APPLIED MATERIALS®

Make Possible® a Better Future

Sustainability Report 2020

About Applied Materials

Applied Materials is the leader in materials engineering solutions used to produce virtually every new chip and advanced display in the world. Our expertise in modifying materials at atomic levels and on an industrial scale enables customers to transform possibilities into reality. We are driven to Make Possible a Better Future for everyone.

Our Products and Services

Applied provides manufacturing equipment, services, and software to the semiconductor, display, and related industries. Our customers include manufacturers of semiconductor chips, liquid crystal (LCD) and organic light-emitting diode (OLED) displays, other electronic devices, solar panels, plus processors of flexible substrates.

Applied Ventures, LLC, is the venture capital arm of Applied Materials that invests in and collaborates with startups to transform disruptive possibilities into reality. Applied Ventures is stage agnostic and invests up to $50M per year globally. Learn more

Note: Any images that depict people unmasked or not socially distant were taken pre-pandemic.

Semiconductor Systems

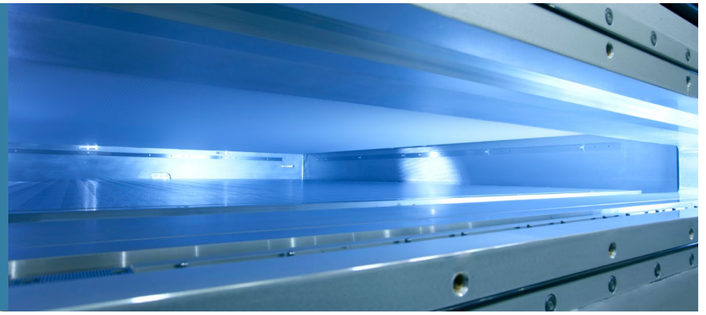
Designing and manufacturing the systems used to fabricate semiconductor chips.

Applied Global Services

Providing consulting, spare parts, services, and automation software to improve equipment and fab operation performance and productivity.

Display and Adjacent Markets

Making the products to manufacture LCDs, OLEDs, and other display technologies and customer-oriented devices, and equipment for processing flexible substrates.



FY20 Company Overview Highlights

Headquartered in **California's Silicon Valley**

$17.2 billion revenue

$2.2 billion R&D investment

~14,300 patents

~24,000 employees worldwide (>110 locations, 19 countries)

AMAT stock listing on Nasdaq

Awards and Recognition

Top 100 Fortune World's Most Admired Companies 2021

Intel's 2020 Supplier Continuous Quality Improvement (SCQI) Award

Barron's 100 Most Sustainable Companies 2021

Best Place to Work in IT in 2020

Investor's Business Daily 2020 Best ESG Companies

Training Magazine 2021 Training Top 100

Insider Pro and Computerworld 100 Best Places to Work in IT 2020

2020 Environment + Energy Leader 100

Responsible Business Alliance Compass Award for CSR Leadership 2020

Human Rights Campaign Foundation Best Places to Work for LGBTQ Equality 2021

Message from Our CEO

Over the next decade, digital transformation will have a profound impact on the global economy and touch almost every aspect of our lives. Healthcare, research, retail, transportation, education, manufacturing—almost everything you can imagine will benefit from amazing new digital tools.

As the leader in materials engineering solutions, Applied Materials innovations are used to produce virtually every chip and advanced display in the world. That places us in a privileged position to help shape the future, and we recognize this privilege comes with tremendous responsibility. This is the drive behind our vision to Make Possible a Better Future for everyone. To support this vision, we've aligned our company around a bold, aspirational 10-year sustainability roadmap—1X–100X–10,000X—with aggressive goals to grow our business responsibly and have a positive social impact.

In 2020, the convergence of a global pandemic, social inequities, geopolitical unrest, and the rising impact of climate change created unprecedented challenges for all of us. In this most unconventional year, Applied Materials and our employees around the world stepped up by demonstrating resilience, persistence, and a strong commitment to our goals to:

- **Lead with purpose**, translating our values into action to respond to the urgent needs of our customers and suppliers, while also supporting first responders, emergency-focused nonprofits, and the most vulnerable populations in our communities.
- **Invest in people**, prioritizing the health and safety of our workers and their families, while advancing our Culture of Inclusion through comprehensive leadership and employee training delivered virtually.
- **Protect our planet**, setting science-based targets, completing our first full value-chain carbon footprint, and advancing our solar and wind projects as we transition to 100% renewable power globally by 2030.
- **Innovate for progress**, establishing a Center of Excellence to drive our ambitious 3x30 goals to improve the efficiency of our semiconductor manufacturing tools, and a 10-year roadmap for Supply Chain Certification for Environmental and Social Sustainability—SuCCESS2030.

You'll learn much more about these initiatives, and meet some of our passionate, innovative people, in this year's sustainability report. The events of 2020 challenged all of us to rethink how we work and live. At Applied we took important steps forward to emerge stronger, more resilient, and more committed than ever to Make Possible a Better Future for everyone.

Gary E. Dickerson
President and Chief Executive Officer

Our Sustainability Vision and Strategy

We take a holistic approach to sustainability that considers our direct impact and how we run our business (1X), our industry's impact and that of our customers and suppliers (100X), and how our technology can be used to advance sustainability on a global scale (10,000X).

To advance our 1X–100X–10,000X strategy, we:

Lead with purpose

through a values-based approach to innovation, decision-making and community action.

Read more

Invest in people

to build a deep-rooted Culture of Inclusion and foster a diverse and skilled talent pipeline.

Read more

Protect our planet

by respecting the Earth's finite resources while enabling infinite growth in our business and the data economy.

Read more

Innovate for progress

to empower transformative innovation that improves technology in harmony with resources.

Read more

Our 1X–100X–10,000X framework is underpinned by aggressive environmental and social impact goals, outlined at the start of each section, that hold us accountable for progress.

Make Possible a Better Future

Our innovations can help empower a more sustainable and equitable world

Lead with Purpose

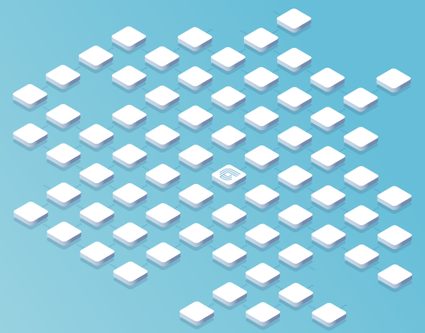
Invest in People

Protect our Planet

Innovate for Progress

1X
FOR OUR BUSINESS

100X
FOR THE INDUSTRY



10,000X
FOR THE WORLD

Our COVID-19 Response

The COVID-19 pandemic has affected nearly every person, community, business, and economy in the world since early 2020.

Designated as an essential business, we executed a comprehensive response across all regions in which we operate, implementing strict safety protocols in our factories, labs, and logistics centers so we could continue operating throughout the pandemic. We prioritized the protection and trust of our employees, customers, suppliers, partners, and community as we drove key initiatives to strengthen Applied for the long term.

Employee Health and Safety

- Required remote work where possible
- Provided enhanced screenings, testing, social distancing, and personal protective equipment (PPE) for on-site employees
- Offered virtual physician and wellness appointments through company health centers

Remote Productivity

- Provided reimbursement of expenses and ergonomic support for working from home
- Offered hardware and connectivity resources
- Upgraded virtual productivity tools

Community Support

- Provided PPE and blood analysis systems to medical facilities
- Sent emergency support to food banks and crisis-response nonprofits
- Donated cases of hand sanitizer for isolated seniors and people who are unhoused

Employee Volunteering

- Printed 3D face shields and touchless door handles for hospitals
- Created open-source designs for medical gear
- Sewed masks for nonprofit volunteers

COVID Impacts on Sustainability

Many of the results reflected in this year's Sustainability Report are influenced by the events of 2020. The pandemic response shifted some of our workforce to work at home, and corporate travel was curtailed, at the same time we experienced increased customer demand impacting our on-site manufacturing operations and associated carbon footprint. Other initiatives, such as environmental health and safety self-assessments and on-site supplier audits, were more challenging to execute amid pandemic shutdowns. We have noted these potential impacts in the data where appropriate.

As the world begins to recover from the pandemic, Applied is committed to leveraging essential 2020 learnings and innovative solutions to accelerate progress against our goals in 2021 and beyond.

Applied has a multi-phase plan to return to working on-site, which takes into consideration factors such as Applied's business needs, local government regulations, community case trends, and recommendations from public health officials. The plan involves multiple phases that gradually allow additional workers to return on-site while practicing social distancing and other safety measures.

Lead with Purpose

Our values guide every decision we make and every action we take to Make Possible a Better Future for our employees, customers, partners, and neighbors.

We act with intention to create the future to which we and our communities aspire.

In a year filled with multiple urgent challenges, Applied Materials fully leaned into our core values to guide our strategies and actions.

Our immediate priority is to protect the health and safety of our workers, customers, and neighboring communities. In response to the uncertainty and disruptions of the COVID-19 crisis, our business continuity teams directed a comprehensive response across all the regions where we operate.

We worked alongside governments and trade associations to keep critical facilities operating and minimize global supply chain disruptions. Together with our employees and the Applied Materials Foundation we responded to the immediate humanitarian needs in our communities, delivering funding, PPE, and other essential donations.

Applied continues to drive our leadership agenda. We increased diversity on our Board of Directors, refreshed our Standards of Business Conduct, and integrated progress against our 2030 ESG goals into our Company Scorecard and factored it into executive compensation.

