



See Beyond™

SUSTAINABILITY REPORT 2024



**Quaker
Houghton™**
Forward Together™

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Joseph Berquist
Chief Executive Officer
and President

Message From the CEO

Our vision is to be the trusted partner to the world's leading manufacturers, who rely on our process fluid solutions to advance the world safely and sustainably. As the global leader of industrial process fluids, it is our responsibility to create a lasting positive impact on our industry. Sustainability is fully embedded in our value proposition and our enterprise strategy. Our products and services provide significant value to our customers and communities by reducing waste, water and energy consumption, and improving their outcomes.

The macroeconomic, geopolitical and regulatory landscape remained dynamic in 2024, and the uncertainty created will likely have lasting effects. It is evident that despite these challenges, our commitment to responding to the needs of our customers and society is more important than ever.

In 2024, we achieved 90% of our internal goals as part of our long-term sustainability strategy, building on the momentum from prior years. We are pleased to report that we have decreased Scope 2 greenhouse gas

emissions by 7% compared to 2023, and we also increased renewable electricity by 5% compared to 2023. Now 76% of the Company's electricity is from zero carbon or renewable sources. We also reduced, or avoided, 23,000 metric tons of waste at QH FLUIDCARE™ customer locations. We have continued our focus on building a culture that prioritizes the safety and well being of our colleagues. For the fifth consecutive year we have improved our safety performance, and we are proud to be recognized as a leader amongst our industry's safest companies. These achievements reflect our commitment to our core values and driving sustainable progress.

Following the completion of our first double materiality assessment in 2024, which incorporated financial and impact materiality, we have a more targeted vision of how to affect positive change and respond to the changing needs of our industry, customers, and regulatory environment. Our strategy will remain centered around our pillars: Innovating for a

Better Tomorrow, Protecting Our Planet, Empowering Our Colleagues and Communities, and Sourcing Our Materials Responsibly. How we measure success and report on progress, however, may evolve over time. We are making intentional investments in our business to reduce complexity in our operations and manufacturing to better serve customers and align with those that share our vision for making progress on our sustainability mission.

We are proud of the progress we have made and the external validation by EcoVadis, Newsweek, Statista and others. Our success is built on the foundation of our talented people, and I am confident in our ability to continue providing sustainable innovations to our customers and drive the Company Forward Together™.

We appreciate your interest in Quaker Houghton. We are devoted to continued progress and transparency and encourage you to read more in this 2024 Sustainability Report .



A Discussion on the Evolving Landscape

Joe Berquist, the President and CEO of Quaker Houghton, mentioned in his letter that the sustainability strategy will stay the same but how you measure success may evolve. What exactly does that mean? And why change it now?

While the four pillars of our strategy will remain the same, some of the topics we focus on under those pillars may evolve. This means we must assess how our targets align to those updated topics and that we will adjust our initiatives, and how we measure success, accordingly.

In 2020, we completed our first impact materiality assessment. This created the foundation of our sustainability strategy, which we then launched in 2021. Since then the world, as well as the needs of our stakeholders, has evolved. As a result, in 2024, we conducted a double materiality assessment (DMA), which looks to determine what impacts, risks, and opportunities are critical from both an impact and financial materiality perspective.

This updated view of materiality, finalized late in the year, has confirmed that moving forward our approach must evolve. This will enable us to continue supporting our stakeholders in a way that is most impactful to them.

Does the political environment directly impact your strategy?

While the political environment may indirectly impact the expressed needs of our stakeholders in certain parts of the world, it is not the driving force behind our strategy. We are a global organization, whose key stakeholders include our people, customers, investors, suppliers, and communities at large. As we cater to the world's leading manufacturers, we know that their core ambitions will not change, they continue to aim for efficiency in their operations. We plan to continue to support those ambitions by contributing positively to their goals, to reduce their negative impacts such as waste, water, and energy consumption, with the use of our products. Our sustainability strategy and ambitions allow us to continue providing sustainable value to our key stakeholders globally.

Will Quaker Houghton remain an inclusive workplace regardless of any external environment changes?

We strive to have an environment where all colleagues are treated fairly and inclusively and feel like they belong. We believe that inclusion of colleagues with different backgrounds, experiences, and thoughts makes us stronger, so this will continue to be a foundation of our culture.

Does Quaker Houghton have new sustainability targets?

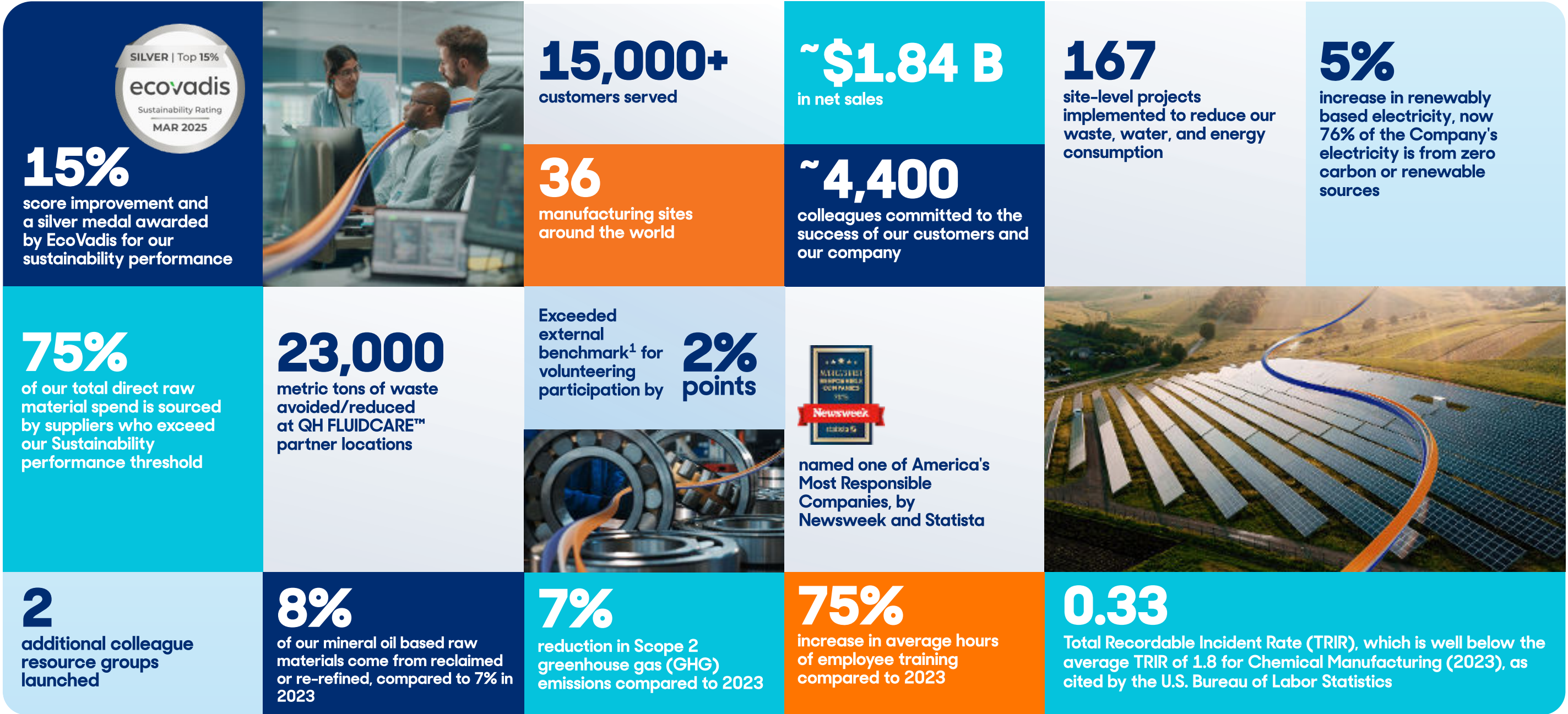
We are still assessing the impact of the DMA on our goals and targets—all good things take time. The DMA was finalized in late 2024. In 2025, we will build our path forward in a way that helps us achieve our vision and support our stakeholders in a dynamic environment. Then, we will aim to finalize the governance and organizational structure needed to support that path. I look forward to sharing these developments with you in early 2026.

If the company is re-assessing its sustainability targets will progress continue in 2025?

Absolutely! Our responsibility and commitment to sustainability is unwavering. In 2025, we have established 25 internal goals focused on bringing new sustainable innovations to our customers, continued reduction of energy and water, continued investment in our colleagues and communities, and collaborating with our supply chain to move the industry Forward Together™. These goals are aligned with our new material topics and continue to align with our enterprise strategy. I look forward to sharing our continued progress with you in next year's report.

A discussion with
Sarah Briggs
Director, Corporate
Sustainability

Highlights: 2024 at a Glance



¹As compared to the industry average according to the [Blackbaud 2023 CSR Industry Review](#).

Who We Are and How We Manage Sustainability



Company Overview

Quaker Houghton is the global leader in industrial process fluids. With a robust presence around the world, including serving customers in 100+ countries, our customers include thousands of the world’s most advanced and specialized steel, aluminum, automotive, aerospace, offshore, container, mining, and metalworking companies. Our high-performing, innovative, and sustainable solutions are backed by best-in-class technology, deep process knowledge, and customized services. With approximately 4,400 colleagues, including chemists, engineers, and industry experts, we partner with the world’s leading manufacturing companies who rely on our process fluid solutions to advance the world safely and sustainably.

Sustainability Governance and Management at Quaker Houghton

At Quaker Houghton we strive to integrate sustainable business practices across our operations and to continually develop sustainable solutions that meet evolving customer needs. Accordingly, our sustainability strategy is critical to our long-term business objectives and a strong governance structure, and management approach are needed to support the achievement of our ambitious sustainability vision. Our governing process creates accountability, supports consistent communication, and drives progress.

Board Level Governance

Quaker Houghton’s Board Sustainability Committee (BSC), established in 2020, assists the Board of Directors in its assessment and evaluation of Quaker Houghton’s sustainability programs pertaining to the company’s business, operations, and colleagues. The Committee’s responsibilities include integrating sustainability initiatives into the company’s business planning, risk management, processes, and culture, while assessing and responding to risks connected with sustainability matters. They engage in the development and implementation of the organization’s sustainability progress. The Board Sustainability Committee traditionally meets no less than twice annually, but met four times in 2024. Beyond the Board Sustainability Committee, Quaker Houghton’s full Board of Directors receive sustainability updates from the Executive Leadership Team (ELT) via quarterly reports and periodic presentations.

Additional information on sustainability management and reporting responsibilities is available in the [Board Sustainability Committee Charter](#). Details on the Board Sustainability Committee members’ knowledge and expertise are available in our most recent Proxy Statement.

Executive Level Governance

The ELT has operational leadership and responsibility for sustainability management. In 2024, the Executive Sponsors of the program included the Chief Commercial Officer, Chief Technology Officer, Chief Human Resources Officer, and Chief Supply Chain Officer.

Functional and Disclosure Leadership

Quaker Houghton’s Director of Corporate Sustainability partners with leaders across business functions to propel our existing sustainability activities forward and to develop and execute on new initiatives. The collective sustainability team works with functional leaders as well as marketing, corporate communications, legal, and investor relations to accurately and efficiently share information with our stakeholders.



