



Act With Purpose for a Better World



2022

**Environmental, Social,
and Governance Report**

Progress is a journey and we're well on our way

As a global supplier of wafer fabrication equipment and services, Lam's technology is at the core of the semiconductor industry's most exciting innovations. To ensure a sustainable future as we help transform the world with technology, we aspire to incorporate environmental, social, and governance (ESG) principles into everything we do.

From the way we power our global operations to our approach to designing next-generation products, we remain dedicated to our pursuit of a better world. With this report, we are proud to share impactful stories and data that demonstrate our ESG progress throughout 2022.¹

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¹ Unless stated otherwise, the data in this report reflect our performance as of Dec. 31, 2022.



Building a responsible, sustainable trillion-dollar industry

A MESSAGE FROM OUR CEO



Over the last 20 years alone, semiconductors have changed how we work, learn, and connect. And today, change is once again upon us. Artificial intelligence is becoming pervasive at rapid speed, and society is already adjusting. The next decade is expected to bring even more opportunities with the age of machine learning and the metaverse, in which the physical world will merge with an immersive virtual world.

The growth of new technologies means more demand for chips, and the semiconductor industry will play a critical role in shaping the future. But greater opportunity also means greater responsibility: If the semiconductor industry is expected to grow to \$1 trillion within the decade, ESG will play an even more important role in building a responsible and sustainable industry.

While it is expected that the industry will almost double in size, it's imperative our impact on the environment doesn't increase at the same rate. At Lam, we have set a goal to achieve 100% renewable electricity by 2030 and net zero by 2050, and we have defined the key milestones to get there. In 2022, we became the first U.S.-based semiconductor equipment manufacturer to have its near-term emission reduction targets approved by the Science Based Targets initiative.¹ Additionally, in 2022, we exceeded our 2025 water savings goal.

Growing to a trillion-dollar industry will also require a strong pipeline of STEM talent. To support that, Lam pledged to donate \$10 million to the nonprofit *FIRST*® Global to help bring science and technology education to youth around the globe. With this partnership, we are creating opportunities for continuous discoveries, and ultimately inspiring the next generation of innovators.

We are also committed to ensuring human rights across our operations and supply chains. That's why we recently published a human rights policy that affirms and expands upon our ongoing commitment to upholding internationally recognized human rights standards.

At Lam, we recognize the value of collaboration, so while we are focused on our own progress, we are also working across the industry—and the broader business community—to build a responsible and sustainable semiconductor ecosystem.

Lam joined the UN Global Compact, the world's largest sustainability initiative, with an ambition for businesses to take shared responsibility for achieving a better world. We also worked with industry leaders to form the Semiconductor Climate Consortium, a new partnership with SEMI to accelerate the industry's response to climate change. We are working across our supply chain, with a goal to increase

supplier engagement and assess their performance on human rights and climate action. We are also engaging closely with our customers because we know their use of our tools impacts their sustainability goals. Through our Semiverse™ Solutions, we are bringing our industry into the virtual space, improving the sustainability of our work, and creating new ways to build the next generation of the workforce quickly and efficiently.

It's clear that semiconductors have revolutionized the world, and as we continue to innovate the next generation of technology breakthroughs, we must do it in a sustainable way—for our customers, employees, communities, stockholders, and the planet. None of us can succeed alone, so let's build the future we want together.

Tim Archer
president and chief executive officer

¹ Our 2030 emissions reduction goal was validated in 2022 and was subsequently restated in 2023 in alignment with SBTi.



For decades, Lam Research has been challenging assumptions and pushing the boundaries of semiconductor technology.

We create solutions that enable chipmakers to power progress—always thinking ahead to ask, *what's next?*

Lam's global edge¹

14

primary locations, including:
Fremont, California
headquarters

11

manufacturing facilities

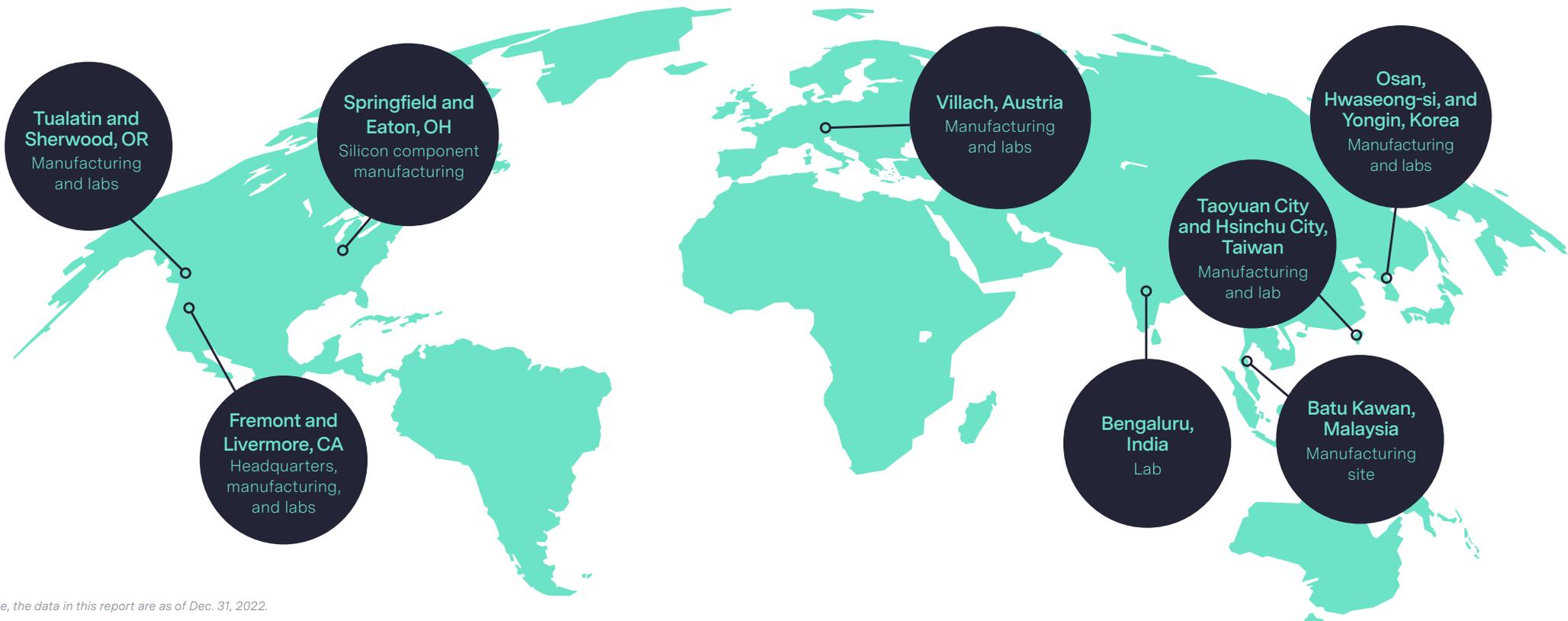
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research & development labs

19,200+ global employees,
distributed across:

- 50.2% United States
- 20.1% Southeast Asia & India
- 8.5% South Korea
- 6.3% Taiwan
- 6.2% Europe
- 5.9% China
- 2.8% Japan

Note: Minimal rounding has been applied to these data.



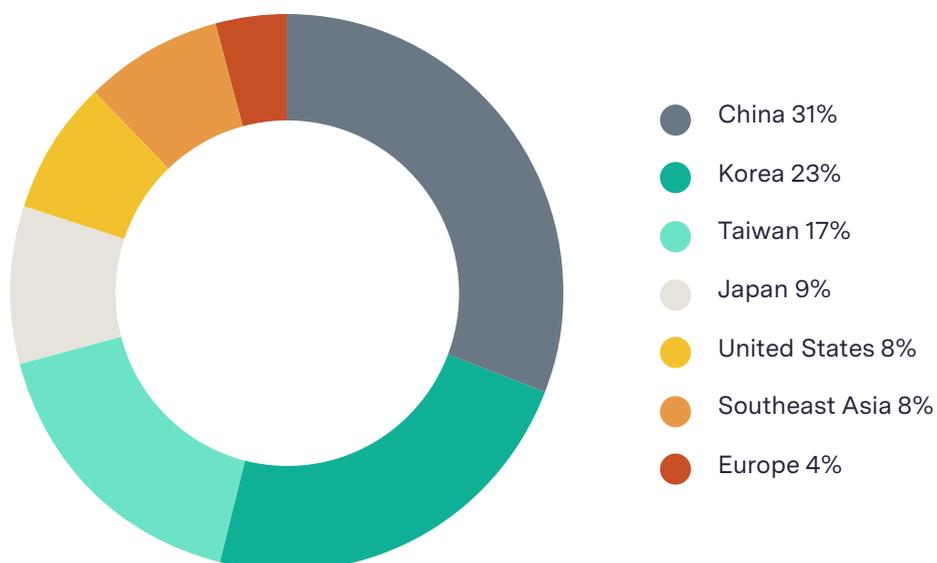
¹ Unless stated otherwise, the data in this report are as of Dec. 31, 2022.



Financial overview¹

(IN THOUSANDS, EXCEPT PERCENTAGES AND PER SHARE DATA)	FY 2020	FY 2021	FY 2022	CHANGE FY 21 TO FY 22
Revenue	\$10,044,736	\$14,626,150	\$17,227,039	17.8%
Gross margin	\$4,608,693	\$6,805,306	\$7,871,807	15.7%
Gross margin as a percent of total revenue	45.9%	46.5%	45.7%	(0.8)%
Total operating expenses	\$1,934,891	\$2,323,283	\$2,489,985	7.2%
Research and development (R&D) expenses²	\$1,252,412	\$1,493,408	\$1,604,248	7.4%
R&D as a percent of operating expenses	64.7%	64.3%	64.4%	0.1%
Net income	\$2,251,753	\$3,908,458	\$4,605,286	17.8%
Net income per diluted share	\$15.10	\$26.90	\$32.75	21.7%

Revenue by region FY 2022



¹This fiscal year data indicates our performance through the following periods: 2020 is for fiscal year ending June 28, 2020; 2021 is for fiscal year ending June 27, 2021; 2022 is for the fiscal year ending June 26, 2022.

²R&D expenses are included in total operating expenses.





Living our Core Values

Our Core Values are the bedrock on which Lam’s culture is built. They help us cultivate an environment where we can come together to do our best work. These values are ingrained in our daily operations and our efforts to propel sustainable growth, from the way we design new products to how we engage with our stakeholders and teams.

 <p>Achievement</p>	 <p>Agility</p>	 <p>Honesty and integrity</p>
 <p>Inclusion and diversity</p>	 <p>Innovation and continuous improvement</p>	 <p>Mutual trust and respect</p>
 <p>Open communication</p>	 <p>Ownership and accountability</p>	 <p>Teamwork</p>





Our vision for a future of accelerated innovation

To bolster innovation we must first address and identify common barriers. Within the semiconductor industry, those barriers can include research and communication silos that keep us working apart. By sharing knowledge and insights more widely, we can unlock solutions for a smarter, faster, more sustainable world.

Here's how we're collaborating internally and externally to realize new opportunities for what our industry can achieve:

Collaborating with customers

to reduce our industry's environmental impact by developing tools (the products we make) and processes with sustainability in mind

Teaming up with industry leaders

to break down research and development silos, advocate for our business and stakeholders, and advance climate action

Coaching and investing in startups

to help them grow and bring transformative technologies and sustainable solutions to scale

Collaborating internally

by participating in cross-functional teams, sharing data-based insights, knowledge, and best practices



Engaging suppliers

to support them in their own environmental and social efforts, such as driving human rights programs and environmentally sustainable material sourcing

Partnering with universities and academic consortia

to support and solicit advanced research on the industry's most pressing challenges

Empowering employees

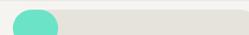
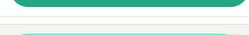
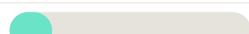
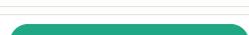
through employee resource groups, volunteerism, and other programs that leverage employees' passions to drive positive change



Building momentum to achieve our ESG goals

As we progress in each of Lam's ESG pillars, our goals keep us focused and accountable. In 2022, we made important strides, including surpassing our water goal years ahead of schedule. We also received approval from the Science Based Targets initiative (SBTi) for our near-term emissions-reduction goals.¹ Unless stated otherwise, we aim to complete each of our ESG goals by 2025.



ESG PILLAR	GOAL	STATUS	TIMEFRAME
Governance 	<ul style="list-style-type: none"> Continue to expand our disclosure and alignment with industry-recognized frameworks and standards 		Annual
Product innovation 	<ul style="list-style-type: none"> 83% of customers measured by emissions set science-based targets (SBTs)² 		Cumulative from baseline
Sustainable operations 	<p>Achieve net zero emissions by 2050 by meeting the following targets:</p> <ul style="list-style-type: none"> Achieve 100% renewable electricity by 2030³ Reduce absolute Scope 1 and 2 (market-based) greenhouse gas (GHG) emissions 25% by 2025 and 60.6% by 2030 from a 2019 baseline. By 2040, achieve net zero operations⁴ Achieve 12 million kilowatt-hours (kWh) in total energy savings from a 2019 baseline 		Annual
	<ul style="list-style-type: none"> Achieve zero waste to landfill for hazardous waste 		Cumulative from baseline
	<ul style="list-style-type: none"> Achieve 17 million gallons of water savings (15%) in water-stressed regions from a 2019 baseline 		Cumulative from baseline
	<ul style="list-style-type: none"> Build on our high-performance culture with best-in-class employee engagement at the global benchmark as measured by our annual employee survey 		Annual
	<ul style="list-style-type: none"> Maintain an Occupational Safety and Health Administration (OSHA) recordable injury rate at or below 0.4 annually 		Annual
Workplace 	<ul style="list-style-type: none"> Increase the proportion of women (globally) and underrepresented employees (U.S.) across the company 		Annual
	<ul style="list-style-type: none"> Achieve more than 90% compliance with our social and environmental expectations across our top-tier suppliers 		Annual
	<ul style="list-style-type: none"> Engage with at least 50% of our top-tier suppliers on environmental sustainability opportunities 		Annual
	<ul style="list-style-type: none"> Increase engagement with all suppliers on social and environmental topics through assessment, training, and capacity building 		Annual
Responsible supply chain 	<ul style="list-style-type: none"> 46.5% of suppliers measured by emissions will set SBTs⁵ 		Cumulative from baseline
	<ul style="list-style-type: none"> Determine key targets for larger-scale impact aligned to a new strategic focus 		Annual
	<ul style="list-style-type: none"> Implement measurement of outcomes for key program and large-scale grants 		Annual
Community 	<ul style="list-style-type: none"> Increase annual unique participation rate in all employee giving programs from 10% to 30% 		Cumulative from baseline
	<ul style="list-style-type: none"> Increase employee volunteer hours by 33% from a 2019 baseline 		Cumulative from baseline

¹ Our 2030 goal was validated in 2022 and was subsequently restated in 2023 in alignment with SBTi.

² Previously, this goal targeted SBTs for 83% of customers measured by revenue by 2025. Lam updated this goal in 2022 per the SBTi verification and approval process.

³ Previously, this goal targeted 100% renewable energy by 2030. Lam updated this goal in 2022 per the SBTi verification and approval process.

⁴ Previously, the 2030 goal targeted a 46% reduction in Scope 1 and 2 (market-based) greenhouse gas (GHG) emissions. Due to a previously unidentified source of Scope 1 emissions, Lam worked with SBTi to update our 2019 emissions inventory and restate our 2030 goal.

⁵ Previously, this goal targeted SBTs for 80% of top direct suppliers by spend by 2025 and 95% by 2030. Lam updated this goal in 2022 per the SBTi verification and approval process.



2022 ESG scores and recognitions

KEY INDEX	BEST POSSIBLE RANKING	2020	2021	2022
Dow Jones Sustainability Index North America ¹	Listing indicates top 20% sustainability performance	Unlisted	Listed	Listed
CDP Climate Change questionnaire	A	B	B	B
CDP Water Security questionnaire	A	B	B	B
ISS ESG Corporate Rating	Excellence (A+)	C	C	C
MSCI USA	AAA	AA	AA	AAA
Sustainalytics ESG Risk Rating	Negligible (0)	17	14.7 low risk	13.4 low risk

¹ Recognizes the top 20% of sustainability performers among the largest 600 U.S. and Canadian companies in the S&P Global Broad Market Index.



CORPORATE RECOGNITIONS

- Institutional Investor—Top ranking for semiconductor industry by Sell-Side analysts for:
 - ESG: #3
 - Company Board: #3
 - Chief executive officer: #2 (awarded to Tim Archer)
 - Chief financial officer: #2 (awarded to Doug Bettinger)
 - Investor Relations (IR) Team: #3
 - IR Professional: #2 (awarded to Ram Ganesh)
 - IR Program: #3



CUSTOMER RECOGNITIONS

- Intel—EPIC Outstanding Supplier Award with supplier diversity distinction
- Micron
 - Outstanding Performance in Front End Capital
 - Outstanding Performance in Supplier Diversity
- Samsung’s “Collaboration Award”
- TSMC—Excellent Performance Award for Excellent Technology Collaboration



WORKPLACE AND INDUSTRY RECOGNITIONS

- Forbes
 - America’s Best-in-State Employers Oregon: #1
 - World’s Top Female-Friendly Companies: #219
 - World’s Best Employers: #555
 - America’s Best Employers: #29
- Fortune
 - Fortune 500: #250
 - World’s Most Admired Companies: #6 in the semiconductor industry
- Human Rights Campaign Foundation—2022 Best Places to Work for LGBTQ+ Equality
- JUST 100—151st overall and 10th in the semiconductor industry
- Newsweek—America’s Most Responsible Companies: #20
- Silicon Valley Business Journal—2022 Community Impact Award





Business and governance



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- 16 Engaging policymakers and complying with global taxation



We strive to integrate ESG principles into everything we do.

Lam's business enables transformative technologies that shape the ways we live and work. Our impact can be felt throughout our company and value chain and by society at large. In our quest for semiconductor breakthroughs, we hold ourselves to the highest standards of responsible and ethical conduct. When the road ahead seems uncertain, our Core Values and robust corporate governance program guide us to do what's right.

We strive to model sustainable best practices within our organization while catalyzing global change. In 2022, we focused on leading with accountability and strengthening Lam's ethical culture. We proudly developed our first Human Rights Policy and celebrated our inaugural Ethics & Compliance (E&C) Week. As the year came to a close, we joined thousands of participants working to enhance corporate sustainability through the United Nations Global Compact (UNGC).



Governance¹



GOAL	STATUS	2022 PROGRESS
Continue to expand our disclosure and alignment with industry-recognized frameworks and standards		• Our efforts to increase disclosure raised our ratings and rankings with third parties

¹ Unless stated otherwise, we aim to complete each of our ESG goals by 2025.

2022 HIGHLIGHTS

Developed a new **global Human Rights Policy**

Celebrated our first **Ethics & Compliance Week**

Joined the **UN Global Compact**

Conducted an in-depth **ESG materiality assessment**





Our ESG approach

Our ESG strategy supports the success of Lam’s business as we act with purpose for a better world. It provides a framework for meaningful investments, proactive risk management, and globally focused action. Our approach emphasizes engagement, goal setting, and accountability. We aspire to continuously increase transparency and disclosure, in line with industry-recognized frameworks, best practices, and standards.

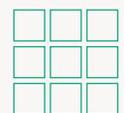
Our ESG strategy consists of six pillars that reflect areas where Lam can make a significant positive impact. These pillars include:

ESG pillars



BUSINESS AND GOVERNANCE

Integrate ESG into our business operations and foster ownership and accountability as we advance our ESG strategy and goals.



PRODUCTS AND CUSTOMERS

Innovate with ESG in mind and design for environment principles to be a partner of choice for our customers and support their ESG goals.



SUSTAINABLE OPERATIONS

Minimize our environmental impact through investments in energy, water, waste, and GHG emissions reductions.



OUR WORKPLACE

Build an inclusive, diverse, and engaged workplace while achieving top performance in health and safety.



RESPONSIBLE SUPPLY CHAIN

Ensure an ethical and responsible business ecosystem focused on human rights and the environment.



OUR COMMUNITIES

Be a responsible corporate citizen with programs focusing on transformative learning, resilient communities, and inclusive societies.

Aligning our strategy with the UNGC and United Nations Sustainable Development Goals (SDGs)

Lam is dedicated to the development, implementation, and disclosure of responsible business practices—qualities that are championed by the UNGC. Based on this alignment, we joined the UNGC in 2022 to underscore our commitment to accelerating ESG progress on a global scale. The organization is the world’s largest corporate sustainability initiative, with tens of thousands of participants worldwide. As a member, Lam supports the UNGC’s Ten Principles for labor, environment, anti-corruption, and human rights, as well as the advancement of the UN’s SDGs.

The SDGs represent an international effort to tackle the world’s most pressing issues. As global citizens, we see the framework of the SDGs as another method of measuring Lam’s progress and ensuring our ESG initiatives serve the greater good. We aim to drive progress on the SDGs throughout Lam’s operations and supply chain, including through our workforce, our products, and our new social impact platform. [Learn how Lam is working to accelerate progress toward priority SDGs.](#)

Learn more about our [ESG strategy](#) →

Our ESG mission

We elevate human prosperity and protect the environment in our operations, supply chain, and the products we create.



Leading with accountability

Lam’s Board of Directors (Board) and leaders are committed to strong corporate governance to deliver stakeholder benefits over the long term. We have processes in place for ESG governance, which extend throughout our organization and lead all the way up to our Board. These processes establish clear responsibilities for the oversight, management, and implementation of our ESG strategy.

In 2022, we deepened our Board’s engagement around ESG issues and increased the cadence of our leaders’ ESG briefings. Our chief communications officer presents ESG updates via presentations or written reports to the

Board or its Nominating & Governance Committee four times per year. Additionally, our vice president of global trade and government affairs (GTGA) now briefs the Board’s Nominating & Governance Committee at each of its meetings. We also tied our executive compensation program to progress on Lam’s ESG goals to ensure that Lam’s executive leaders are accountable for driving ESG progress and are rewarded for their achievements. Human capital management and ESG goals represented 20% of the corporate scorecard used as part of the determination of the annual incentive compensation for our named executive officers.¹

¹ Refers to our named executive officers for our fiscal year ended June 26, 2022, which was the fiscal year during which annual incentive program payouts for calendar year 2021 were made, as determined in accordance with the rules of the U.S. Securities and Exchange Commission.



Celebrating the legacy of Catherine P. Lego’s leadership at Lam

In 2022, Lam announced the retirement of Catherine P. Lego, who served on our Board for more than 16 years. Throughout her tenure, she was a chair or member of each of the Board’s committees. She has also served on other boards over a span of more than 30 years, including for several other semiconductor and technology companies.

Chairman of the Board Abhijit Y. Talwalkar stated, “Always highly engaged and thoughtful in her guidance, Cathy’s understanding of the semiconductor industry, commitment to accountability, and drive for continuous improvement enabled her to make an incredible and lasting impact at Lam.”

ESG governance at Lam

Lam Research Board of Directors
Overall ESG oversight

Nominating and Governance Committee
ESG priorities

Compensation and Human Resources Committee
Workforce-related issues

Audit Committee
Ethics and compliance and information security

ESG Executive Steering Committee

Guides ESG strategy, approves and supports initiatives, drives accountability

ESG Leadership Team
Proposes goals, develops and executes strategy, and embeds ESG into operations management system

Net Zero Leadership Team
Drives progress towards net zero goal and embeds net zero into operations management system

Topic-Specific Working Groups
Execute on key issues

OVERSIGHT

MANAGEMENT

IMPLEMENTATION

Learn more about:
our ESG governance program →

our Board diversity metrics →



Engaging our global stakeholders

The semiconductor industry is dynamic, presenting new challenges and opportunities each day. Through regular engagement, we stay informed of the issues that matter most to our communities, customers, employees, industry organizations, policymakers, stockholders, and other stakeholders. We tailor our engagement approach to each group, connecting through activities such as industry forums, meetings, and community events.

