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union; Laborers International Union of North America; Cement, Lime, Gypsum and Allied Workers' Division of International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers; and International Union of Operating Engineers A.F.L. - C.I.O. We maintain good relations with our workers and their respective unions and have not experienced any material strikes or work stoppages since 1987.

Data Security

Protecting our cyber networks and online programs

U.S. Silica maintains an elevated focus on managing information security risks and provides continuing education and awareness for all employees. We have developed and implemented a comprehensive risk-based cybersecurity management program that is designed to identify, assess, manage, and mitigate information security risks facing our company. The underlying controls of this program are based on industry cybersecurity and information technology best practices and standards, such as International Organization for Standardization 27001 (ISO 27001) and National Institute of Standards and Technology (NIST) SP 800-53. We verify and drive improvements by performing periodic external maturity assessment of our cybersecurity program against the NIST Cybersecurity Framework (CSF).

All electronically connected U.S. Silica employees and contractors are required to complete annual trainings and certifications in information security best practices, phishing, software compliance, and data protection.

Every month, our employees receive a new installment of security awareness training videos where they are educated on cybersecurity practices, including how to detect and respond to threats. We also conduct weekly phishing simulations for all employees, as well as dedicated awareness trainings for high-risk

By leading regular training programs and simulations, we experienced no known cybersecurity breaches or loss of sensitive data in 2021 and achieved a phishing simulation susceptibility rate that was better than

the industry average.

employees, like our accounting and accounts payable departments.

We continuously invest in new cybersecurity solutions to improve digital safety across our footprint. The vast majority of cyberattacks against companies originate through email. Last year, we implemented an additional security layer called a Multi-Factor Authentication (MFA) system to reduce the impact of compromised credentials with our Office 365 suite.



100% of our connected employees received monthly security awareness trainings.

About This Report



About This Report

The information included in this report is subject to U.S. Silica's policies and requirements surrounding the disclosure of financial and non-financial data. The financial information included in this report was sourced from our Form 10-K filed with the SEC on February 25, 2022. All non-financial data included in this report was not subject to a third-party audit verification process.

Forward-Looking Statements

This Sustainability Report includes "forward-looking statements" within the meaning of the federal securities laws.

All statements other than statements of historical fact included in this Sustainability Report are forward-looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. These statements may include words such as "anticipate," "estimate," "expect," "project," "plan," "intend," "believe," "may," "will," "should," "could," "can have," "likely" and other words and terms of similar meaning.

For example, any statements we make relating to our estimated and projected costs and cost reduction programs; reserve and finished products estimates; demand for our products; the strategies of our customers; anticipated expenditures, cash flows, growth rates and financial results; our plans and objectives for future operations, growth or initiatives; strategies and their anticipated effect on our performance and liquidity; and the expected outcome or impact of pending or threatened litigation are forward-looking statements. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expect. These risks and uncertainties include, but are not limited to, those described in Part I, "Item 1A. Risk Factors" and elsewhere in our latest Annual Report on Form 10-K (the "Form 10-K") filed with the Securities and Exchange Commission (the "SEC") and those described from time to time in our other more recent reports filed with the SEC.

We derive many of our forward-looking statements from our operating budgets and forecasts, which are based on many detailed assumptions. While we believe that our assumptions are reasonable, it is impossible for us to anticipate all factors that could affect our actual results. As a result, forward-looking statements are not guarantees of future performance, and you should not place undue reliance on any forward-looking statements we make.

If one or more of the risks described in our Form 10-K or other risks or uncertainties materialize (or the consequences of any such development changes), or should our underlying assumptions prove incorrect, actual outcomes may vary materially from those reflected in our forward-looking statements. The forward-looking statements included in our latest Form 10-K are made only as of the date thereof. We disclaim any intention or obligation to update publicly or revise such statements, whether as a result of new information, future events or otherwise. All written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by these cautionary statements as well as other cautionary statements that are made from time to time in our other filings with the SEC, and our other public communications.

2021 SASB Index

Introduction Al

About U.S. Silica Governance

nce Environmental

Social About Th

2021 SASB Index

The Sustainability Accounting Standards Board ("SASB") is an independent, private sector standards-setting organization whose mission is to help businesses around the world identify, manage, and report on the sustainability topics that SASB believes matter most to investors. According to the SASB's Sustainable Industry Classification System®, we determined the two industry standards listed below most accurately reflect our business operations. This index references only the disclosure topics within those two standards that we believe are significant and relevant to our business.