Our Materiality Results

Relevant Topics

Quaker Houghton completed an impact materiality assessment in 2020, following the combination of Quaker Chemical Corporation and Houghton International, to identify the sustainability topics most significant to our company and key stakeholders. These topics were identified via extensive research and benchmarking of the industry landscape as well as in-depth stakeholder engagement. They were then mapped across the Quaker Houghton value chain to determine where they were most relevant in the business.

Stakeholder Engagement

The materiality assessment process included substantial engagement with internal and external stakeholders. Internal stakeholder engagement included interviews with leaders across business functions and a survey of approximately 10% of our colleagues. External stakeholder engagement included interviews with investors, customers, and suppliers. We further engaged our Executive Leadership Team and Board Sustainability Committee to validate the prioritized material topics (see figure to right).

Application

The final list of material topics informed the development of our sustainability strategy released in August 2021. These topics continue to be the focus of our sustainability initiatives and reporting to date. During the annual reporting process, we re-engage key internal stakeholders responsible for our material topics to review our approach, programs, and progress.

Double Materiality Update




In 2024, the company completed its first double materiality assessment. The results of that assessment, its impacts, and potential impacts on targets, are still being reviewed internally and are expected to be disclosed in the 2025 Sustainability Report. In 2025, we plan to focus our efforts on material topics that were highlighted in the 2020 impact assessment, and that align with the results of the double materiality assessment, as well as our overall enterprise strategy.

Materiality Matrix



- Empowering Our Colleagues and Communities
- Protecting Our Planet
- Innovating Together for a Better Tomorrow
- Sourcing Our Materials Responsibly

Progress on Material Topics

UN SDG	MATERIAL TOPIC	2024 PROGRESS
INNOVATING TOGETHER FOR A BETTER TOMORROW		
 	Minimizing Hazards in Our Portfolio	<ul style="list-style-type: none">Developed 2 new roadmaps for CMR² reductions and implemented 2 corresponding field trials with customersContinued implementation of Green Chemistry Guidelines and included more translations in the local languages of our colleagues
	Transitioning Our Solutions to Support a Low-Carbon Economy	<ul style="list-style-type: none">Eliminated over 23,000 metric tons of waste at QH FLUIDCARE™ partner locationsUpdated our preferred raw material list which was launched in 2023Developed 3 new roadmaps for reducing waste, water, and energy at customer locations, and implemented 2 corresponding field trialsContinued implementation of Green Chemistry Guidelines and included more translations in the local languages of our colleagues
	Formulating With Renewable Raw Materials	<ul style="list-style-type: none">Developed 7 new roadmaps for reducing virgin fossil-based raw materials, and implemented 3 corresponding field trials with customersAchieved 19% renewable raw materials globally, excluding reclaimed and refined mineral oilIncreased our reclaimed or re-refined mineral oil based raw materials to 8%Continued implementation of Green Chemistry Guidelines and included more translations in the local languages of our colleagues
PROTECTING OUR PLANET		
  	Reducing Our Greenhouse Gas Emissions	<ul style="list-style-type: none">Reduced Scope 2 GHG Emissions by 9% compared to 2023Created a roadmap to reduce GHG emissions at major locationsImplemented 64 projects which further reduced energy consumptionIncreased renewably based electricity by 5%, now 76% of Quaker Houghton's electricity is sourced renewably via grid, on site solar generation, and purchased renewable contracts.Installed solar panel systems at 3 additional manufacturing locationsRolled out energy monitoring software at 5 additional manufacturing locations
 	Managing Our Water Responsibly Minimizing Our Waste	<ul style="list-style-type: none">Created a roadmap to reduce water consumption at major locationsImplemented 34 projects which reduced water consumption in key processesCreated a roadmap to reduce waste to landfill and hazardous waste generation at major locationsImplemented 69 projects which reduced waste to landfill and hazardous waste generation

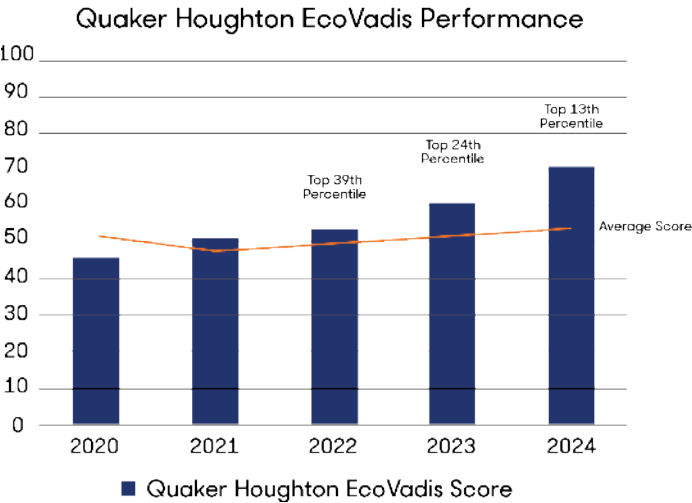
² CMR GHS category 1 A/B, excluding not intended usage (ingestion hazard), the plating business from Sifco, platform extension in the regions (localization of existing platforms) and maintenance activities of finished goods at existing customers.






Incremental Sustainable Improvement

We are proud to share Quaker Houghton is now ranked in the top 13th percentile of all companies assessed for their Sustainability performance in EcoVadis, and as a result was awarded a silver medal. In late 2024, Quaker Houghton underwent a thorough reassessment of its operational sustainability practices and in March of 2025 increased its score by 15%.

Quaker Houghton partners with EcoVadis to rate the sustainability performance of our suppliers, and for the past five years we have also partnered with them to be assessed annually for our business’ sustainability performance. Through its globally recognized platform, EcoVadis rates how sustainable companies are based on four key categories: environmental impact, labor and human rights standards, ethics, and procurement practices. This involves a rigorous two-month certification process, which includes answering over 300 questions, submitting documentation, and completing audits.

Since 2020, when we formally began the implementation of our sustainability strategy, our Ecovadis score has increased by 35%. With each passing year, the organization more deeply embeds this into existing processes and programs and makes progress on our material topics. This significant improvement demonstrates our commitment to sustainability and we anticipate that as we continue to drive progress we will be able to further improve our performance.



UN SDG	MATERIAL TOPIC	2024 PROGRESS
EMPOWERING OUR COLLEAGUES AND COMMUNITIES		
	Empowering Our Colleagues to Live Safe	<ul style="list-style-type: none">Achieved a TRIR of 0.33 and zero severe recordable injuriesMaintained ISO 45001 certifications in 80% of our non-U.S. locationsCertified 53% of our U.S. sites against the RC 14001 standard
	Investing in Our People's Growth and Development	<ul style="list-style-type: none">Continued providing learning and leadership development opportunities for our colleaguesIncreased usage of QH University by 10% since 2023
	Embracing Inclusion	<ul style="list-style-type: none">Kicked off the "Belonging Campaign" by holding inclusion training for leadersIntroduced allyship in our inclusion training for leaders and as an element of our Colleague Resource Group frameworkProvided global programming experience for all colleagues for International Women's DayProvided targeted learning opportunities to women and minority leaders through partnership with Leader's EdgeExpanded colleague resource groups to include Veterans and PRIDE
	Supporting Our Local Communities' Development	<ul style="list-style-type: none">Exceeded volunteering engagement goal of 3% (industry standard⁴), by achieving over 5% employee engagement in our volunteer programLaunched our global foundation, global donation-matching, and two global grant-making campaigns
SOURCING OUR MATERIALS RESPONSIBLY		
	<div>Ensuring Everyone in the Supply Chain Is Treated With Dignity and Respect</div> <div>Confirming Sustainable Sourcing of Raw Materials</div>	<ul style="list-style-type: none">Established Quaker Houghton reporting metrics on supplier sustainability scoringAchieved the Roundtable on Sustainable Palm Oil (RSPO) certification for the Santa Perpetua, Spain siteAchieved 75% of total direct spend with suppliers³ that exceed our sustainability threshold65% of total palm oil and palmoleine volume was fully segregated through the RSPOSelected and announced additional supply chain awareness training for colleagues

³ This percentage is derived from suppliers who are deemed material to Quaker Houghton with a direct spend above \$100k.
⁴ As compared to the industry average according to the [Blackbaud 2023 CSR Industry Review](#).

Innovating Together for a Better Tomorrow

As the global leader in industrial process fluids, we continuously seek ways to improve and adapt to stay ahead in a changing world. Through our solutions that bring about positive environmental and societal impacts, we help everybody win – our customers, our communities, and the planet.

Innovating Together for a Better Tomorrow is a critical endeavor at Quaker Houghton. Our management approach in 2024 is consistent with our 2023 approach. For more details on our approach to:

- Minimizing Hazards in Our Portfolio, please see pg. 11 of our [2023 report](#).
- Transitioning Our Solutions to Support a Low-Carbon Economy, please see pg. 13 of our [2023 report](#).
- Formulating With Renewable Raw Materials, please see pg. 14 of our [2023 report](#).

Minimizing Hazards in Our Portfolio

While our portfolio is largely non-hazardous we continue to strive to minimize the use of Global Harmonized System (GHS) category 1 labeled products that are Carcinogen, Mutagen, Reprotoxic (CMRs). Currently, these CMRs are mostly found in the surface chemistry segments, such as, metal finishing, plating, conversion coatings, and passivation. In 2024, we introduced two product transition roadmaps specific to reducing CMR hazards². In parallel to our work to reduce hazards in our portfolio, our commercial and strategy teams engaged in a multi-year project to simplify our portfolio, which significantly and strategically reduced the amount of finished goods with CMR hazards². As a result of both strategic projects, we have

reduced CMR hazards² in our finished goods portfolio from 2.2% in 2022 to 1.3% in 2024. Re-classifications of hazards across the globe are increasing, which slightly increased the finished goods labeled as CMR category 1, or 1 A/B, in 2024 compared to 2023, but we remain committed to reducing these types of hazards in our portfolio. In 2025, we strive to continue reducing CMRs by formulating 100% of new finished goods not labeled as CMR category 1A/B and plan to also reduce current active formulations which are labeled as CMR category 1A/B.

Transitioning Our Solutions to Support a Low-Carbon Economy

We continue to support all customers in their transition to support a low-carbon economy by working together to reduce product consumption, waste, water, and energy. While much of our solutions provide one or multiple of those benefits [our See Beyond™ portfolio](#), launched in March 2024, highlights products which provide the most significant sustainable benefit to customers. In addition, our QH FLUIDCARE™ offering provides sustainable and affordable technical solutions that help our customers achieve waste elimination or avoidance. We are pleased to share that QH FLUIDCARE™ customers avoided or eliminated more than 23,000 metric tons of waste in 2024. In 2025, we plan to add new sustainable innovations

to our See Beyond™ portfolio and partner with our QH FLUIDCARE™ customers to continue to significantly reduce their product consumption and waste.