Learn more about our [approach to stakeholder engagement](#) →



Ensuring a focused approach: What we learned from our latest materiality assessment

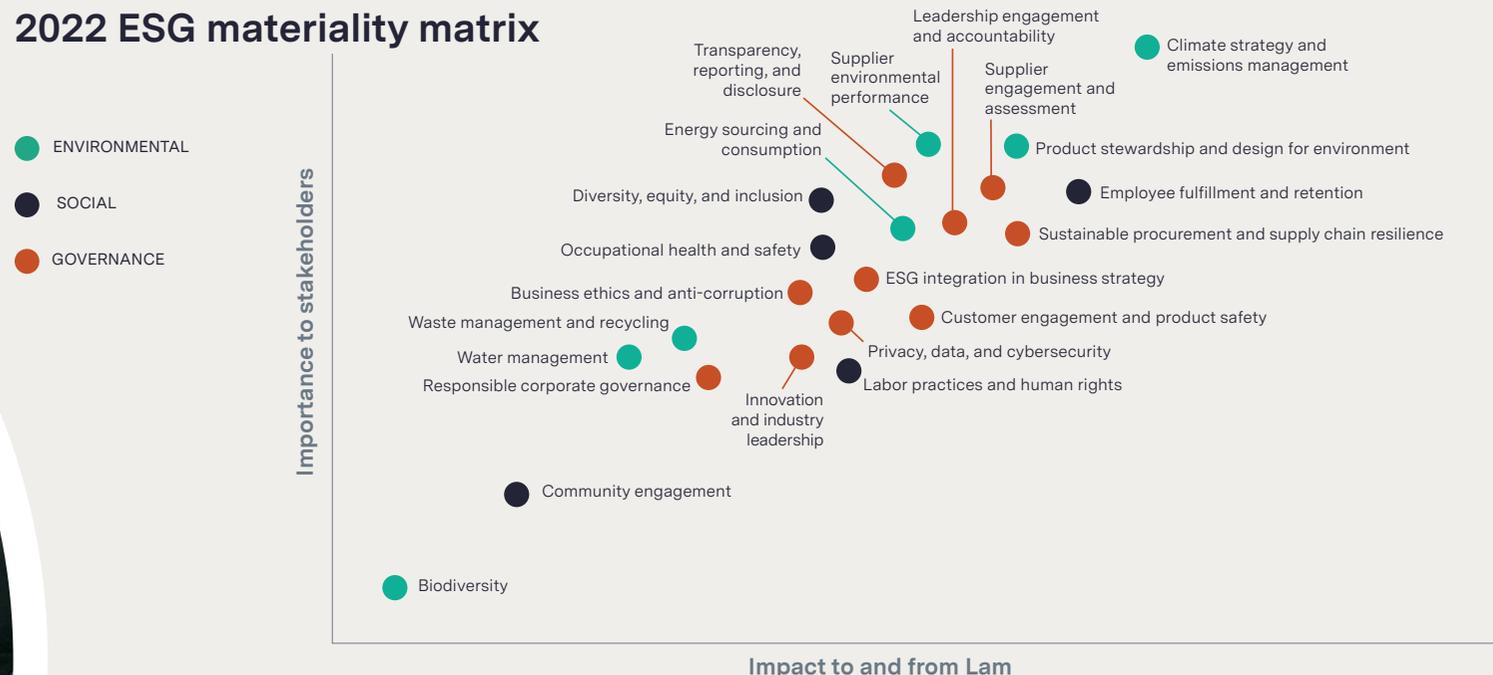
An effective ESG strategy can't remain stagnant—it must be agile to address issues as our business, industry, and world evolve. With that in mind, Lam conducts in-depth ESG materiality¹ assessments every three to five years or whenever there's a notable shift in our industry and business. During this process, we engage a diverse group of internal and external stakeholders, whose insights help guide and affirm Lam's ESG approach.

We conducted our latest assessment in 2022, using a double materiality methodology in line with guidance from the Sustainability Accounting Standards Board (SASB) and the Global Reporting Initiative (GRI). We reviewed topics that are aligned with a variety of standards, frameworks, and rating entities and narrowed them down to identify topics that have the greatest relevance to our business (such as

risk mitigation, market presence, innovation, and reputation). In total, we engaged more than 50 global stakeholders, including internal subject matter experts, customers, investors, suppliers, trade associations, and community organizations. Through surveys and interactive interviews, participants rated ESG topics based on their importance and potential internal and external impacts. We also integrated results from an ESG materiality employee survey to further incorporate our employees' perspectives.

Based on the results, we identified the following topics as being most impactful and strategically important to Lam's ESG program: climate strategy, product stewardship, employee fulfillment, inclusion and diversity, supplier engagement and environmental performance, and leadership accountability. Other ESG topics indicated on the matrix—such as corporate governance, ethics, labor practices, human rights, and community engagement—are also key to our success and are foundational to our business. Within this ESG report, we discuss the majority of the topics identified through the assessment.

2022 ESG materiality matrix



¹The identification of a topic or other matter as "material" for purposes of this report does not and should not be interpreted to mean that it is material for any other purpose, including for the purpose of our financial statements or the documents we file with the U.S. Securities and Exchange Commission.



Building an ethical culture

Do the right thing. The concept sounds simple but putting it into practice requires both dedication and awareness of how to react when challenges arise. This is work we're committed to, as we know it's fundamental to maintaining strong internal and external relationships based on honesty, integrity, and trust. Our [Global Standards of Business Conduct \(GSBC\)](#) supports our Core Values and details the behavior we expect of every employee. The GSBC is a cornerstone of our E&C program, which is designed to meet evolving global requirements.

Our E&C program is further strengthened by Lam's E&C Steering Committee, which provides strategic and operational guidance. In 2022, the E&C team enhanced

our culture of integrity by forming our first regional E&C Steering Committee in Malaysia, which supports local compliance objectives as well as the agenda of our global E&C Steering Committee. We also launched a global Ethics Ambassador program for which we selected and trained employees outside of E&C about promoting an ethical culture and driving progress on our initiatives in our ambassadors' respective business units and regions.

Our global E&C team works to promote an organization-wide culture of ethics and compliance. The team is led by our chief compliance officer (CCO), who manages our E&C function. The CCO reports to Lam's chief legal officer and has dotted-line reporting to the Board's Audit Committee.

Program focus areas:



RISK MANAGEMENT



POLICIES AND PROCEDURES



COMMUNICATION



TRAINING



INVESTIGATIONS

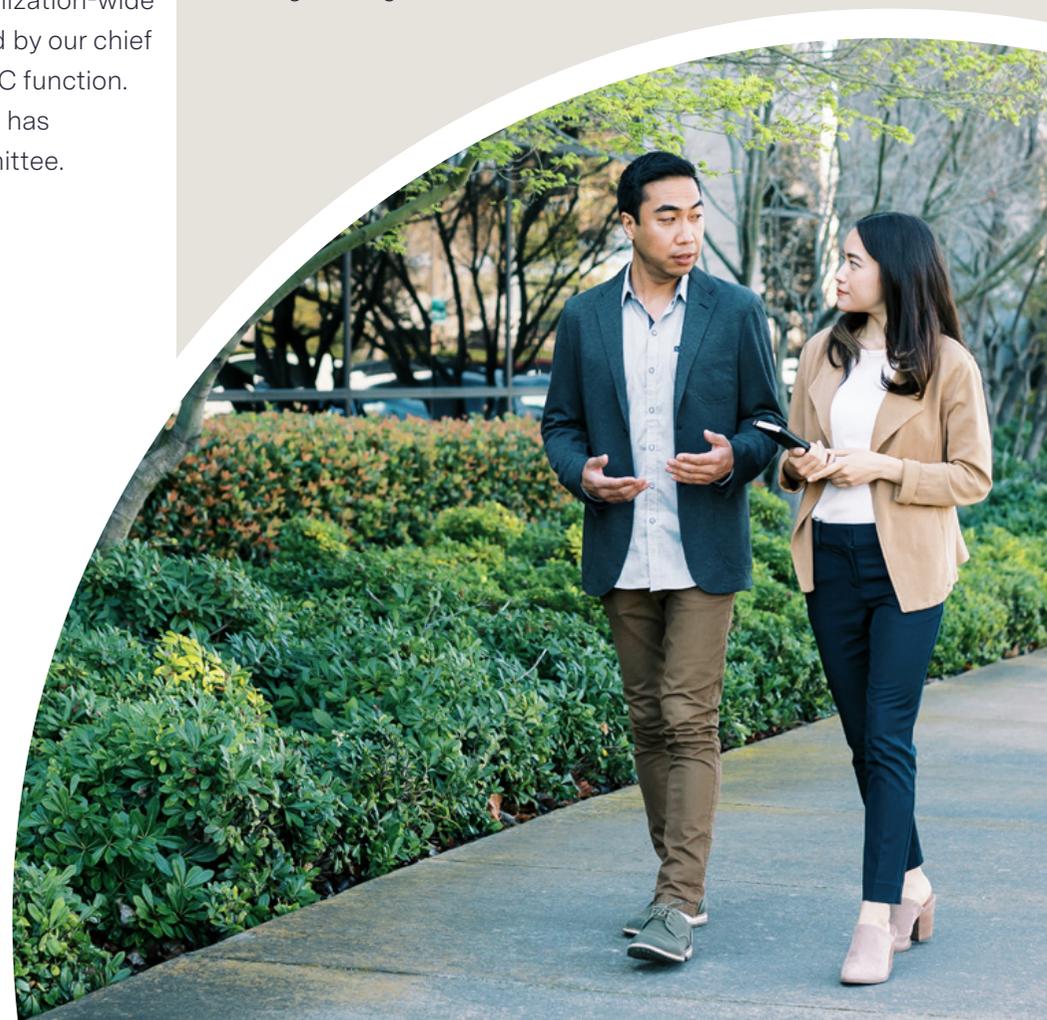


“ Compliance at Lam is both a strategic enablement and risk management function that focuses on innovation and setting new boundaries. We continue to make investments in people, technology, and resources to support this vision. Our program is based on Lam's Core Values, which sit at the heart of everything that we do.”

Sangeet Dalliwall
senior director, E&C at Lam

Hosting Lam's E&C Week

In October, Lam hosted its first-ever E&C Week, which focused on raising awareness of E&C resources, recognizing and celebrating ethical behavior, and reinforcing our ethical values and culture. We connected with employees by holding regional town halls with global leaders and members of our E&C team. We also shared a video in which CEO staff members discussed the importance of our Core Values and building an ethical culture. Employees nominated colleagues for our inaugural Ethics Award, where we celebrated doing the right thing.





Risk management

Assessing internal and external risk on an ongoing basis is essential for Lam's long-term success. As we face challenges related to our growing global footprint and a shifting regulatory landscape, this work is key to the continuity and resilience of our business.

With this in mind, we further operationalized our E&C global risk assessment program in 2022 by conducting a focused risk assessment; enhancing our third-party risk management program; implementing a gifts, meals, travel, and entertainment monitoring program; and conducting manager workshops.

Policies and procedures

Lam is committed to fair and humane employment practices as a core business principle. In 2022, we developed and published our first corporate-wide Human Rights Policy, which underscores our commitment to respecting human rights and treating our workers and business partners with dignity and respect. Our policy aligns with several internationally recognized standards, including the Universal Declaration of Human Rights, the UN's Guiding Principles on Human Rights, and the Responsible Business Alliance Code of Conduct. Looking ahead, we intend to build on this policy by developing and implementing a formal human rights program.

Communication

Open communication is a Core Value at Lam and is key to building a successful E&C program. We distribute global bulletins and regional newsletters that focus on relevant topics so our employees can recognize and respond appropriately to potential compliance risks and ethical issues. On a quarterly basis, people managers receive tailored communications on trending E&C risk areas in a company newsletter. We also use multiple channels to solicit employee feedback, including deploying surveys and conducting employee focus groups after delivering in-person and virtual training. Our leadership team plays an important role in raising awareness about our E&C program. In 2022, several of our global leaders participated in town halls and employee meetings to discuss and reinforce the importance of building on Lam's ethical culture.

Training

Our training program equips and empowers our employees to make ethical and compliant decisions. We deliver training to increase awareness of our policies and processes through a combination of in-person and virtual sessions and online training modules, which we refresh each year. Lam requires employees to complete annual training that reinforces their understanding of selected topics within the GSBC.

We rolled out additional manager resources and mandatory ethical leadership training for our people managers in 2022. Our newly created manager resource center provides our people managers with practical guidance for identifying and handling ethical challenges. We also held in-person manager workshops to provide tips and tools to our managers to encourage ethical behavior and support employees who raise concerns.



2022 GSBC TRAINING HIGHLIGHTS

99%

employee completion rate¹

100+

in-person and virtual targeted training sessions to leadership teams and employees in higher risk roles covering E&C policies and procedures

Investigations

Lam's E&C team can't be everywhere, so we rely on employees to speak up if something doesn't seem right. All Lam employees have the right and responsibility to raise ethical concerns to their managers, senior management, human resources, or the E&C team. Employees and third parties—including contractors, suppliers, and customers—can make a report through our Ethics Helpline via telephone or online.

Learn more about our
**Ethics Helpline and
approach to investigations**



¹Employee completion rate was calculated by excluding: 1) employees who were on leave of absence during the reporting period; and 2) employees who left the company during the reporting period before completing the training. The reporting period was from Oct. 2022 to March 2023.



Protecting data and intellectual property

As we fuel our innovation pipeline, we are committed to keeping the intellectual property and data of our company, employees, customers, and suppliers safe. Lam holds [International Organization for Standardization \(ISO\) 27001](#) certification for information security at our corporate headquarters and engages an independent, third-party expert to evaluate security capabilities against the National Institute of Standards and Technology (NIST) Cyber Security Framework (CSF). As we continued to mature our information security processes in 2022, we improved our scores across the five pillars of the NIST CSF: identify, protect, detect, respond, and recover.

Learn more about our [information security program](#) 



INNOVATION SPOTLIGHT

Mindful care of our valuable assets

In an industry facing unprecedented supply chain pressures, balancing the need for business agility and security can be a challenge. One employee who understands this well is Nivedita (Niv) Kamat, a program manager with Lam’s Governance, Risk, and Compliance Information Security group.

As part of Lam’s Sensitive Information Protection program, Niv runs an initiative to safeguard thousands of critical drawings. After discovering that one of the program’s safety protocols stood in the way of business agility, she met with several internal and external stakeholders to develop new processes to meet the program’s goals.

This led to the creation of a Supplier Tier Management application that enables Lam to secure its drawings while granting access to authorized users. Launched in 2022, with full implementation planned for 2023, the solution makes Lam even more nimble while keeping the company’s files safe and secure.



Engaging policymakers and complying with global taxation

Our company and industry exist within a dynamic regulatory environment. Lam's Global Trade and Government Affairs group is responsible for Lam's strategic engagement with Congress, the U.S. executive branch, and other regulatory bodies at the local, state and federal levels, as well as internationally, to help inform sound public policy in support of our industry and business. We pursue a collaborative approach to policy engagement, working alongside our customers, suppliers, and industry peers with a focus on the following issues:

- Business operations
- Research and development
- Export controls and trade policy
- Tax policy

Our lobbying and political activities are governed by our GSBC, as well as our Political Activity and Government Affairs Policy.

Learn more about our [policies and governance approach](#) →

In 2022, the GTGA group remained focused on addressing issues such as supply chain resiliency and trade compliance in the local economies in which we operate. The group played a central role in helping Lam navigate new export controls issued by the U.S. Department of Commerce's Bureau of Industry and Security in October. The controls restrict the export of advanced U.S. chipmaking equipment to the People's Republic of China.¹ These controls directly impact our industry and business, so the group worked closely with Lam's leadership and Board to ensure a compliant, proactive response.

Externally, the GTGA group played a leading role in industry consortia to amplify Lam's voice in the wafer fabrication equipment industry and larger semiconductor ecosystem. In November, Lam joined the Semiconductor Climate Consortium as a founding member to advocate for semiconductor industry climate action on a global scale. Lam has also established its political action committee, Leading American Microelectronics Political Action Committee (LAMPAC), as another means of engagement and advocacy.

Ensuring compliance with global taxation

Our approach to global taxation is to comply with all legal, regulatory, and internal control requirements.

¹Bureau of Industry and Security Office of Congressional and Public Affairs, "Commerce Implements New Export Controls on Advanced Computing and Semiconductor Manufacturing Items to the People's Republic of China (PRC)."

Learn more about [our approach to global taxation](#) →

Supporting U.S. semiconductor competitiveness

Recent challenges related to the pandemic, as well as geopolitical conflicts, have highlighted the importance of semiconductor manufacturing within the U.S. Headquartered in Fremont, California—with manufacturing sites in California, Ohio, and Oregon—Lam has long represented the strength of American manufacturing and innovation on a global stage.

In 2022, Lam's president and CEO, Tim Archer, testified before the U.S. Senate Committee on Commerce, Science, and Transportation. During the hearing, entitled "Developing Next Generation Technology for Innovation," he discussed opportunities to bolster American competitiveness and address key challenges that industry leaders continue to face.

He focused on three areas that could benefit from the committee's consideration: leveraging existing infrastructure, such as the National Labs; enabling shared innovation, including through the establishment of the National Semiconductor Technology Center; and taking an "all-of-ecosystem" approach.



Read the full [transcript](#) →

“

U.S. leadership in semiconductor manufacturing technology remains strong because of the innovation, drive, and resourcefulness of American workers across the semiconductor ecosystem. I am proud of the role that Lam Research and our employees have played for more than four decades in setting the pace for innovation and in maintaining U.S. leadership in the global market.”

Tim Archer

president and CEO at Lam



Product innovation



IN THIS SECTION:

- 18** Highlights
- 19** Creating our most efficient and sustainable generation of products
- 20** Bringing our Tech Vision to life
- 24** Developing sustainable solutions
- 25** Giving our customers a market edge
- 26** Delivering safe, high-quality products



By collaborating with our industry and customers, we continue to define what’s next.

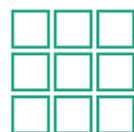
Every year, Lam strives to enable semiconductor breakthroughs that may have seemed impossible the year before. Through experimentation, collaboration, and rigorous testing, we continue to do what’s never been done. Today, advanced microchips shape everything from how we communicate to how we work and drive. The potential for future innovation is limitless, but we don’t plan to realize it alone. Instead, we’re prioritizing open communication and strategic investments in research and development (R&D). By embracing diverse perspectives, we can unlock a faster, smarter, and more sustainable world.

In 2022, we sponsored and participated in numerous industry and university events to collectively address the semiconductor industry’s most pressing challenges. One highlight was our Tech Symposium, themed “Engineering a Greener Fab.” Internally, we focused on developing smarter, more efficient products and processes to measure and reduce the greenhouse gas (GHG) emissions footprint of our tools. These efforts support sustainability in our industry.

RELEVANT SDGS



[View SDG alignment](#)



Product innovation¹



GOAL	STATUS	2022 PROGRESS
83% of customers measured by emissions set science-based targets (SBTs) ²		• 16.9% of customers as measured by emissions have set SBTs

2022 HIGHLIGHTS

Released three new products: **Argos[®]**, **Prevos[™]**, and **Selis[®]**

Began **establishing a baseline** to measure Lam’s product-based energy usage and emissions

Invested over **\$1.6 billion** in R&D³

Opened **new R&D labs** in India and South Korea



¹ Unless stated otherwise, we aim to complete each of our ESG goals by 2025.

² Previously, this goal targeted SBTs for 83% of customers measured by revenue by 2025. Lam updated this goal in 2022 per the SBTi verification and approval process.

³ Based on Lam’s 2022 fiscal year.

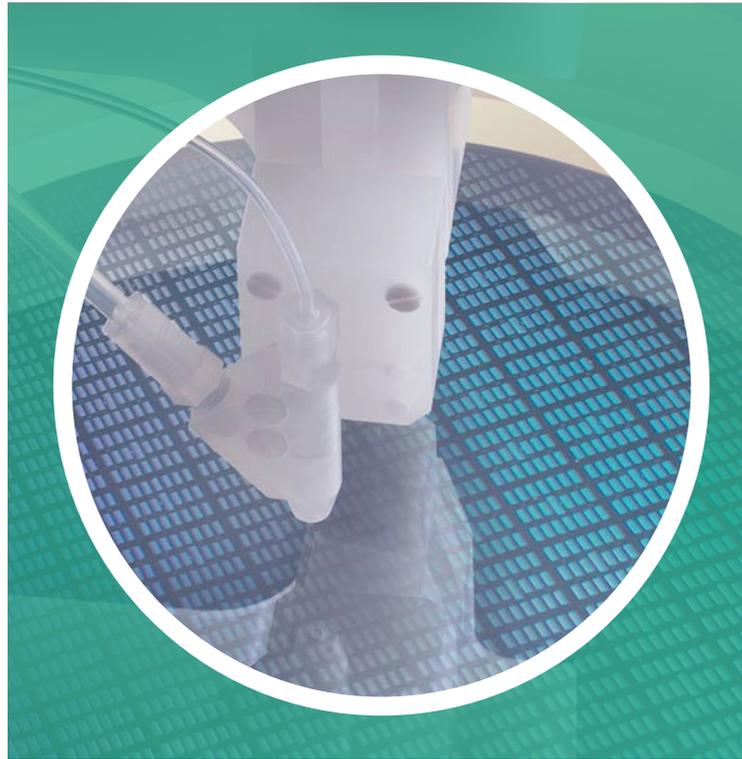
Creating our most efficient and sustainable generation of products

It starts by sparking sustainable innovations.



- Investing in R&D—including over \$1.6 billion in 2022¹
- Listening to our customers and imagining new ways to meet their needs
- Breaking down research silos and bringing experts together to explore big ideas

Understanding our product impact and opportunities is key.



- Using Equipment Intelligence[®] sensors to measure the GHG emissions and energy usage of our products
- Incorporating Design for Environment (DfE) principles and designing for the entire product lifecycle
- Embracing smart solutions to accelerate Industry 4.0

The result: Breakthrough solutions that enhance performance, precision, and yield, including:



- Sense.i[®]: A smart solution that enables customers to reduce their energy and material and achieve a smaller fab footprint
- Argos[®], Prevos[™], and Selis[®]: Products that enable ultra-high selectivity and precision to facilitate the next generation of 3D devices
- Coronus[®]: A bevel clean system that improves yield by up to 2% per wafer

¹Based on Lam's 2022 fiscal year.



Bringing our Tech Vision to life

Technology moves fast—and it’s not enough to just keep pace. At Lam, we’re determined to lead our industry into a future that works better for us all. Rather than taking a single-minded approach, we focus on bringing together our industry’s brightest minds. Together, we’re asking big questions, addressing persistent challenges, and realizing new opportunities for what semiconductors can do.

Technology Vision



Building an innovative workforce

Our work to accelerate large-scale innovation begins by inspiring Lam’s teams. Each year, our Office of the Chief Technology Officer organizes a variety of collaborative and innovation-focused internal events. We also make a point to highlight Lam employees who are driving innovation and providing opportunities to share their knowledge with others.

In 2022, we continued our Celebrating Innovation campaign for the second year to highlight stories of innovation by employees in technical and non-technical roles (look for highlights in our Innovation Spotlights throughout this report). Lam’s leaders also engaged our global technological community through several sessions focused on our Core Values. Through our Seminar Series, we invited our engineering community to share their work and insights with their peers. Additionally, our Innovation Speaker and Book Series brought the outside world in to educate and inspire Lam employees. Topics featured during our 2022 Innovation

Speaker Series include: the intersection of innovation and ESG, how to innovate inside bureaucracies, developing a culture of innovation, and innovations in additive manufacturing, among others.