Key Highlights

- Achieved **ISO 27001 certification** for information security at 45 business sites
- Expanded **Responsibility and Integrity Week** into a worldwide virtual learning experience
- **Paused political action committee** giving in Q1 2021 for formal policy review following January 6, 2021, insurrection at U.S. Capitol
- Delivered **$14,920,039** in direct corporate contributions and Foundation grants
- **Raised $4 million** for Fight Against Hunger
- **Impacted 10,000 girls** through Generation Girl™, an Applied Materials Foundation initiative

Corporate Governance

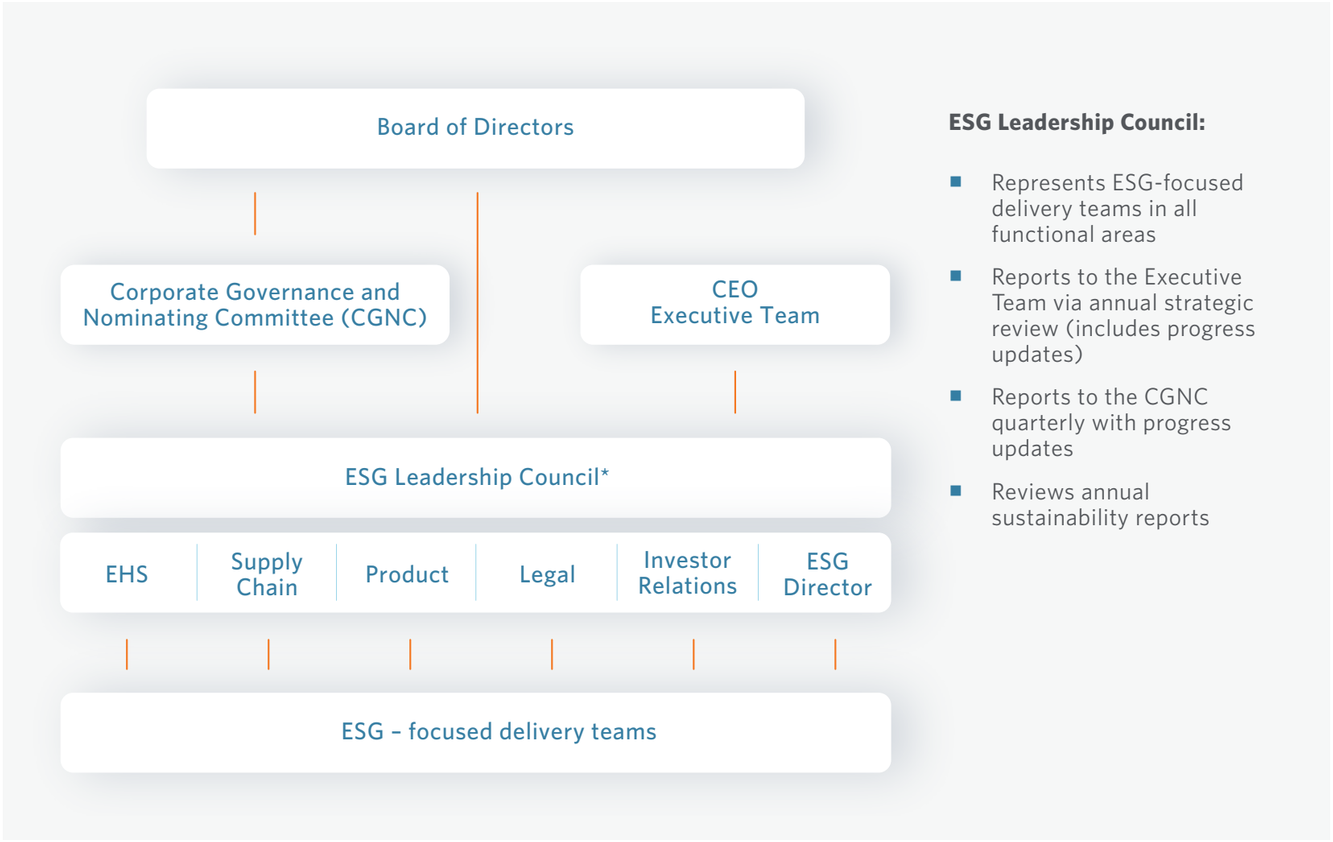
Applied Materials' reputation for honesty and fairness is one of our greatest assets, reflecting a culture guided by our core values and overseen by a strong corporate governance structure.

See the Report Annex for additional information on Applied's corporate governance structures and policies.

ESG Oversight and Management

Our company-wide Environmental, Social, and Governance (ESG) strategy integrates sustainability into our operations and culture, in alignment with our corporate strategy. ESG is a part of the company's annual strategic review process with the CEO and his Executive Team. Work toward our corporate 2030 ESG goals is included in our Corporate Scorecard, and progress is reviewed quarterly. Progress against the ESG goals impacts compensation for executives, including our CEO and his executive team.

ESG Oversight Structure



ESG Leadership Council:

- Represents ESG-focused delivery teams in all functional areas
- Reports to the Executive Team via annual strategic review (includes progress updates)
- Reports to the CGNC quarterly with progress updates
- Reviews annual sustainability reports

* Also includes functions covering Human Resources, Culture of Inclusion, Community Affairs, Global Information Services and other functions by invitation.

Reporting on our ESG efforts is segmented by focus area:

Environmental Health and Safety (EHS)
On a quarterly basis, our Corporate Governance and Nominating Committee (CGNC) receives EHS and Sustainability updates from our Director of EHS and Sustainability, as well as more in-depth annual updates on overall ESG strategy, covering emissions, energy, water, waste, health, and safety.

Environmental, Social, and Governance (ESG)
On a quarterly basis, the CGNC receives in-person and written updates from our Director of ESG, Corporate Sustainability, and Reporting. The CGNC also reviews the company's ESG strategy on a regular basis.

Supply Chain and Conflict Minerals
The Board reviews material supply chain issues. The Audit Committee reviews our annual conflict minerals report filed with the SEC.

Our People and Workplace
The Board's Human Resources and Compensation Committee (HRCC) oversees corporate culture and human capital management programs, including our Culture of Inclusion practices and initiatives.

Community Engagement
Much of our community engagement and grantmaking is led by the Applied Materials Foundation, which has its own board and is independently audited on an annual basis.

All Applied Materials corporate governance documents are publicly available here. Our 2021 Proxy Statement is available here.

Ethics and Compliance

Applied is committed to being a good corporate citizen and a trusted partner to our customers, suppliers, and shareholders. Each member of our workforce plays a part in this commitment by conducting their professional duties with responsibility and integrity, and we expect our executives and managers to lead by example.

To continually reinforce integrity across our culture, Applied maintains a **Global Ethics and Compliance Program** with strong leadership and engagement from senior management. The Board's Audit Committee is responsible for overseeing overall program design and implementation, including mechanisms for reporting potential violations of law or policy and investigating potential integrity violations by executive officers. The Audit Committee receives quarterly reports covering investigations, program development initiatives, and key trends and indicators.

Employee engagement efforts include ethics training and awareness campaigns, employee ethics surveys, campus fairs, information tables, and our annual Responsibility and Integrity Week. Applied has also positioned Compliance Champions throughout our business units to promote ethics and compliance, intellectual property protection, and mandatory training completion throughout the organization, and to serve as trusted local contacts employees can approach with concerns and questions.

See the Report Annex for additional details about our ethics policies and governance structures. Click here for information on our mechanisms for reporting ethics concerns.

Standards of Business Conduct

Applied Materials' **Standards of Business Conduct** communicate our values, set expectations for our global workforce and network of trusted partners, and provide guidance designed to ensure the highest ethical standards in our interactions with customers, suppliers, colleagues, communities, and other stakeholders. The Standards are designed to promote trust in management's commitment to our values, empower employees to speak up without fear of retaliation, and provide comprehensive guidance about risks, laws, policies, and reporting processes, including in key areas such as conflicts of interest, bribery, and corruption.

In 2020 we began updating our Standards along with our whole system of associated policies, procedures, controls, and trainings, tying them closer to our core values and emphasizing relevance and right-sized response to today's dynamic risk environment, everywhere we do business.

To enable real-time data analytics and insights on compliance with our Standards, we maintain a global dashboard for tracking conflict-of-interest disclosures, corporate donation approval requests, and approvals regarding gifts, meals, entertainment, and travel with business partners. We are in the process of automating key elements of our third-party due diligence procedures, and have completed program maturity assessments to help inform our program roadmap.

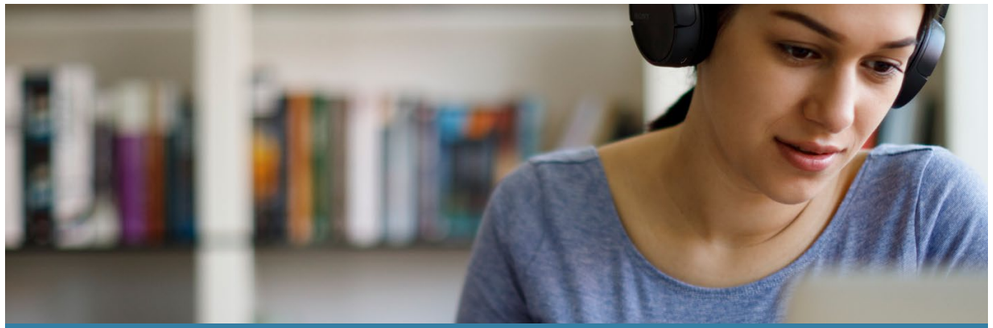
Our Core Values

To be the most valued partner

To work as a winning team

To act with responsibility and integrity

To deliver world class performance



2021 Responsibility and Integrity Week

In early 2021, we expanded our annual global Ethics week into a new event designed to connect the dots and instill a holistic view of responsibility across Applied. Conducted virtually due to the pandemic, the week featured leadership-hosted events that raised awareness of themes, resources, and best practices supporting our core value of Responsibility and Integrity. Highlights included a fireside chat in which Applied's Chief Legal Officer and Chief Human Resources Officer discussed what responsibility and integrity mean to them, a podcast on the evolution of compliance with a technology industry veteran, plus engaging videos and quizzes. Over the course of the week, the programming attracted over 5,200 viewers and included cross-functional presenters from across our Ethics and Compliance, Culture of Inclusion, Privacy and Data Governance, IP Protection, Information Security, Quality, EHS, ESG, and Supply Chain teams.