Formulating With Renewable Raw Materials

Our green chemistry strategy and [guidelines](#) play an integral role in the successful transition of our portfolio to the use of renewable and refined base oils. In 2024, we built upon that success by expanding translations so that colleagues could use the [guidelines](#) to formulate and adjust our solutions in their native language. Several roadmaps were created and launched to focus on the reduction of virgin-fossil based raw materials and we partnered with several customers to trial those new solutions. [Our See Beyond™ portfolio](#) highlights solutions with renewable or re-refined base oils which enable our customers to be more sustainable. As a result of our continued efforts, in 2024, 19% of our global raw materials were renewably based, excluding reclaimed and re-refined. We also increased our reclaimed or re-refined mineral oil based raw materials to 8%. In 2025, we plan to add new sustainable innovations to our [See Beyond™ portfolio](#) and will continue to buildout and implement roadmaps which reduce the use of virgin-fossil based raw materials. We then plan to partner with customers to trial these new solutions.

23,000

metric tons of customer waste was eliminated or avoided in 2024 through our QH FLUIDCARE™ program

Reduction in Magnetic Iron Sludge Generation by 33%

A large steel customer approached Quaker Houghton to help reduce magnetic iron sludge generation. The customer made process changes and achieved a 5-8% reduction in sludge generation. Once Quaker Houghton was brought on board, our experts suggested both product and process changes which further reduced sludge waste generation by 33% without any additional energy consumption. In turn, this also enabled the customer to achieve a 20% reduction in their oil consumption.

² CMR GHS category 1 A/B, excluding not intended usage (ingestion hazard), the plating business from Sifco, platform extension in the regions (localization of existing platforms) and maintenance activities of finished goods at existing customers.

Protecting Our Planet

To reduce negative impacts on the environment, Quaker Houghton actively strives to improve waste, water, energy, and fuel use.

Protecting Our Planet, by minimizing our impact on the world around us, is a top priority at Quaker Houghton. Our management approach in 2024 is consistent with our 2023 approach. For more details on our approach to:

- Reducing Our Greenhouse Gas Emissions, please see pg. 16 of our [2023 report](#).
- Managing Our Water Responsibly, please see pg. 17 of our [2023 report](#).
- Minimizing Our Waste, please see pg. 18 of our [2023 report](#).

This year, we continued the standardization of ISO 14001 and RC 14001 certifications in our manufacturing sites. As a result, 100% of our non-U.S. manufacturing sites are ISO 14001 certified. In addition, as a member of the American Chemistry Council, we committed to improve environmental performance through the implementation of the Responsible Care^{®1} (RC) management system. As a part of that membership, eight U.S. locations are now certified against RC 14001, with four newly certified in 2024. This standardization displays the quality and robustness of our management practices and will support Quaker Houghton in continuing to utilize resources efficiently. For 2025, we plan to certify additional U.S. sites with RC 14001.

Reducing Our Greenhouse Gas Emissions

Reducing Scope 1, 2, and 3 greenhouse gas emissions (GHG) is integral to Quaker Houghton's

commitment to the environment, meeting the needs of our customers, and our overall business success. We aim to reduce our GHG emissions through sustainable sourcing of energy and decreasing energy usage, and in 2024 we are happy to announce that we have decreased our Scope 1 and 2 GHG Emissions by 5 percent compared to 2022. The Company increased its renewably based electricity by 5%, now 76% of the Company's electricity is from zero carbon or renewable sources via grid, solar panels, and purchased renewable contracts. Part of that increase is due to new solar installations at our locations in Mexico, Thailand, and Australia. Since 2022, we have implemented energy monitoring equipment at 16 sites, which allow us to target energy reductions strategically. With 5 new investments in 2024, we expect an average 7% reduction in electricity consumption at these sites.

In addition, 64 projects were launched or implemented across our primary locations to reduce energy through our site champion program. Site Champions are provided additional funds for implementing initiatives which reduce waste, water, and energy at major locations.

In 2024, a Scope 3 roadmap was launched to measure and report our material Scope 3 GHG emissions for the first time. In 2025, we plan to build the first sustainability report using Scope 3 data, continue to increase our renewable energy usage, and implement projects which reduce our Scope 1 and 2 GHG emissions.

Managing Our Water Responsibly

As the world's leading supplier of process fluids, water is a critical resource to Quaker Houghton for our operations, our customers, and in our communities. In 2024, 37 projects were launched or implemented across our primary locations to contribute to water efficiency and reduce water consumption in key processes through our site champion program. We are also pleased to announce that we had zero incidents of non-compliance associated with water quality permits, standards, and regulations, and also created a long-term road map to help envision our water management goals. In 2025, we plan to enhance our water management best practices and continue implementing projects which improve our water usage efficiency, contributing to scarcity management.

Minimizing Our Waste

We work to minimize and responsibly manage waste-to-landfill and hazardous waste generated in our operations. In 2024, 69 projects were launched or implemented across our primary locations to reduce waste generation. We reduced our waste to landfill by 18% compared to 2022, and created a long-term roadmap to envision our waste management goals.

In 2025, we plan to enhance our waste management best practices and standardize in all locations.

76%

of our electricity is sourced through renewable/zero carbon electricity, a 5% increase compared to 2023.

Manufacturing Our Own Esters Lead to Significant Energy Improvements

One of the ways we better serve our customers is by manufacturing esters in-house which both reduces cost and increases performance. Esters are a key component used in many of our products. The esterification process is energy intensive and our location in Uithoorn, Netherlands, is one of the select sites globally with these capabilities. This year the local team assessed the esterification process and then implemented operational changes which decreased processing time by approximately 50% and decreased the heating temperature by 34%, further reducing the site's energy consumption. This is a significant improvement in the process and key learnings from this project will be implemented globally in the future.

¹Responsible Care[®] is a registered trademark of the American Chemistry Council



Empowering Our Colleagues and Communities

Quaker Houghton maintains an unwavering commitment to our colleagues' engagement, safety, and professional development; advancing inclusion and supporting the communities where we live and work.

Empowering Our Colleagues and Communities is of the upmost importance at Quaker Houghton. For more details on our management approach to:

- Empowering Our Colleagues to Live Safe, please see pg. 20 of our [2023 report](#).
- Investing In Our People's Growth and Development, please see pg. 21 of our [2023 report](#).
- Embracing Inclusion, please see pg. 13 of [this report](#).
- Supporting Our Local Communities' Development, please see pg. 24 of our [2023 report](#).

Empowering Our Colleagues to Live Safe

Safety is critical to the Quaker Houghton culture. We believe everyone has a role to play in protecting themselves and those around them. In 2024, our focus areas were to revitalize our Life Saving Rules, increase emphasis on job task risk analysis (JTRA), invest in Process Hazard Analysis software, and expand the Devonway EHS platform to include Management of Change. As a result of our focus on risk assessment, Quaker Houghton colleagues completed over 14,000 safety activities in 2024, a 42% increase from 2023. We also completed detailed site improvement plans for all locations, putting additional focus on setting reasonable deadlines for audit findings and completing them on time.

We increased ISO 45001 certifications to 80% in our non-U.S. locations, and in 2024, 53% of our U.S. sites were RC 14001 certified. ISO 45001 is an internationally recognized framework for occupational health and safety management systems, and RC 14001 is a standard for meeting the American Chemistry Council's (ACC) Responsible Care® (RC) safety and sustainability principles. These certifications speak to the robustness of our occupational health and safety, and sustainability program management. In addition to upholding these standards, we also implement compliance audits on a three-year cycle in partnership with a third party consultant to support our compliance with EHS regulations and industry best practices.

Due to our efforts in 2024, we achieved a Total Recordable Incident Rate (TRIR), of 0.33 and zero severe recordable injuries. We are proud of our progress as this achievement is a decrease of 57% since 2019 and well below the average TRIR of 1.8 for Chemical Manufacturing (2023), as cited by the U.S. Bureau of Labor Statistics. In 2025, we plan to continue to focus on employee engagement, increase employee reporting of leading indicators, standardize policies and procedures, and continue to improve process safety management which we anticipate will lead to a reduction in recordable incidents.

Investing In Our People's Growth and Development

Our colleagues are our most significant differentiator. To ensure our success, we prioritize supporting and investing in the skills, talents, and expertise of our colleagues.

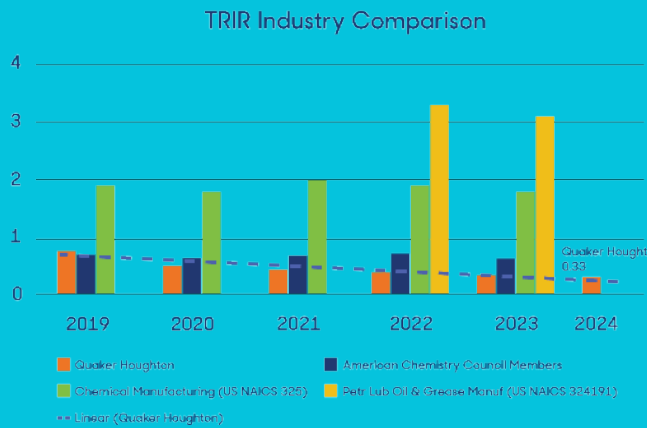
Our global performance management framework, learning and development programs, and organizational talent assessment process are core elements of Quaker Houghton's talent investment efforts. The performance management process provides a standardized approach and cadence for evaluating colleague performance and identifying learning goals, action plans, and opportunities for professional development that are aligned with our overarching enterprise strategy.

Through our learning and development programs we place importance on developing our leaders at all levels—whether a colleague is leading themselves or others—and providing them with opportunities to enhance their effectiveness. Our organizational talent review works to identify the critical skills and capabilities needed to drive our collective success, delivering results.

We prioritize efforts and investments around wellness and wellbeing. In 2024, Quaker Houghton partnered with an external global wellbeing platform, Personify Health (formerly Virgin Pulse), which provides access to activities, tools, and resources on wellness topics, and celebrated World Mental Health Day with enterprise-wide discussions and education.

0.33

TRIR; well below the average TRIR of 1.8 for Chemical Manufacturing (2023), as cited by the U.S. Bureau of Labor Statistics



World Safety Week

Beginning in April, Quaker Houghton celebrated its third World Safety Week. During this time, colleagues received training, participated in various activities, and were encouraged to focus on hazard identification and situational awareness. Regardless of a colleague's role or location these two aspects of safety play an integral part of Quaker Houghton's Live Safe core value. While there was global programming, such as key messaging from leaders and videos involving Quaker Houghton colleagues, there were also dedicated activities at local sites to involve and engage colleagues on these topics. We are proud to report that over 90% of our colleagues got involved in the events embracing our Live Safe core value and our path to zero vision.

To further support colleague wellbeing, we continued our partnership with Carrot Fertility and offered a new voluntary benefit with Care.com providing unlimited access to the world's leading online network for finding short- or long-term care for children, seniors, and pets. In the United States we also expanded our Paid Parental Leave program in 2024 to birthing and non-birthing parents (previously limited to the birthing parent) and offered the Calm App for guided meditations, mindfulness programs, sleep stories, breathing exercises and stress management tools.

Colleague engagement will remain an important element of Quaker Houghton's people strategy, and we will expand opportunities for learning, development, engagement, and total rewards offerings for our colleagues.