Driving research-backed breakthroughs

As chip technology becomes radically small and almost inconceivably precise, the challenges we face become greater and more complex. We support academic research that provides insights into these challenges and opportunities for our industry to advance. By collaborating with leading universities around the world, we boost innovation and fuel our talent pipeline.

Learn more about [how we're bringing our Tech Vision to life](#) →

Opening the doors to two new global hubs of R&D

One way we accelerate learning and development cycles is through our investments in semiconductor R&D. In 2022, we opened two advanced facilities in South Korea and India.

Located in the heart of South Korea’s K-semiconductor cluster, the Korea Technology Center enables Lam engineers and customers to work side-by-side. Together, they can qualify new devices, processes, and yield improvements—allowing for fewer and faster development cycles. The new location also lends itself to closer relationships with local suppliers, universities, and research institutions, and has the added environmental benefit of less travel.

Our India Center for Engineering specializes in the R&D, engineering, and testing of wafer fabrication hardware and software used to create next-generation memory and logic devices. The new facility doubles Lam’s footprint in India and supports shorter development cycles by enabling engineers to design, test, and validate new deposition and etch technologies on site.



“ I see vast potential in the ability of our engineers to have hands-on access to Lam’s tools at the India Center for Engineering. This access will have a transformative impact on both the speed and the quality of the engineering solutions that are being developed there.”

Sesha Varadarajan
senior vice president, Global Products Group at Lam



How we're unlocking research-backed breakthroughs



Unlock Ideas

provides awards to support the testing of novel ideas proposed by Lam's global technical community in collaboration with university faculty. In 2022, the program sought proposals in categories including sustainability for the second year.



University Collaboration Showcase

brings Lam employees together to share results from our university research collaborations and Unlock Ideas projects. We hosted the event virtually for the third year in 2022.



Elevate Ideas

provides additional funding and support to take successful Unlock Ideas projects to the next level. After piloting the program in 2021 with two awards, we awarded two new winners in 2022.



Celebrating the people who push technology forward

In May 2022, we held our Technical Awards Ceremony to celebrate some of the exemplary people behind Lam's technical achievements. We were proud to announce our newest Lam Research Fellow and present our annual Patented Innovation Award.



Lam Fellows advance the development of products, processes, and technologies that bring value to customers and industry year after year. Our newest fellow, John Drewery, has been with Lam since 2011. He has deep expertise in both deposition and etch, with his contributions in product development recognized at Lam and industrywide. Throughout his 25 years in the industry, he has secured 49 patents. He is known as a passionate mentor who inspires future technical leaders at Lam.

Technological innovations keep Lam at the forefront of our industry with competitive differentiation and commercial success. Thus, our Patented Innovation Award recognizes the achievements of inventors who earn a U.S. patent for their breakthrough innovations. In 2022, we presented the award to a well-rounded team of 11 Lam inventors. Together, they secured two innovative patents in dielectric atomic layer deposition, an area of significant strategic importance for Lam's growth objectives.

Learn more about how we're engaging universities [→](#)



Bringing experts together to engineer a greener fab

It's not easy to change processes that take place on an atomic scale, but for the sake of our industry and planet, there's got to be a greener way. That was the focus of Lam's 2022 Technical Symposium, themed "Engineering a Greener Fab."

The symposium is Lam's premiere forum for joint academic and industry cooperation. The 2022 event took place at the University of California, Berkeley, with participants joining in person for the first time since 2019.

Experts used the forum to share and discover leading-edge technologies aimed at advancing environmental sustainability for semiconductor fabrication. Highlights included faculty presentations, panels, student posters, and keynotes from our customers Intel and Micron.

“

The key to innovating is bringing together diverse groups of people and going outside our own little world.”



Rick Gottscho

executive vice president, strategic advisor to the CEO, and former chief technology officer at Lam





Supporting the next generation of semiconductor innovators with Lam Capital

Sometimes, you've got to disrupt the system to move it in a new direction. In that regard, Lam Capital invests in innovative companies that are addressing today's most high-impact problems.

In conjunction with the Tech Symposium, we hosted our second-annual Lam Capital Venture Competition in 2022. During the event, select startups pitched sustainable innovations to a panel of venture capital judges. Proposed solutions ranged from wastewater treatment to microfabs to energy-saving strategies. The winning startup, XLight, pitched an energy-efficient technology for photolithography. The prize: a \$250,000 investment funded by Lam Capital.

2022 TECH SYMPOSIUM BY THE NUMBERS

11
universities
represented

11
finalist startups
presented

6
customer keynotes and
faculty presentations

6
venture capital judges, plus
a judge from Lam Capital

\$250K
investment to the winning team by Lam Capital



Developing sustainable solutions

We are driven to accelerate a net zero transition and a future where our company and customers can achieve more while using less. In that pursuit, one of the most impactful steps we can take is to track and reduce our product-based emissions. This will give Lam an edge in providing the solutions customers need to reduce their environmental impact while meeting increasing demands.

As of 2022, emissions generated from the energy use of our products represent 55% of our total GHG emissions. To reduce the emissions output of our products, we're optimizing solutions that are smarter and more efficient. In doing so, we're proving that it's possible to increase productivity while reducing the use of raw materials, energy, and space.

Accelerating Industry 4.0

A new phase of the industrial revolution is beginning—known widely as Industry 4.0. It's an era defined by automation, machine learning, interconnectivity, and real-time data. Our Equipment Intelligence® solutions combine these elements with Lam's equipment and process expertise. By enabling faster learning cycles, these solutions help customers enhance productivity, efficiency, and performance while minimizing waste.

For example, Lam's Net Zero Product Working Group uses Equipment Intelligence® sensors to monitor and report the energy and resource consumption of our lab tools. In 2022, the group worked toward establishing baseline data for our tools' energy consumption and GHG footprint. This will help Lam address our product-based emissions, while supporting our customers' sustainability goals. The working group's vision is to connect this data to specific fab processes, enabling customers to optimize resource planning and reduce their energy usage, GHG emissions, and costs. We also made progress on product sustainability by:

- Implementing throughput and uptime improvements, which improve the efficiency of tool operations by 4% and yield with station matching by 60%.
- Releasing new ECO Mode features for 2300 and Sense.i® etch tools, which save up to 30% peripheral energy in idle mode and result in faster tool time recovery.
- Increasing RF generation efficiency on our Vantex tool, which reduces the energy consumed per RF subcomponent by 10%.

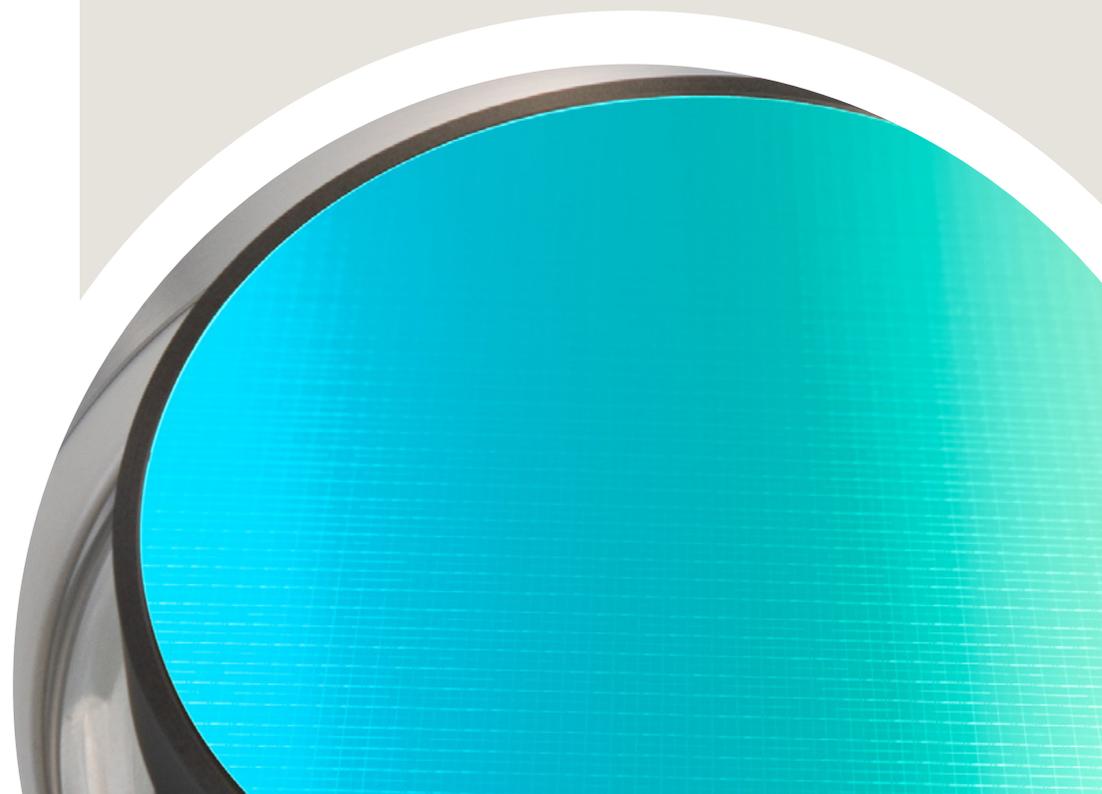
Incorporating DfE principles

DfE principles guide us to develop products with their full lifecycle in mind. In doing so, we're finding ways to reduce the environmental impact of our products while maintaining or improving quality and value. In 2022, our working group continued to incorporate these principles into the product design process.

Three new products that are accelerating three-dimensional (3D) scaling

Typically, companies talk about scaling in terms of expansion. In semiconductor manufacturing, it often means the opposite. One of our industry's pressing challenges is to continuously scale the tiny devices in chips to make chips that are smaller, denser, and more powerful. This is driving many semiconductor manufacturers to move away from planar structures in favor of complex, 3D versions.

Lam's etch and deposition tools are at the forefront of this innovation, and in 2022, we announced three new precision selective etch innovations: Our new Argos®, Prevos™, and Selis® products are designed to complement and extend Lam's industry-leading etch solutions portfolio. These breakthrough products are enabling chipmakers to etch and modify films with ultra-high selectivity and precision to achieve the most advanced integrated circuit performance capabilities and accelerate 3D scaling.



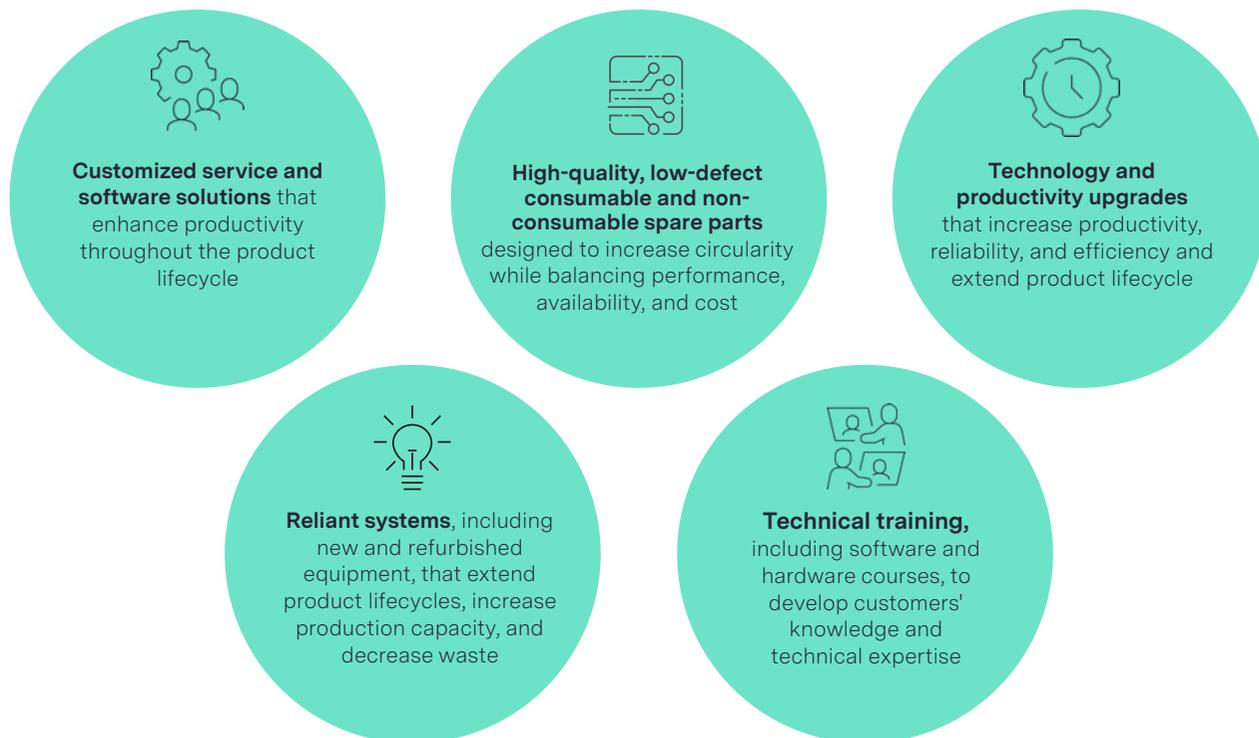


Giving our customers a market edge

When they ask, we deliver. That’s how we build our customers’ trust. And what many of them want are faster, more efficient, and sustainable chipmaking solutions. Our customers are global technology leaders, and we take pride in supporting their success. Through close collaboration, we strive to exceed their expectations and continuously anticipate their long-term needs.

Our Customer Support Business Group (CSBG) supports Lam’s customers across the equipment lifecycle. From solutions that increase system uptime to offerings that extend the product lifecycle, the group’s goal is to help customers optimize quality and cost, with the added benefit of reducing their environmental impact.

CSBG’s strategy for providing best-in-class customer support:



Lam's installed base included approximately **84,000** chambers at the end of 2022.



INNOVATION SPOTLIGHT

Simulating complex processes to get real results

Lam engineers have a knack for getting to the bottom of vexing customer challenges. Yet wafer-based experiments require an investment in resources and time. Realizing this, several have turned to our powerful SEMulator3D software to create renderings, simulate fabrication processes, and calculate the physical properties of nanostructures without ever stepping into a lab.

Among them is Peng Fei Lyu (left), a process engineer who facilitated a special interest group to receive training on the software at Lam China. After learning the software, the team used it to identify the root cause of an issue in a customer’s etch process—cutting a task that would have taken approximately 10 wafers and two weeks in a lab down to about an hour.

Another member of the group, process engineer Tian Hao Zhang (right), used the software to help a customer determine their ideal etching approach. In doing so, he and his colleagues cut the experimentation time down from 10 weeks to four while using a third of the wafers required for traditional testing. By helping engineers deliver rapid results while reducing material waste and costs, the software is helping Lam build value for our company and customers.



Products that support a circular economy

When great products go further, we all win. In addition to new systems, CSBG provides refurbished tools, previous generation tools, and equipment upgrades. These options deliver great customer value while avoiding the environmental impacts of manufacturing new tools and sending existing equipment to landfills. Our spares offerings include the reuse of high-value spare parts such as electrostatic chucks, RF hardware, and showerheads through a variety of re-cleaning, repair, refurbishment, and re-coating services. [Learn more about our spares offerings.](#)

HOW OUR CSBG OFFERINGS MAKE A DIFFERENCE:

~\$400M worth of annual materials savings enabled by re-cleaning services

~\$150M worth of annual materials savings enabled by repair & refurbishment services

20% of Etch installations used upgrades or tools with refurbished components in 2022

33% of electrostatic chucks (ESCs) shipped in 2022 were refurbished, representing a 70%+ increase since 2019

~8kg aluminum reused in each refurbished ESC baseplate, representing 30 metric tons (MT) reused in 2022

~5kg hazardous residue avoided by each refurbished ESC baseplate, representing 18 MT avoided in 2022

Delivering safe, high-quality products

Our cross-functional Quality Leadership team oversees our design teams to ensure the safety and quality of every product they create. We take a systematic approach to continuously improve our products and strive to quickly address any adjustments that need to be made. Lam is also certified under [ISO 9001](#), an international standard that provides a framework for an effective quality management system.

Learn more about [our commitment to product safety](#) →

Earning recognition as an outstanding supplier

Lam has proudly achieved the top honor within the Intel global supply chain: The Intel EPIC Outstanding Supplier Award. Of the thousands of suppliers Intel works with every day, Lam was one of only six companies to win this award for 2022.

“

In a truly unique and volatile supply chain environment, Lam has earned Intel’s top supplier award through its steadfast commitment to safety, quality, diversity and inclusion, continuous innovation, and its close partnership with Intel toward operational excellence results.”



Keyvan Esfarjani

executive vice president and global chief operations officer at Intel



Sustainable operations



IN THIS SECTION:

- 28 Highlights
- 29 Advancing our net zero roadmap
- 33 Optimizing energy
- 35 Accelerating water savings
- 36 Maximizing value by minimizing waste

Around the world we are stepping up to bring our net zero vision into sight.

The way we operate speaks to who we are and what we value. At Lam, our Core Values drive us to take ownership, hold ourselves accountable, and continuously improve. These values shape our approach to reducing Lam's environmental impact, and executing on our commitment to operating responsibly and improving our sustainability performance over time.

Positive change requires action, so we are pursuing global initiatives to reduce our energy and water consumption and minimize waste. By 2050, we aim to achieve net zero emissions. It's a bold ambition, and Lam was among the first in the semiconductor industry to establish such a goal. Our net zero roadmap outlines our path to achieving climate progress. It informs the way we create products, upgrade our facilities, and allocate our resources and time.

In 2022, our employees mobilized to move our climate and environmental initiatives forward. They completed solar and energy-efficiency projects and exceeded our water-savings goal. Lam closed the year by joining the Semiconductor Climate Consortium as a founding member, demonstrating our company's climate leadership on a global scale. As the work continues, we're energized by how far we've come and our vision for a greener future ahead.

RELEVANT SDGS



[View SDG alignment](#)



Sustainable operations¹



GOAL	STATUS	2022 PROGRESS
Achieve net zero emissions by 2050 by meeting the following targets:		
<ul style="list-style-type: none"> Achieve 100% renewable electricity by 2030² 		<ul style="list-style-type: none"> Sourced 44% renewable electricity globally in 2022
<ul style="list-style-type: none"> Reduce absolute Scope 1 and 2 (market-based) GHG emissions 25% by 2025 and 60.6% by 2030 from a 2019 baseline.³ By 2040, achieve net zero operations 		<ul style="list-style-type: none"> 207% increase in Scope 1 and 2 (market-based) GHG emissions⁴
<ul style="list-style-type: none"> Achieve 12 million kWh in total energy savings from a 2019 baseline 		<ul style="list-style-type: none"> Achieved 6.9 million kWh in energy savings
Achieve zero waste to landfill for hazardous waste		<ul style="list-style-type: none"> Diverted 99.99% of hazardous waste from landfills in 2022
Achieve 17 million gallons of water savings (15%) in water-stressed regions from a 2019 baseline		<ul style="list-style-type: none"> Achieved 46.9 million gallons of water savings in water-stressed regions, surpassing our 2025 goal by 175% Our updated goal will be to achieve 80 million gallons of water savings from a 2019 baseline

2022 HIGHLIGHTS

Achieved **Science-Based Target initiative (SBTi) validation** for our near-term environmental goals⁵

Exceeded our **2025 water target**

Completed **renewable electricity projects** at two sites

¹ Unless stated otherwise, we aim to complete each of our ESG goals by 2025.

² Previously, this goal targeted 100% renewable energy by 2030. Lam updated this goal in 2022 per the SBTi verification and approval process.

³ Previously, the 2030 goal targeted a 46% reduction in Scope 1 and 2 (market-based) GHG emissions. Due to a previously unidentified source of Scope 1 emissions, Lam worked with SBTi to update our 2019 emissions inventory and restate our 2030 goal.

⁴ Primarily due to the increase in usage of a specific chemical in our testing process between 2019 and 2022.

⁵ The 2030 goal was validated in 2022 and was subsequently restated in 2023 in alignment with SBTi.

Note: Sustainable Operations data is comprehensive of all Lam-owned and leased facilities, including our subsidiary Siflex. Energy, waste, and water data is not currently included for Avonisys, Coventor, Metryx, SemSysco, Solmates, or Talus. Greenhouse gas emissions for these entities is included in our reported Scope 1 and 2 emissions (Talus, Metryx, and Coventor), or within our Scope 3 investment data (Avonisys, Solmates, SemSysco).



Advancing our net zero roadmap

While net zero emissions is our long-term vision, our success starts with the action we take today. Our net zero roadmap outlines our strategy to achieve time-based targets that keep us accountable and on track. Lam's Net Zero Leadership team drives these efforts with ultimate oversight from our Board.

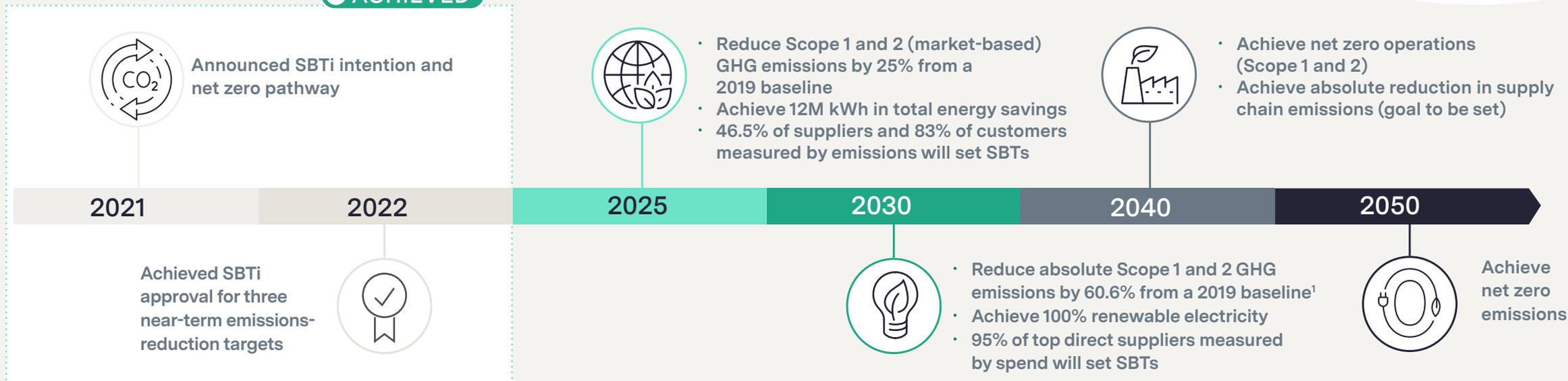
Externally, we engage our customers and suppliers to support them in setting and achieving science-based targets (SBTs). We strive to lead by example, and in 2022 we achieved SBTi validation for our near-term GHG-reduction goals. These goals are in line with limiting global warming to 1.5°C, representing the most ambitious SBTi designation available. We recently discovered a source of Scope 1 emissions which caused a significant increase of our previously reported Scope 1 emissions, dating back to our 2019 baseline year. This led us to work with SBTi to restate our 2030 goal by targeting a 60.6% reduction in Scope 1 and 2 (market-based) emissions, instead of the prior target of a 46% reduction. We are acting with expediency with a goal to eliminate this emissions source completely.

By identifying risks related to climate change, we can take meaningful steps to make our company more resilient. Learn more about our 2021 climate change risk analysis assessment and how our practices align with frameworks, such as the [Task Force on Climate-related Financial Disclosures](#) →



Net zero roadmap

✓ **ACHIEVED**



¹Previously, the 2030 goal targeted a 46% reduction in Scope 1 and 2 (market-based) GHG emissions. Lam updated this goal in 2023 following a restatement of our baseline in alignment with SBTi.