- Metals & Mining (Code EM-MM)
- Construction Materials (Code EM-CM)

Code	Accounting Metric	Unit of Measure	2021 Response
Greenhous	se Gas Emissions		
EM-MM- 110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Metric tons (t) CO ₂ -e, Percentage (%)	see page 23; 98%
EM-MM- 110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions	n/a	see page 23
Air Quality	,		
EM-CM- 120a.1 EM-MM- 120a.1	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N_2O), (3) SOx, (4) particulate matter (PM_{10}), (5) mercury (Hg), (6) lead (Pb), (7) dioxins/furans, (8) volatile organic compounds (VOCs), (9) polycyclic aromatic hydrocarbons (PAHs), and (10) heavy metals	Metric tons (t)	see page 25
Energy Ma	nagement		
EM-MM- 130a.1	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Gigajoules (GJ), Percentage (%)	see page 26
Water Mar	nagement		
EM-CM- 140a.1 EM-MM- 140a.1	(1) Total fresh water withdrawn, (2) total fresh water consumed, (3) percentage recycled, (4) percentage in regions with High or Extremely High Baseline Water Stress	Thousand cubic meters (m³), Percentage (%)	see page 27
EM-MM- 140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Number	1

Code	Accounting Metric	Unit of Measure	2021 Response
Waste & Ha	azardous Materials Management		
EM-MM- 150a.1	Total weight of tailings waste, percentage recycled	Metric tons (t), Percentage (%)	4,188,471.4t; 100% recycled
EM-MM- 150a.2	Total weight of mineral processing waste, percentage recycled	Metric tons (t), Percentage (%)	NA
			High hazard potential= 2
EM-MM- 150a.3	Number of tailings impoundments, broken down by MSHA hazard potential	Number	Significant hazard potential= 4
			Low hazard potential= 4
Biodiversit	y Impacts		
EM-MM- 160a.1	Description of environmental management policies and practices for active sites	n/a	See page 28
	Percentage of mine sites where acid rock drainage		(1) 0%
EM-MM- 160a.2	is: (1) predicted to occur, (2) actively mitigated, and	Percentage (%)	(2) 0%
	(3) under treatment or remediation		(3) 0%
EM-MM- 160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Percentage (%)	(1) 92.8% sand; 0.7% clay; 6.5% diatomaceous earth; 0% aplite
			(2) 61.7% sand; 6.7% clay; 23.8% diatomaceous earth; 7.8% aplite

Social

Security, Human Rights & Rights of Indigenous Peoples

EM-MM- 210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Percentage (%)	(1) 0% (2) 0%
EM-MM- 210a.2	Percentage of (1) proved and (2) probable reserves in or near indigenous land	Percentage (%)	(1) 4.0% sand (2) 0.8% clay
EM-MM- 210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	n/a	See page 38

Introduction

About U.S. Silica

Governance

About This Report 2021 SASB Index

Code	Accounting Metric	Unit of Measure	2021 Response
Communit	y Relations		
EM-MM- 210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	n/a	See page 13
EM-MM- 210b.2	Number and duration of non-technical delays	Number, Days	0; 0
Labor Rela	tions		
EM-MM- 310a.1	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	Percentage (%)	29%
EM-MM- 310a.2	Number and duration of strikes and lockouts	Number, Days	0; 0
Workforce	Health & Safety		
EM-MM- 320a.1	(1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) fulltime employees and (b) contract employees	Rate, hours	See page 34: (1); (2); (3); (4)(a) 29 hours; (b) 29 hours
EM-CM- 320a.2	Number of reported cases of silicosis	Number	0
Product In	novation		
EM-CM- 410a.1	Percentage of products that qualify for credits in sustainable building design and construction certifications	Percentage (%) by annual sales revenue	<1%
EM-CM- 410a.2	Total addressable market and share of market for products that reduce energy, water, and/or material impacts during usage and/or production	Reporting currency, Percentage (%)	\$1.6B; 2%
Business E	thics & Transparency		
EM-MM- 510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	n/a	See page 15
EM-MM- 510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Metric tons (t) saleable	0

Social

Introduction

About U.S. Silica

Governance

About This Report 2021 SASB Index

Code	Accounting Metric	Unit of Measure	2021 Response
Pricing Inte	egrity & Transparency		
EM-CM- 520a.1	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities	Reporting currency	\$0
Labor Rela	tions		
EM-CM- 000.A	Production by major product line	Metric tons (t)	ISP= 4,226,532t; O&G= 11,609,791t
EM-CM- 000.B	Total number of employees	Number	1,819

Social

About This Report 2021 SASB Index

Introduction

About U.S. Silica

Governance