Embracing Inclusion

We aim to foster an inclusive culture that mirrors our global organization. We value doing great things together, in a way that celebrates this and creates an environment where everyone belongs. One of the core objectives of our Culture and Engagement Taskforce (which focuses on Quaker Houghton's overall culture) is to support inclusion initiatives. We leveraged this taskforce as we expanded our global Colleague Resource Groups (CRGs), which increase opportunities for our colleagues to feel a sense

of belonging and introduced Inclusion Training for leaders. Our global CRGs (The NextGen Professionals, HiredPower, the Women's Inclusion Network, Veteran, and PRIDE) were active during the year and hosted a variety of events focused on colleague development and building inclusivity. Allyship is a crucial element of our CRG framework and was an element in our inclusion training for leaders. We continue to build an inclusive talent pipeline by providing learning opportunities to talented women and minority leaders through a partnership with Leader's Edge. In 2025, we plan to continue our focus on belonging and engagement.



Supporting Our Local Communities' Development

The Global Philanthropy Committee, along with our local volunteering site coordinators, partnered with colleagues and nonprofit organizations worldwide to make a positive impact in the communities where we live and work. The company expanded its global month of giving to two months in 2024, as a result of the program's success in 2023. This expansion led the company to surpass its goal of meeting industry benchmarks for volunteer participation, achieving over 5% of colleagues globally involved in our volunteer program.

Through two successful grant cycles, the organization positively impacted 17 nonprofits worldwide. Additionally, the newly launched global donation matching program amplified the impact of colleagues' generosity while supporting causes important to them.

In 2025, we aim to establish long-term relationships with community organizations and charities near our primary regional and global headquarters and increase colleague participation in volunteering.

17 non-profit grant partners across the globe

Global Months of Giving

As we strive to make significant positive impacts in the places where we live and work, we encourage colleagues around the world to utilize their 16 hours of paid time off to give back to their communities. In April and November, Quaker Houghton hosted two Global Months of Giving, which focused on driving colleague volunteerism. Our colleagues jumped into action—they participated in hundreds of hours of volunteer work and doubled our year-to-date recorded volunteering hours. Activities included cleaning up beaches at the North Sea Shore in the Netherlands, helping at animal shelters in Germany, serving food at a soup kitchen in the United States, providing support for flood survivors in Spain, and organizing a library in China. We are proud of the outcomes of our Global Months of Giving and look forward to continuing this tradition in 2025.

Sourcing Our Materials Responsibly

Quaker Houghton works diligently to source raw materials from suppliers who operate in an ethical and responsible manner.

Sourcing Our Materials Responsibly is a key area of focus for Quaker Houghton. Our management approach in 2024 is consistent with our 2023 approach. For more details, please see pg. 26 of our [2023 report](#).

Ensuring Everyone in the Supply Chain Is Treated With Dignity and Respect and Confirming Sustainable Sourcing of Raw Materials

Quaker Houghton is committed to conducting our business ethically and sustainably to serve the best interests of our company, colleagues, communities, customers, suppliers, and the planet. We hold our suppliers and subcontractors to high standards, which are outlined in both our [Supplier Code of Conduct](#) and the [Quaker Houghton Code of Conduct](#). New Quaker Houghton suppliers must commit to the Supplier Code of Conduct when they are approved. All colleagues have a responsibility to select responsible vendors, as outlined in [Quaker Houghton's Code of Conduct](#) which is reviewed during the onboarding process and recommitted to on a biannual basis. In addition, in 2024 colleagues were required to complete a “Due Diligence: What’s My Responsibility” course, which enables colleagues to better understand their role in identifying risks in the supply chain, as part of the company’s annual ethics and compliance program.

One of our most significant sustainable supply chain initiatives is our ambition to only source responsibly derived palm oil. We can achieve this by confirming sustainable sourcing directly with the supplier, or through third party certification. We are proud to hold a Supply Chain Certification in Uithoorn, the Netherlands and Santa Perpetua, Spain from the Roundtable on Sustainable Palm Oil (RSPO). This certification assures our customers the palm oil used in our products, manufactured in those locations, are 100% responsibly sourced. In 2024, 65% of our global supply of palm oil and Palmoleine was fully segregated through the RSPO. In certain areas of the world sourcing fully segregated palm oil is not feasible, adoption rates are slower with some customers, and/or may no longer be desired. As a result, the percentage of our fully segregated supply may fluctuate in the future. We plan to continue to invest in fully segregated palm oil, when feasible, as well as book and claim through the RSPO, and work directly with suppliers to ensure what we buy is ethically and responsibly sourced.

Quaker Houghton also maintains external partnerships to assess our suppliers’ performance. We have partnered with EcoVadis since 2022 to assess the sustainability performance of our direct suppliers with over \$100,000 spend. In 2023, we worked to onboard those suppliers to the EcoVadis platform. In 2024, we established a sustainability performance

threshold aspiring that direct suppliers achieve a score of “low risk” by EcoVadis. In 2024, 75% of our direct raw material spend was with suppliers who exceeded that threshold. In the next year, we strive to continue onboarding suppliers as supply shifts and will work with targeted suppliers to improve their practices enabling them to meet our threshold.

In 2024 we continued using Supplier IO, a supplier intelligence platform, to monitor suppliers in our U.S. supply base that are owned by people with varying backgrounds and experiences. By 2025, supplier data sets from Supplier IO reports will be available to inform our procurement policy recommendations.

75%

of our total direct raw material spend was with suppliers who exceeded our sustainability performance threshold



Santa Perpetua RSPO certification

In 2024, our Santa Perpetua, Spain site was newly certified as using fully segregated palm oil by the Roundtable on Sustainable Palm Oil (RSPO). With this certification, Santa Perpetua joins our Uithoorn, Netherlands location, which received its RSPO certification in 2015. The RSPO certifies palm oil and its derivatives as sustainable if it has been grown in a manner that protects forests, wildlife, the environment, communities, and workers, which are major concerns surrounding the sourcing of palm oil. This work is part of our commitment to ensure that every stage of our supply and value chain, from raw materials to customer operations, benefits from continual improvements in sustainability performance.



APPENDIX

About This Report

Reporting Frameworks

Quaker Houghton has reported the information cited in the [GRI content index](#) with reference to the Global Reporting Initiative (GRI) Standards.

Additionally, our [SASB Index](#) provides information, or the location of information, pertaining to the Sustainability Accounting Standards Board (SASB) Standards for the Chemicals industry. We report against all of the standards which are material to Quaker Houghton..

In 2024, Quaker Houghton continued to disclose climate related risks and opportunities aligned with the Task Force on Climate-Related Financial Disclosures (TCFD). Please see our [TCFD Index](#) for more information.

Report Scope

Quaker Houghton reports on our management of sustainability topics as determined by the materiality assessment conducted in 2020. The information in our report focuses on activities from January 1, 2024–December 31, 2024. The Data Tables in the appendix of the report also include fiscal years 2023 and 2022.

In 2024, we updated the baseline and historical environmental data, from year 2022 to present to reflect organizational changes. These changes included divestitures or change in operating scope of 3 locations. We omit standalone offices or labs from our environmental data as they do not have a material impact.

Forward-Looking Statements

This report contains “forward-looking statements” that fall under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and the Securities Act of 1933, as amended. These statements can be identified by the fact that they do not relate strictly to historical or current facts. We have based these forward-looking statements on assumptions, projections and expectations about future events that we believe are reasonable based on currently available information, including statements regarding the potential effects of the conflicts in Ukraine and the Middle East; trade and tariffs throughout the world; our expectation that we will maintain sufficient liquidity and remain in compliance with the terms of the Company’s credit facility; expectations about future demand and raw material costs; and statements regarding the impact of increased raw material costs and pricing initiatives. These forward-looking statements include statements with respect to our beliefs, plans, objectives, goals, expectations, anticipations, intentions, financial condition, results of operations, future performance, and business, which may differ materially from our actual results, including but not limited to the potential benefits of acquisitions and divestitures, the impacts on our business as a result of global supply chain constraints, and our current and future results and plans and statements that include the words “may,” “could,” “should,” “would,” “believe,” “expect,” “anticipate,” “estimate,” “intend,” “outlook,” “target,” “possible,” “potential,” “plan” or similar expressions. A major risk is that demand for the Company’s products and services is largely derived from the demand for its customers’ products, which subjects the Company to uncertainties related to downturns in a customer’s business and unanticipated customer production slowdowns and shutdowns, including as is currently being experienced by many automotive industry companies as a result of supply chain disruptions. Other major risks and uncertainties include, but are not limited to inflationary pressures; supply chain disruptions; customer financial instability; rising interest rates and the possibility of economic recession; economic and political disruptions, including the impacts of the military conflicts between Russia and Ukraine and between Israel and Hamas; tariffs, trade restrictions, and the economic and other sanctions imposed by other nations on Russia and/or other government organizations; suspensions of activities in Russia by many multinational companies and the potential expansion of military activity; foreign currency fluctuations; significant changes in applicable tax rates and regulations; future terrorist attacks and other acts of violence; the impacts of consolidation in our industry, including loss or consolidation of a major customer; and the potential occurrence of cyber-security breaches, cyber-security attacks and other security incidents. Furthermore, the Company is subject to the same business cycles as those experienced by our customers in the steel, automobile, aircraft, industrial equipment, aluminum and durable goods industries. Our forward-looking statements are subject to risks, uncertainties and assumptions about the Company and its operations that are subject to change based on various important factors, some of which are beyond our control. These risks, uncertainties, and possible inaccurate assumptions relevant to our business could cause our actual results to differ materially from expected and historical results. All forward-looking statements included in this report, release, including expectations about business conditions during 2024 and future periods, are based upon information available to the Company as of the date of this report, which may change. Therefore, we caution you not to place undue reliance on our forward-looking statements. For more information regarding these risks and uncertainties as well as certain additional risks that we face, refer to the Risk Factors section, which appears in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2024, and in subsequent reports filed from time to time with the Securities and Exchange Commission. We do not intend to, and we disclaim any duty or obligation to, update or revise any forward-looking statements to reflect new information or future events or for any other reason. This discussion is provided as permitted by the Private Securities Litigation Reform Act of 1995.

GRI and SASB Content Index

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
GRI 2: General Disclosures 2021	2-1 Organizational details	Quaker Chemical Corporation D/B/A Quaker Houghton 901 East Hector Street, Conshohocken, PA, USA Please see additional details in our 2024 10-K .
	2-2 Entities included in the organization’s sustainability	Please see our 2024 10-K .
	2-3 Reporting period, frequency, and contact point	The 2024 Sustainability Report was published on April 21, 2025, covers the 2024 calendar year, and is updated annually. For questions about the 2024 Sustainability Report information, please contact Sarah Briggs; Director, Corporate Sustainability: sustainability@quakerhoughton.com .
	2-4 Restatements of information	<p>In this report we have updated our baseline for site environmental data, through 2023, to reflect the changes in scope and data reporting errors. We removed three divested sites from our baseline data and future reporting. One additional site was added back into the scope of 2022 and 2023 data, as it was a manufacturing location prior to becoming a warehouse.</p> <p>We add acquisitions to our safety data to start reporting the second January after the acquisition is made. In the 2022 report, the 2022 TRIR was reported as 0.32. After including Baron Industries and Grindaix the TRIR was recalculated to be 0.41. Depending on M&A activity we may routinely adjust the historical TRIR as a result.</p> <p>The historical data restatements are indicated in 2024 Data Tables by two asterisks (**).</p>
	2-5 External assurance	Quaker Houghton’s sustainability reporting has not been externally assured.
	2-6 Activities, value chain, and other business relationships	Please see our 2024 10-K .
	2-7 Employees	Please see the 2024 Data Tables included in this report.
	2-8 Workers who are not employees	We do not track the proportion of organizational activities performed by workers who are not classified as employees globally in the HR system of record.
	2-9 Governance structure and composition	Please see the Who We Are and How We Manage Sustainability section of this report. Please also see our 2025 Proxy Statement .
	2-10 Nomination and selection of the highest governance	Please see our 2025 Proxy Statement .