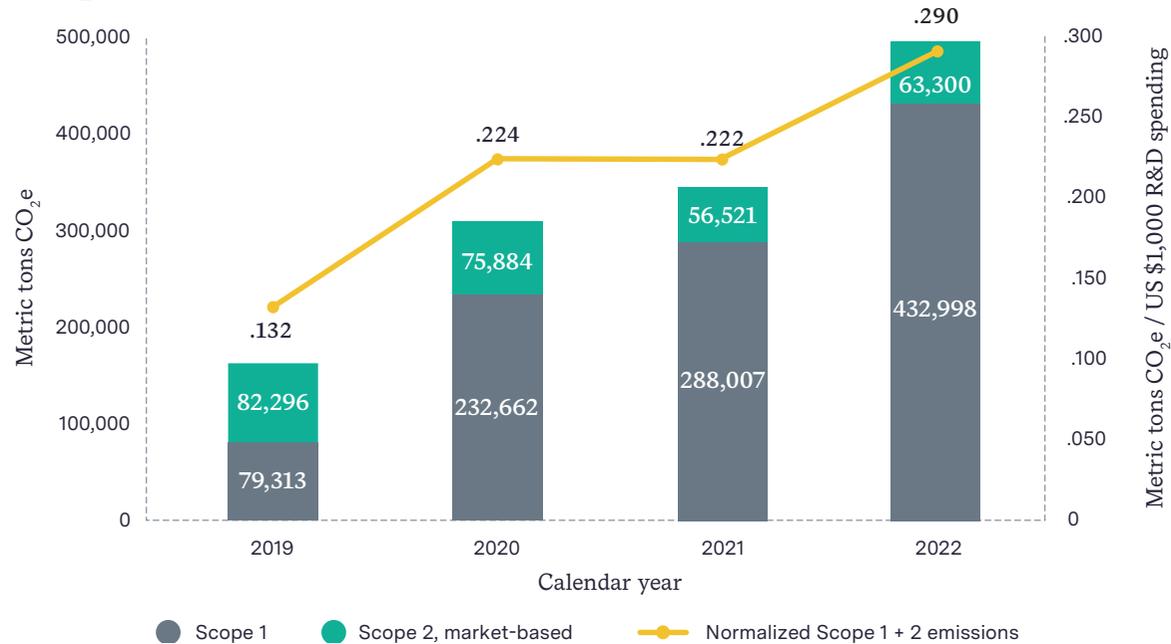
Driving reductions in each scope

Each part of Lam's value chain presents unique emissions-reduction challenges and opportunities. For instance, while we have the most control over reducing our Scope 1 and 2 emissions, they account for only about 8% of our combined 2022 Scope 1, 2, and 3 GHG emissions. To achieve net zero emissions, we must take a value-chain-wide approach, with a focus on operational efficiency and supplier, employee, and customer engagement. More details on our emissions management can be found in our annual [CDP Climate Change questionnaire submission](#).

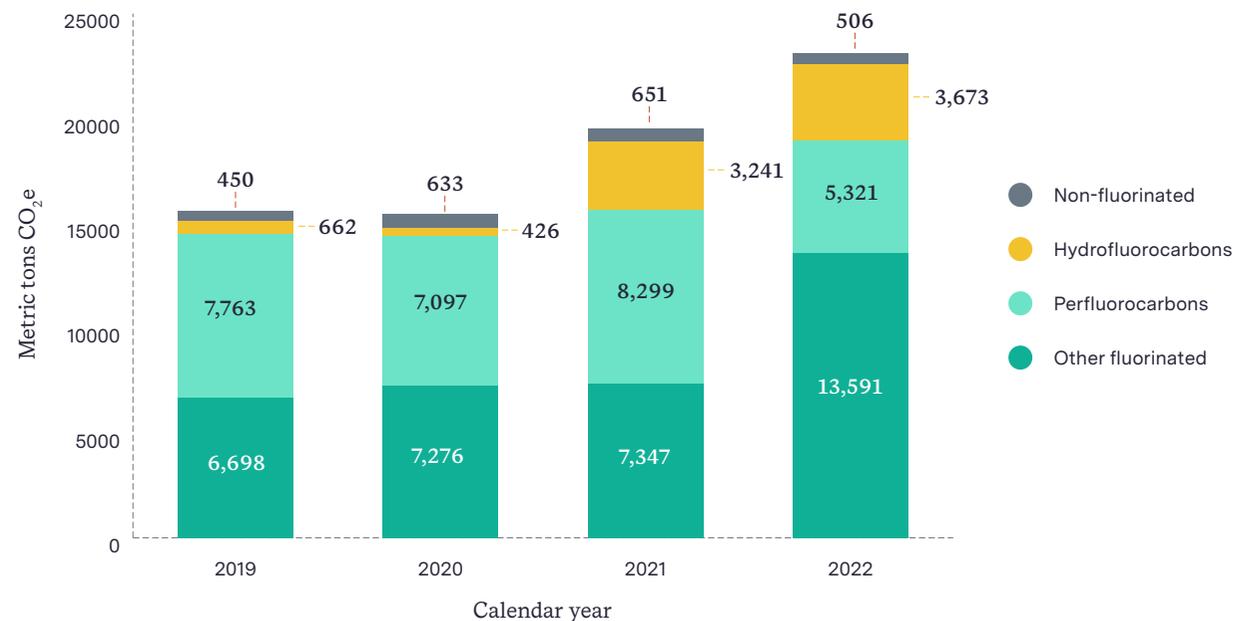
Breaking down our 2022 value chain emissions

	 Upstream activities	 Lam facilities & operations		 Downstream activities
Scope	Scope 3, indirect	Scope 2, market-based indirect	Scope 1, direct	Scope 3, indirect
GHG emissions	2,034,127 metric tons carbon dioxide equivalent (MTCO ₂ e)	63,300 MTCO ₂ e	~433K MTCO ₂ e	4,733,017 MTCO ₂ e
Emissions details	<ul style="list-style-type: none"> • Purchased goods & services: 1,764,704 MTCO₂e • Capital goods: 5,759 MTCO₂e • Fuel- and energy-related activities: 52,793 MTCO₂e • Upstream transportation & distribution: 173,093 MTCO₂e • Waste generated in operations: 8,556 MTCO₂e • Business travel: 10,731 MTCO₂e • Employee commuting: 18,491 MTCO₂e • Upstream leased assets: N/A 	<ul style="list-style-type: none"> • U.S.: <ul style="list-style-type: none"> • Fremont, CA: 23,227 MTCO₂e • Livermore, CA: 2,382 MTCO₂e • Tualatin, OR: 8,876 MTCO₂e • Ohio: N/A • Austria: 1,195 MTCO₂e • South Korea: 16,078 MTCO₂e • Malaysia: N/A • Taiwan: 4,439 MTCO₂e • India: N/A • Leased (All): 7,103 MTCO₂e 	<ul style="list-style-type: none"> • Hydrofluorocarbons: 3,673 MTCO₂e • Perfluorocarbons: 5,321 MTCO₂e • Other fluorinated: 13,591 MTCO₂e • Non-fluorinated: 506 MTCO₂e • Other refrigerants: 385,764 MTCO₂e • Diesel: 63 MTCO₂e • Natural gas: 19,468 MTCO₂e • Liquid petroleum gas: 4,587 MTCO₂e • Owned vehicles: 25 MTCO₂e 	<ul style="list-style-type: none"> • Downstream transportation & distribution: 607,555 MTCO₂e • Processing of sold products: N/A • Use of sold products: 3,704,749 MTCO₂e • End-of-life treatment of sold products: 2,546 MTCO₂e • Downstream leased assets: N/A • Franchises: N/A • Investments: 418,167 MTCO₂e
How we're driving reductions	Engaging suppliers to set SBTs and providing support and resources to help them build carbon measurement and reduction capabilities and purchasing offsets for portions of our business travel	Maximizing energy efficiency, purchasing RECs, and investing in large-scale projects to transition to renewable electricity	Optimizing our processes and products, investing in emissions controls and energy-efficiency technologies, updating manufacturing and lab processes, and evaluating lower global warming potential process gas alternatives	Developing efficient products and processes, establishing a baseline for product-based energy consumption and emissions, and engaging customers to set SBTs

Scope 1 and 2 GHG emissions by year



Process chemistry emissions by type



2022 GHG EMISSIONS HIGHLIGHTS

496,298

combined MTCO₂e Scope 1 & 2 (market-based) GHG emissions

92%

of Lam's GHG footprint made up of Scope 3 emissions

23%

reduction in Scope 2 (market-based) GHG emissions from 2019 baseline

1%

increase in Scope 3 GHG emissions from 2021

From 2019 to 2022, our overall Scope 1 and 2 emissions increased by 207% from our updated 2019 baseline. The baseline values and subsequent year emissions growth is primarily due to a previously unknown source of Scope 1 emissions. In addition, we found that we had not accounted for the partial abatement of certain process gas emissions at our Fremont, California, lab facility. We revised the historical data on this page to reflect these changes. In addition, we limited our Scope 3 emissions increase to a modest 1% despite seeing nearly 18% in revenue growth.





Decarbonizing our industry together

Lam has long been active in SEMI, the global industry association representing the electronics manufacturing and design supply chain. In 2022, we joined SEMI’s Semiconductor Climate Consortium as a founding member. The consortium is the first global, ecosystem-wide collaborative of semiconductor companies dedicated to reducing industry-based emissions. Through collaboration, transparency, and ambitious goal setting, we aim to advance our industry’s response to climate change—one of the most pressing challenges of our time.

As a participant, Lam has the opportunity to:



Shape industry standards on sustainability



Share knowledge and best practices, and collectively solve the industry’s big challenges



Leverage industry-level collaborations to accelerate our own climate progress



“Lam is committed to proactive climate action. We share the Semiconductor Climate Consortium’s vision to drive progress on climate challenges within our industry. By collaborating with fellow members, we hope to accelerate solutions with greater speed and scale than can be achieved alone.”

Shawn Covell
managing director, global ESG strategy at Lam





Optimizing energy

We can't power semiconductor breakthroughs without consuming energy—and our energy needs increase as our operations expand. Our goal is to adopt solutions that decouple Lam's growth from increased energy use and emissions. To do so, we're transitioning toward renewable electricity and optimizing our facilities and processes to be more energy efficient. Currently, our renewables are sourced from a mix of onsite solar and renewable energy credits.

Pursuing 100% renewable electricity

Our Villach, Austria, plant uses 100% renewable electricity through a combination of onsite solar and purchased electricity. In 2022, we completed a solar expansion project to achieve additional energy generation at the site, which now generates approximately 3.6 megawatt-hours (MWh) per day. We project that the site will eventually generate 8 MWh per day following further expansion work planned for 2024.

Meanwhile, at our facility in Malaysia, which we opened in August 2020, we completed a two-part solar project. Lam's Global Workplace Solutions (GWS) team expedited phase two of the solar project, completing the installation of 1,076 solar panels in December 2022.

Our Malaysia facility's new solar panels **cover the majority of the roof's** 800,000-square-foot rooftop and generate **13 MWh per day**. They supply **20% of the site's electricity requirement**.





Using an innovative mindset to increase global energy savings

In our everyday lives, many of us adopt energy-conscious behaviors—from turning the thermostat down during cold-weather months to turning the lights off when we leave a room. At Lam, we take a similar approach to drive energy-efficiency improvements. When implemented at our facilities, these upgrades can lead to large-scale savings in energy, emissions, and costs.

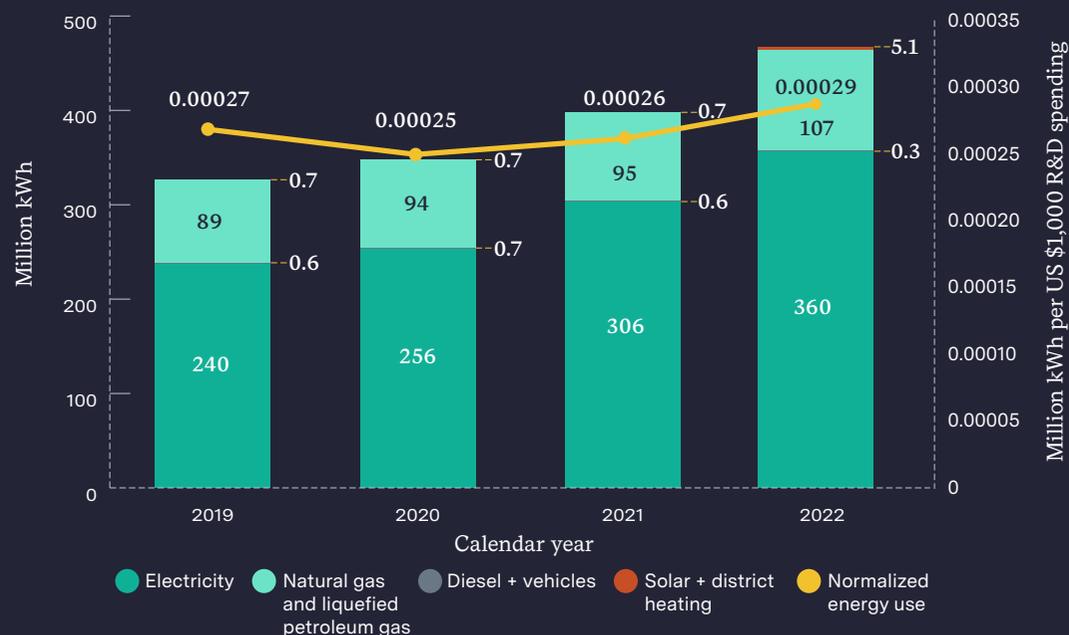
Recently, we turned our attention to Lam’s new manufacturing site in Malaysia, a state-of-the-art facility designed with efficiency in mind. Lam’s outlook: Why stop there when we can make it even better? We challenged the site’s employees to push efficiency further. In response they embarked on a series of building improvements, including:

- Reducing lighting during off hours
- Reducing cooling in the office
- Exploring the potential to reduce cleanroom humidity in the future

Some solutions turned out to be simple but required critical thinking. For example, by reducing pressure in the facility’s clean room, they enabled the fans to slow down—achieving energy savings while keeping the space contaminant free.

Our teams also drove improvements at sites in the U.S., completing lighting upgrades in Livermore, California; commissioning a scrubber to reduce fan speed in Fremont, California; and installing a variable frequency drive (VFD) air compressor and chiller in Tualatin, Oregon. Installing a VFD chiller resulted in immediate energy savings. Additionally, by monitoring the chiller’s operation and adjusting its controls, the Tualatin facilities team nearly doubled the energy savings achieved from installing the equipment itself. For 2023, we have enrolled in energy-efficiency programs sponsored by the local utilities in Oregon and California to identify and implement low- or no-cost improvements.

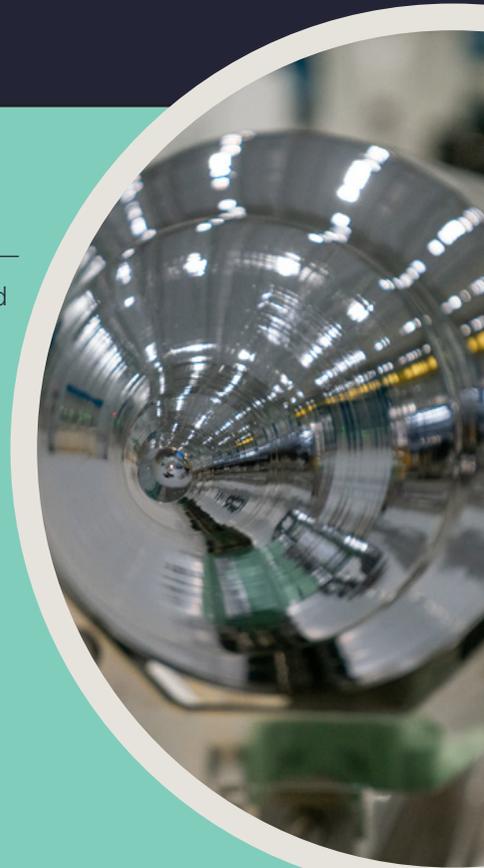
Energy usage by type



Improving seed lift

At our facility in Springfield, Ohio, we grow silicon ingots—large crystals that are sliced into wafers. Getting the seed of the ingot to lift into a defect-free crystal is a highly technical and energy-intensive process. In 2021, we implemented process improvements that reduced the number of attempts to achieve each high-quality crystal. We conducted a follow-up seed lift project in 2022, which enabled improved mixing and energy efficiency, and therefore increased energy savings and yield. Outcomes included:

- Nearly 50% increase in the speed at which crystals are pulled
- 13.7% increase in energy savings per wafer millimeter





Accelerating water savings

Water is a key component in semiconductor manufacturing, making it critical to our company, suppliers, and customers. At Lam, we rely on freshwater to operate our chillers, house scrubbers, process cooling water systems, and soft water treatment plants. It's a precious resource that we share with our communities.

In water-stressed regions, we know it is imperative to manage water as responsibly and sustainably as we can. In 2022, we exceeded our goal to achieve 17 million gallons of water savings in water-stressed regions from a 2019 baseline by 2025. As part of setting this goal, we used the World Resource Institute Aqueduct Water Risk Atlas to identify which of our facilities were in water-stressed regions. To date, we have identified six sites throughout California, South Korea, India, and Malaysia. However, regions identified as water-stressed shift over time, so we will continue to periodically review and update this list.

In these and other areas, our GWS team explores and invests in water-saving technologies and efficiency upgrades. We monitor industrial wastewater and stormwater discharges in accordance with local regulatory requirements, and often find ways to repurpose process-based wastewater to support other areas of our operations. To build on our success in achieving our initial water-savings goal, we are updating our 2025 goal to 80 million gallons of water savings from a 2019 baseline.

PURSUING—AND EXCEEDING—OUR WATER-SAVINGS GOAL



Learn more about our approach to responsible water management [on our website](#) and in our annual [Water Security submission to CDP](#) →



2022 WATER-SAVINGS HIGHLIGHTS

33.4M

gallons of water savings in water-stressed regions

40K-45K

gallons of water saved per day at our Springfield, Ohio, site through water reclamation and reuse, with ongoing efforts to find additional water-saving opportunities

Water use, treatment, and recycling by year



2022 Water usage in water-stressed regions¹

	MILLION GALLONS	% OF TOTAL USAGE
Fremont	118.6	29.79%
Malaysia	25.9	6.49%
South Korea	16.9	4.24%
Livermore	10.8	2.72%
India	0.3	0.08%
Total	172.5	43.33%

¹Water-stressed regions as identified through the World Resources Institute (WRI) Water Risk Atlas.



Maximizing value by minimizing waste

To ensure a sustainable future, we need to reduce waste. Whether it's operating more efficiently or embracing circularity, we're committed to doing our part.

Lam generates both non-hazardous and hazardous waste as we research, develop, and manufacture our products. We actively monitor this waste and manage it in accordance with industry best practices, and our [ISO 14001](#) multi-site certification drives us to reduce our environmental impact by using materials as efficiently as we can.

Embracing circularity to reduce non-hazardous waste

Most of the waste we generate consists of non-hazardous materials, such as wood pallets, cardboard and packaging, and municipal waste. To reduce these streams, we employ circular practices, such as waste reduction, recovery, recycling, and reuse.

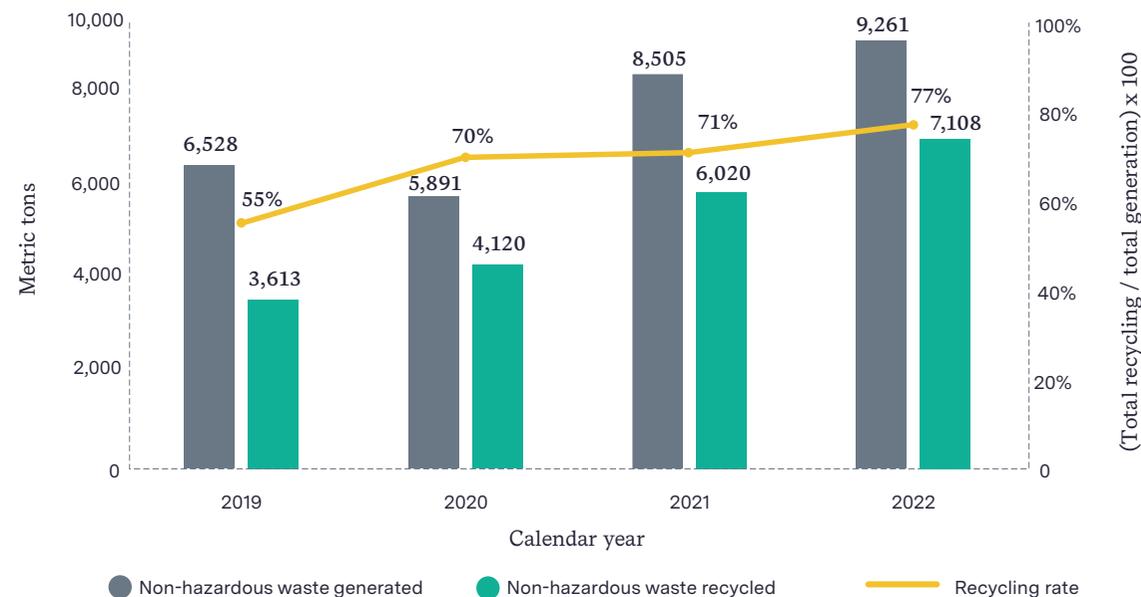
In 2022, our teams identified strategies to better manage and reduce non-hazardous waste. They partnered with a third party to conduct reporting and internal audits, which resulted in key recommendations for efficient waste management practices. We are now engaging employees to implement these practices globally, while exploring an additional third-party partnership to examine our practices related to receptacles, signage, composting, compacting, and more. Lam has also joined SEMI's Circularity working group to share best practices and collaborate to advance further industry innovations.

2022 NON-HAZARDOUS WASTE MANAGEMENT HIGHLIGHTS

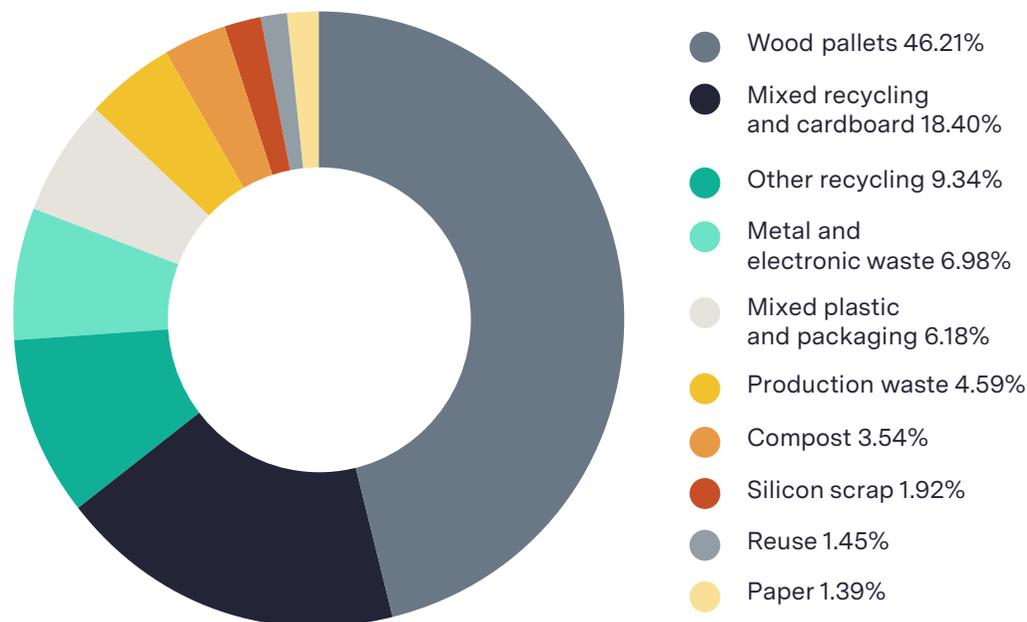
9,261 MT
of non-hazardous waste generated

77%
recycling rate

Non-hazardous waste generation and recycling



Non-hazardous waste recycling by material





INNOVATION SPOTLIGHT

Reduce. Reuse. Rethink.