Responsible Business Alliance Code of Conduct

Applied Materials sets clear expectations for social responsibility in our supply chain, requiring our vendors and suppliers to comply with both our own Standards and the Responsible Business Alliance (RBA) **Code of Conduct**. The RBA Code provides standards related to labor, health and safety, environment, management systems, and ethics, including responsible minerals sourcing.

Ethics and Compliance Training

To support our employee's obligations around ethics and compliance, newly hired employees are assigned a Standards of Business Conduct training and certification course that covers our policies on conflicts of interest, intellectual property protection, anti-corruption, gifts, insider trading, supplier selection and treatment, speaking up, and non-retaliation. Employees renew their training and certification to the Standards each year.

Employees also have access to ongoing training in specific areas of ethics and compliance. In 2020, those included:

- **Introduction to Applied's ethics and compliance program** during new-hire orientation
- **Live, localized anti-corruption training** across our APAC region
- **Micro-learning and awareness campaigns**, that provide process refreshers and assist in ethical decision-making

Public Policy

Policy Engagement

Applied Materials participates in efforts to inform policymakers about issues and challenges critical to our company, our customers, and our end users, typically via meetings, hearings, and trade association advocacy efforts. In 2020, the majority of these efforts centered on issues related to COVID-19 and international trade.

In the early months of the pandemic, efforts centered on assuring the continued operation of our manufacturing sites in California, Massachusetts, Montana, and Texas. Our Government Affairs function worked with trade associations and government agencies in these states to secure essential worker designation for our employees. At the same time, they worked with U.S. government officials to secure essential worker designation for critical suppliers in their home countries to ensure continuity in our global supply chain. Later, as vaccines became available, Government Affairs worked with states and localities to understand vaccination requirements to assure our workers had timely access.

Throughout 2020 and into 2021, Government Affairs devoted significant focus to international trade, particularly the strained U.S.-China trade relationship. Engaging the U.S. government, Government Affairs advocated for policies that would allow the company to remain competitive in global markets while achieving U.S. policy interests. In addition to the year's pressing issues, we continue to advance policy changes in areas such as corporate tax, international competition, technology regulation, R&D, human resources and labor, and sustainability. These include advocating for immigration reform that embraces the valuable role of immigrants in the U.S. economy; advocating for fairness, diversity, and inclusion, including LGBTQ rights; and working on policies, partnerships, and R&D incentives to develop and advance next-generation technologies.

In 2020, Applied sponsored well-received virtual town halls with Texas's Democratic and Republican candidates for the U.S. Senate, to encourage our employee's participation in the political process.

Business and Trade Associations

Applied Materials belongs to various business and trade associations representing issues that align with our corporate strategy and the needs of our company, industry, employees, and communities. Our membership in a group does not imply that we endorse the entirety of that group's policy positions.

In 2020, Applied paid approximately $535,000 in trade association membership dues, 16% of which was specified by the associations as non-deductible lobbying expenditures. This total does not include conference or event sponsorships, programming activities, or similar costs. Applied Materials reports on federal lobbying through the Lobbying Disclosure Act Database. We file periodic reports with federal and state agencies as appropriate.

Our U.S. Trade and Business Associations membership list can be found here.

Political Contributions

The **Applied Materials, Inc. Political Action Committee (AMPAC)** contributes to federal candidates and political action committees or party committees supporting issues of strategic importance to the company, consistent with all legal requirements. Our **State Contributions Committee** oversees corporate political spending to advance those issues at the state and local levels. Contributions are based solely on corporate objectives, without regard for committee members' private political preferences.

During 2020, political contributions made by AMPAC totaled $53,500. Following the insurrection at the U.S. Capitol on January 6, 2021, AMPAC paused all political giving in Q1 2021.

See the Report Annex for additional details on Applied's political donation policies, mechanisms, and compliance practices.

Political Spending

	CY2020	CY2019	CY2018
Total value of financial and in-kind contributions to political parties, candidates, and related institutions by Applied Materials	**$0**	$0	$10,000
Total value of financial and in-kind contributions to political parties, candidates, and related institutions by AMPAC	**$53,500**	$84,000	$47,000

Data and IP Security

Applied Materials considers data security one of our top strategic priorities. In a threat landscape marked by growing vulnerabilities, readily available hacking tools, the rise of business disruption attacks, and incursions by state-sponsored actors, we desire to be a safe data choice for all our global stakeholders.

Recognizing that cyber-attacks long ago moved from being a matter of *if* to *when*, we maintain both a robust defense framework and the capacity for rapid detection and response. We conduct 24/7 monitoring and weekly vulnerability assessments and continuously update our mitigation practices to stay ahead of threats. Among other efforts, we:

- Maintain response procedures and escalation protocols
- Employ third parties for monitoring of external threats, penetration testing, and phishing exercises
- Maintain enhanced email security controls
- Provide robust training for our employees on recognizing security threats to help comply with applicable data security laws, regulations, industry practice, and our Company policies
- Partner with industry groups, government agencies, and outside experts for information exchange and peer benchmarking
- Engage third-party auditors to help assure the effectiveness of internal controls

Our efforts extend across our supply chain via enhanced security controls embedded in the supplier onboarding process, processes for assessing supply chain cyber-breaches and ransomware incidents, a playbook for restoring business continuity, and continuous assessment and control enhancement of high-impact suppliers. To enhance customer trust, we provide virus-free certifications with all sales of Applied semiconductor systems.

Applied Materials has undergone a NIST Cybersecurity Framework assessment and currently maintains one of the best BitSight security scores among our industry peers. We've also achieved ISO 27001 certification for information security at 45 of our business sites, assuring our data security management systems and programs align with global best practices.

Our Chief Information Security Officer reports at least quarterly to the Board's Audit Committee on our data and IP security programs, policies, controls, key risks, and notable incidents. Applied Materials takes data security very seriously and continues to devote substantial resources to it.

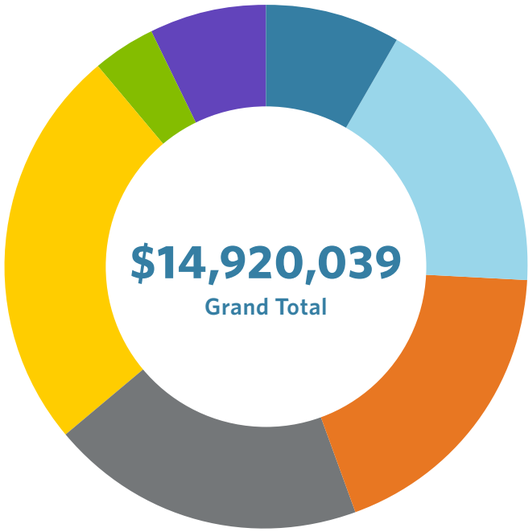
Community Impact

Helping the communities where we live and work is about building and leveraging trusted partnerships, and that was never more true than in 2020.

In a typical year, Applied Materials and the Applied Materials Foundation fund nonprofits working in our focus areas of Education, Civic Engagement, Arts and Culture, and the Environment, as well as the Generation Girl™ initiative, the Foundation's signature girls empowerment program. But as COVID-19 began its worldwide spread, we pivoted quickly, engaging with outside organizations, listening to their ideas for serving their communities during the crisis, and making additional COVID-specific funding available for community service agencies. To give organizations flexibility, we converted many program-related grants into general operating support — for instance, helping Arts and Culture grantees transform their facilities into COVID testing or food distribution sites. We enthusiastically approved other programs' transition from in-person to virtual settings, as our partners sought creative ways to engage with local communities.

In total, Applied Materials and the Foundation awarded more than $14 million in direct corporate contributions and Foundation grants in 2020, benefiting 310 recipients in nine countries—a 38% increase over our 2019 total. At the same time, our employees donated their time to create personal protective equipment (PPE) and other essentials for frontline workers and boosted their individual charitable contributions, which we amplified by large increases in the Foundation's matching grant program.

Breakdown of Contributions by Category



Category label	Amount	%
Arts and Culture	$1,251,273	8.40%
Civic Development	$2,640,392	17.70%
Disaster Response	$2,746,766	18.40%
Education	$2,893,768	19.40%
Employee Matching Gift	$3,729,244	25.00%
Environment	$586,461	3.90%
Girls Empowerment	$1,072,135	7.20%

Contributions include both Foundation and Company giving, which is further detailed in the Social Data section of the Annex under Community Impact.

COVID-19 Response: A Culture of Giving

Around the world, Applied Materials, the Applied Materials Foundation, and our 24,000 employees stepped up to help those most impacted by the COVID-19 pandemic. To meet urgent health needs, we delivered face masks and blood analysis systems to frontline medical personnel in the U.S., Europe, and China; shipped cases of individual hand sanitizers to homeless shelters and programs serving isolated seniors; and provided a grant to Médecins Sans Frontières (Doctors Without Borders) to support relief efforts around the globe. In the face of growing need, we increased our support to food banks across the U.S., and in Korea we helped ensure disadvantaged children and their families gained access to nutritious meals and personal protective equipment.

Though largely dispersed to their home offices, Applied's employees continued donating their time, talent, and financial resources to the relief effort. At our manufacturing sites in Austin, TX, Kalispell, MT, and Singapore, enterprising engineers used 3D printers to create face shields and touchless door handles for hospitals and other responding organizations in their communities. In Austin, employees sewed masks for Meals on Wheels volunteers. In India, our design teams created open-source designs for low-cost medical gear.