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
GENERAL DISCLOSURES		
GRI 2: General Disclosures 2021	2-11 Chair of the highest governance body	Please see our 2025 Proxy Statement .
	2-12 Role of the highest governance body in overseeing the management impacts	Please see the Who We Are and How We Manage Sustainability section of this report, Please also see our 2025 Proxy Statement .
	2-13 Delegation of responsibility for managing impacts	Please see the Who We Are and How We Manage Sustainability section of this report.
	2-14 Role of the highest governance body in sustainability	Please see the Who We Are and How We Manage Sustainability section of this report.
	2-15 Conflicts of interest	Please see our 2025 Proxy Statement .
	2-16 Communication of critical concerns	Please see our 2025 Proxy Statement .
	2-17 Collective knowledge of the highest governance body	Each Board Sustainability Committee member has experience in overseeing environmental, social and governance matters. In addition, Committee members are provided materials at each Committee meeting which support additional knowledge and skill development in this evolving landscape. Please see our 2025 Proxy Statement .
	2-18 Evaluation of the performance of the highest governance body	The Board of Directors conducts an annual self-evaluation each year.
	2-19 Remuneration policies	Please see our 2025 Proxy Statement .
	2-20 Process to determine remuneration	Please see our 2025 Proxy Statement .
	2-21 Annual total compensation ratio	Please see our 2025 Proxy Statement .
	2-22 Statement on sustainable development strategy	Please see the Message From the CEO section of this report.
	2-23 Policy commitments	Quaker Houghton's Code of Conduct requires adherence and compliance with all laws and regulations on human rights and all topics/matters globally. The Legal Department works with all groups on all material policy commitments, but they are not housed in one place or controlled by the legal department. The Corporate Compliance Program, as well as the Global Trade Department's trainings and communications, include varied and broad topics, including such areas as human rights.
	2-24 Embedding policy commitments	The Legal Department works with all groups on all material policy commitments, but they are not housed in one place or controlled by the legal department.
	2-25 Processes to remediate negative impacts	Please see our Code of Conduct .
	2-26 Mechanisms for seeking advice and raising concerns	Please see our Code of Conduct .
	2-27 Compliance with laws and regulations	Quaker Houghton is fulfilling its compliance obligations.

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
GENERAL DISCLOSURES		
GRI 2: General Disclosures 2021	2-28 Membership associations	While Quaker Houghton participates in many industry associations, the company is an active and corporate member of the American Chemistry Council and is Responsible Care certified in many of its U.S. locations.
	2-29 Approach to stakeholder engagement	Please see the Our Materiality Results section of this report.
	2-30 Collective bargaining agreements	38% of Quaker Houghton employees are covered by union/collective bargaining agreement.
MATERIAL TOPICS		
GRI 3: Material Topics 2021	3-1 Process to determine material topics	Please see the Our Materiality Results section of this report.
	3-2 List of material topics	Please see the Our Materiality Results section of this report.
MANAGING OUR WATER RESPONSIBLY		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Managing Our Water Responsibly section of our 2023 Sustainability Report .
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	Please see the Managing Our Water Responsibly section of our 2023 Sustainability Report .
GRI 303: Water and Effluents 2018	303-2 Management of water discharge-related impacts	Please see the Managing Our Water Responsibly section of the 2023 Sustainability Report . Quaker Houghton has a corporate policy that advises sites on how to manage their wastewater. It instructs on how to apply for permits, licensing, and comply with local regulations. In 2024, Quaker Houghton has completed several voluntary wastewater initiatives at a site level for 3 of our sites to improve their wastewater management.
	303-3 Water withdrawal	Please see the 2024 Data Tables included in this report.
	303-5 Water consumption	Please see the 2024 Data Tables included in this report.
MANAGING OUR WATER RESPONSIBLY		
SASB Water Management	RT-CH-140a.1 Total water withdrawn, and percentage in regions with High or Extremely High Baseline Water Stress; Total water consumed	Please see the 2024 Data Tables included in this report.
	RT-CH-140a.2 Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Please see the 2024 Data Tables included in this report.
	RT-CH-140a.3 Description of water management risks and discussion of strategies and practices to mitigate those risks	Please see the Managing Our Water Responsibly section of the 2023 Sustainability Report and the TCFD Index in this report.

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
REDUCING OUR GREENHOUSE GAS EMISSIONS		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Reducing Our Greenhouse Gas Emissions section of the 2023 Sustainability Report .
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities	Please see TCFD Index included in this report.
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Please see the 2024 Data Tables included in this report.
	302-3 Energy intensity	Please see the 2024 Data Tables included in this report.
	305-1 Direct (Scope 1) GHG emissions	Please see the 2024 Data Tables included in this report.
	305-2 Energy indirect (Scope 2) GHG emissions	GWP source used is IPPC Global Warming Potential Values: August 2024 AR6 , as distributed by the GHG Protocol. GHG Protocol is the standard used and followed for methodologies and calculations. We account for CO2, CH4, N2O in our calculations and then convert those to total CO2e. The approach Quaker Houghton takes on calculations is operational control of all assets. Please see the 2024 Data Tables included in this report.
GRI 305: Emissions 2016	305-4 GHG emissions intensity	Please see the 2024 Data Tables included in this report.
	305-5 Reduction of GHG emissions	Quaker Houghton follows GHG Protocol standards for calculating scopes 1 and 2 emissions. We created an internal calculation tool to carry out our methodology. This tool is reviewed, but not certified, by a third party to ensure proper conversion factors, methodologies, calculations, and processes were used in calculating total emissions. Conversion factor sources include the following globally recognized organizations: International Energy Agency (IEA), Environmental Protection Agency (EPA), and GHG Protocol GWP values. Quaker Houghton has identified 100% operationally controlled manufacturing sites (plus any warehouses, labs or offices connected to a manufacturing site), regional headquarters and customer processing locations; in scope for emissions calculations. Out of scope sites are small warehouses, labs, and offices not connected to a manufacturing site. Scope 1 emission sources include owned and leased company vehicles as well as burning of fossil fuels consumed in our manufacturing processes and heating and cooling of sites in scope. Excluded scope 1 emissions are any potential coolant leaks on site. Scope 1 emission sources also include burning of fossil fuels for steam generating purposes, which are directly tied to our manufacturing processes. Scope 2 emissions are a result of electricity consumption directly associated with manufacturing processes, as well as the heating and cooling of in scope sites. We calculate both location and market based emissions for scope 2, and these values are reported annually via our CDP questionnaire, as well as our 2024 Data Tables in this report. Scope 3 GHG emissions are excluded from this report, and we anticipate being able to begin reporting in the 2025 report.
	RT-CH-110a.1 Gross global Scope 1 emissions	Please see the 2024 Data Tables included in this report.
SASB Greenhouse Gas Emissions	RT-CH-110a.2 Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Please see the Reducing Our Greenhouse Gas Emissions section of the 2023 Sustainability Report .
SASB Energy Management	RT-CH-130a.1 Energy consumption within the organization	Please see the 2024 Data Tables included in this report.

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
MINIMIZING OUR WASTE		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Minimizing Our Waste section of the 2023 Sustainability Report .
	306-1 Waste generation and significant waste-related	Please see the 2024 Data Tables included in this report.
GRI 306: Waste 2020	306-2 Management of significant waste related impacts	Please see the 2024 Data Tables included in this report.
	306-3 Waste generated	Please see the 2024 Data Tables included in this report.
	306-4 Waste diverted from disposal	Please see the 2024 Data Tables included in this report.
SASB Hazardous Waste Management	RT-CH-150a.1 Amount of hazardous waste generated, percentage recycled	Please see the 2024 Data Tables included in this report.
EMPOWERING OUR COLLEAGUES TO LIVE SAFE		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Empowering Our Colleagues to Live Safe section of this report.
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	<p>All of our sites operate under a health and safety management system. All employees and workers, regardless of activity, are covered by that system. In 2024, the Environmental, Health and Safety (EHS) policy was updated and approved by the CEO and President. Personal Protective Equipment (PPE) and Safety Committee policies were updated, and the new Job Task Risk Assessment (JTRA) procedure was developed. Quaker Houghton in its mission to build on process safety, initiated two new programs, the design and implementation of a Management of Change (MOC) program through DevonWay with an expected rollout in Q2 2025 and a Process Hazards Analysis (PHA) program, utilizing ABS Leader software.</p> <p>Quaker Houghton uses a combination of job descriptions, standard operating procedures (SOP's), EHS policy and procedures, and job task risk assessments to define workers' activities. These documents are managed via the DevonWay document control module.</p>

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
EMPOWERING OUR COLLEAGUES TO LIVE SAFE		
GRI 403: Occupational Health and Safety 2018		<p>There are multiple processes we follow to identify work-related hazards and assess risks on a routine and non-routine basis. These include:</p> <ul style="list-style-type: none"> • Job Task Risk Assessment (JTRA) • Stop work authority • Incident management system • Inspection of equipment, processes, or work procedures to determine if operating conditions are within acceptable limits • Observation via formal, in-person evaluation of a job task or work procedure while it's being performed in its entirety; assess behaviors, conditions, and overall work processes to determine compliance with regulatory requirements or other defined parameters
	403-2 Hazard identification, risk assessment, and incident investigation	<p>In 2024, a new JTRA procedure was developed. Quaker Houghton colleagues completed over 14,000 safety activities in 2024, a 42% increase over 2023. We ensure the quality of these processes and the competency of the individuals through internal audit and performance reviews of EHS trained staff. We tie the results to KPIs which are connected to a monthly report. Individual and/or global EHS goals are built into every Quaker Houghton colleague's objectives.</p> <p>Potential hazards and hazard situations are reported by all workers through our leading indicators of Hazard ID, Near Misses, and observations in the new platform, DevonWay. DevonWay was implemented to improve the end-user experience for reporting, but also the tracking of hazards and hazard situations. This will help to optimize communication across regions, avoid similar hazards, and reduce the closure time. If a hazard does occur, the reporting individual is empowered by the CEO and President and the rest of the organization to stop work under the Stop Work Authority Program. The company also has an Incident Management Policy in place which describes the process for workers to remove themselves from work situations they believe could cause injury or ill health. There is public recognition for colleagues who identify and stop potential hazards from occurring, as health and safety leadership routinely communicates these hazards identified through intercompany communications.</p>
	403-3 Occupational health services	<p>The dedicated EHS staff, who are screened and trained professionals, are accountable for the implementation of EHS processes and programs, including occupational health services. The EHS staff track leading indicators which are accessible in DevonWay, our EHSQ management system, to ensure the quality of these services. We have implemented Job Task Risk Assessments (JTRA) for tasks performed on a routine basis. The purpose of this procedures is to define the methods and guidelines for assessing and addressing Safety, Environmental and Security risks at Quaker Houghton facilities.</p> <p>Federal, state and local legislation, as well as international standards that Quaker Houghton subscribes to, require that Safety, Environmental and Security risks be evaluated and appropriate risk mitigation actions be initiated to prevent safety, environmental and security incidents. Typically, this is performed using a risk assessment. Employees are trained on each JTRA when they have to perform related tasks.</p> <p>Quaker Houghton has implemented an EHS compliance audit program which contracts a 3rd party EHS consulting firm, GHD, to verify the quality of the occupational health services and programs for eliminating hazards and mitigating risks in the work environment. Critical Quaker Houghton locations are generally audited on a 3 year cycle.</p>
	403-4 Worker participation, consultation, and communication on occupational health and safety	<p>Supporting ISO 45001 requirements for site Safety Committees, CORP-P-EHS-0015 defines protocols for sites to implement Safety Committees. Furthermore, there are several EHS policies defining worker participation and consultation, examples are: CORP-P-EHS-0004 defines incident management and reporting, CORP-P-EHS-0005 defines workers authorization for Stop Work action, and CORP-P-EHS-0026 defines workers responsibilities and participation in completing hazardous work permitting.</p>