Sometimes it pays to challenge the status quo and test new ways to optimize existing processes. That was true for a manufacturing process where we shipped unused parts back to the warehouse to be returned to stock.

In the past, our material handlers shipped each part in individual boxes, which were discarded once the parts were re-stocked and stored in bulk. Then, Willis Wah, who joined Lam from a global shipping company, put his expertise to work to streamline the process and reduce packaging waste.

As the manager of logistics for Lam’s Fremont, California, campus, Willis worked with the Warehouse team to consolidate and ship the parts in reusable totes. Within the first month of implementation, the new process helped Lam avoid using approximately 275 boxes. It also led to reduced labor hours and transportation costs, and made stress injuries less frequent among material handlers.

Our commitment to strong environmental management

Lam holds [ISO 14001](#) multi-site certification for environmental management, which covers our Fremont and Livermore, California; Tualatin, Oregon; and Villach, Austria; sites, and individual site certification for Osan, Korea and Eaton, Ohio. As an engaged member of the RBA, we also complete voluntary assessments across our manufacturing sites.

In 2022, our sites’ self-assessment questionnaires (SAQ), which cover environmental and social topics, low-risk scores. We also earned Silver recognition for our first RBA-validated audit at our Livermore, California, site.



Responsible hazardous waste management

Our manufacturing processes and research & development (R&D) operations use chemicals that produce hazardous waste, such as lab debris and waste that is corrosive or flammable. We follow strict controls to responsibly handle each of these streams and aim to divert hazardous waste from landfills by finding alternative methods of disposal. As part of our commitment to environmental stewardship and due diligence, we conduct a periodic risk assessment of our hazardous waste treatment, storage, and disposal facilities (TSDF). Lam partners with CHWMEG—a nonprofit trade association whose members strive to efficiently steward waste—to perform comprehensive TSDF audits, the results of which we integrate into our risk assessment process.

Proactive chemicals management

Chemicals enable us to manufacture leading-edge products, and they're essential to R&D. Our site Environmental Health and Safety (EHS) and Product groups work together to ensure our employees handle these materials with caution and care. This begins even before chemicals arrive at Lam's sites, as we use a chemical information management system to track and monitor our chemical inventories and approve site-based chemical requests. Once onsite, our teams focus on proper transportation, storage, and inventory management to track where and how chemicals are used and manage potential risks.

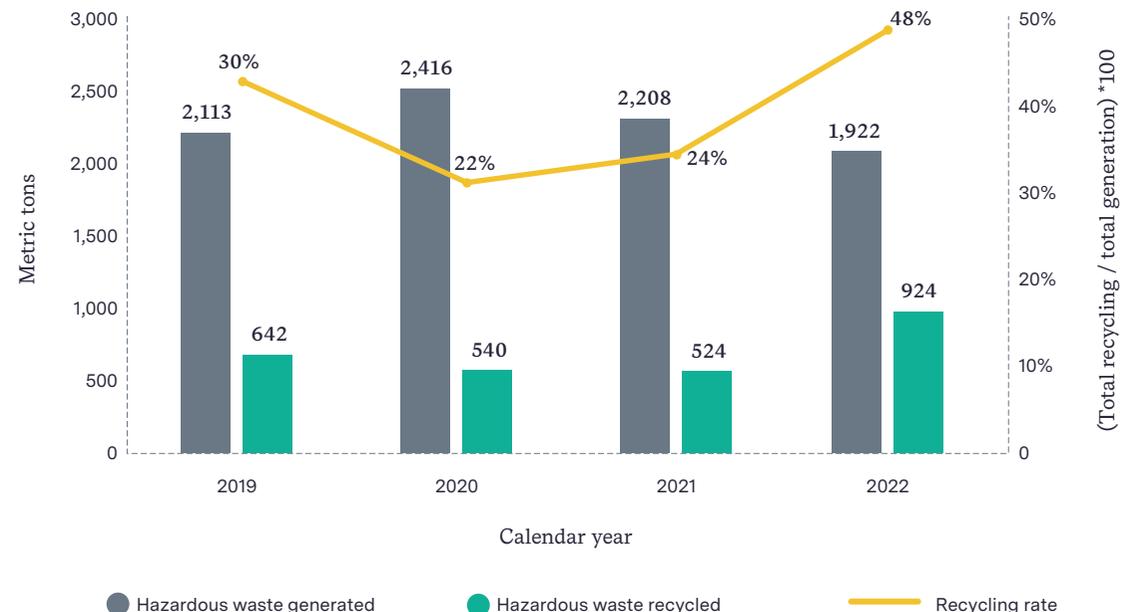
In 2022, we continued to drive consistency among all Lam sites and integrate a chemical information management system as part of the overall chemical management process at the new sites in South Korea, Malaysia, and India. In 2023, we plan to improve our purchasing systems to allow easier and more automated environmental reporting.

Learn more about [our hazardous waste disposal methods](#) →

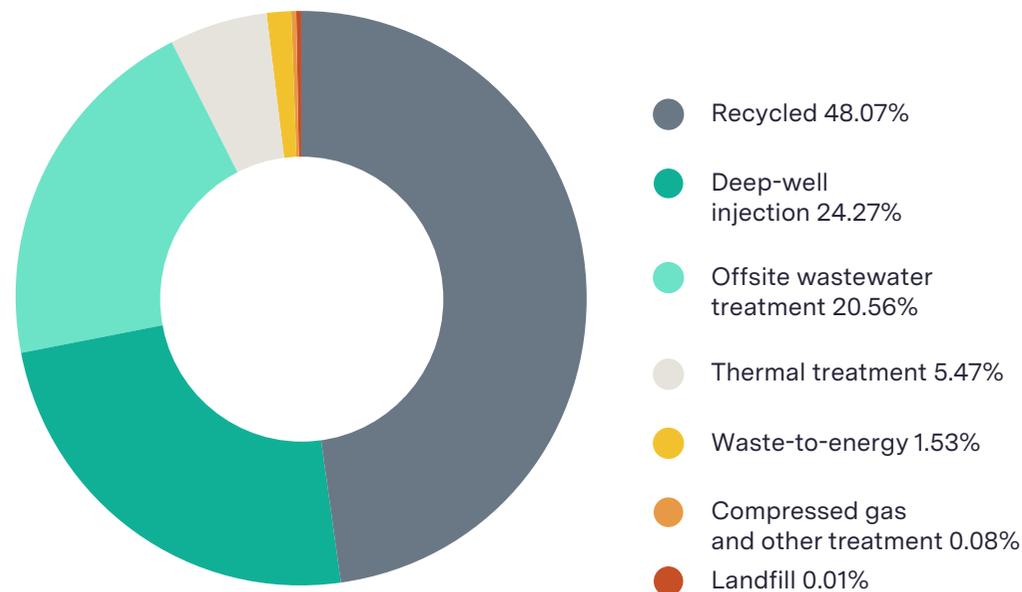


99.99%
hazardous waste diverted from landfills in 2022

Hazardous waste generation and recycling



Hazardous waste by disposal method





Embracing green chemistry practices

We use our expertise to weigh the benefits and drawbacks of various chemicals in terms of their effectiveness, availability, and impact on the environment. As global chemical regulations become more complex, we are proactively working with our supply chain partners, chemical suppliers, and chemicals management systems to ensure Lam’s ongoing compliance and to adopt emerging green chemistry practices.

We work with our engineers and designers to make decisions with the planet in mind. In 2022, we created a tool that engineers can use to assess the GHG emissions intensity of various recipes that are used to process the wafers. We plan to expand on this project in 2023 and share the insights we’ve gained across our organization.

Managing air pollution

Clean air is essential for human and environmental health, and we are committed to doing our part to reduce air pollution. As we work to reduce emissions, our teams have pilot programs in place to further integrate Lam’s tools with our customers’ chemical systems. This allows us to minimize chemical waste and maximize abatement system efficiency. Sometimes we do this by using external abatement systems. In other cases, we focus on selecting processes that minimize the use of high global warming potential chemicals and thereby reduce emissions.



Engaging employees in environmental action

For many of Lam’s passionate employees, internal sustainability is just the start. We’re proud to see our employees get involved with their local communities to plant trees, protect biodiversity, and advocate for environmental health. A key pathway for employee-led sustainability action is Lam’s Employee Sustainability Community (LESC). This employee resource group (ERG) includes more than 450 global members working to support sustainable change.

In 2022, LESG facilitated many volunteer and learning opportunities, including inviting Stacey MacNeil, Lam’s chief communications officer, to discuss our company’s net zero roadmap. LESG members in Malaysia planted trees to mark 50 years of industrialization in the country, and, in India, LESG hosted a Best out of Waste competition to showcase employees’ commitment to recycling and reuse.

Because of these efforts, LESG received Lam’s 2022 Environmental Stewardship Award, which highlights employees’ environmental efforts, both at Lam and in our communities. Sponsored by EHS, the Environmental Stewardship Awards are part of a larger campaign for Earth Month, which, this year, included events around the globe. Many more environmental activities took place throughout the year, as employees acted with purpose for a better, greener world.



“

LESG Malaysia formed after learning about the company's net zero ambition and roadmap. We’re a passionate group of individuals working to spread awareness and directly support Lam's ESG goals. We strive to leverage our Core Values, cross-functional collaboration, and continuous improvement to make a positive impact on the planet.”

EC Pon
LESG Malaysia co-leader at Lam



Our workplace



IN THIS SECTION:

- 41 Highlights
- 42 Engaging and developing our people
- 46 Shaping an inclusive culture
- 53 Keeping our employees safe



We're engaging employees to shape a culture rooted in our Core Values.

How do we solve the unsolvable? By bringing together the brightest minds and empowering them to reach new heights. Our workplace programs are designed to facilitate collaboration, enhance safety, spur innovation, and accelerate employee growth. We strive to offer inclusive development opportunities and benefits that meet our employees' holistic needs. This supports our goal to build on our high-performance culture with best-in-class employee engagement. It also bolsters our work to create a more diverse and inclusive workplace—work that begins by expanding our talent pipeline and collaborating with industry and community partners to create more opportunities for women and underrepresented students and professionals in science, technology, engineering, and math (STEM).

In 2022, we opened the doors of our new India Center for Engineering and our Korea Technology Center. As we expanded Lam's operations, our Core Values and Purpose kept our global workforce united and aligned. With a focus on engagement, we increased employee outreach and grew our employee resource groups (ERGs). We also rolled out new manager resources and cutting-edge benefits that further empower our employees to lead and thrive.

RELEVANT SDGS



[View SDG alignment](#)



Workplace¹



GOAL	STATUS	2022 PROGRESS
Build on our high-performance culture with global employee engagement at the global benchmark, as measured by our annual employee surveys		<ul style="list-style-type: none"> Ended the year with an engagement score of 78, one point below the global top tier benchmark of 79
Maintain an OSHA recordable injury rate at or below 0.4 annually		<ul style="list-style-type: none"> Realized recordable injury rate of 0.35
Increase the proportion of women (globally) and underrepresented employees (U.S.) across the company		<ul style="list-style-type: none"> Increased the proportion of women in our global workforce by 3.0% and underrepresented employees in the U.S. by 5.0% over 2021

¹ Unless stated otherwise, we aim to complete each of our ESG goals by 2025.

2022 HIGHLIGHTS

Matured our engagement process with **new data inputs and a pulse survey**

Jumped 68 places to #219 on Forbes' list of the World's Top Female-Friendly Companies

Implemented a new Student Loan Assistance program in the U.S.

Expanded our enhanced paid parental leave and paid bonding leave policies to our employees across the globe



Engaging and developing our people

Lam has a legacy of strong employee engagement and development, and those priorities came to the forefront in 2022. Throughout the year, we up-skilled our people managers to help them support their global teams. We also made it a priority to maintain workplace flexibility while keeping our employees connected, inspired, and engaged. These efforts helped us land at #555 on Forbes’ list of the World’s Best Employers and #29 among the best employers recognized in the U.S.

Turning our employees’ insights into action

There’s power in really listening, and we trust our employees to know what they need to succeed. We regularly engage employees to find out what’s working and how we can better meet their evolving needs. The key is to turn those insights into action—in the form of innovative development opportunities, benefits programs, and more. That’s how we deliver a positive employee experience that supports recruitment, retention, and professional growth.

Our engagement strategy:



Listen through annual, pulse, and lifecycle surveys; one-on-one meetings with managers; discussions with Lam’s leaders, and team meetings



Learn through sophisticated data collection that captures and cross-references key employee insights



Improve our workplace programs and practices by sharing key insights with teams who have the power to act

In 2022, we matured our engagement processes to improve data collection and analysis and make survey insights more accessible and actionable across Lam’s teams. We conducted our annual survey in June, with seven new data inputs to measure key engagement correlations. We also added two new data outputs to enable cross-program analysis and shared the results with six internal teams.

After the survey, we leveraged online learning and a new Experience Progress Roadmap to drive employee feedback and conversations. Another feature was a short pulse survey administered in October to continue engaging with employees on key topics.

MAKING THE MOST OF OUR EMPLOYEE ENGAGEMENT SURVEYS

Survey design

Our annual engagement survey in June included **17 questions** across **5 categories**



We added **5 new questions** to reflect **core engagement drivers**:

- Cared for at work
- Ethical behavior
- Company values
- Continuous improvement
- Manager support

And followed up with a **3-question pulse survey** in October.

Scores

78
employee engagement score

Falling one point below the global top-tier benchmark

84%
response rate

One percentage point below the global top-tier benchmark

75
2022 Inclusion Index

Represents the combined scores of three questions driving inclusion, authenticity, and equal opportunity

Insights & actions

Based on our **top 3 survey insights**, employees say they:

- Feel supported by their managers and cared for at work
- Believe Lam has a strong culture of ethics and recognition
- Desire varied and timely communication

Employees' feedback indicates a **high rate of satisfaction** with areas including:

- Recognition
- Manager support
- Feeling cared for at work
- Career path opportunities

We responded to survey insights with **3 key actions**:

- Enhanced inclusion and diversity training with new INCLUDE manager training
- Launched culture workshops for new employees
- Guided managers to prioritize teamwide communication

Supporting a sense of connection

Since 2020, many new employees have worked with their teams remotely. To help them build a strong sense of connection, Lam's global Human Resources team launched new culture workshops for these employees in 2022. During 90-minute sessions, Lam's senior leaders demonstrated how we put our Core Values into action. In total, they engaged more than 2,700 employees during 37 global sessions delivered in each region's local language.

Additionally, we facilitated virtual executive employee engagement sessions for those hired within the past six to nine months, in which employees shared their experiences with Lam's chief human resource officer and CEO. These leaders also hosted roundtables with managers of highly engaged teams, which our sites modeled in various regions. Members of Lam's Board got involved by engaging with recently hired college graduates to create an opportunity for two-way feedback and insights.



“Being able to speak directly with Board members helped me connect to our company's culture and understand that we are all one team working together.”

Xiaomin Yun
product engineer 4 at CSBG



Embracing workplace flexibility

Several years after the emergence of the pandemic, workplace flexibility is here to stay. In 2022, we updated our workplace modalities to include onsite, onsite flex, virtual flex, and remote. Workplace flexibility supports an inclusive culture by enabling employees to work in ways that meet their unique needs. In fact, our virtual-flex employees scored the highest on engagement—exceeding the technology industry benchmark. Employees attributed their positive experiences to Lam’s culture, well-being programs, and strong employee support. We’re proud to see our people thrive in this environment and rolled out additional resources to support them in 2022.



Our return-to-work pilot program provided employees with the following tools:

- Home office stipend to help offset remote work expenses
- New manager training on “Leading in a Hybrid Environment,” along with guidance on how to host virtual meetings and keep remote participants engaged
- Internal sites providing information on Lam’s virtual-flex and in-person policies

Up-skilling our teams

From the first day employees join us, we put them on a trajectory for long-term growth. We use layered development programs to support Lam’s employees and leaders through experience and education.

To expand this programming, we launched Supervisor Essentials, a learning program designed specifically for manufacturing supervisors, in 2022. We also continued several ongoing development opportunities, such as BetterUp coaching for new managers, our Targeted Manager Support program, our enterprise-wide mentoring program, and our Leap technical training and certification program for new hires and Lam engineers.

Lam earned Training Magazine’s 2022 Training APEX Award, which recognizes organizations that excel in training and human capital development.



2022 TRAINING AND DEVELOPMENT HIGHLIGHTS

56%

increase in employees who participated in Lam coaching program over 2021

73%

increase in mentorship pairs over 2021, with a 95%+ mentee satisfaction score

1,492

employees participated in our Leap technical training program

759

Leap certifications awarded



Celebrating and caring for our employees

Our employees are high achievers. We strive to equip them with resources for overall health and well-being, while making them feel appreciated and inspired to keep reaching new heights. Our benefits and recognition programs support these aspirations and reinforce Lam's Core Values.

Recognizing exceptional performance

As we mature our engagement processes, we're delving into the link between engagement and recognition. Recent research indicates that organizations with meaningful recognition programs have a 14% employee engagement, productivity, and performance edge. The data also places leadership support and recognition among the top most effective non-financial factors for retention.¹

In 2022, we continued our Above and Beyond recognition program, in which employees can acknowledge their colleagues' great work and embodiment of Lam's Core Values. We also recognized employees' commitment to enhancing sustainability through our environmental stewardship awards.

For the second year, we held a Gratitude Summit, in which employees could attend a series of workshops sponsored by Workhuman. We also worked with Workhuman to conduct a cross-program analysis of our employee engagement survey results so we could better understand the intersection of employee recognition and engagement.

In 2022, Lam earned GOLD Recognition from the American Heart Association for implementing best practices that build a culture of health for our employees.

¹Deloitte, "Recognition programmes. Are they important?" <https://www2.deloitte.com/ie/en/pages/deloitte-private/articles/recognition-programmes.html>

Delivering inclusive benefits

Employees can be more present at work when they have a foundation of overall well-being, whether that means taking time off to be with family, getting regular check-ups, or improving financial health. We strive to continuously enhance our benefits to support the needs of Lam's diverse employee base. Our goal is to deliver resources that support all aspects of our employees' well-being and health.

One of our focus areas is increasing family and parental support. In 2021, we enhanced our U.S. parental leave policy to give birth mothers up to six months of paid parental leave. We also began providing 16 weeks of paid bonding leave to all other new parents—regardless of gender. In 2022, we expanded both policies to our employees across the globe.

In March, we teamed up with Fidelity to launch our new Student Loan Assistance program for eligible U.S. employees. The program offers \$400 per month to eligible employees who have a qualified student loan for their own education in an accredited program. Employees can take advantage of the benefits tax-free, with the money transferring directly to their loan provider.

Additional benefits for 2022 include:

- Elective fertility preservation through Anthem*
- Standalone ID theft protection through LifeLock*
- Accident and hospital indemnity coverage through MetLife*
- Healthcare concierge and advocacy service through Health Advocate*
- Personal Observance Day*
- Malaysia Fitness Center

*For U.S. employees only



2022 BENEFITS HIGHLIGHTS

500+

employees benefited from our new Student Loan Assistance program.

100+

health and well-being events, including a global virtual health fair, webinars, challenges, and more.

Explore our **employee benefits programs** →





Shaping an inclusive culture

In the dynamic semiconductor industry, our culture keeps us strong and steady. It's what brings us together—and what sets our business apart. At Lam, we're building a culture based on our company's Core Values. We welcome diverse perspectives and strive to create an environment where every employee feels they belong. These values are key to attracting, retaining, and developing highly skilled talent. They fuel innovation, build mutual respect, and enable us to better serve our customers, colleagues, and other stakeholders.

Setting the intention

Our Inclusion and Diversity (I&D) strategy is led by Lam's global head of inclusion and diversity. It includes three pillars:

- Fostering inclusion
- Increasing diversity
- Sharing our progress

Lam's leaders take an intentional and progress-oriented approach to build inclusive behaviors across our organization. We aspire to increase the proportion of underrepresented employees and women in Lam's workforce. In this regard, skill-building and accountability are key. As Lam's leaders created their performance and development plans in 2022, we asked them to set a target focused on I&D for the first time.

Additionally, more than 1,700 global people managers participated in our new INCLUDE training which aims to expand inclusive leadership capabilities, and further embed I&D as a Core Value shaping our culture. We also administered our Hire Like a Champion training for the second year, which supports inclusive hiring practices. The 2022 training included cohorts in the U.S. and Asia, which focused on recruiting high-potential minority and female candidates.

Our commitment to non-discrimination

We aim to maintain and cultivate a workplace where every person has equal opportunities to thrive. [Our Global Employment Practices Statement](#) declares our support of workers' rights to freedom of association and collective bargaining, to the extent permitted under local laws.

In line with the highest ethical and legal standards of labor and employment laws in every country where Lam maintains our workforce, we are committed to equal opportunity and non-discrimination in all our employment practices. We prohibit unlawful discrimination, harassment, and retaliation in any aspect of employment, including recruiting, hiring, promotion, and compensation. In 2022, we published a new [Human Rights policy](#) to further ensure the protection, safety, and dignity of all Lam employees.

Making our workplace inclusive for people of all abilities

Lam's Employee Relations team works closely with employees who have disabilities to provide workplace accommodations as needed. Together we develop creative and effective solutions, such as job modifications for physical restrictions, sign language interpretation, and schedule accommodations to minimize obstacles or barriers.





Our 2022 workforce at a glance

Board gender diversity



Board ethnic diversity

ETHNIC DIVERSITY	FEMALE	MALE
Asian	1	3
White	2	3



Advancing equity at Lam

At Lam, we are committed to promoting equity in our workforce. To demonstrate this commitment, we have expanded our Employee Relations function globally, providing managers and employees with a dedicated team to surface and resolve a wide range of workplace issues.

To ensure accountability, we regularly measure our progress in recruiting, hiring, and retaining a diverse workforce. We also conduct an annual pay equity assessment of our compensation practices and systems to promote fair and equitable compensation in our workforce.

We also leverage the expertise of a nationally recognized law firm and its data-driven statistical model to objectively analyze our pay practices and identify trends and patterns. We use this information to maintain and improve Lam's global compensation philosophy and practices.

Note: Minimal rounding has been applied to these data.