To support our employees in contributing to COVID-19 relief efforts and other preferred charities, the Foundation increased its our annual employee giving match from $3,000 to $5,000 between March and December 2020.

Fight Against Hunger

In recent years, Applied Materials has expanded and aligned our efforts to address food insecurity in many of our global locations and communities—a timely move, as the pandemic-related economic downturn of 2020 left people around the world more reliant on food aid than ever before.

As part of our month-long virtual North America campaign in November and December 2020, we transformed our year-end all-employee meeting into a virtual telethon for Fight Against Hunger. With donations matched dollar-for-dollar by the Applied Materials Foundation (plus an additional $500,000 match to help food banks respond to COVID impacts), the campaign raised $4 million, a 70% increase over 2019. This funding provided vital support for 50 nonprofit organizations across the U.S. and Canada as they worked to manage dramatically increased demand.

Global Fight Against Hunger efforts continued throughout the year, often aligned with cultural and seasonal holidays in different countries. In Israel and China, employees volunteered with local organizations to package food for distribution in their communities. Meanwhile, employees in India and Taiwan raised funds to provide access to food for those in need. All these efforts reflect Applied's values and purpose, aligning who we are with what matters to our employees and what's needed in our communities.

Employee spotlight

Cho Wang

Manufacturing Engineer

Cho Wang lives Applied Materials' vision to Make Possible a Better Future for everyone.

"In technology, the development is endless. What we do—what the equipment does—it makes things possible. For someone like me, who doesn't think anything is impossible, being able to be part of this and help drive the industry is what drew me to Applied," said Cho.

Cho applies this same art-of-the-possible mindset to all aspects of his life, engaging in activities where he can rapid-prototype to solve challenges. In his first few months at Applied, Cho got involved with the Austin chapter of the Young Professionals Network, an Applied Employee Resource Group. Seeing an opportunity to make the group more active, inclusive, and engaging, Cho raised his hand for a leadership position and was appointed president.

Within the first few months under Cho's leadership, the group had quadrupled participation in its monthly events. When the pandemic halted in-person gatherings, Cho and the other YPN leaders found new and creative ways to inspire engagement, including supporting the local community. This year, the Austin-based YPN raised over $12,000 through a food drive, which was doubled to $24,000 through the Foundation's donation match program. The group also supported efforts to help end youth homelessness; donated blankets to LifeWorks, a local nongovernmental organization supporting social and mental health services for teens and their families; and supported a local animal shelter.

Generation Girl™ Initiative

In a year that turned a spotlight on diversity and empowerment and saw the election of the United States' first female vice president, the Applied Materials Foundation's Generation Girl™ initiative continued its efforts to ensure that all girls have the opportunity to reach their potential.

The Generation Girl™ initiative works with nonprofit organizations throughout the United States to help girls gain the confidence, skills, and opportunities to succeed in any path they choose. In recognition of the fact that women of color remain the tech industry's most underrepresented group, the program prioritizes funding for organizations serving Black/African American, Latinx/Hispanic, and Indigenous girls as well as girls from low-income backgrounds. By working to break down societal and systemic barriers and develop talent in underrepresented communities, we can help make our future workplaces more vibrant, equitable, and effective.

The onset of COVID-19 precipitated significant shifts in our grantees' programming, varying as time went on. Between September 2019 and August 2020, our grantees were still able to serve more than 10,000 girls, 61% of whom identify as Black, Latinx, or Indigenous and 61% of whom come from low-income backgrounds. While spring and summer programs mostly moved virtual, they continued to have a profound impact on the girls they served, with 76% of surveyed respondents reporting positive levels of self-confidence and 78% indicating increased interest and competence in STEM subjects. Applied's Community of Practice, where grantees convene virtually on a bimonthly basis, proved invaluable during this time of instability, with 82% of grantees reporting that the collaborations through the Generation Girl™ initiative strengthened their programs to a great extent.

From Fall 2020 through Spring 2021, the Generation Girl™ initiative continued supporting girls' empowerment by providing over $1.1 million to 35 organizations located across six U.S. regions where Applied maintains facilities. With this funding, grantees were able to provide girls' programming that fostered learning, connection, and support through virtual after-school and summer programming as well as in-person learning when possible. To ensure girls and their families felt supported and empowered during the pandemic, grantees expanded beyond their normal activities by providing home activity kits focused on STEM and social justice activism, creating safe virtual spaces for girls to be in community (e.g., online music listening sessions), and connecting girls and their caregivers to local community service agencies to address need.

Employee volunteerism also went virtual in 2020, with our employees dedicating their time and talents by serving as volunteer mentors, conducting virtual career exploration sessions with girls, and leading online activities to introduce girls to semiconductor wafers and careers in tech.

A complete list of 2020 Generation Girl™ initiative grantees is available here.

> "Hearing us, seeing us, talking about science as female role models helps young girls envision themselves doing that."

- Idith Varon
System Engineering Manager

Environmental Engagement

COVID-19 has been a forceful reminder of our interconnectedness as people and as a planet, but it has also impacted our ability to conduct many of our traditional environmentally focused efforts, including projects that engage communities with the natural world and help build a more sustainable future.

In FY2020, Applied Materials and the Foundation awarded $586,461 in grants to 37 nonprofits, working with grantees as they took youth education and other outreach efforts virtual and found new ways to leverage their unique resources to serve the local community. In East San Jose, California, Veggielution marshaled its expertise as a community farm to distribute healthy and nutritious food to community members experiencing food insecurity. While the program began as a direct response to the COVID-19 pandemic, it has quickly become a central strategy for Veggielution to connect people from diverse backgrounds through food and farming. In Gloucester, Massachusetts, Backyard Growers sent growing kits home to students so they could continue gardening experiments connected to the science curriculum. Backyard Growers also replanted their school gardens to feature quick-growing items that could be donated to families to supplement healthy home meals. Other community gardens were repurposed to support local food banks and shelters.

Applied's annual, monthlong EarthWorks campaign went virtual in April 2020, educating and inspiring Applied's global employees to learn about household sustainability strategies, discover ways to reduce their carbon footprint, and generally make their communities healthier and more sustainable. The virtual format enabled employees to engage across worldwide sites, sharing tips for home gardening and making upcycled crafts as well as photos of themselves enjoying the great outdoors. To celebrate the 50th anniversary of Earth Day on April 22, we encouraged our employees to post photos of themselves wearing green on our internal social media channel, Applied4You.

Advancing Arts and Culture

Creativity drives new ideas that can transform the way we live. In FY2020, Applied Materials and the Foundation continued to support culturally diverse programming in the visual and performing arts, awarding $1.3 million in grants to 62 non-profits. In a challenging year, our grantees demonstrated resilience and creativity by pivoting to new streaming and on-demand models for delivering their programming to audiences. Cape Ann Art Haven blended traditional art making with digital tools and video instruction to provide creative programming to school children in Gloucester, Massachusetts, while San Jose Jazz presented "Live from Home," a series of performances streamed from musicians' homes.

Education Access

Education inspires young minds, opens new doors, and paves the way to more promising futures. In 2020, Applied Materials and the Foundation invested in efforts to increase access to high-quality education globally even in the midst of an unprecedented pandemic. Examples include supporting the Discovery Center of Idaho in providing interactive and virtual content to ignite student interest in STEM, and funding the Library Project to improve children's literacy through the creation of reading rooms and the training of teachers and families in rural China.

Invest in People

We foster a culture where every person knows they belong, feels empowered to bring their whole self to work, and is inspired to grow.

In 2020, issues of racial and gender inequity were intensified, with women and people of color disproportionately hit hard by the economic impacts of the COVID-19 pandemic. In the U.S., the murder of George Floyd and anti-Asian racism forced a collective social reckoning with systemic racism–in the criminal justice system, our communities, and beyond.

Amid these complex social challenges, we continued to implement our multi-year strategic imperative to foster a meaningful Culture of Inclusion that accomplishes many goals, including addressing systemic race and gender barriers and helping us become the destination employer in our industry. As one step in that effort, we implemented new tools to expand our sourcing of diverse talent and to guide our managers in eliminating bias from our hiring process.

We doubled down on our holistic approach to employee development and training across the board, transforming to new virtual alternatives where necessary and in the process achieving our highest-ever participation in inclusion training and personal engagement, from top executive leadership through all employee levels. Our unwavering commitment to improvement earned us a #14 spot on the 2021 Training Magazine Top 100 rankings.

Protecting the health, safety, and wellbeing of our employees is always our top priority, and 2020 brought new challenges that impacted both personal and professional wellness. In addition to implementing enhanced COVID-19 safety protocols for our essential on-site workers and supporting the productivity and safety of our remote workforce, we offered a range of virtual services to help address our employees' physical, mental, and emotional wellness at home.

Goals and Progress

Goal	Progress	U.N. SDG
Invest in People		
Increase women's representation at Applied in U.S. to 21% by 2021	Increased to 20.2%	5 GENDER EQUALITY
Increase women's representation at Applied globally	Increased to 17.8%	5 GENDER EQUALITY
Increase underrepresented minorities' representation in our U.S. workforce	Increased to 14.2%	10 REDUCED INEQUALITIES
Publish a Human Rights Statement of Principles by 2021	The Human Rights Statement has been published and is available on our website	8 DECENT WORK AND ECONOMIC GROWTH
Maintain occupational health and safety total case incident rate (TCIR) at 0.46 or below	We met this target, achieving a TCIR of 0.33	8 DECENT WORK AND ECONOMIC GROWTH

Key Highlights

- Continued to **increase female representation** in U.S. workforce
- **100%** of leaders, executive-level vice presidents, and managers completed Applied Global University training
- **14,000 employees** participated in our role-based PATHWAY training program
- Applied CEO Gary Dickerson signed **CEO Action for Diversity and Inclusion™** pledge
- **1,700 employees** and contingent workers participated in the virtual global 2020 Culture of Inclusion Summit
- Ranked as **Top Veteran-Friendly Company** by U.S. Veterans Magazine

Our Culture of Inclusion

At Applied Materials, we value a Culture of Inclusion (COI) based on diversity, equity, and belonging. We celebrate different backgrounds, perspectives, and experiences, knowing they help build stronger, more resilient teams. And we know those teams, powered by their talents and capabilities, are what will drive Applied Materials toward greater innovation and financial performance.