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
EMPOWERING OUR COLLEAGUES TO LIVE SAFE		
GRI 403: Occupational Health and Safety 2018	403-5 Worker training on occupational health and safety	Our learning management system is used to train our colleagues globally. It includes training on generic and specific work-related hazards, hazardous activities, or hazardous situations. These trainings are often job specific but include topics such as: Disaster Planning and Response, Fire Safety, Ergonomics, Accessing Medical Reports, etc. Training is provided through online learning platforms (Saba and DSS+). In 2024, our World Safety Week focused on Hazard Recognition and Situational Awareness.
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Our organization has placed focus on monitoring leading indicators and implementing audit programs that ensure we uphold an effective EHS program that mitigates negative occupational health and safety impacts. Setting KPIs and goals around the leading indicators we monitor helps us to address specific items, and to identify and manage larger, more systemic issues before they become an incident.
	403-8 Workers covered by an occupational health and safety management system	All sites operate under an occupational health and safety management system, and 100% of employees and workers are covered by that system. Some of our sites are audited by a third party. In addition, many of our sites are ISO 45001 or RC 14001 certified, and we aspire to have all wholly owned manufacturing facilities certified by the end of 2026.
SASB Workforce Health and Safety	RT-CH-320a.1 Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	Please see the 2024 Data Tables included in this report. Sites maintain site-specific contractor management systems, including visitor/contractor safety training. DevonWay incident reporting module provides a system for reporting and tracking contractor injuries.
	RT-CH-320a.2 Description of efforts to assess, monitor, and reduce exposure of employees and contract workers to long-term (chronic) health risks	At Quaker Houghton we perform several assessments to prevent long-term (chronic) health risks, such as chemical risk evaluations and controls of water (legionella), air quality, or noise levels. All our employees and operators wear personal protective equipment as recommended in the JTRA. We are taking action to implement low risk solutions, prevent access to potentially hazardous environments, and organize our work to reduce exposure to hazards as much as possible.
SASB Operational Safety, Emergency Preparedness and Response	RT-CH-540a.1 Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR)	Please see the 2024 Data Tables included in this report.
	RT-CH-540a.2 Number of transport incidents	Please see the 2024 Data Tables included in this report.
INVESTING IN OUR PEOPLE'S GROWTH AND DEVELOPMENT		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Investing in Our People's Growth and Development section of the 2023 Sustainability Report .
GRI 401: Employment 2016	401-1 New Employee hires and employee turnover	Please see the 2024 Data Tables included in this report.
	404-1 Average hours of training per year per employee	Please see the 2024 Data Tables included in this report.
GRI 404: Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	Please see the Investing in Our People's Growth and Development section of the 2023 Sustainability Report .
	404-3 Percentage of new employees receiving regular performance and career development reviews	Please see the 2024 Data Tables included in this report.

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
EMBRACING INCLUSION		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Embracing Inclusion section of this report.
GRI 405: Diversity and Equal Opportunity	405-1 Breakdown of governance bodies and employees	Please see the 2024 Data Tables included in this report.
SUPPORTING OUR LOCAL COMMUNITIES' DEVELOPMENT		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Supporting Our Local Communities' Development section of the 2023 Sustainability Report .
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact, assessments and development programs	While the infrastructure for global tracking and consolidation is still under development, progress has been achieved in tracking local volunteering efforts in 2024. We anticipate enhancing our capabilities to provide reporting on local community engagement, impact assessments, and development programs within the next year.
SASB Community Relations	RT-CH-210a.1 Discussion of engagement processes to manage risks and opportunities associated with community interests	In 2024, the Global Philanthropy Committee, along with our local volunteering site coordinators, partnered with colleagues and nonprofit organizations worldwide to make a positive impact in the communities where we live and work. We utilize a global volunteering approach to manage opportunities associated with these community interests.
ENSURING EVERYONE IN THE SUPPLY CHAIN IS TREATED WITH DIGNITY AND RESPECT, CONFIRMING SUSTAINABLE SOURCING OF RAW MATERIALS		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Ensuring Everyone in the Supply Chain Is Treated With Dignity and Respect, Confirming Sustainable Sourcing of Raw Materials section of the 2023 Sustainability Report .
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	Please see the 2024 Data Tables included in this report.
	308-2 Negative environmental impacts in the supply chain and actions taken	Please see the 2024 Data Tables included in this report.
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	Please see the 2024 Data Tables included in this report.
MINIMIZING HAZARDS IN OUR PORTFOLIO		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Minimizing Hazards in Our Portfolio section of this report.
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	Product Stewardship evaluates all Quaker Houghton finished goods and creates Globally Harmonized System of Classification and Labelling of Chemicals (GHS) compliant Safety Data Sheets (SDS) for all of our products globally. These customer facing documents ensure customers understand the potential hazards and mitigate the risk of misusing our products. Should a customer have questions or concerns relating to our product, our product stewardship team is available to consult and help our customers make the best product choices for their needs and understand proper use and disposal. Please also see the 2024 Data Tables in this report.

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
MINIMIZING HAZARDS IN OUR PORTFOLIO		
SASB Safety & Environmental Stewardship of Chemicals	RT-CH-410b.a (1) Percentage of products that contain Globally Harmonized System of Classification and Labeling of Chemicals (GHS) category 1 and 2 Health and Environmental Hazardous Substances, (2) percentage of such products that have undergone a hazard impact	Please see the 2024 Data Tables included in this report.
	RT-CH-410b.2 Discussion of strategy to (1) manage chemicals of concern and (2) develop alternatives with reduced human and/or environmental impact	<p>The Innovating Together for a Better Tomorrow team developed a high-level roadmap for all GHS category 1A/B CMR¹ finished goods, and a specific one for finished goods using Hexavalent chromium.</p> <p>The team began in 2022 on determining and implementing a strategy to reduce those hazards in our portfolio. This work continued in 2024. In 2024, 2 additional roadmaps were developed, processed, and implemented. The status of these roadmaps are reported on a quarterly basis. Our Product Stewardship team continues to work with operations to determine appropriate labeling and PPE required for management of chemical hazards. The introduction of the Green Chemistry Guidelines should reduce human and environmental hazards beyond our focus of GHS category 1A/B CMR hazards and virgin fossil based raw materials. The preferred raw material list is updated monthly supporting new raw materials and changes in classification to existing raw materials and will also support this initiative.</p>
TRANSITIONING OUR SOLUTIONS TO SUPPORT A LOW-CARBON ECONOMY		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Transitioning Our Solutions to Support a Low-Carbon Economy section of the 2023 Sustainability Report .
FORMULATING WITH RENEWABLE RAW MATERIALS		
GRI 3: Material Topics 2021	3-3 Management of material topics	Please see the Formulating With Renewable Raw Materials section of the 2023 Sustainability Report .
GRI 301: Materials 2016	301-2 Recycled input materials used	Please see the 2024 Data Tables included in this report.
OTHER RELEVANT SASB INDICATORS		
SASB Air Quality	RT-CH-120a.1 Air emissions of the following pollutants: (1) NO _x (Excluding N ₂ O, (2) SO _x , (3) volatile organic compounds (VOCs), and (4) hazardous air pollutants (HAPs)	Quaker Houghton does not generally track criteria pollutants from operations as the emissions are immaterial, unless required at a local level. This is due to the relative low emissions of VOCs and HAPs in the materials in Quaker Houghton's manufacturing processes and products.
SASB Management of the Legal & Regulatory Environment	RT-CH-530a.1 Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Although our organization supports the mitigation of climate change and environmental protection, we do not take any formal corporate positions on government regulations.

¹ CMR GHS category 1 A/B, excluding not intended usage (ingestion hazard), the plating business from Sifco, platform extension in the regions (localization of existing platforms) and maintenance activities of finished goods at existing customers.

REPORTING STANDARD	DISCLOSURE	LOCATION OR DIRECT RESPONSE
VOLUNTARY DISCLOSURES		
Quality Management System (QMS) Certifications	Percentage of QMS Certifications	Please see the 2024 Data Tables included in this report.
Environmental Management System (EMS) Certifications	Percentage of EMS Certifications	Please see the 2024 Data Tables included in this report.
Bribery and Corruption Policy	Commitments made to mitigate risks posed by bribery and corruption	Our policies on bribery and corruption, and specifically our compliance with the Foreign Corrupt Practices Act, are set forth in our Code of Conduct .
Corporate Governance	Independent Board Chair	Please see our 2025 Proxy Statement .
Remuneration of members of the executive management team	Integration of sustainability performance objectives into the variable remuneration of members of the executive management team	Please see our 2025 Proxy Statement .

REPORTING STANDARD	DISCLOSURE
GOVERNANCE	
<p>Disclose the organization’s governance around climate-related risks and opportunities.</p> <p>1. Describe the board’s oversight of climate-related risks and opportunities.</p> <p>2. Describe management’s role in assessing and managing climate-related risks and opportunities.</p>	<p>The Sustainability Committee of the Quaker Houghton Board of Directors has oversight of our sustainability strategy, which includes energy consumption, greenhouse gas emissions, and water use. Initiatives to responsibly manage water, energy, and emissions are implemented by the Protecting Our Planet team, handled locally by the operations team at each Quaker Houghton site, and regionally by our procurement teams.</p> <p>Beyond the Board Sustainability Committee, Quaker Houghton’s full Board of Directors receive sustainability updates , including climate-related issues, from the Executive Leadership Team (ELT) via quarterly reports and periodic presentations. Quaker Houghton completed a TCFD-aligned scenario analysis in 2023, and the outputs of this exercise were shared with the Committee. The Chair of the Board Sustainability Committee, Mr. Frisby, is responsible for updating the Board on sustainability topics, including climate risks and opportunities.</p> <p>We are currently developing the strategy for circulating the results of the scenario analysis with our leadership teams and discussing our approach to material risks and opportunities. Additional details on Board and Management oversight of and responsibility for climate-related risks and opportunities are available in the following sections of the 2023 Sustainability Report: Who We Are and How We Manage Sustainability; Reducing Our Greenhouse Gas Emissions; Managing Our Water Responsibly; and Minimizing Our Waste.</p>
STRATEGY	
<p>Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material.</p> <p>Describe the climate-related risks and opportunities the organization has identified over the short-, medium-, and long-term.</p> <p>1. Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning.</p> <p>2. Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.</p>	<p>Quaker Houghton recognizes that both transitional and physical climate-related risks and opportunities may impact and influence our business. During the summer of 2023, we conducted a scenario analysis to identify climate-related risks and opportunities over three different future time horizons. We defined short-term as 0 to 3 years, medium-term as 3 to 7 years, and long-term as 8 or more years.</p> <p>Physical Risks and Opportunities</p> <p>As climate change exacerbates the frequency and severity of acute hazards, such as hurricanes and flooding, it could pose a direct threat to Quaker Houghton’s infrastructure, operations, and personnel safety. Weather-related events may lead to costs in the form of physical damage to facilities, as well as business interruptions to our manufacturing process. Severe weather events could create unsafe working conditions, and in response, there may be increased work stoppages. Changes in chronic hazards, such as extreme heat and drought, could put a strain on access to electricity and water, potentially leading to increased operating costs. Physical climate risks in regions where our suppliers operate can disrupt the supply chain, affecting the availability and costs of raw materials.</p> <p>Transition Risks and Opportunities</p> <p>Policy and legal risk, such as carbon pricing schemes enacted in countries where Quaker Houghton produces, and market risks, like volatility in raw material pricing, were identified as the most pertinent transition risks. These risks could impact our operating expenses, revenues, capital expenses and financing options. Identified opportunities include increased demand for our products in developing markets, such as supporting the transition from internal combustion engine (ICE) vehicles to electric vehicles, and improving our processes to be more energy and water efficient. We are currently developing the strategy for circulating the results of the scenario analysis with our leadership teams and discussing our approach to material risks and opportunities.</p>