All Employees Global and U.S. Gender



Executives Global and U.S. Gender



Managers Global and U.S. Gender



Technical Employees Global and U.S. Gender



Graduates U.S. Gender



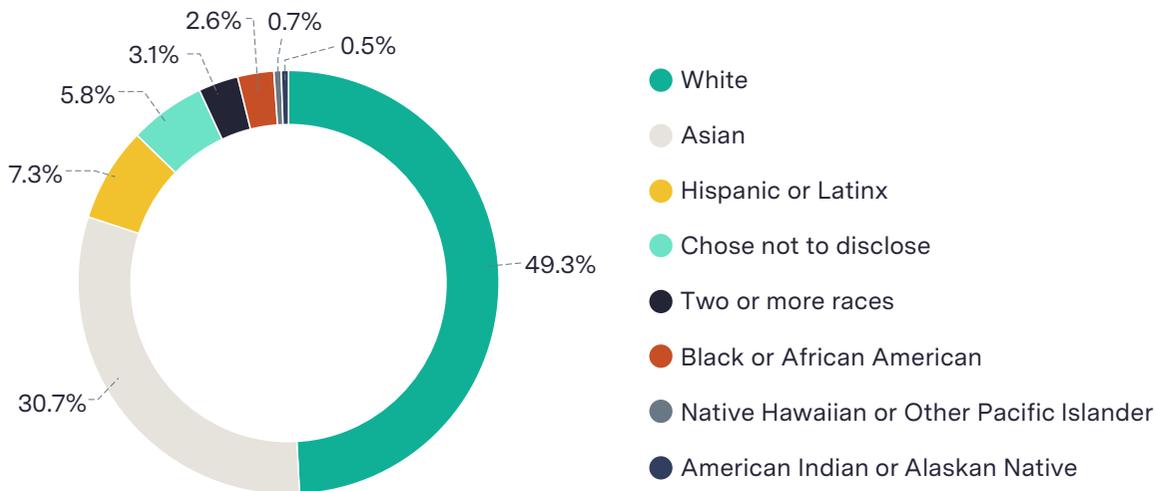
New Hires Global Gender



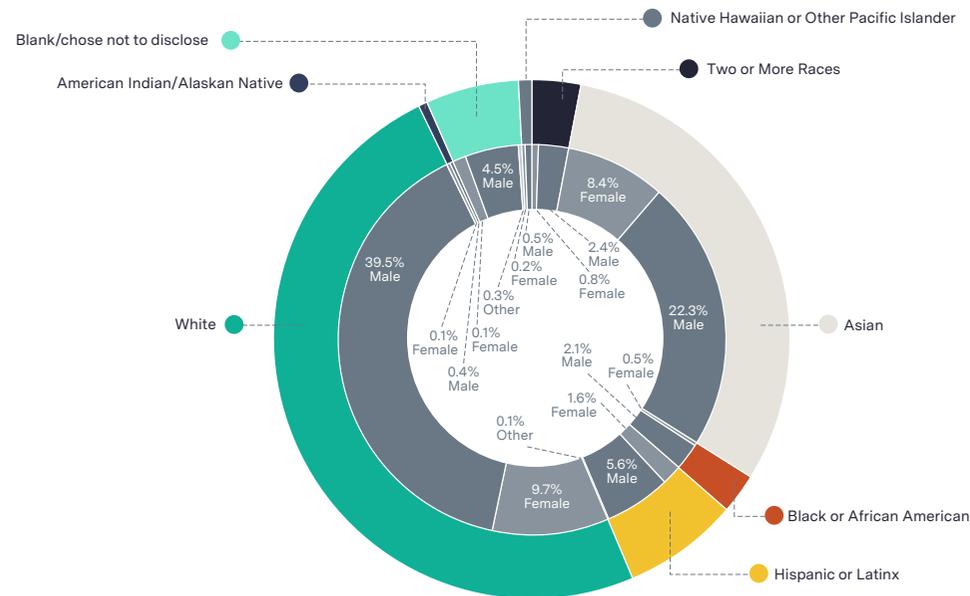


2022 Employee demographics

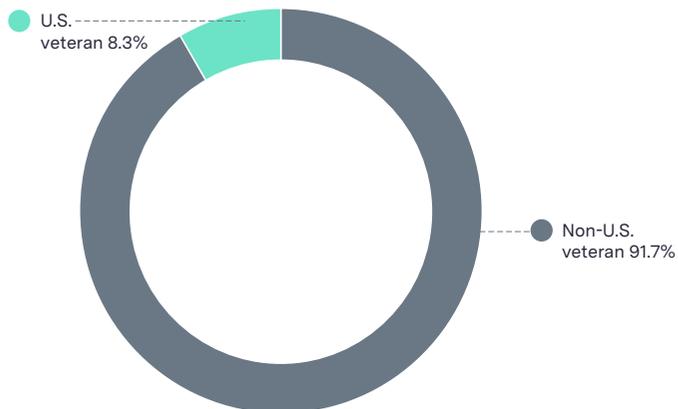
U.S. employees



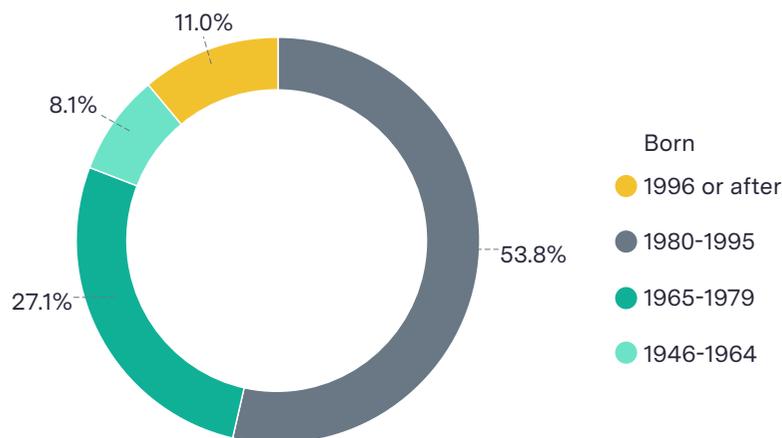
U.S. gender and ethnicity



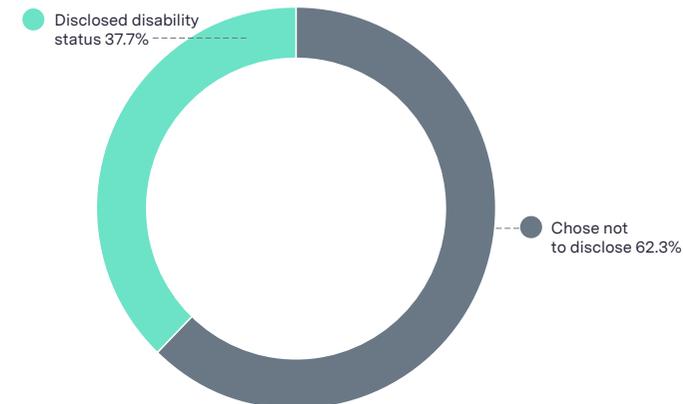
U.S. veteran status¹



Global employees by generation



Employees who disclosed their disability status (global)¹



¹ Does not include Silfex.
Note: Minimal rounding has been applied to these data. Data do not include Talus.



Increasing opportunities for diverse talent in STEM

Everyone deserves the chance to succeed. Yet diverse talent remains largely underrepresented in STEM. Too often, students and candidates face institutional, social, and economic barriers that make it difficult to break into these fields and advance. At Lam, we believe it's time for that to change, so we use our resources, reach, and leadership position to move the needle. We collaborate with universities and academic organizations to provide internships, fund fellowships, and support our recruitment goals, in addition to sponsoring and attending key industry events to amplify and recruit diverse STEM professionals.

Our 2022 activities included attending AfroTech's annual conference, which brings together Black entrepreneurs and innovators. Internally, our Talent Acquisition team piloted a new centralized talent-sourcing model in the U.S., which emphasizes outreach to diverse candidates and includes a diverse-slate-of-candidates goal. Other ongoing pipeline-building activities include:

U.S. university collaborations

In 2022, we continued our collaboration with the United Negro College Fund (UNCF) for the second year. Lam provided \$100,000 to fund 20 scholarships at UNCF schools, including historically Black colleges and universities (HBCUs). We also launched new alumni and student recruiting relationships including:

- Georgia Institute of Technology
- National Society of Black Engineers
- Society of Hispanic Professional Engineers
- Spelman College

Learn more about the **transformative learning initiatives** launched through our new social impact program. [→](#)

U.S. academic internships and fellowships

Lam serves as a key partner for the National Consortium of Graduate Degrees for Minorities in Engineering (GEM), which provides graduate-level fellowships to underrepresented candidates in engineering and science. In 2022, we provided \$460,000 to enable 20 GEM fellowships—up from 13 fellowships in 2021. GEM also provides its fellows with exposure to industry internship programs, including our own. We were proud to welcome GEM fellows as part of a highly diverse and talented intern cohort in 2022.

Global academic scholarship awards

When we see passion and talent, we go all in to help STEM students succeed. In 2022, several of our locations in Asia provided scholarships aimed at increasing I&D in STEM. Lam provided Thesis Award scholarships to three universities in China, as well as scholarships for women in STEM in Taiwan.



2022 WORKFORCE DIVERSITY HIGHLIGHTS

3.0%

increase in proportion of female employees in Lam's global workforce from 2021

5.0%

increase in proportion of underrepresented employees in Lam's U.S. workforce from 2021

20

fellowships funded through our collaboration with GEM

59%

diversity for global intern class

11

hires through partnership with National Society of Black Engineers

Learn more about our **university partnerships and programs** [→](#)



Supporting women in our industry and workforce

Despite some improvement, women remain largely underrepresented in global STEM careers.¹ We are committed to shifting this gender imbalance—especially in the semiconductor industry—and we know progress must start from within. One of our workplace goals is to increase the proportion of women throughout our company by 2025. To drive progress, we strive to amplify the voice of our industry’s women leaders while creating a workplace environment where women can excel and advance.

In 2022, we updated our internal hiring practices to strive to include a female employee on every interview panel. Compared to 2021, we increased the proportion of women at our company by 3.0%. We supported female STEM leaders through company webinars, industry conferences, and global ERGs. One highlight was attending our first in-person Grace Hopper Celebration—the premier U.S. conference for women in tech. During the conference, three of Lam’s female leaders hosted an inclusion-focused career development workshop. Themed “Breaking Barriers Through Innovation,” the breakout session engaged more than 200 participants.

Lam also sponsored the 2022 Diversity in Tech Symposium, themed “Advancing Climate Resilience.” The symposium was hosted by the University of California’s EDGE in Tech Initiative, which is committed to addressing challenges faced by women and other under-included identities in engineering and computer science. Also in California, Lam attended the Women in Semiconductor Hardware conference. We were a finalist for the Designing the Difference award, which recognizes companies that are making a significant and measurable impact on advancing the industry through I&D.

At Lam’s new site in Malaysia, our manufacturing leadership team boasts **50%** female representation.

The Lam India Women’s Network (LIWN) was our first ERG launched in India. LIWN brings female employees together to focus on personal and professional development, networking and collaboration, and business impact. During 2022, LIWN hosted a financial awareness session, career-mapping and Gallup Strengths profiling workshops, and many other events.



¹Catalyst, “Women in science, technology, engineering, and mathematics (STEM).” <https://www.catalyst.org/research/women-in-science-technology-engineering-and-mathematics-stem/#:~:text=Women%20with%20bachelor's%20degrees%20and,women's%20overall%20underrepresentation%20in%20STEM>.



Connecting employees through ERGs

Lam’s ERGs create a welcoming space where employees empower each other to learn, develop, advocate, and lead. Under our model, each ERG develops its own charter, initiatives, and goals, which support ESG progress, mentorship, inclusion, community outreach, and employee engagement.

Members of our CEO staff engage closely with ERGs and serve as executive sponsors for each group. The support goes two ways, with sponsors often seeking feedback on emerging and ongoing company initiatives. In 2022, our leaders held roundtables with global ERGs, including a U.S. roundtable where over 80 participants joined Lam’s CEO. Globally, we continued to grow our ERG network, achieving above-average Fortune 500 participation. Our global ERGs include:



Black Employee Network



Community of Latinos and African Americans for Student Success and Outreach



Lam Employee Sustainability Community*



Lam India Women’s Network



Lam’s Veteran Community



New Professionals Network



PRIDE LGBTQ+ Allies



Women in Customer Support Business Group (CSBG)



Women in Engineering



Women@Fremont



Women in Global Operations (WGOP) U.S. Korea, and Malaysia



Women in Korea



Women in Leadership at Lam



Women of Southeast Asia



Women in Taiwan



ERG FAST FACTS

We now have **15 ERGs** in **6 countries** with **3,500+** members.¹

ERGs hosted **60+ events** in 2022.

We **began promoting ERGs through our onboarding materials** to help employees get involved right away.

Learn more about one of our newest ERGs, **LESC** →

Cultivating inclusion year-round

Creating an inclusive culture is a year-round commitment. It's part of how we show up at work each day. We also take time to highlight important moments throughout the year that honor, celebrate, or affect diverse employee groups. Examples from 2022 included:

- Black History Month: honored with a letter to employees from Vince Brigman, Lam's corporate vice president of global finance and corporate functions operations, who also sponsors two ERGs
- International Women's Day: celebrated with a "Break the Bias" webinar and campaign promoted by our LIWN ERG
- Earth Month: included activities hosted by our global chapters of LESG and the local green teams
- PRIDE: celebrated by Lam's Pride ERG, which hit a new milestone by growing to 200 members
- Global Diversity Awareness Month: featured several activities, including a keynote on "Reimagining Global Inclusion," an interactive theatrical activity, and interactive conversations on "Leading from the Top"



“

Women should not have to settle based on limitations and boundaries. At Lam, we're asking what can be done to remove those barriers, instead. Our Women in Global Operations ERG helps members address potential barriers by growing their network, finding mentorship and guidance, and building long-term careers at Lam.”

Soon Kuek

managing director and general manager,
Lam Malaysia manufacturing



¹Employees may belong to multiple ERGs as we encourage allyship and cross-cultural engagement.



Keeping our employees safe

Ensuring employees' safety is fundamental to creating a positive work experience—whether it be in an office, manufacturing plant, or lab. We follow strict safety protocols and prioritize training and risk controls to help employees safely perform their tasks.¹

Our global [EHS policy](#) applies to every employee and outlines our commitment to protecting all Lam personnel and minimizing risk.

¹Data are inclusive of Lam Research and Silfex.



We also maintain a single site certification at our Fremont, California, headquarters for [ISO 45001](#), the globally recognized standard for occupational health and safety management systems.

In 2022, our Tualatin, Oregon, site achieved Voluntary Protection Program Star Status, the highest health and safety award bestowed by OSHA's U.S. and Oregon divisions. The award recognizes Lam's low illness and injury rates and our commitment to a culture of safety—setting us on a bold trajectory for continuous improvement and accountability for our safety performance. Overall, we conducted more than 264,000 Risk Management by Walking Around inspections, a process used to identify and track safety issues and implement corrective actions.

Learn more about our [safety program and governance](#) →



“

At Lam Korea, we apply a ‘planning, execution, validation, and problem-solving’ cycle, based on the safety and health management practices put forth by ISO 45001. We strive to monitor and address risks that can lead to safety and health issues while building a safety culture for all employees.”

Andy Yeo
EHS specialist at Lam Korea

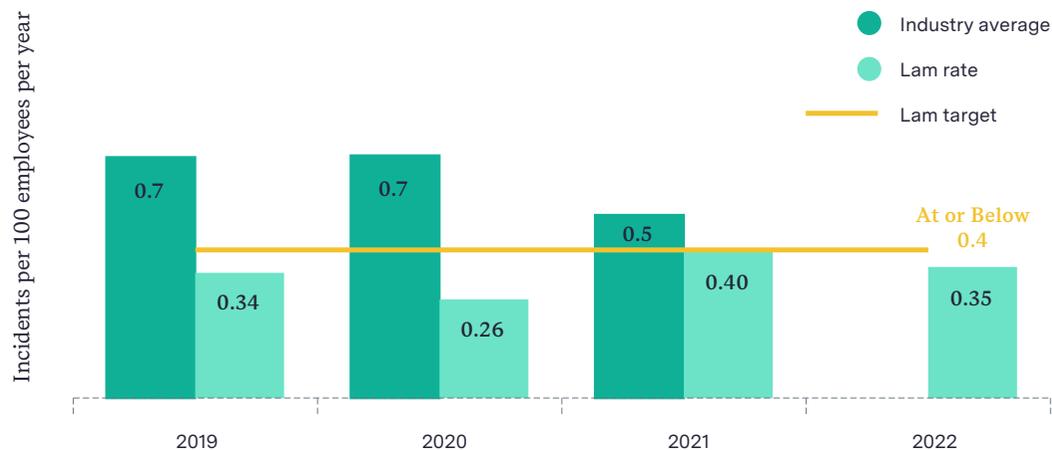


Working toward our safety goal

One of our ESG goals is to achieve an OSHA recordable injury rate at or below 0.4. In 2022, we achieved a rate of 0.35. Lam’s growth in 2022 posed additional safety challenges, as we increased the number of temporary employees working in our operations. To offset this challenge, we invested in prevention-based education, training, awareness, and emergency preparedness programs.

Examples of these investments include our general health and safety training, physical training program, and ergonomic assessments. We also continued our Safety Awareness for Everyone (SAFE) program, which we use to update employees on emerging safety issues. We employ SAFE to prevent future issues by including lessons and stories based on incidents from the past.

Recordable injury rate (Lam vs. industry)



2022 SAFETY PERFORMANCE

63,000 hours employee safety training completed

63% injuries attributed to strains, sprains, slips, trips, and falls

0 fatalities



INNOVATION SPOTLIGHT

Innovation spotlight: Enabling a safe, smooth shift to next-generation product design

Typically, engineers design products using 3D models, then deliver manufacturing information in 2D drawings. At Lam, we’re moving to a new model-based definition (MBD) format, in which engineers embed all product data—including assembly-level bills of materials (BOMs)—directly in their 3D models.

Using MDB reduces design time and creates a single resource for Lam’s engineers, manufacturers, suppliers, and customers. However, there are challenges in making the transition. For example, to create a 3D spare-parts identifier, which field technicians and customers use to service tools and replace parts, engineers must manually copy part numbers from a BOM and paste them into a computer-aided design model for verification.

Ramanathan Kannappan, a Bangalore-based senior designer at Lam, identified several issues with this process. Copying the wrong part number or overwriting data can lead field technicians and customers to order the wrong part, and engineers risk repetitive strain injuries by completing the same task hundreds of times.

As a solution, Ramanathan created a macro for the BOM that identifies duplicate parts, prevents data overrides, and improves project communication. Since implementing the macro, engineers have nearly eliminated data errors and cut project-ownership times by up to 50%.



Responsible supply chain



IN THIS SECTION:

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- 57 Our strategy for mutual success
- 60 Advancing climate action together
- 61 Upholding human rights
- 61 Ensuring responsible sourcing of minerals
- 61 Cultivating a diverse supply chain
- 62 Collaborating toward ESG progress

We collaborate with suppliers to grow and scale for the future.

Lam's advanced technologies rely on specialized materials and components. To source them, we collaborate with thousands of suppliers around the world. We invest in supplier relationships built on shared values of open communication and trust. Our Core Values drive us to take ownership for upholding responsible, ethical practices and continuously improving our supply chain performance over time.

Our supply chain focus areas include [climate action](#), [human rights](#), [supplier diversity](#), and [responsible mineral sourcing](#). To increase supplier engagement across these areas in 2022, we matured our supply chain management processes and grew our Supply Chain ESG team. We also surveyed our suppliers on their climate performance and helped them accelerate progress toward their sustainability goals. By the year's end, more than half of our top 100 suppliers (by spend) acknowledged our Climate Pledge. Together, we can collaborate toward mutual ESG progress and long-term, sustainable business growth.

RELEVANT SDGS



[View SDG alignment](#)



Responsible supply chain¹



GOAL	STATUS	2022 PROGRESS
Achieve more than 90% compliance with our social and environmental expectations across our top-tier suppliers		<ul style="list-style-type: none"> Exceeded our goal with 94% of suppliers responding to our conflict minerals survey
Engage with at least 50% of our top-tier suppliers on environmental sustainability opportunities		<ul style="list-style-type: none"> Exceeded our goal by engaging with 100% of top-tier suppliers in 2022
Increase engagement with all suppliers on social and environmental topics through assessment, training, and capacity building		<ul style="list-style-type: none"> Deepened supplier engagement through our inaugural Supplier ESG Forum, new supplier engagement platform, new monthly webinar series and newsletter, and additional trainings via the Responsible Business Alliance (RBA)
46.5% of suppliers measured by emissions will set SBTs ²		<ul style="list-style-type: none"> 14.5% of suppliers as measured by emissions have set SBTs

2022 HIGHLIGHTS

Launched our **supplier engagement platform**

Engaged suppliers at Lam's inaugural **Supplier ESG Forum**

Received **Lam Climate Pledge acknowledgments** from 53% of top 100 suppliers

Leveraged **RBA tools** to assess supplier performance

¹ Unless stated otherwise, we aim to complete each of our ESG goals by 2025.

² Previously, this goal targeted SBTs for 80% of top direct suppliers (by spend) by 2025 and 95% by 2030. Lam updated this goal in 2022 per the SBTi verification and approval process.

Note: Unless otherwise noted, data in this chapter are inclusive of direct material spend globally.



Our strategy for mutual success

Lam’s supply chain is extensive, so we employ strong oversight and governance to facilitate comprehensive supply chain management across the globe. Our Supply Chain ESG team leads our direct supplier risk assessment efforts, with a focus on driving continuous improvements. Lam also has cross-functional supply chain teams that collaborate to share best practices around supplier engagement.

Embedding ESG across our supply chain

We manage and monitor ESG performance throughout our supply chain through a strategic framework built on five pillars:



Transparency



Training



Responsibility



Risk Assessment and Audit



Governance



“

We believe it is vital that we prioritize innovation, competitiveness, collaboration, and supply chain security to maintain U.S. leadership in this critical global industry.”

Tim Archer

president and CEO of Lam speaking about U.S. semiconductor competitiveness during his testimony before the U.S. Senate Committee on Commerce, Science, and Transportation.

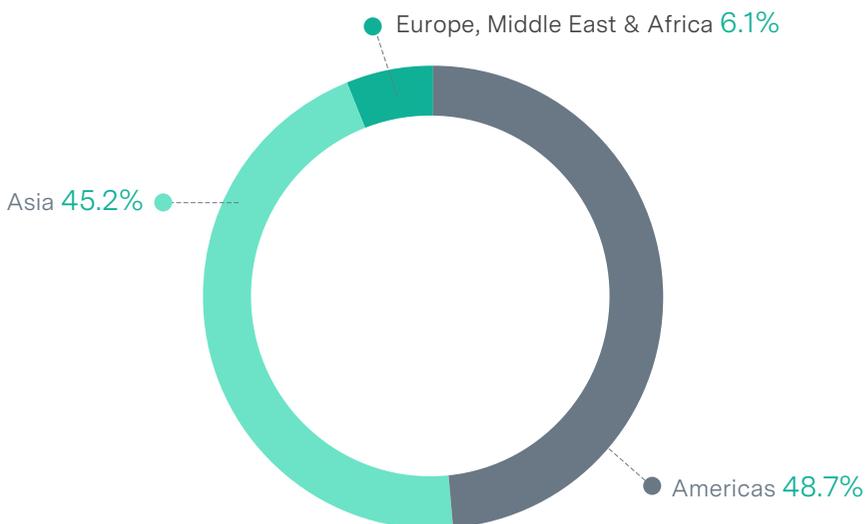
Learn more about [his testimony](#) →



Managing the supplier lifecycle

Lam engages suppliers early in the supplier lifecycle and continues to manage and facilitate their progress over time. We evaluate suppliers based on multiple factors, including known human rights risk indicators, geography, and spend. Upon selection, we encourage suppliers to become RBA members and contractually require that every supplier adheres to our [Global Supplier Code of Conduct \(GSCC\)](#), the [RBA Code of Conduct](#), and applicable laws and regulations. Throughout the supplier lifecycle, we continue to conduct due diligence using a risk-based approach. This process may include RBA audit reports, inspections, and corrective actions as needed.

In 2022, we leveraged additional RBA tools to better quantify risks in the regions where our suppliers operate. This included requesting and collecting RBA self-assessment questionnaires (SAQ) and audit assessments via RBA's Validated Assessment Program. Through the process, we identified three high-risk countries for child labor and migrant labor. We use country-level risk data to inform our overall supplier engagement and assessment strategy. And, for any specific supplier risks, we apply the RBA guidelines to address those on a case-by-case basis by requesting corrective action plans and that follow-up closure audits are completed.



¹ Represents spend of direct and indirect suppliers.