Our strategy drives a multi-year roadmap, which contains actions to engage leaders as champions for change and sets us on the path to identifying and eliminating systemic barriers to inclusion and operationalizing inclusion in everything we do.

COI Strategy: Foundation and Roadmap

Engage leaders as champions of change

Make inclusion personal for leaders

Define metrics and leader accountability for change

Eliminate systemic barriers to inclusion

Identify and break down systemic barriers to inclusion

Engage and empower Inclusion Change Teams to break down barriers

Leverage data to develop action strategies to inclusion

Operationalize inclusion in all we do

Ensure talent practices are inclusive

Accelerate strategies for finding, selecting, placing, developing, and retaining talent

Measure qualitative and quantitative progress

Pledges for Change

In 2020, our CEO, Gary Dickerson, signed the **CEO Action for Diversity and Inclusion pledge** and the **Catalyst CEO Champions for Change pledge**, publicly committing Applied Materials to advancing diversity and inclusion in the workplace.

Employee spotlight

Karen Courter

Human Resources Executive Partner

For more than 20 years, Karen Courter had centered her career around supply chain, logistics, and materials management, most recently managing a large team supporting Applied's global contact centers. But it was during a recent Culture of Inclusion Summit at Applied that Karen found a whole new calling. "I have two daughters and two sons. Diversity and inclusion is very personal to me," said Karen, a native of Brazil now living in Texas. "I want all my kids to have a future living in a world and working in a company that lets people succeed while being their authentic selves." In April 2021, Karen became the Human Resources Executive Partner for HR at Applied. To Karen, the willingness to let employees explore new passions and to look beyond a resume to see the whole person and the value she or he brings are just two of the many things she appreciates about the culture at Applied Materials. "The company welcomes people the way they are," she said. "I feel like I matter—that I belong. I can bring my full self."

Growing a Diverse Workforce

Over the past four years, Applied Materials has focused on strengthening our strategies for retaining and recruiting diverse talent and designing a fully actualized Culture of Inclusion to the benefit of all our employees. During 2020, we made significant progress in strengthening our COI strategy and targets, training commitments, and data disclosure. This year's report includes expanded data on gender representation and global voluntary turnover. Our 2020 data shows five-year increasing trends in:

- Women's representation (+1.2 percentage points (pp) global, +2.2 pp U.S.)
- Women's representation at the executive (+0.3 pp), manager (+5.1 pp), and professional (+2.8 pp) levels
- Underrepresented minority representation at all levels (+2.4 pp U.S.)
- Black representation at the manager level (+1.1 pp U.S.)
- Women in engineering (+1.8 pp global, +2.1 pp U.S.)

We also saw a decrease in voluntary turnover among female employees between 2019 and 2020 (-2.0 pp global), contributing to an improvement in gender diversity. Overall voluntary turnover in FY20 (4.6%) continued to remain below the company's target of 5% or less.

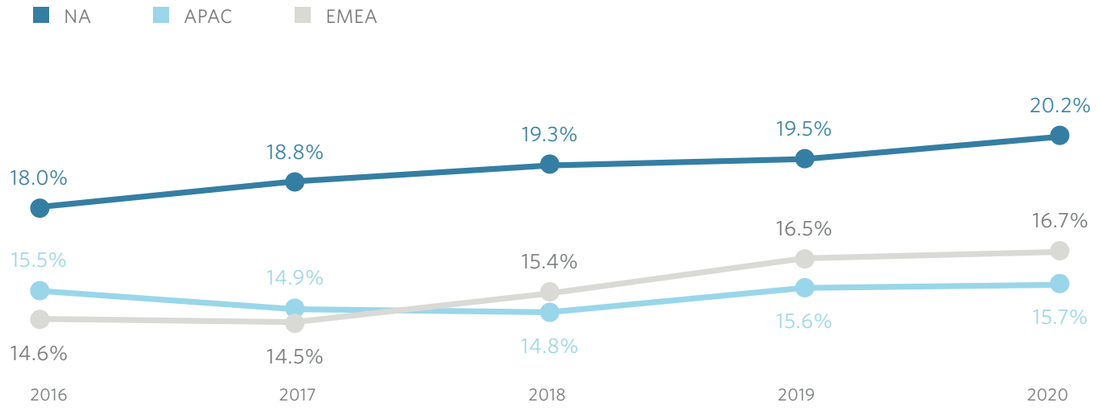
Since 2019, women's representation in our U.S. workforce has increased to above 20%, with global representation at 17.8%. Additionally women's representation in our global engineering staff has increased to 13.2%, with U.S. representation at 12.9%.

FY2020 U.S. Workforce Gender, Ethnicity, and Race Representation by Employee Level

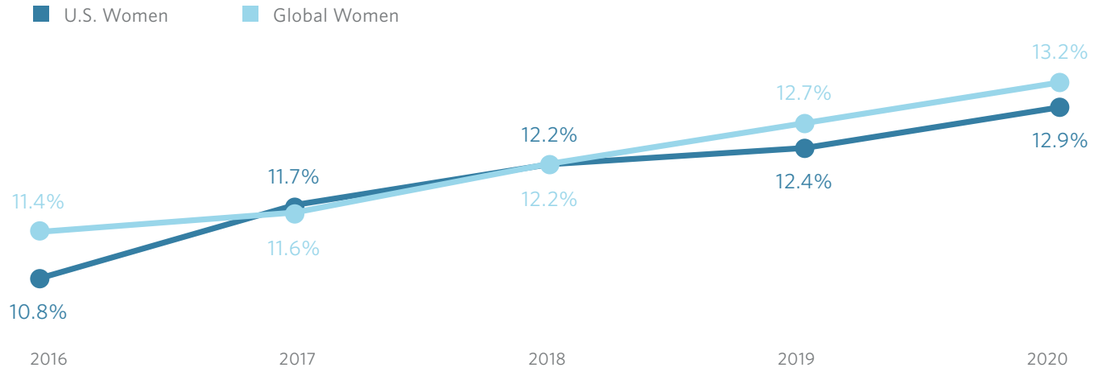
	Women	Asian	Black	Hispanic/Latinx	Other URMs*	White
Executives Vice Presidents and Directors	11.6%	45.3%	0.9%	2.1%	0.8%	50.6%
2016	11.3%	40.5%	1.0%	2.0%	0.8%	55.6%
	0.3% ↑	**4.8% ↑**	**0.1% ↓**	**0.1% ↑**	**0.0% →**	**5.0% ↓**
Managers People Managers	17.5%	34.4%	4.2%	7.2%	2.0%	51.9%
2016	12.4%	29.0%	3.1%	5.3%	0.7%	61.7%
	5.1% ↑	**5.4% ↑**	**1.1% ↑**	**1.9% ↑**	**1.3% ↑**	**9.8% ↓**
Professionals Business, Engineering, and Sales Career Bands	26.9%	44.8%	2.7%	7.0%	1.6%	43.3%
2016	24.1%	40.6%	2.9%	6.4%	1.1%	48.9%
	2.8% ↑	**4.2% ↑**	**0.2% ↓**	**0.6% ↑**	**0.5% ↑**	**5.6% ↓**

*Underrepresented minorities

Female Representation by Region 2016–2020



Improved Gender Diversity in Engineering



Women in Engineering Talent Development Program

Our Women in Engineering Talent Development Program (WE TDP) is focused on supporting the career growth of female technical talent at Applied. This two-year development program offers resources to support a select group of high-potential U.S. women employees through networking opportunities, conference participation, professional skill development workshops, career development roundtables, and mentoring programs. Women are nominated by their managers annually. Fifty-nine new members joined WE TDP in 2020. More than half of WE TDP alumni and year-two members have been promoted.

Engaging Leaders as Champions of Change

In 2020 and early 2021, we introduced several executive-level initiatives to drive accountability and support our leaders in their COI education and mission.

- **Driving accountability and inspiration through experiential learning:** In September 2020, 27 leaders (including executive team) took part in a six-hour experiential learning session titled "Leading Courageously on Issues of Race and Racial Equity," focused on making inclusion personal and learning to understand inclusion challenges before trying to fix them.
- **Tying performance to executive compensation:** To reinforce accountability, we added our diversity commitments as an objective on the Corporate Scorecard that informs determination of executive bonuses, tying executive compensation directly to the achievement of our diversity objectives.
- **Using dashboards to expose market availability gaps:** In 2020, we introduced U.S. diversity dashboards through which executive leaders can track progress against diversity goals for each organization.
- **Introducing the Inclusive Leader Action Guide:** In early 2021, we created a comprehensive action guide for executive staff and leadership teams that provides pragmatic strategies and best practices for becoming more inclusive leaders, partners, and change catalysts.

Progress is shared on a quarterly basis with our Board of Directors. Over the past several years our Board itself has grown more diverse, and now consists of 40% women and 30% people of color.

Workforce Diversity Recognition

Applied Materials is consistently recognized for our efforts around workforce diversity and military veteran recruitment.

Human Rights Campaign Foundation
Corporate Equality Index, 100% overall rating
Best Places to Work for LGTBQ+ Equality

Military Friendly Employer
100%-plus overall rating, exceeds every standard

U.S. Veterans Magazine
Top Veteran-Friendly Company

Woman Engineer Magazine
Top 50 Employers

2020 Inclusion Highlights

In 2020, Applied Materials employees came together in a series of mostly virtual events, including opt-in inclusion learning sessions and events recognizing the cultural heritage and diverse experiences of our workforce.