REPORTING STANDARD	DISCLOSURE
RISK MANAGEMENT	

<p>Disclose how the organization identifies, assesses, and manages climate-related risks.</p> <p>Describe the organization’s processes for managing climate-related risks.</p> <p>1. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management.</p>	<p>As part of the scenario analysis, physical and transition risks were assessed to determine our exposure to climate-related risks. In line with TCFD recommendations, potential acute and chronic hazards were reviewed to identify physical risks that could impact our operations. The physical risk analysis was conducted using two warming scenarios issued by the Intergovernmental Panel on Climate Change. The low warming scenario, referred to as SSP1-2.6, assumes mean global temperature rise remains below a 2°C increase by the end of the century. In contrast, the higher warming scenario, SSP3-7.0, depicts a trajectory in which the global temperature rises 4°C and climate impacts are heightened.</p> <p>Risks pertaining to policy, legal, market, technology, and reputational matters were assessed to identify climate-related transition risks and opportunities. The transition risk analysis was conducted with two scenarios from the International Energy Agency’s World Energy Outlook. The Stated Policies Scenario (STEPS) results in an expected temperature rise of around 2.5°C, and the Announced Pledges Scenario (APS) results in an expected temperature rise of around 1.7°C.</p> <p>Climate-related risks are also included in our enterprise risk management process. Annually, Quaker Houghton’s Risk Manager engages with our leaders and the heads of our businesses to identify what they consider to be our company’s key risks. They further quantify how severe those risks are and prioritize them. Climate-specific impacts have been identified as part of this process.</p> <p>Quaker Houghton has a long history of implementing programs and processes to manage our GHG emissions, water use, and waste—which are closely related to the risks and opportunities identified during the scenario analysis. Please read more about these efforts in the Reducing Our Greenhouse Gas Emissions section of this report. Following the outputs of the scenario analysis, our next steps include planning our corporate approach for programs that may address specific climate-related risks.</p>
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METRICS AND TARGETS	
<p>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</p> <p>Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.</p> <p>1. Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.</p> <p>2. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</p>	<p>Quaker Houghton’s Scope 1 and 2 GHG emissions, as well as other relevant environmental metrics related to water, energy, and waste management, are included in the in this report. We monitor these metrics as indicators of our overall environmental performance—and as indicators of our ability to mitigate our contributions to climate change (emissions) and the physical impacts of climate change (water, etc.). We aim to complete a Scope 3 GHG emissions assessment in 2025 and anticipate this to be detailed in the 2025 report.</p> <p>We are also making progress on each of our material topics many of which relate to climate-related impacts. As a result we aspire to reduce our greenhouse gas emissions, waste to landfill, hazardous waste, and water intensity. Please read more about our progress in the Reducing Our Greenhouse Gas Emissions section of this report.</p>

2024 Data Tables

STANDARD	DESCRIPTION	FY22	FY23	FY24
GENERAL DISCLOSURES				
GRI 2-7 Employees ¹	Total number of employees	4,600	4,400	4,400
	Female	1,083	1,053	1,089
	Male	3,509	3,321	3,284
	Not specified	8	26	27
	Americas	1,897	1,840	1,884
	APAC	1,090	1,095	1,109
	EMEA	1,613	1,465	1,407
	Total number of permanent employees	4,550	4,300	4,300
	Female	1,064	1,040	1,066
	Male	3,478	3,236	3,207
	Not specified	8	24	27
	Americas	1,885	1,825	1,865
	EMEA	1,579	1,456	1,045
	APAC	1,086	1,019	1,390

¹ All employee data listed in GRI 2 is rounded.

STANDARD	DESCRIPTION	FY22	FY23	FY24
GENERAL DISCLOSURES				
GRI 2-7 Employees ¹	Total number of temporary employees	50	100	100
	Female	22	14	23
	Male	28	84	77
	Not specified	-	2	-
	Americas	6	19	22
	APAC	42	68	60
	EMEA	2	13	18
	Total number of non-guaranteed employees	-	N/A	N/A
	Total number of full-time employees	4,400	4,250	4,250
	Female	976	972	984
	Male	3,417	3,255	3239
	Not specified	7	23	27
	Americas	1,862	1,852	1,857
	APAC	1,066	1,033	1,102
	EMEA	1,472	1	1,291

¹ All employee data listed in GRI 2 is rounded.

STANDARD	DESCRIPTION	FY22	FY23	FY24
GENERAL DISCLOSURES				
GRI 2-7 Employees ¹	Total number of part-time employees	200	150	150
	Female	126	103	109
	Male	72	46	41
	Not specified	2	1	-
	Americas	28	7	28
	APAC	8	5	6
	EMEA	164	138	116
MANAGING OUR WATER RESPONSIBLY				
SASB RT-CH-140a.1 Water management GRI 303-3 Water Withdrawal	Total water withdrawal from all areas ²	**346 ML	**343 ML	354 ML
	Total water withdrawal from all areas with water stress ³	**41%	**38%	37%
	Water withdrawn L/\$1000 revenue	**131	**132	154
	Water withdrawn L/t produced	**525	**563	615
SASB RT-CH-140a.2 Water management	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	4	5	0
REDUCING OUR GREENHOUSE GAS EMISSIONS				
GRI 302-1 Energy consumption within the organization RT-CH-130a.1 Energy consumption within the organization	Total fuel consumption within the organization from non-renewable sources (MJ)	**406,000,000 MJ ⁴	**390,000,000 MJ ⁴	402,000,000 MJ ⁴

¹ All employee data listed in GRI 2 is rounded.
² We do not currently track the breakdown of water withdrawal by source type.
³ Percentage of water withdrawal in regions with high or extremely high water stress per the WRI [Aqueduct Water Risk Atlas](#).
⁴ Fuel types include byproduct fuel, diesel, liquified petroleum gas, natural gas. We do not currently track fuel from renewable sources.

STANDARD	DESCRIPTION	FY22	FY23	FY24
REDUCING OUR GREENHOUSE GAS EMISSIONS				
GRI 302-1 Energy consumption within the organization	Total energy consumed (MJ)	**539,000,000 MJ	**521,000,000 MJ	526,000,000 MJ
	Percentage of grid electricity	**100%	**99.69%	99%
RT-CH-130a.1 Energy consumption within the organization	Percentage of renewable	**21%	**41%	47%
	Total self-generated energy	-	**0.31%	1%
GRI 302-3 Energy intensity	Energy intensity ratio (energy within the company per \$1000 revenue)	**283 MJ/\$1000	**267 MJ/\$1000	292 MJ/\$1000
GRI 305-1 Direct (Scope 1) GHG emissions	Gross direct (Scope 1) GHG emissions (CO ₂ equivalents)	**26,000 MT	**25,000 MT ⁵	25,000 MT ⁵
SASB RT-CH110a.1 Gross global Scope 1 emissions	Gases included in calculation	CO ₂ , CH ₄ , N ₂ O, CO ₂ e	CO ₂ , CH ₄ , N ₂ O, CO ₂ e	CO ₂ , CH ₄ , N ₂ O, CO ₂ e
GRI 305-2 Energy indirect (Scope 2) GHG emissions	Gross location based indirect (Scope 2) GHG emissions (CO ₂ equivalents)	**14,000 MT	14,000 MT ⁶	13,000 MT ⁶
	Gases included in calculation	CO ₂ , CH ₄ , N ₂ O, CO ₂ e	CO ₂ , CH ₄ , N ₂ O, CO ₂ e	CO ₂ , CH ₄ , N ₂ O, CO ₂ e
GRI 305-4 GHG emissions intensity	GHG emissions intensity ratio	-	0.02 MT CO ₂ e per \$1,000 revenue (\$) ⁷	0.02 MT CO ₂ e per \$1,000 revenue (\$) ⁷
MINIMIZING OUR WASTE				
306-3 Waste generated	Amount of waste to landfill generated	**1,700 MT ⁸	**1,600 MT ⁸	1,400 MT ⁸
	Waste to Landfill intensity kg/t produced	4	4	3
	Waste to landfill intensity kg/\$1000 revenue	1	1	1
	Amount of hazardous waste generated	**5,700 MT ⁸	6,000 MT ⁸	6,200 MT ⁸
GRI 306-4 Waste diverted from disposal SASB RT-CH-150a.1 Hazardous waste management	Hazardous waste intensity kg/t produced	12	13	14
	Hazardous waste intensity kg/\$1000 revenue	3	3	3
	Amount of hazardous waste recycled	**2,200 MT ⁸	**2,400 MT ⁸	2,800 MT ⁸
	Percentage of hazardous waste recycled	**39%	**40%	45%

⁵ Scope 1 emissions account for 64% of total measured emissions.

⁶ Factors impacting this increase include acquisitions into our scope and an increase in emission factors for some countries, according to our emission factor sources (EPA and IEA), which in turn increase emissions for plants located in those countries.

⁷ Included in the value is emissions from fuel and electricity consumption within the organization.

⁸ Quaker Houghton tracks hazardous waste generated, hazardous waste recycled, and waste to landfill. This data was requested from each site with the guidance to follow their local legislation’s definition of hazardous waste. At this time, we do not track waste diverted from disposal. This data is rounded.

STANDARD	DESCRIPTION	FY22	FY23	FY24
EMPOWERING OUR COLLEAGUES TO LIVE SAFE				
SASB RT-CH-320a.1 Workforce health and safety	Total Recordable Incident Rate (TRIR) for direct and contract employees	0.41**	0.37	0.33
	Fatality rate for direct employees	0	0	0
	Fatality rate for contract employees	0	0	0
	# of fatal accidents	-	-	0
SASB RT-CH-540a.1 Operational safety, emergency preparedness and response	Process Safety Incidents Count (PSIC) ⁹	0	0	0
	Process Safety Total Incident Rate (PSTIR)	0	0	0
	Process Safety Incident Severity Rate (PSISR)	0	0	0
SASB RT-CH-540a.2 Operational safety, emergency preparedness and response	Number of transport incidents	9	11	9
INVESTING IN OUR PEOPLE'S GROWTH AND DEVELOPMENT				
GRI 401-1 (a) New employee hires	Total number of hires	-	568	591
	Female (global)	-	148	154
	Male (global)	-	395	424
	Gender not specified (global)	-	25	13
	Under 30 years old (global)	-	196	223
	30-50 years old (global)	-	297	282
	Over 50 years old (global)	-	74	86
	Unknown age (global)	-	1	-

⁹ This disclosure pertains to tier I events.