OUR SUPPLY CHAIN BY THE NUMBERS

1,483 supplier families in over 25 countries support our global operations

11 of our top 100 suppliers have established SBTs

17 of our top 100 suppliers are RBA members

We source minerals sourced from smelters in **51** countries

Our diverse supplier spending totaled **\$123.3M** in 2022¹

269 Lam employees completed human rights training in 2022

INNOVATION SPOTLIGHT

Leveraging plug-and-play technology to expedite direct material shipments

Supply chain challenges in 2022 led to significant delivery delays for certain tools. As the team worked to address these challenges, one opportunity that was identified led to reduced delivery time for some shipments by more than 50%. How did we do it? A cellphone-sized device that costs about \$40.

The idea came from Joe Picciocchi, who joined Lam's Livermore, California, site in 2021 as senior manager of logistics. At the time, it took about 12 days for a shipment from our supplier in Guadalajara, Mexico, to arrive at our Tualatin, Oregon, site. Realizing Logistics had no way of tracking a package's location, Joe launched an initiative to equip critical shipments with inexpensive trackers that provide real-time location data. This empowered Logistics to optimize manufacturing schedules and hold transportation vendors accountable.

As a result, the shipping time from Guadalajara, Mexico, to Tualatin, Oregon, now takes just four to five days. Currently, Logistics is tying its shipment-tracking data to Lam's Transportation Management System. In the future, the system could leverage predictive analytics and artificial intelligence to automatically plan and dispatch shipments.

Conducting due diligence at key steps

Screening and evaluation



- Lam's top direct material suppliers are assessed on human rights, environmental impact, and other known risk indicators including business volume and geographic location.

Onboarding



- New direct suppliers are required to acknowledge Lam's GSCC.
- Existing qualified suppliers are contractually obligated to comply with the GSCC as well as the RBA Code of Conduct.

Getting started



- Critical suppliers are assessed through our Quality Management System (QMS) with a focus on new regional suppliers supporting Lam's Asia manufacturing locations.

Managing progress



- Our top suppliers are eligible to be awarded bonus points on their monthly Supplier Scorecard for diversity, ISO-14001 certification or RBA membership.
- We ask our top suppliers to acknowledge Lam's Climate Pledge and provide carbon emissions data via our supplier engagement platform.
- We offer supplier support to build environmental knowledge and capabilities that includes webinars and resources from academic institutions and subject matter experts.

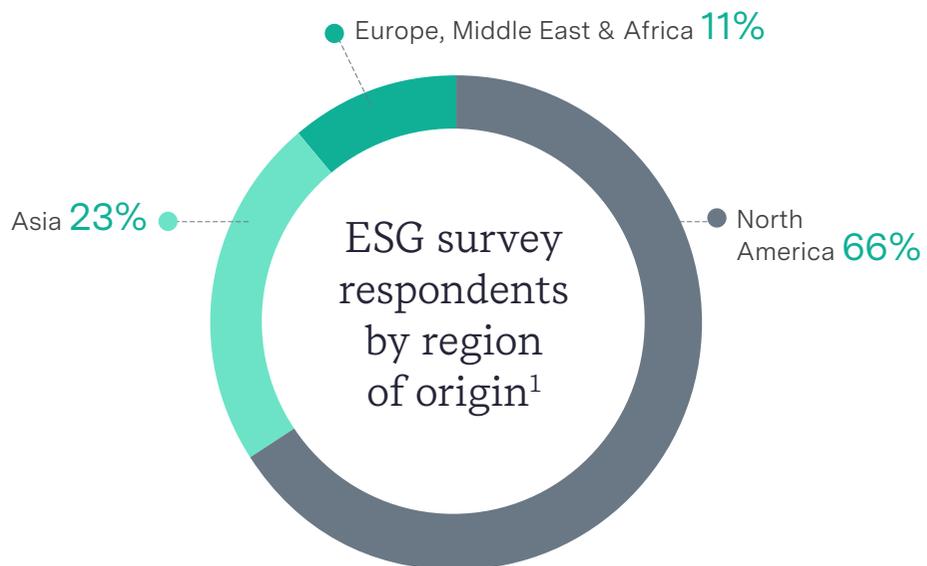


Advancing climate action together

Beyond supporting our business and customers, our supplier relationships are intrinsic to our net zero targets. Upstream activities contribute to our Scope 3 emissions, so if we want to reduce them, we need top suppliers on board.

In 2022, we engaged with 100% of our top-tier suppliers (by spend) on environmental sustainability opportunities, exceeding our goal of engaging at least 50% of our top-tier suppliers on these topics by 2025. We also made progress toward our 2025 goal by supporting 46.5% of top suppliers (measured by emissions) in setting SBTs.

During the year, we surveyed our top suppliers to better understand their climate progress and encouraged them to commit to climate action by acknowledging our Climate Pledge. We also began asking suppliers to take a carbon footprinting class through the RBA. By engaging suppliers on these issues, we are encouraging them to measure and manage important areas of their environmental impact. This supports mutual progress toward our respective ESG priorities and goals.



¹Based on ESG survey responses from 62 suppliers. Data have been rounded.



2022 ESG SUPPLIER SURVEY & PLEDGE RESULTS

59%

survey completion and 53% acknowledgement of the Lam Climate Pledge by top 100 suppliers.

9

suppliers completed energy audits.

21

of our top 100 suppliers published annual sustainability reports.

50%

of supplier survey respondents indicated they are using renewable energy.





Upholding human rights

When it comes to safe, dignified, and lawful working conditions, no one should be left behind. We are committed to protecting and supporting human rights—both in our supply chain and in our global operations. Not only is this a compliance issue; it aligns with our Core Values of honesty, integrity, mutual respect, and mutual trust. We expect our suppliers and sites to comply with laws including—but not limited to—the U.K. Modern Slavery Act of 2015 and the California Transparency in Supply Chains Act of 2010.

Lam published its first [Human Rights Policy](#) in 2022, which outlines our expectations to uphold internationally recognized human rights. This policy applies to all employees and we expect our suppliers, as well as our business and community partners, to adopt similar practices. The policy aligns with the RBA’s Code of Conduct and builds on expectations outlined in our GSCC. Additionally, our [Global Employment Practices Statement](#) declares our support of workers’ rights to freedom of association and collective bargaining, to the extent permitted under local laws. These documents are distributed via email, published on our intranet, and made publicly available on our website.

Regular training is an important part of our human rights program. And in 2022, we had 269 global supply chain management employees complete human rights training. We also requested our top suppliers to complete RBA’s online human rights module.

Learn more about [how we uphold human rights in our supply chain](#) →



Ensuring responsible sourcing of minerals

Raw minerals are the building blocks of semiconductor technology, and we are committed to ensuring that they are ethically and responsibly sourced. Lam is a member of the [Responsible Mineral Initiative \(RMI\)](#), a multi-stakeholder organization that helps address egregious human rights issues in the mining of tin, tantalum, tungsten, gold, and other minerals of concern. Since 2012, we have used the Conflict Minerals Reporting Template developed by RMI to assess our suppliers. In 2022, we expanded our due diligence efforts related to minerals of concern to include cobalt and mica, as recommended by RMI.

Access our [Conflict Minerals Policy Statement](#) →

Cultivating a diverse supply chain

Inclusion and diversity are part of our Core Values at Lam, and we recognize the value that our relationships with diverse suppliers bring. During our supplier onboarding process, we implement measures to identify diverse suppliers, including minority-, women-, LGBTQ+-, and veteran-owned businesses, as well as businesses owned by people with disabilities. We also include diverse qualifications in our Supplier Scorecard and track and report spending with diverse direct material suppliers on a periodic basis. Our diverse supplier spend totaled \$123.3 million in 2022.

Learn more about [our approach to cultivating a diverse supplier network](#) →



Collaborating toward ESG progress

Our Supply Chain ESG team engages suppliers to understand their challenges, priorities, and needs. They also reach out with best practices and resources to help suppliers build capability to make progress on social and environmental goals. In addition to rolling out our supplier engagement platform in 2022, we launched:

- An ESG-focused webinar series and a monthly newsletter, which we shared with nearly 200 direct and indirect suppliers
- A dedicated email address for supplier queries
- An ESG portal to provide suppliers with additional support and resources

We also offered additional training sessions and tools to help suppliers calculate their GHG emissions.



Celebrating and connecting with top suppliers

Semiconductors are strategically important to the world. Throughout 2022, our suppliers played a key role in ensuring that the semiconductor ecosystem could continue to meet heightened demand. We presented our highest-performing suppliers with Excellence Awards during our annual Supplier Day at the end of October, recognizing their accomplishments across several categories.

In conjunction with Supplier Day, we held our inaugural Supplier ESG Forum where we presented XP Power with our Supplier ESG award. The event included an expert panel with Lam's supply chain leaders, a keynote speaker from our customer Intel, and a presentation from a key supplier, Celestica. The forum was a catalyst for relationship-building and prioritizing environmental initiatives.



“

There's a reason why open communication is one of Lam's Core Values—we believe it translates to mutual success. This holds true for our approach to engaging suppliers to drive joint progress on climate action, human rights, and other issues related to ESG. By investing in close, collaborative partnerships, we can build a stronger semiconductor ecosystem and future for all.”

Pat Lord

chief operating officer at Lam



Our communities



IN THIS SECTION:

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- 65 Powering breakthroughs together
- 66 Transformative learning
- 68 Resilient communities
- 69 Inclusive societies
- 70 Turning employees' passion into action

We use our resources to foster communities that are empowered, inclusive, and resilient.

Lam's business is about powering semiconductor breakthroughs, and our communities know we don't stop there. We fund community programs that uplift the places where we operate and live—in line with our *Guiding Principle* to act with purpose for a better world. Beyond our philanthropic work, we encourage employees to participate in community initiatives on the ground. Lam attracts people who are changemakers and problem solvers at heart—when they see a community in need, they pitch in.

In 2022, our employees worked alongside colleagues and neighbors to pack backpacks, donate textbooks, and plant trees. They held fundraisers and drives to support local causes and took part in Lam's longtime tradition of delivering joy. As an organization, we launched our new social impact platform, which focuses our community work around three areas that align with our values and strengths. Lam also kicked off our first signature initiative, a three-year collaboration with *FIRST* Global. We look forward to working with the organization to inspire science and technology leadership and innovation in youth. It's just one way we're working with our community partners to power breakthroughs together.

RELEVANT SDGS



[View SDG alignment](#)



Community¹



GOAL	STATUS	2022 PROGRESS
Determine key targets for larger-scale impact aligned to a new strategic focus		<ul style="list-style-type: none"> Achieved our goal by launching a new social impact framework with three strategic focus areas to guide our giving and signature program initiatives
Implement measurement of outcomes for key program and large-scale grants		<ul style="list-style-type: none"> Began developing a reporting process and measurement outcomes
Increase annual unique participation rate in all employee giving programs from 10% to 30%		<ul style="list-style-type: none"> Increased annual unique employee participation rate from 10% in 2021 to 18% in 2022
Increase employee volunteer hours by 33% from a 2019 baseline		<ul style="list-style-type: none"> Achieved and surpassed our goal with employees completing 21,133 volunteer hours in 2022 for a total increase of 58% from a 2019 baseline² and set a new goal to achieve 40,000 by end of 2025

2022 HIGHLIGHTS

Rolled out Lam's new **Powering Breakthroughs Together** social impact platform

Committed **\$10M** over three years to *FIRST* Global

Increased volunteer hours by **65%** from 2021, logging 21,133 hours in 2022

Organized **80+** employee-driven events for our Deliver Joy campaign

¹ Unless stated otherwise, we aim to complete each of our ESG goals by 2025. Data in this chapter are inclusive of Lam Research and Silfex.

² Based on data tracked through our community engagement platform.



Powering breakthroughs together

One of Lam’s Guiding Principles is to act with purpose for a better world. In 2022, we introduced our new social impact platform to bring that vision to life. Our new platform, Powering Breakthroughs Together, provides a framework for Lam to make a positive community impact where it matters most. Our strategy is to cultivate meaningful relationships with charitable organizations that share our purpose and vision. In August 2022, we closed our first cycle of grants with applicants supporting each of our focus areas:



Transformative learning

We’re pushing the boundaries of education to carve out new pathways for learners, innovators, and creative thinkers.



Resilient communities

We’re helping communities build resilience in the face of adversity through strong relationships, enhanced technological capacity, preparedness, and recovery planning.



Inclusive societies

We’re working to change inequitable systems and increase access to resources and opportunities that help communities reach their full potential and flourish.



Our social impact manifesto

For more than forty years, we’ve defied conventions.
Challenged assumptions.
Pushed the boundaries of technical limitations.
But we know, technology alone doesn’t enable breakthroughs.
People do.
They think big to build better communities.
To create safer, more sustainable systems.
To relentlessly pursue innovation that delivers real impact.
When people are empowered to collectively reimagine tomorrow,
we power a better world for generations to come.



“

Our new Powering Breakthroughs Together platform speaks to what Lam stands for and the type of social impact we want to make. Through it, we’re building meaningful partnerships with organizations that align with Lam’s Guiding Principle to act with purpose for a better world.”

Christie Valdez

director of community relations at Lam



Launching our signature program with *FIRST* Global

Ready. Set. Carbon capture. That was the objective of the 2022 *FIRST* Global challenge, held in Geneva, Switzerland. The Olympics-style international robotics competition brought together 1,550 students from 180 countries and 179 teams. Using kits of identical parts, the teams built and programmed robots, working together to complete tasks in a challenge themed around carbon capture.¹

Lam provided a \$1.33 million donation to support *FIRST* Global in 2022 and served as the premier sponsor for the challenge. We also engaged 17 employees who volunteered as mentors for the students. During the event, Lam’s chief technology officer announced Lam’s long-term *FIRST* Global commitment: A donation of \$10 million over the next three years, beginning in 2023.

The 2022 *FIRST* Global challenge included:

1,550 students
directly impacted

179 teams
representing 180 countries, including a team of refugees

65+ solutions developed
to capture and store carbon as part of the challenge’s technology experience

39% female participation
including an all-girls team

\$1.33M donation from Lam followed by a commitment of \$10M over three years, starting in 2023



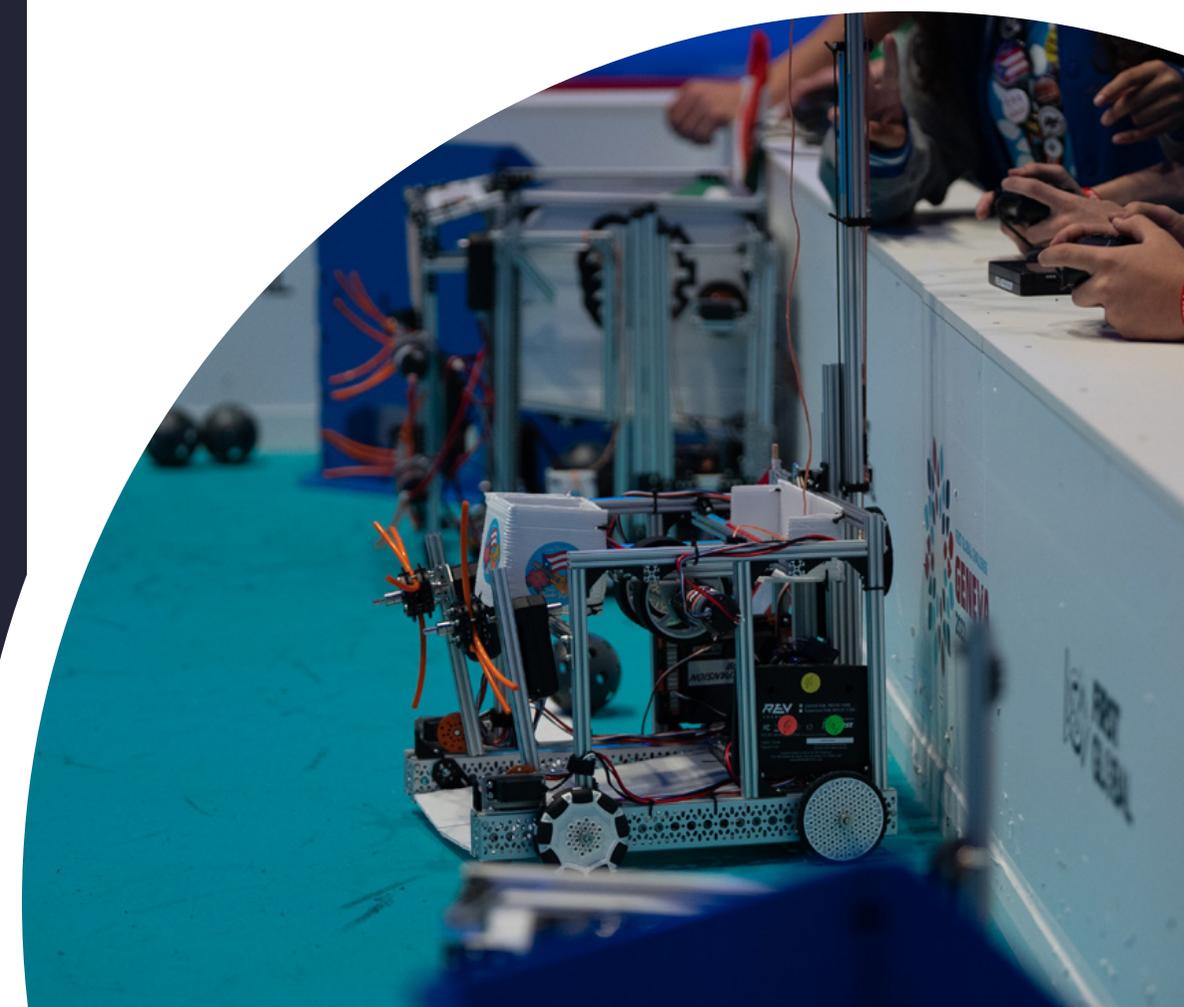
“*FIRST* Global enables transformative learning on a world stage...The competition is an important opportunity to showcase and foster the critical thinking required to address the challenges facing our industry and, more broadly, society.”

Rick Gottscho
executive vice president, strategic advisor to the CEO, and former chief technology officer at Lam

Transformative learning

Curiosity and inspired learning are key to powering breakthroughs, so we invest in the ongoing foundational elements that lead to continuous discoveries and innovations. This includes making investments in programs that are:

- **Pushing the boundaries of traditional approaches to education**, with an aim to introduce new ways of learning, foster new discoveries, shift mindsets, and empower growth
- **Inspiring the next generation of innovators** to solve the world’s most pressing problems through engineering and/or technology
- **Equipping people with the knowledge and skillsets needed to succeed** in the innovation workforce of the future



¹First Global, “2022 Theme: Capture and storage of carbon dioxide.” <https://first.global/archive/fgc-2022/>



TRANSFORMATIVE LEARNING INITIATIVES IN 2022

FIRST Global

“What if every child had the tools they needed to solve problems in their own communities?” That’s the question posed by *FIRST* Global, a nonprofit working to inspire science and technology leadership and innovation in young people from all nations through robotics. In 2022, Lam donated \$1.33 million to the organization and announced an additional \$10 million donation, to be distributed over the next three years.

East Oakland Youth Development Center (EOYDC)

California’s EOYDC is on a mission to develop the social and leadership capacities of youth and young adults. The center works to prepare local youth for future employment, higher education, and leadership opportunities.¹ Lam bolstered EOYDC’s programs with a \$300,000 donation to foster education equity for 1,000 Black and Latinx low-income youth.

Kids and Future Foundation Hello Coding Camp

The vision of the Kids and Future Foundation is to see a world where every youth can realize their dreams of a better, brighter future.² Lam’s South Korea site partnered with the foundation to support 117 students’ participation in the Hello Coding Camp afterschool program.

Family Giving Tree and Hawks View Elementary

For six years, the Women in Leadership at Lam ERG has collaborated with the Family Giving Tree in California for its annual backpack drive. In 2022, more than 70 employees supported the effort, bringing in the help of family members and friends to fill and deliver 1,500 backpacks for Bay Area students. Inspired by the drive at our headquarters, a product manager at Lam rallied 22 employees in Oregon to deliver 250 backpacks filled with school supplies to Hawks View Elementary school students.

¹EOYDC, “Building character to build community,” <https://eoydc.org/>

²Give2Asia “Kids and future foundation,” <https://give2asia.org/kidsandfuture/>



Lam received the Silicon Valley Business Journal’s 2022 Community Impact Award, which recognizes businesses and nonprofits making a positive impact in Silicon Valley.

Other activities included:



U.S.

- Supporting Springfield High School’s STEM Learning Academy program in Ohio (via Silfex), which provides students with STEM experiences and supplies
- Serving as the title sponsor for the Silicon Valley Leadership Group Foundation’s Heart & Soles run, whose objective is to promote Silicon Valley student success through increased physical activity and access to healthy foods



ASIA

- Supporting the National Science and Technology Museum’s coding and robotics programs for elementary and junior high school students from remote and disadvantaged areas in Taiwan
- Donating textbooks to university students majoring in engineering in South Korea to encourage their STEM learning journey



Resilient communities

We support programs to strengthen relationships, technology, preparedness, and recovery plans that enable communities to succeed in the face of adversity. This includes making investments in programs that are:

- **Implementing disaster preparedness and recovery plans** that strengthen communities
- **Engaging and connecting with community members** to support the adoption, maintenance, and evolution of preparedness, recovery, and relief efforts
- **Helping rebuild communities** impacted by natural disasters or adverse conditions
- **Curbing climate change** and mitigating its impact

Members of our LESC ERG engaged in year-round sustainability efforts in the U.S., Asia, and Europe. Learn how they're supporting community resilience across the globe →



Lam Research is a company that acts on both a global and local scale. Eighty-five percent of our Lam Villach employees live in Carinthia, so I see it as our duty to support the local area and its charitable organizations. It makes me proud whenever we can share our company's successes with those less fortunate."

Walter Lerch

managing director, business operations at Lam Villach

2022 INITIATIVES FOR RESILIENT COMMUNITIES:

One Tree Planted

One dollar. One tree. One planet. That's the idea behind One Tree Planted, a nonprofit organization focused on reforestation. Through a \$100,000 donation, Lam supported the organization's efforts in Europe to restore forests, create habitat for biodiversity, and make a positive social impact around the world.¹

United Way Bengaluru

The Lam Foundation supports United Way Bengaluru's efforts in India to restore a local school. Based on the school's design and location, it has been subject to annual flooding and fallen into disrepair. Lam pledged \$600,000 over the next three years to support the resiliency project, with additional funds provided by Lam's India site.

Tse-Xin Organic Agriculture Foundation (TOAF)

Based in Taiwan, TOAF works to restore the environment while improving people's livelihoods and well-being. The Lam Foundation provided a grant to help TOAF establish coastal forests to prevent coastal erosion. In addition, 39 Lam employees volunteered alongside family members to plant 1,000 trees along the island.

GlobalGiving's Carinthia Storm Response Campaign

In August, a series of storms near our site in Villach, Austria, caused widespread damage and destruction. In response, 47 Lam employees raised over \$8,000, including the company match, to help communities in the area rebuild, with additional relief funding provided by the Lam Foundation. Both donations went to GlobalGiving's Caritas Carinthia project, providing food, medical, and financial support.

Other activities included:



U.S.