These corporate-wide learning opportunities were presented in partnership with our Employee Resource Groups (ERGs), which represent a range of diverse employees within Applied. An integral part of the Applied Materials experience since 2001, our ERGs provide forums for learning, exchanging ideas, and strengthening bonds across and within our employee communities and advise on our leaders' efforts to remove systemic barriers to inclusion.

Virtual Inclusive Leader Summits: In early 2021, we launched experiential learning opportunities targeting our top 400 executives for participation in two half-day sessions designed to build awareness of insider culture and the unique roles played by both insiders and outsiders in creating an inclusive culture.

On-Demand Training for Managers and Employees: In addition, we launched virtual on-demand training courses focused on three areas:

- **The Inclusive Manager:** Explains actions managers can take to increase inclusion, engagement, and team performance, with an emphasis on understanding unconscious bias, being aware of micro-messages, and creating psychological safety.
- **Unconscious Bias and Micro-inequities:** Explores the social stereotypes individuals can internalize about certain groups of people without being consciously aware they're doing so. The training challenges participants to test their automatic assumptions, move from micro-inequities to micro-affirmations, and be mindful of the ARTS of Inclusion: Appreciation, Respect, Trust, and Sensitivity.
- **Inclusive Virtual Meetings:** Examines challenges and best practices for facilitating inclusive virtual meetings.

Global Culture of Inclusion Summit

Held in October 2020, our virtual COI Summit served as the launchpad for our Listen, Learn, and Act campaign, which challenges our workforce to listen to people's lived experiences, deepen their understanding of unconscious bias, learn to work in community across differences, and act to bring about change. More than 1,700 global employees and contingent workers participated and more than 1,500 signed personal pledges to work toward inclusion in everything they do.

Black History Month

As part of our 2021 virtual celebration, nearly 350 Applied attendees welcomed activist and diversity educator Jane Elliot for a candid conversation about today's racial justice issues. In a post-talk survey, 92% of respondents said the event gave them valuable insight on racism, allyship, and/or partnership.

Pride Month

Applied Materials stands in solidarity to support LGBTQ+ rights. In 2020, employees raised the rainbow flag at our headquarters in Silicon Valley, as well as at our sites in Austin, Gloucester, and Israel. With support from our ERGs and regional sites, we also hosted virtual workshops and lectures in the U.S. and India to increase understanding of LGBTQ+ rights and workplace challenges.

Lead Like an Ally

Held in September 2020 and cosponsored by the Santa Clara branches of our Black Employee Network (BEN), Veterans Employee Team (VET), Women's Professional Development Network (WPDN), and Hispanics in Partnership (HIP), this virtual workshop shared strategies for leaders on facilitating diversity and inclusion.

WPDN U.S. Event

Throughout the year, various chapters of our Women's Professional Development Network hosted and sponsored events focused on women's advancement and inclusion and diversity, including National Instruments Women Network's "Defining Your Success" panel discussion, which engaged 214 attendees from seven technology companies.

WPDN Asia Pacific Events

To celebrate International Women's Day month, WPDN members sponsored a digital engagement series showcasing inspiring professional stories from women at different career stages across Applied Materials Southeast Asia. At Applied Materials India, our WPDN chapter collaborated to present weekly learning sessions during Inclusion Month in August 2020, discussing gender, cultural, and multigenerational diversity, and hiring biases.

Employee Resource Groups: Making an Impact Globally

Since our first ERGs launched in 2001, the network has increased to nine ERGs with 26 global chapters.

- Applied PRIDE
- Asians in Motion
- Hispanics in Partnership
- Leadership Encouraging Achievement through Diversity and Black Employee Network
- Male ERG for Equity
- Persians at Applied Materials
- Veterans Employee Team
- Women's Professional Development Network
- Young Professionals Network (YPN).

Recruiting and Hiring

As leaders in the technology industry, our practices for attracting, recruiting, hiring, and onboarding a top-performing workforce must be enabled and informed by a total commitment to inclusion and diversity. In 2020, that imperative was challenged by the pandemic and increased demand for industry talent, adding complexity to meeting our growing skill needs, especially in semiconductor technologies.

Diverse Talent Recruiting

Our diverse talent recruiting efforts focus on attracting candidates from the technology industry and related fields, seeking talented new graduates from universities with strong engineering and science programs (including U.S. schools with large Black and Hispanic student populations), and building a pipeline of future talent through STEM education initiatives with colleges, universities, and nonprofit partners serving middle and high school students.

In 2020, we established the following targets for meeting our diversity goals:

- For new college graduate (NCG) positions in the U.S., provide managers with a resume pool consisting of at least 50% female or underrepresented minority candidates.
- For NCG positions in China, Taiwan, India, and Israel, provide managers with a resume pool consisting of at least 20% female candidates.

Innovate Anywhere, Collaborate Everywhere

By offering more remote, flexible work models, we're able to recruit talented people from anywhere—expanding our candidate pools, and enabling people to work where they're most effective.

To achieve these goals, we pursued a range of new initiatives and technologies:

- **Diverse Talent Sourcing Platform:** In 2020, we invested in a new sourcing platform that allows us to search specifically for diverse candidates.
- **Talent Selection Playbook:** In 2020, we rolled out a talent assessment framework and tools for assessing and selecting talent for current and future roles. The Talent Selection Playbook includes best practices in talent placement with a focus on diverse hiring.
- **Increased Referral Bonuses:** We increased our referral bonus program for employees who refer qualified female candidates who are then hired for technical positions.
- **Expanded Geographical Searches:** The COVID-19 pandemic proved the broad efficacy of distance-working models, leading us to expand our searches and broaden our potential talent pool beyond our operating regions.
- **Military Recruiting:** Building on our success from the past 10 years, we continued to actively recruit talent from the U.S. military, with recruiters who have clearance to access military bases and speak with candidates who are exiting the services.

These initiatives and others led to an increase in diverse hiring. Overall, we saw a 3% global increase in diverse hiring in our manufacturing job family group and a 4% increase in hiring in our Asia-Pacific operations. Global NCG hiring increased by 4.5% over FY2019 and resulted in more diverse selections.

Employee spotlight

Dale Morris

Director of Manufacturing Engineering

Dale Morris has a big job as director of engineering at Applied, but he doesn't miss an opportunity to get involved in other company programs and initiatives where he can have a positive impact.

Dale helped develop a new manufacturing-based college rotation program that provides college graduates with exposure to different areas and job functions before they start their new position at Applied. He is currently working on an emerging leadership pipeline program for transitioning managers to executive roles, and actively engages in various Employee Resources Groups, including founding the first "Green Team" ERG in Austin, TX around 2007. Today, he is the President of the new Male Employee Resource Group for Equity (MERGE).

Dale joined Applied nearly 26 years ago while still in college himself. "It was a great paying and challenging job I could do at night while also attending University of Texas–Austin during the day to finish my undergrad engineering degree," said Dale. "Applied was a fast-growing company that felt like a start-up with many growth opportunities." Dale says these growth opportunities have helped create a culture of longevity at Applied.

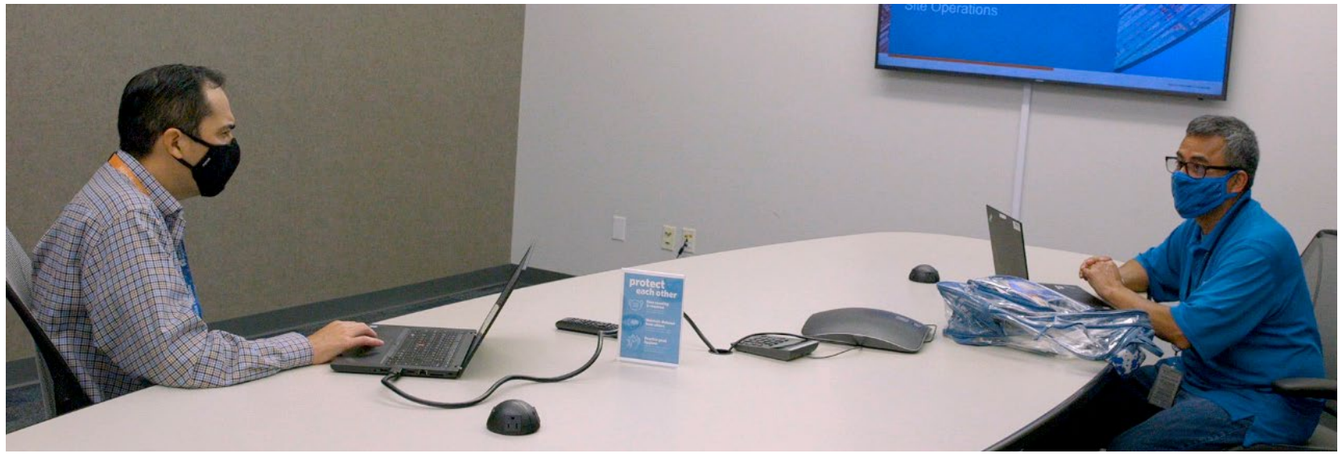
Recruiting and Hiring During COVID-19

Throughout 2020, the pandemic upended our traditional recruiting, hiring, and onboarding practices, forcing us to adapt quickly with creative and transformative solutions.