STANDARD	DESCRIPTION	FY22	FY23	FY24
INVESTING IN OUR PEOPLE'S GROWTH AND DEVELOPMENT				
GRI 401-1 (a) New employee hires	White ¹⁰	-	95	139
	Black or African American ¹⁰	-	39	40
	Asian ¹⁰	-	4	14
	Two or more races ¹⁰	-	31	18
	American Indian or Alaska Native ¹⁰	-	0	1
	Native Hawaiians and Other Pacific Islanders ¹⁰	-	1	1
	Hispanic or Latino (any race) ¹⁰	-	8	17
	Race not specified ¹⁰	-	9	8
	Americas	-	320	334
	EMEA	-	186	158
GRI 401-1 (a) New employee hires	APAC	-	62	99
	Rate of hire in each of the following categories:			
	Female (global)	-	26%	26%
	Male (global)	-	70%	72%
	Gender not specified (global)	-	4%	2%
	Under 30 years old (global)	-	35%	38%
	30-50 years old (global)	-	52%	48%
	Over 50 years old (global)	-	13%	15%
	White ¹¹	-	51%	58%

¹⁰ This data is representative of U.S. only.

STANDARD	DESCRIPTION	FY22	FY23	FY24
INVESTING IN OUR PEOPLE'S GROWTH AND DEVELOPMENT				
GRI 401-1 (a) New employee hires	Black or African American ¹⁰	-	21%	17%
	Asian ¹⁰	-	2%	6%
	Two or more races ¹⁰	-	17%	8%
	American Indian or Alaska Native ¹⁰	-	0%	0%
	Native Hawaiians and Other Pacific Islanders ¹⁰	-	1%	0%
	Hispanic or Latino (any race) ¹⁰	-	4%	7%
	Race not specified ¹⁰	-	5%	3%
	Americas	-	56%	57%
	EMEA	-	11%	17%
	APAC	-	33%	27%
GRI 401-1 (b) Employee turnover ¹¹	Total number of turnovers	-	693	592
	Female (global)	-	151	123
	Male (global)	-	534	460
	Gender not specified (global)	-	8	9
	Under 30 years old (global)	-	156	146
	30-50 years old (global)	-	383	305
	Over 50 years old (global)	-	153	141
	White ¹⁰	-	100	98
	Black or African American ¹⁰	-	29	34

¹⁰ This data is representative of U.S. only.
¹¹ All turnovers exclude retirement.

STANDARD	DESCRIPTION	FY22	FY23	FY24
INVESTING IN OUR PEOPLE'S GROWTH AND DEVELOPMENT				
GRI 401-1 (b) Employee turnover ¹¹	Asian ¹⁰	-	5	10
	Two or more races ¹⁰	-	18	10
	American Indian or Alaska Native ¹⁰	-	0	0
	Native Hawaiians and Other Pacific Islanders ¹⁰	-	1	0
	Hispanic or Latino (any race) ¹⁰	-	12	13
	Race not specified ¹⁰	-	1	2
	Americas	-	314	264
	EMEA	-	283	242
	APAC	-	96	86
	Rate of turnovers in each of the following categories:			
GRI 401-1 (b) Employee turnover ¹¹	Female (global)	-	22%	21%
	Male (global)	-	77%	78%
	Gender not specified (global)	-	1%	2%
	Under 30 years old (global)	-	23%	25%
	30-50 years old (global)	-	55%	52%
	Over 50 years old (global)	-	22%	24%
	White ¹⁰	-	60%	59%
	Black or African American ¹⁰		17%	20%
	Asian ¹⁰		3%	6%

¹⁰ This data is representative of U.S. only.

¹¹ All turnovers exclude retirement.

STANDARD	DESCRIPTION	FY22	FY23	FY24
INVESTING IN OUR PEOPLE'S GROWTH AND DEVELOPMENT				
GRI 401-1 (b) Employee turnover ¹¹	Two or more races ¹⁰	-	11%	6%
	American Indian or Alaska Native ¹⁰	-	0%	0%
	Native Hawaiians and Other Pacific Islanders ¹⁰	-	1%	0%
	Hispanic or Latino (any race) ¹⁰	-	7%	8%
	Race not specified ¹⁰	-	1%	1%
	Americas	-	45%	45%
	EMEA	-	41%	41%
	APAC	-	14%	15%
	Average hours of training that the organization's employees have undertaken ¹²	5	4	7
	Female	5	5	6
GRI 404-1 Average hours of training per year per employee	Male	6	4	7
	Management	1	7	8
	Professional	6	5	7
	Technical	3	2	6
	Support	3	2	5

¹⁰ This data is representative of U.S. only.
¹¹ All turnovers exclude retirement.
¹² Global training records maintained in general, legal and safety learning systems were used to report 2024 data. Hourly averages were based on staff populations with access to our performance and development learning management system.

STANDARD	DESCRIPTION	FY22	FY23	FY24
INVESTING IN OUR PEOPLE'S GROWTH AND DEVELOPMENT				
Percentage of new employees receiving regular performance and career development reviews	Percentage of total employees who received a regular performance and career development review ¹³	74%	97%	95%
	Female	29%	25%	26%
	Male	71%	75%	74%
	Management	16%	20%	22%
	Professional	39%	35%	38%
	Technical and Support	26%	37%	36%
	Unclassified	12%	8%	4%
EMBRACING INCLUSION				
GRI 405-1 Breakdown of governance bodies and employees	Percentage of individuals within the organization's governance bodies in each of the following categories: ¹⁴			
	Female	17%	18%	33%
	Male	83%	82%	67%
	Under 30 years old	0%	0%	0%
	30-50 years old	0%	0%	0%
GRI 405-1 Breakdown of governance bodies and employees	Over 50 years old	100%	100%	100%
	White	66%	66%	58%
	Black or African American	17%	17%	17%
	Asian	17%	17%	25%
	Percentage of women in management	23%	22%	22%

¹³ 2023 and 2024 performance participation data includes eligible staff populations both with and without access to our global performance management system that were assigned a performance rating and captured in global tracking records. Eligibility for an annual performance review includes active employees directly hired on or before September 30th and whose performance and compensation are not governed by contractual agreement. Employees gained through acquisition may not be integrated in this process.

¹⁴ We identify Board members as the governing body.

STANDARD	DESCRIPTION	FY22	FY23	FY24
EMBRACING INCLUSION				
GRI 405-1 Breakdown of governance bodies and employees	Percentage of employees in each of the following categories:			
	Female	24%	24%	25%
	Male	76%	75%	75%
	Gender not specified (global)	-	1%	1%
	Under 30 years old	12%	12%	12%
	30-50 years old	58%	57%	56%
	Over 50 years old	30%	30%	32%
	White ¹⁵	73%	71%	71%
	Black or African American ¹⁵	11%	13%	13%
	Asian ¹⁵	5%	5%	5%
	Two or more races ¹⁵	4%	5%	5%
	American Indian or Alaska Native ¹⁵	<1%	<1%	<1%
	Hispanic or Latino ¹⁵	5%	5%	5%
	Not specified ¹⁵	2%	1%	0%
ENSURING EVERYONE IN THE SUPPLY CHAIN IS TREATED WITH DIGNITY AND RESPECT, CONFIRMING SUSTAINABLE SOURCING OF RAW MATERIALS				
GRI 414-1 New suppliers that were screened using social criteria	Percentage of new suppliers that were screened using social criteria	7%	3%**	6%
GRI 414-2 Negative social impacts in the supply chain and actions taken	Number of suppliers assessed for social impacts	88	121	201
	Number of suppliers identified as having significant actual and potential negative social impacts	0	0	0
GRI 308-1 New suppliers that were screened using environmental criteria	Percentage of new suppliers that were screened using environmental criteria	7%	3%**	6%

¹⁵ This data is representative of U.S. only.

STANDARD	DESCRIPTION	FY22	FY23	FY24
ENSURING EVERYONE IN THE SUPPLY CHAIN IS TREATED WITH DIGNITY AND RESPECT, CONFIRMING SUSTAINABLE SOURCING OF RAW MATERIALS				
GRI 308-2 Negative environmental impacts in the supply chain and actions taken	Number of suppliers assessed for environmental impacts	88	121	201
	Number of suppliers identified as having significant actual and potential negative environmental impacts	0	0	0
MINIMIZING HAZARDS IN OUR PORTFOLIO				
GRI 416-1 Assessment of the health and safety impacts of product and	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement ¹⁶	100%	100%	100%
SASB RT-CH-410b.1 Safety and environmental stewardship of chemicals	Percentage of finished goods that contain Globally Harmonized System of Classification and Labelling of Chemicals (GHS) category 1A/B Health and Environmental Hazardous Substances ¹⁷	2.2%	1.2%	1.3%
	Percentage of such products that have undergone a hazard assessment ¹⁸	100%	100%	100%
FORMULATING WITH RENEWABLE RAW MATERIALS				
GRI 301-2 Recycled input materials used	Percentage of recycled input materials used to manufacture the organization's primary products and services ¹⁹	7%	7%	8%
VOLUNTARY DISCLOSURES				
QMS Certifications	Percentage of ISO 9001 Certifications ²⁰	-	100%	100%
	Percentage of ISO 14001 Certifications ²¹	-	100%	100%
EMS Certifications	Percentage of RC 14001 Certifications ²²	-	-	53%
	Percentage of ISO 45001 Certifications ²³	-	57%	80%

¹⁶ Product Stewardship classifies 100% of Quaker Houghton finished goods using GHS (Globally Harmonized System of Classification and Labelling of Chemicals). Depending on the classification, projects are defined to either rationalize those finished goods, reformulate them, or ensure that EHS precautions can be taken by our customers and at our own plant sites.

¹⁷ These figures represent the volume of finished goods newly classified for category 1 A/B (Not including Category 2 and Carcinogens, Mutagens, and Reproductive Hazards in category 1 A/B that were tested by oral route of exposure) introduced in the calendar year that are applicable for professional or industrial applications. Based on Volume (Total QH Revenue excludes data from IKV, Sifco, Sutai, Norman Hay).

¹⁸ 100% of all Quaker Houghton products (including GHS category 1 and 2 Hazardous Substances) have undergone a hazard assessment as part of the Quaker Houghton product stewardship program when we generate safety data sheets. Once a new formula is introduced, revised, or if new relevant information is received, we update all hazard assessments.

¹⁹ Data represents global usage of reclaimed or re-refined oil.

²⁰ This percentage includes global manufacturing sites.

²¹ This percentage includes non-U.S. Manufacturing sites.

²² This percentage includes U.S. Manufacturing sites.

²³ This percentage includes non-U.S. Manufacturing sites

Forward Together™

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