- Donating over \$4,000 raised by 66 employees, including Lam's company match to support communities impacted by hurricanes Ian and Fiona



ASIA

- Celebrating Lam Japan's 30th anniversary through donations to three nonprofits selected based on a vote by regional employees
- Collaborating with the National Nature Trust in support of habitat preservation, restoration projects, and endangered species protection projects in South Korea

¹One Tree Planted, "About us." <https://onetreepanted.org/pages/about-us>



Inclusive societies

Successful societies are inclusive societies. We invest in initiatives to facilitate equitable access and opportunities to help communities reach their full potential. This includes making investments in programs that are:

- **Eliminating barriers** that prevent vulnerable, marginalized, and/or disadvantaged groups from fully participating in social institutions (after-school programs, education systems, workplaces, etc.)
- **Leveling the playing field** for underserved and underrepresented communities' long-term economic and physical well-being
- **Driving systemic change** to break the cycle of inequities and/or designing new systems, processes, and procedures with inclusion in mind

INCLUSIVE SOCIETIES INITIATIVES IN 2022

International Rescue Committee

In response to the humanitarian crisis in Ukraine, the Lam Foundation provided a \$100,000 donation to the International Rescue Committee to uplift those who have been impacted and displaced during the war. Lam's employees also rallied behind the people of Ukraine, with 327 employees donating a total of \$60,000, including the company match, to support the country's refugees.

United Negro College Fund (UNCF)

UNCF envisions a nation where all Americans have equal access to a college education that prepares them for rich intellectual lives, competitive and fulfilling careers, engaged citizenship, and service to our nation.¹ Lam is proud to have partnered with this organization over the last several years in support of multiple activities. For the second year in 2022, Lam provided \$100,000 to UNCF to fund 20 scholarships to historically Black colleges and universities (HBCUs).

Learn more about how we're collaborating with universities to support I&D in STEM →

Sankalp Student Needs Program

Through the efforts of Sankalp, the corporate social responsibility (CSR) team at Lam India, more than 400 economically disadvantaged students from three local schools were provided with essentials, such as classwork supplies, textbooks, school clothing items, and nutritional snack kits to help mitigate barriers to obtaining an equitable education. This project was one of many that Sankalp supported through local Lam India CSR-dedicated funding, which totaled more than \$80,000 in 2022.

Stand Against Hate Fundraising Campaign

Bias- and hate-motivated crimes are a threat to our communities. After a deadly shooting targeting LGBTQ+ individuals in Colorado Springs, Colorado, 24 Lam employees donated \$6,500, including the company match, to a community response campaign, with the funds split among several organizations supporting services for LGBTQ+ youth and mass casualty crime victims.

Singapore Children's Society

Established in 1952, the Singapore Children's Society protects and nurtures children and youth of all races and religions. We provided grant support for youth services, anti-bullying campaigns, and the organization's annual "Walk for Children." Lam's team in the region also supported the organization by donating school supplies to local students.

¹ UNCF, "Our mission." <https://uncf.org/our-mission>

Celebrating our legacy of delivering joy

One of Lam's enduring traditions is our annual campaign to Deliver Joy, which engages employees to support communities where they live and work around the world. In 2022, employees across 18 countries organized 82 volunteer events, contributing over 10,000 volunteer hours and raising \$1.3 million in community donations alongside the Lam Foundation.

On GivingTuesday, many employees took advantage of our two-for-one corporate match. Others chose to volunteer at local food banks or participate in activities through their ERGs. For example, Lam Malaysia teamed up with the Women's Center for Change to support initiatives that empower women and children. Employees donated pre-loved items and volunteered for a sale to raise funds for the organization.

Other Asia-based employees assembled care packages to support approximately 450 teenagers experiencing homelessness, and, in Japan, employees gathered and delivered clothes to local foster children. Meanwhile, Lam China employees participated in a donation drive to provide remote, underprivileged students in the Sichuan and Yunnan provinces with recess equipment and books.

Finally, in North America and Europe, our teams mobilized for a range of donation drives and community support activities. This included facilitating a toy drive benefiting Toys for Tots in the U.S.





Other activities included:



U.S.

- Working with Girls Inc. of the Pacific Northwest to support their STEM-focused Eureka! program, a five-year skills and knowledge development program for girls in underserved communities
- Continuing our relationship with the Hispanic Foundation of Silicon Valley to support the Latinos in Technology scholarship initiative

Turning employees' passion into action

At Lam, we believe wholeheartedly in our employees' potential to reimagine tomorrow. We encourage them to engage with their local communities to activate positive change. By providing opportunities for community involvement, we also give our company a competitive edge. Our teams work best when they feel inspired, and our community programs attract new employees who are passionate about this work.

Employees can track their volunteer hours and make charitable contributions through our community engagement platform. Lam provides monetary matching gifts, matching dollars for employee volunteer time, and resources for our teams to mobilize and volunteer. We are also growing our Lam Cares ambassador program, which enables employees to champion community involvement for their teams, departments, and regions.

In 2022, employees showed depth of impact through recurring donations, weekly volunteerism, and activities facilitated by our ERGs. Our partnership with Rise Against Hunger is just one example, in which we held meal-packing events with groups of 100-150 employees.

Creating a service-oriented culture at Silfex, a Lam subsidiary

In 2022, Silfex employees at our Eaton and Springfield, Ohio, sites found creative ways to uplift and serve their local communities. Examples include:

- Celebrating National Pet Month by organizing pet adoptions and running a pet supply drive to support local shelters
- Supporting Pink Ribbon Girls to promote breast cancer awareness
- Packing boxes of goods for the Second Harvest Food Bank during Thanksgiving (and achieving an all-time box-packing record)
- Volunteering with Preble County Christmas for Kids to sponsor nearly 200 wish lists for local kids





2022 COMMUNITY GIVING BY THE NUMBERS

2,153

organizations supported in 2022

1,331

employees volunteered a total of

21,133 hours

18%

employee participation rate through our community engagement platform

300%+

increase in new-hire engagement throughout 2022

10

employee-led ERG events supported, generating

475 volunteer hours

\$6.6M

donated by the Lam Foundation

\$1.2M

provided by the Lam Foundation to match employee donations

\$1.4M

raised through employee donations

\$135K

raised by employees for disaster and crisis relief

\$1.3M

donated by the Lam Foundation and employees for Deliver Joy

10K+

volunteer hours completed by employees in 18 countries for Deliver Joy





Resources



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About this report

Lam Research Corporation published this report to provide an overview of our company's products, services, and operations related to ESG performance. This report covers calendar year 2022, with some exceptions noted, including financial data that is Lam's fiscal year (June 28, 2021 – June 26, 2022). The report encompasses our wholly owned subsidiaries across the globe, with some data limited to particular geographies, which we note throughout the report.

We self-declare that this report is completed *In Reference* to the Global Reporting Initiative (GRI) Universal Standards. A GRI index at the end of this report shows our alignment with GRI reporting elements and our priority ESG topics. We intend to continue to report annually.

We also report in alignment with the Sustainability Accounting Standards Board (SASB) Standard for the Technology and Communications Sector: Semiconductor Industry. This alignment is detailed in the SASB index.

We have noted any significant changes in scope and boundary throughout the report that may vary from our 2021 report, published in 2022. External assurance is limited to financial data from the consolidated financial statements in our 2022 Annual Report on SEC Form 10-K and environmental and safety data as outlined in the third-party assurance letter included in this report. This ESG report has been reviewed by the Nominating and Governance Committee of our Board and has been reviewed and approved by our president and CEO.

For more information about our corporate governance, please reference our [Proxy Statement](#).



Assurance letter



WHEN TRUST MATTERS

Independent Assurance Statement

Introduction

DNV Business Assurance USA, Inc. (DNV) has been commissioned by the management of Lam Research Corporation (Lam) to carry out an independent limited level assurance engagement of Selected Information for calendar year 2022 and, where marked, for Calendar Years 2019, 2020, and 2021, as presented in Lam's 2022 Sustainability Disclosures (the "Report"). The assurance was carried out March through May 2022.

Lam has sole responsibility for preparation of the data and external report. DNV, in performing our assurance work, is responsible to the management of Lam. Our assurance statement, however, represents our independent opinion and is intended to inform all stakeholders including Lam.



Assurance letter (continued)

Scope of Assurance

The scope of work agreed with Lam includes the following:

Organizational boundary

- All global facilities under Lam's operational control

Data Verified for the period of January 1, 2022, to December 31, 2022

- GHG Emissions Scope 1 and 2
- Energy Consumption
- Energy Savings
- Water Usage
- Water Saving
- Waste & Waste Data Diversion Rate (including Hazardous Waste)
- Total Recordable Incident Rate (TRIR)

Data Verified for the period of January 1, 2021, to December 31, 2021

- GHG Emissions Scope 1
- Water Saving

Data Verified for the period of January 1, 2020, to December 31, 2020

- GHG Emissions Scope 1
- Water Saving

Data Verified for the period of January 1, 2019, to December 31, 2019

- GHG Emissions Scope 1

We do not express conclusions on other information that may be published on Lam's website or sustainability disclosures for the current reporting period or previous periods.

Topic	Accounting Metric	Units
Greenhouse Gas Emissions	(1) 2022 Gross global Scope 1 and 2 emissions (2) 2021 Gross global Scope 1 and 2 emissions (3) 2020 Gross global Scope 1 and 2 emissions (4) 2019 Gross global Scope 1 and 2 emissions	Metric tonnes CO ₂ e (MTCO ₂ e)
Energy Consumption	2022 Total energy consumed	Kilowatt hours (kWh)
Energy Savings	2022 Energy savings achieved	Kilowatt hours (kWh)
Water Usage	2022 Total water usage	Gallons
Water Savings	2020 – 2022 Total water savings	Gallons
Waste Management	(1) 2022 Total amount of hazardous waste (2) 2022 Total amount non-hazardous waste generated (3) 2022 Total percentage hazardous waste recycled (4) 2022 Total non-hazardous waste recycled	Metric tonnes (MT) Percentage (%)
Employee Health & Safety	Total Recordable Incident Rate (TRIR)	Rate per 200,000 hours
Progress towards 2025 Goals	(1) 2022 GHG Scope 1 and 2 emissions (market-based) change against 2019 baseline (2) 2022 Hazardous waste to landfill (3) 2022 Water savings exceed 2025 ESG goal	Percentage (%)

Assurance letter (continued)

Level of Assurance

We performed a limited assurance engagement in accordance with the *International Standard on Assurance Engagements (ISAE) 3000 (revised) – ‘Assurance Engagements other than Audits and Reviews of Historical Financial Information’*, issued by the International Auditing and Assurance Standards Board. This standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance.

DNV applies its own management standards and compliance policies for quality control, in accordance with *ISO/IEC 17029:2019 - Conformity Assessment Requirements* for bodies providing audit and certification of management systems, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The procedures performed in a limited assurance engagement vary in nature and timing and are less detailed than those undertaken during a reasonable assurance engagement, so the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. We planned and performed our work to obtain the evidence we considered sufficient to provide a basis for our opinion, so that the risk of this conclusion being in error is reduced, but not reduced completely.

DNV's assurance engagements are based on the assumption that the data and information provided by the client to us as part of our review have been provided in good faith. This includes but is not limited to sales and acquisitions, building occupancy rates, operating hours, and operational control. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Assurance Statement.

Assurance Methodology

DNV is a leading provider of sustainability services, including verification of GHG emissions data and other environmental metrics. Our environmental and social assurance specialists work in over 100 countries.

In that respect, the environmental footprint inventories have been evaluated against the following reporting criteria:

- World Business Council for Sustainable Development (WBCSD) / World Resources Institute (WRI) Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard REVISED EDITION

DNV used a risk-based approach throughout the assurance engagement, concentrating on the areas that we believe are most material for both Lam and its stakeholders. DNV applied a materiality threshold of five percent for all data in scope.

The assurance process involved a series of 60-minute interviews with the accountable party(ies) and/or senior manager(s) responsible for collating the information at a corporate level to:

- Perform a walkthrough to understand how data is managed and reported and the systems, legal registers, processes, and procedures used
- Interview of managers and data users representing relevant functions for supporting the environmental inventory and safety data management process
- Review the controls in place to confirm data and information accuracy
- Confirm the scope and boundaries of the data included
- Requests for further evidence and documentation in support of testimony and system observation

The assurance process includes desk review of the submitted documentation, site visit, data records and sources relating to the selected performance metrics and corporate environmental footprint data claims.

- Review of the processes and tools used to collect, aggregate, and report on all data and metrics
- Assessment of environmental and other information systems and controls, including:



Assurance letter (continued)

- Selection and management of all relevant environmental and safety data and information
- Processes for collecting, processing, consolidating, and reporting the environmental and safety data and information
- Systems and processes that ensure the accuracy of the performance data and information
- Design and maintenance of the environmental and employee workforce and safety information system
- Systems and processes that support the environmental and employee workforce and safety information system
- Performed sample-based audits of the processes for generating, gathering, and managing the data
- Performed key data recalculations to confirm accuracy
- Examination of the social, governance, and environmental data and information to develop evidence for the assessment of the claims and assertions made
- Evaluation of whether the organization conforms to the reporting criteria
- Evaluation of whether the evidence and data are sufficient and support Lam's environmental, social and performance claims
- Conducted remote site assessment at Fremont, California to review GHG emissions, energy, waste, and health and safety management

In addition to the above, specific to the environmental indicators, the following steps were conducted for energy savings, waste, and water:

Energy Savings

- Review of energy conservation measures implemented in the reporting year
- Conducted sample-based review of the process for quantifying energy savings performance including:
 - Evaluation of reasonableness and conservativeness of assumptions related to energy baseline and savings calculated from energy conservation measures
 - Desk-based review of energy calculations provided by Lam and energy consultants

Waste

- Review of the waste segregation methodology and description of waste categorization
- Conduct data checks for the waste data collected, transferred, and calculated
- Perform sample-based assessment of data reported against the source data (waste collected to landfill and waste diverted) provided by waste management companies.

Water

- Review water usage measures within the reporting year
- Conducted desk review and sample selection to cross check data points provided by Lam Research
- Review the water savings allocation methodology and the assumptions made in the water savings section



Assurance letter (continued)

Data Verified

Greenhouse Gas Emissions – CY 2022

• Scope 1 Emissions	432,998 MT CO ₂ e ¹
• Scope 2 Emissions (location-based)	131,084 MT CO ₂ e
• Scope 2 Emissions (market-based)	63,300 MT CO ₂ e

Greenhouse Gas Emissions Scope 1 Restatement – CY 2019, CY 2020, CY 2021²

• 2019 Scope 1 Emissions Restatement	79,313 MT CO ₂ e
• 2020 Scope 1 Emissions Restatement	232,662 MT CO ₂ e
• 2021 Scope 1 Emissions Restatement	288,007 MT CO ₂ e

Energy Consumption – CY 2022

• Total Energy Consumed	493,955,846 kWh
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Energy Savings – CY 2022

• Energy Savings Achieved	2,243,860 kWh
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Water Used – CY 2022

• Total Water Usage	398,130,121 Gallons
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Water Savings – CY 2020, CY 2021, CY 2022

• Water Savings in CY2020	6,767,100 Gallons
• Water Savings in CY2021	6,767,100 Gallons
• Water Savings in CY2022	33,380,713 Gallons

Waste – CY2022

• Total Hazardous Waste	1,922 Metric tonnes
• Hazardous Waste Recycled	48%
• Total Non-Hazardous Waste	9,261 Metric tonnes
• Non-hazardous Waste Recycled	77%

Employee Health & Safety – CY 2022

• Total Recordable Incident Rate (TRIR)	0.35
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Progress towards 2025 ESG Goals

• CY 2022 Scope 1 and 2 (market-based) emissions against 2019 baseline	207%
• CY 2022 Hazardous Waste to Landfill	0.01%
• CY 2022 Water Savings exceed 2025 ESG goal	176%

¹ MT CO₂e stands for metric tonnes of carbon dioxide equivalent

² Scope 1 Restatement from 2019 – 2021 is based on a newly identified refrigerant (FC-3283).



Assurance letter (continued)

Inherent Limitations

Due to the selective nature (sampling) and other inherent limitations of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities may not have been detected. Calculations of energy savings are subject to inherent limitations, given the nature and the methods used for determining such data. DNV did not conduct independent measurement of the energy savings variables. This is a limitation which can influence the accuracy of our opinion. Finally, the selection of different but acceptable measurement techniques, in particular related to the waste and energy savings performance, may result in materially different measurements.

Assurance Opinion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the information and data within the Report is not fairly stated and has not been prepared, in all material respects, in accordance with the criteria stated. This conclusion relates only to the information in the Report and is to be read in the context of this Assurance Statement.

Independence

DNV was not involved in the preparation of any part of Lam's data or report. This is our first year of providing assurance for Lam. We adopt a balanced approach towards all stakeholders when performing our evaluation.



DNV Business Assurance USA, Inc.
Katy, Texas
June 27, 2023

Stephen Carlson
Lead Verifier

Owen Chen
Lead Verifier

Shruthi Poonacha Bachamanda
Technical Reviewer



Assurance letter (continued)

Topic	Description	Methodology	Units
Energy Savings	2022 Energy savings achieved Energy savings achieved as a result of energy conservation measures (ECM) implemented at all global facilities under Lam's operational control in the reporting year. Savings quantified in comparison to energy baseline (energy consumption occurring without implemented ECM.)	Total sum of energy savings achieved across all ECMS implemented in the reporting year.	Kilowatt hours (kWh)
Water Usage	Water usage at all global facilities under Lam's operational control in the reporting year.	Total sum of water usage entered based on invoices.	Gallons
Water Saving	Water savings are achieved by installing water reduction units at the manufacturing plants in water-stress areas. Water savings are quantified based on the reduced flow rate measured by the flow meters.	Total sum of water savings based on real-time flow meters and proper assumptions.	Gallons



Assurance letter (continued)

Topic	Description	Methodology	Units
Waste Management	<p>(1) 2022 Total amount of hazardous waste Hazardous waste generated at all global facilities under Lam's operational control in the reporting year.</p> <p>(2) 2022 Total amount non-hazardous waste generated Non-hazardous waste generated at all global facilities under Lam's operational control in the reporting year.</p> <p>(3) 2022 Total percentage hazardous waste recycled (%) Hazardous waste disposed by means of recycling across global facilities under Lam's operational control in the reporting year.</p> <p>(4) 2022 Total non-hazardous waste recycled (%) Non-hazardous waste disposed by means of recycling across global facilities under Lam's operational control in the reporting year.</p>	<p>Methodology:</p> <p>(1) Total sum of hazardous waste generated across global facilities in the reporting year.</p> <p>(2) Total sum of non-hazardous waste generated across global facilities under Lam's operational control in the reporting year.</p> <p>(3) Total metric tons of hazardous waste recycled / total metric tons of hazardous waste generated X 100 (%)</p> <p>(4) Total metric tons of non-hazardous waste recycled / total metric tons of non-hazardous waste generated X 100 (%)</p>	<p>Metric tonnes (MT)</p> <p>Percentage (%)</p>
Employee Health & Safety	<p>Total Recordable Incident Rate (TRIR) Number of incidents reported per 100 full-time employees against the number of hours worked. In 2022 reporting year, employee hours worked was assumed to be 2000, per Lam full-time employees.</p>	<p>(Total number of incidents X 200,000) / Full time equivalent headcount X 2000</p>	<p>Rate per 200,000 hrs</p>



Additional information

Relevant links

[Annual Reports](#)

[Code of Ethics](#)

[Community Relations](#)

[EEO-1 Report](#)

[Environmental, Social and Governance](#)

[Ethics Helpline](#)

[Global Standards of Business Conduct](#)

[Lam Research](#)

[Lam Research Global EHS Sustainability
Commitment Policy](#)

[Products](#)

[Supplier Code of Conduct](#)

[Supply Chain Policies](#)

[Human Rights Policy](#)

Appendices

Visit our [Report Appendix](#) for our Performance Summary, and our GRI, SASB, TCFD and UNSDG indexes.

Contact information

If you have questions regarding this report or Lam's ESG activities, please contact: ESG@lamresearch.com.



Cautionary statement

With the exception of historical facts, the statements contained in this ESG Report (“Report”) are forward-looking statements. Forward-looking statements are subject to the safe harbor provisions created by the Private Securities Litigation Reform Act of 1995. Certain, but not all, of the forward-looking statements in this Report are specifically identified as forward-looking by the use of words and phrases such as “aim,” “anticipate,” “aspire,” “believe,” “build,” “commitment,” “continue,” “could,” “expand,” “expect,” “future,” “goal,” “increase,” “intend,” “maintain,” “may,” “objectives,” “opportunities,” “path,” “plan,” “remain,” “should,” “strategy,” “strive,” “target,” “vision,” “will,” and “would.” However, our identification of certain statements as forward-looking does not mean that other statements not specifically identified are not forward-looking. Forward-looking statements include, but are not limited to, statements that relate to: economic, market, industry and industry segment expectations; the role of our technology and innovations in the semiconductor industry and the world; our incorporation of ESG principles into our activities; our environmental impact; our engagement with our suppliers in their environmental and social efforts; our contributions to climate action; our ESG goals, including our goals related to achieving net zero emissions; our standards for responsible and ethical conduct; our aspirations for transparency and disclosure; the role of ESG considerations in our product development; our efforts to build an inclusive and diverse workplace; our efforts to develop a responsible and ethical supply chain; our ethics and compliance initiatives; our commitment to ensuring human rights across our operations and supply chains and plans for our human rights program; our compliance with legal, regulatory, and internal control requirements with respect to taxation; our product innovation; our investments in R&D; the performance, productivity, quality, safety, efficiency, or sustainability of our products; the impact of our investment in opening new R&D centers; the technology areas that are strategically important to us; reductions in the emissions output of our products; the ability of our products to enable faster learning cycle; our use of environmental principles in the product design process; energy or water savings, or emissions reductions, that might be achieved by customers using our products; materials savings that might be achieved through our re-cleaning, repair, refurbishment or re-coating services; our commitment to diversity and inclusion; our commitment to acting responsibly and improving our sustainability performance over time; our initiatives to reduce our energy and water consumption and to reduce waste; our investments in transitioning to renewable energy, emissions controls and energy efficiency technologies; our engagement with customers and suppliers to set SBTs; our commitment to climate action; our management of water use and treatment; our management of hazardous and non-hazardous waste and our emissions; our ability to safely manage chemicals and our adoption of green chemistry practices; workplace flexibility; the enhancement of our benefit programs; our goals with respect to increasing the proportion of underrepresented employees and women in our workforce; our ability to ensure the safety of our employees; our ability to manage risks in our supply chain, including with respect to human rights; and the impacts of our social impact platform. Such statements are based on current expectations and are subject to risks, uncertainties, and changes in condition, significance, value and effect. Some factors that may affect these forward-looking statements include: trade regulations, export controls, trade disputes and other geopolitical tensions may inhibit our ability to sell our products; business, political and/or regulatory conditions in the consumer electronics industry, the semiconductor industry and the overall economy may deteriorate or change; the actions of our customers and competitors may be inconsistent with our expectations; supply chain cost increases and other inflationary pressures have impacted and are expected to continue to impact our profitability; supply chain disruptions have limited and are expected to continue to limit our ability to meet demand for our products; the severity, magnitude and duration of the COVID-19 pandemic (and the related governmental, public health, business and community responses to it), and their impacts on our business, results of operations and financial condition, are evolving and are highly uncertain and unpredictable; and widespread outbreaks of illness may impact our operations and revenue in affected areas; as well as the other risks and uncertainties discussed under the headings “Risk Factors” and “Cautionary Statement Regarding Forward-Looking Statements” within Item 1A and at the beginning of Part I, respectively, of our fiscal year 2022 Annual Report on Form 10-K; and other documents we file from time to time with the Securities and Exchange Commission, such as our quarterly reports on Form 10-Q and current reports on Form 8-K. Such risks, uncertainties and changes in condition, significance, value and effect could cause our actual results to differ materially from those expressed in this Report and in ways that are not readily foreseeable. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this Report and are based on information currently and reasonably known to us. We do not undertake any obligation to update any forward-looking statements, or to release the results of any revisions to these forward-looking statements, to reflect the impact of anticipated or unanticipated events or circumstances that occur after the date of this Report.