Despite logistical hurdles in 2020, we honored all current hiring offers for both new employees and interns, and onboarded incoming employees on schedule. Recruitment continued throughout the year, and we undertook several virtual New College Graduate (NCG) programs to drive in-depth, cross-functional training, provide access to a global knowledge database, and assure optimal placement of new hires:

- **Semiconductor Products Group (SPG) Onboarding:** Recognizing the need to manage a talent shortage in semiconductor technologies by training new hires, SPG offered a virtual onboarding program that included three weeks of in-depth industry training.
- **Fusion Rotation Program:** Offered by our Implant Semiconductor Equipment group in Gloucester, MA, this two-year program offers new graduates in key engineering disciplines a series of three to four unique engineering assignments and one manufacturing assignment, during which participants complete hands-on duties and work on large, collaborative year-end engineering projects.
- **Supply Chain Rotation Program:** This annual program offers participants a series of multiple rotation opportunities in our supply chain operation.
- **Finance Rotation Program:** Offered through our Austin and Silicon Valley offices, this program provides ongoing mentoring, networking, skills development, and hands-on experience across various finance disciplines.

In North America and globally, our internship programs also continued operating on a remote-work basis throughout the pandemic, giving students exposure to our diverse and inclusive workplace and introducing them to career paths and roles in both engineering and corporate. A significant number of interns subsequently joined the company as full-time employees, with diverse talent representing 71.5% of resulting U.S. hires.



Taking Care of Our Employees

Throughout the COVID-19 pandemic, the safety of our employees and their families remained our top priority.

With our business deemed essential, the majority of our global manufacturing, lab, and customer-focused employees continued to work on-site at Applied or at customer locations. To keep our employees healthy, we improved on our already exacting on-site safety protocols. To keep them informed, we stepped up our proactive internal communications around plans for safety, business continuity, and promoting employee health and wellness. To maintain cohesiveness around COVID-era policies and programs, our Global Manager Forum engaged our people managers with Q&A sessions, safety briefings, and other resources to help them support their teams.

To help our employees who shifted to a virtual, dispersed work model, we introduced programs to support wellbeing and address the complexities of melding work and home life, especially for parents of school-age children.

In an employee survey we conducted in July 2020, 92% of respondents reported high confidence in Applied's ability to overcome COVID-19 challenges, and over 80% gave positive marks on role expectation clarity, regular check-ins with managers, and recognition from managers.

Employee Safety, Security, and Support

Applied operations around the world responded quickly to the pandemic with measures to keep our workplaces healthy and safe while ensuring compliance with orders and restrictions imposed by government authorities.

Throughout 2020, we reduced on-site staffing to the essential minimum needed to keep our critical labs and operations active and able to support our customers. The rest of our workforce worked virtually beginning in mid-March. To protect our essential on-site employees, we maintained enhanced safety and health protocols including strict screenings, social distancing requirements, enhanced sanitation protocols, and mandatory use of personal protective equipment.

To support all our employees, we adjusted our pay and benefits as necessary, adding flexibility to address particular circumstances:

- **Pay continuity policy:** Employees who could no longer come to work due to compromising health conditions were paid their regular salaries and reassigned to interim home-based work or provided other reasonable accommodations where possible.
- **Standardized sick time:** U.S. exempt and nonexempt employees now have the same amount of sick time.
- **Home office expenses:** We compensated our employees for the expense of creating or upgrading home offices, taking into account employee needs around technology, productivity enhancements, and wellness needs (ergonomic chairs, desks, etc.).
- **Flexible time off for vaccinations:** To encourage our employees to get their COVID-19 shots, we offer paid time for any working hours used for vaccination appointments.
- **Support for working parents:** To aid parents who suddenly had to cope with the stress of managing their children's online education during work hours, we began offering expanded research resources, training, and tele-consultation support through the award-winning Rethink program.
- **Health and wellness support:** To adapt our health and wellness benefits to the needs of the time, many in-person programs were transitioned to virtual, offering services from doctors, therapists, behavioral health coaches, fitness providers, and nutritionists. All virtual visits are free through our company-sponsored health plans through 2021.

For more details on Applied's standard benefits, see here.

Occupational Health and Safety

Safety Training Rate

In FY2020, Applied Materials set and met a target that 96% of relevant employees would complete safety training by year-end. Weekly safety training penetration reports, across all business units, are sent to all members of executive management as part of the weekly EHS Update Report.

Safety Targets and Performance

Applied Materials maintains global programs and monitoring to promote a safety culture and safe work practices, minimize workplace risks, and support continuous improvement in our safety performance. We use the definitions set by the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) for recordable, lost-time, and restricted-day injuries. These definitions are implemented globally for data gathering and analysis, and we set targets and objectives both at the corporate and site level, embedded into annual performance objectives. At the end of each year, results are analyzed and the targets are reset for the coming year.

Sort
Shine
Sustain
Set in order
Standardize
Safety

6S for Manufacturing Safety

To ensure safety is prioritized, many of our factories have implemented 6S, a lean manufacturing concept that empowers employees to assess and enhance functionality and safety in their work areas. After introducing 6S in 2019, injury rates fell by 35% in our semiconductor manufacturing operations.

Total Case Incident Rate (TCIR)

In FY2020, Applied set a company-wide internal target of keeping our TCIR to 0.45 or below. We met this target, achieving a TCIR of 0.33.

0.33
TCIR achieved in 2020

Health and Safety Violations

In 2020, Applied received zero notices of violation worldwide.
Find additional information on Applied's Occupational Health and Safety Program here.

Work-Related Injury Rates

	FY2020	FY2019	FY2018
Total Case Incident Rate (TCIR)	**0.33**	0.43	0.52
Days Away, Restricted, or Transferred (DART)	**0.23**	0.29	0.34
Lost Time Severity Rate (LTSR)	**3.70**	3.63	5.41
Fatalities	**0**	0	0

The main types of work-related injury accidents are strains, sprains, and fall-related incidents. TCIR is calculated as (total number of OSHA Recordable injuries and illnesses x 200,000)/total hours worked by employees. DART rate is calculated as (total number of DART incidents x 200,000)/total hours worked by employees. LTSR is calculated as (total number lost workdays x 200,000)/total hours worked by employees.

Learning and Development

Applied Materials invests in creating growth and development opportunities for our employees to support an engaged, motivated, and dedicated workforce that will propel our business into the future.

Program Adaptations for COVID-19

The confluence of COVID-19 and the onboarding of more than 500 new hires challenged our training and development programs in 2020, requiring us to quickly develop and deploy new virtual alternatives to deliver on our plans and objectives. At the same time, we evolved the structure of our role-based employee development programs and rolled out new leadership programs in several regions, businesses, and functions, comprised of training, mentoring/coaching, and special assignment projects.

Learn more about Applieds Learning and Development program here

2020 Program Highlights

Our PATHWAY program helps each of our people plot a customized course of growing their professional skills to help Applied achieve our overall goals. In early 2021 we added a focus on future skills, identifying capabilities that will be required in the next phase of the digital age and offering coursework to achieve those needs. PATHWAY also offers flexible elective courses, enabling our people to explore additional professional skills based on personal interest and recommendations from managers.

The integrated PATHWAY platform allows employees to browse and select courses related to their job role, development plan, and skill topics critical to the company, and provides role-based recommendations for self-directed learning. To meet their requirement of completing 40 learning hours in each fiscal year, employees may supplement required and elective coursework with university-level coursework, professional accreditation or continuing-education workshops, or reading research papers.

During 2020, over 14,000 employees accessed and participated in training through the PATHWAY program.

In 2020, Applied also invested in two new management development initiatives to address growing needs from our business. First, we piloted a Team Leader program in several of our businesses and regions, equipping high-potential employees to carry out management functions like setting goals, giving feedback, and managing team effectiveness. In addition, we initiated a global Manager Forum, sparked by the need to keep our people managers informed and connected during COVID-19. This forum has evolved into a powerful channel for people manager communication and training on urgent real-time issues.

> “The global health crisis we face today is demonstrating the need to think and act differently, the value of innovating anywhere and collaborating everywhere, and the urgency to care for our planet and for one another.”

- Gary Dickerson,
CEO, Applied Materials

PATHWAY Vision and Development

FY2020: Skill Mapping

Focus on skill development, with custom skill maps to help employees search for courses related to their job role, development plan, and topics critical to the company

FY2021: Skill-Based Journeys

Build skill-based journeys (e.g., Data Analysis Track, Communication Track, etc.)

FY2022: Measure Skill Proficiency

Appraise and track employee proficiency in new skills

#14
in Training Magazine's 2021 Top 100 Rankings

2020 Learning Hours

Our successful pivot to virtual training across the organization allowed us to meet our corporate training objectives and goals for 2020. In our Applied Global Services organization, the move to virtual enabled us to increase our training capacity by more than 40% in 2020 while reducing travel-related expenses by more than $7 million.

100% of our leaders, executive-level vice presidents, and managers completed training in 2020, and 96% of full-time employees completed role-related and additional training. We have a 98% completion rate for new-hire training on our Standards of Business Conduct, with the remaining 2% receiving reminders until they fulfill their obligation.

Additional information on training related to ethics and compliance is provided here.

For additional details and breakdowns, see the Report Annex.

Learning Hours Trends and Total Hours

Learners	FY2020	FY2019	FY2018
Total individual learners (RFT)	**23,214**	21,850	20,930
Total individual learners (total workforce)	**33,759**	32,087	26,704
Total Training/ Learning Hours	**1,436,271**	**1,407,932**	**1,311,582**

Completed Training by Role	FY2020
Executive-level vice presidents	166
Executive-level directors	1637
Manager level	2439
Individual contributors	18,907
Interns	65

Human Rights

Our commitment to protecting human rights wherever we do business is formalized in our new Human Rights Statement of Principles, which Applied Materials published in June 2021.

This statement builds upon our company-wide Standards of Business Conduct, our Responsible Minerals Sourcing Policy, and our position on the California Transparency in Supply Chains Act. It also reflects common principles in key international human rights standards, including the United Nations Guiding Principles on Business and Human Rights, and aligns with the Responsible Business Alliance (RBA) Code of Conduct. These policies and statements spell out our commitments, enumerate our expectations around training and accountability for our personnel and suppliers, and lay out enforcement mechanisms for non-compliance.

Non-Discrimination: Applied Materials is committed to providing a workplace that is free of discrimination, harassment, and retaliation. We do not tolerate harassment based on race, color, national origin, ancestry, religion, age, sex, sexual orientation, gender identity, marital status, physical disability, mental disability, medical condition, genetic information, family care leave status, union membership, veteran status, or any other basis prohibited by law. Our Non-Discrimination Policy protects employees who have lodged good-faith reports of possible ethical issues or policy violations, or participated in any investigation, proceeding, or hearing. The policy addresses conduct, complaint procedure, supervisory responsibilities, responsive action, and supplemental state-specific rules.

See the Occupational Health and Safety section of this report for additional information on employee working conditions and policies. See Supply Chain Responsibility for our commitment to protecting human rights in our supply chain.

Photo taken pre-pandemic.

Protect Our Planet

We challenge ourselves to reimagine processes, materials, lifecycles, and applications to fundamentally transform the impacts of technology and drive lasting benefit to our planet.

The COVID-19 pandemic impacted nearly every aspect of our business and lives during the past year. Designated as an essential business and responding to unprecedented demand in the semiconductor industry, Applied nevertheless delivered record performance in 2020.

We view this extraordinary and challenging year as a springboard for our global goals. The tools, processes, and innovations that enabled our company to deliver during the global crisis, coupled with learnings from our Climate Risk Assessment, will help us achieve greater efficiency and footprint reductions across our business even as the world emerges from the pandemic.

We also consider this an opportunity to accelerate the sustainable transformation of our industry and of worldwide technology use. We continue to invest in renewable electricity sources, including signing a major power purchase agreement for a wind energy project that, once commercial operation commences in late 2021, is expected to be a major factor in meeting our U.S. renewable energy goal. Still, we have additional work to do to decouple our business growth from our environmental footprint. Our Scope 1 and 2 emissions in 2020 increased 5% from 2019 baseline, due to record production of our semiconductor products. We also transitioned our data tracking to a more robust system, Intelex SPI, which has required a slight restatement of our 2019 Scope 1 and 2 data. This year's report represents a more accurate reflection of our total footprint in 2019 and 2020, and we will use this data to inform our strategy as we continue to drive progress toward our aggressive 2030 climate goals.

Key Highlights

- Kept **Scope 1 and 2 emissions** nearly flat despite unprecedented demand in the semiconductor industry*
- Reduced hazardous waste in our global operations by **62%**, compared to 2019*
- Began analysis of Scope 3 carbon footprint, on track to set **Science Based Targets by 2022**
- Reduced use of water for irrigation in our global operations by **21%**, compared to 2019*

Goals and Progress

Goal	Progress	U.N. SDG
Protect our Planet		
100% of our energy globally comes from renewable sources by 2030, with an interim goal of 100% in the U.S. by 2022	30.9% of our global and 60% of our U.S. energy comes from renewable sources	7 AFFORDABLE AND CLEAN ENERGY
50% reduction in Scope 1 and Scope 2 CO_2 emissions by 2030, from 2019 baseline	Scope 1 and Scope 2 CO_2 emissions increased 5% from 2019 baseline, due to record production	13 CLIMATE ACTION

*Applied is migrating our environmental data tracking to a new, more robust system, Intelex SPI. With this transition, Applied has identified updates and corrections to its 2019 data. See the 2020 Data Annex for more details.

Climate and Energy

Through cleaner energy, improved operational efficiency, and the use of more energy-efficient building materials and equipment at our facilities, Applied Materials is working to meet our commitments for a low-carbon future.

While we expect to see the year's strong demand and business growth continue over the coming decade, we are developing strategies to ensure that our renewable energy projects and other environmental initiatives will position us well for reducing Scope 1 and Scope 2 CO_2e emissions 50% by 2030. We are also working to quantify our Scope 3 emissions inventory as we prepare to announce Scope 3 targets in 2022 as part of our commitments through the Science Based Targets initiative (SBTi).

Climate Risks

Applied Materials monitors current and emerging climate-related risks on an annual basis. Responsibility for identifying company-wide and site-specific risks rests with a core team of global emergency response, crisis management, and business continuity personnel, as well as local Environmental Health and Safety & Sustainability (EHS&S) teams and facilities teams. Our risk identification, mitigation, and management plans help ensure our ability to recover quickly from climate-related events and effectively support our customers' and suppliers' operations.

In June 2020, we undertook a third-party **Climate Risk Assessment** to identify opportunities for improving our management of climate-related risks and disclosures in line with recommendations from the Task Force on Climate-related Financial Disclosures. The assessment included a physical risk assessment utilizing three different Representative Concentration Pathways (RCPs) illustrating low, moderate, and high-risk climate change scenarios in three different years (2020 baseline, 2030, and 2050), to show both shorter- and longer-term risks. The assessment determined Applied's risk exposure across our global operations, identifying our highest-risk assets and operations based on various chronic and acute geographical climate hazard indicators.

This past year, our U.S. operations experienced some of these climate change impacts firsthand. In California, our facilities were undamaged by 2020's record-breaking wildfire season, but hazardous air quality forced us to update our buildings' air intake and filtration to MERV 13 wherever possible and distribute N95 masks to our employees. In Texas, the February 2021 winter directly affected our manufacturing operations, with power grid failures forcing a 5-day shutdown at our manufacturing facility.

In the coming years, we will perform additional scenario analyses and disclose specific cases in which the analyses have influenced business strategy and objectives. After completing our analysis of Scope 3 emissions in 2022, we will begin analyzing **transitional risks** (e.g., shifting asset values, higher costs of doing business, and carbon regulation compliance) associated with Applied's transition to a low-carbon economy.

Emissions

In 2020, Applied Materials' **Scope 1 and 2 emissions** (market-based) totaled approximately 151,300 metric tons of carbon dioxide equivalent (MT CO_2e), a 5% rise from 2019 driven primarily due to the opening of new Applied manufacturing facilities in Taiwan, process expansion in Massachusetts, and overall production and business growth to meet unprecedented demand in the semiconductor industry.

The largest part of our Scope 1 and 2 footprint is traceable to the power needs of our factories and labs and is the area of greatest additional reduction. To keep us on track toward our 100% renewable energy commitments (U.S. by 2022, global by 2030), we are evaluating increases in our renewable energy procurement.

Our Scope 2 (market-based) emissions fell to approximately 102,400 MT CO_2e in 2020, a 2% decrease from 2019. This was driven in part by partial facility closures due to COVID-19 remote-work protocols. The likely persistence of remote work options post-COVID should help us toward our Scope 1 and 2 emissions reductions goals.

As part of our commitment to setting science-based targets, we are on track toward our goal of quantifying our Scope 3 emissions inventory. By early 2020 we had already measured and established reduction strategies for emissions tied to employee travel, a category whose numbers fell nearly 71% during 2020 due to pandemic restrictions and the viability of teleconferencing. Post-COVID, Applied Materials intends to continue encouraging the use of teleconferencing and virtual platforms in lieu of travel wherever feasible. We are currently assessing details of our lifecycle tool emissions, setting baselines for tools produced by our semiconductor business, and preparing to set baselines for our display and semiconductor technologies businesses. We also anticipate quantifying Scope 3 emissions across at least 10 of the 15 categories, and completing our inventory and setting reduction targets in 2022.

Air emissions from our manufacturing processes are treated with point-of-use abatement units and facility scrubbers before being discharged to the atmosphere, consistent with local or regional air permit requirements.

Inadvertent omission of data led us to inaccurately report our 2019 Scope 1 and 2 totals as 145,400 MT CO_2e. Our actual 2019 Scope 1 and 2 emissions totaled 144,200 MT CO_2e. We have improved our internal data entry and checking systems to assure reliability, and are now working with a third-party data assurance partner.

Renewable Energy

In 2020, Applied Materials set a target of securing 100% of our global energy needs from renewables by 2030, with an intermediate step of using 100% renewable power in our U.S. operations by 2022. To enable those targets, we are following a global renewable energy strategy built around three complementary strategies:

- **On-site solar power generation:** Applied Materials maintains on-site solar generating capacity at our facilities in Singapore; Austin, TX; Sunnyvale, CA; and Xi'an, China. Combined, these arrays generated 374 MWh of clean power in 2020.
- **Virtual power purchase agreements and RECs:** Financial contracts with external solar, wind, and other renewable energy generating projects that deliver power to the grid. Each Renewable Energy Certificate (REC) provided by project owners represents the environmental benefits of 1MWh of electricity generated from renewable sources, affirming our investment in renewable power and providing reductions in our Scope 2 emissions.
- **Utility green procurement programs:** Direct purchase of renewable energy from a utility provider.

In 2020, Applied used 121,982 MWh of green power from a combination of these three sourcing strategies, representing nearly 31% of our total U.S. power needs for the year. We also signed a power purchase agreement to support a new **500-megawatt wind energy project** in Crockett County, TX. We anticipate being able to offset a large percentage of our U.S. footprint as this facility begins coming online in late 2021.

We continue to evaluate further renewable energy projects worldwide.

EPA Green Power Partnership

Applied Materials, 2020 and 2021
National Top-100 User of Green Power
Top 30 Tech and Telecom
Fortune 500® Partners

Environmental Health and Safety

Our emissions reduction efforts are only one part of Applied Materials' overall commitment to reducing our environmental impacts. Throughout our global operations, we also work continuously to reduce waste, conserve resources, ensure safe and healthy work environments for our people, and demonstrate environmental leadership in our communities.

With pandemic measures taking precedence throughout 2020, we initiated no major new conservation, efficiency, or recycling/reuse programs. Nevertheless, the fact that 70% of our people worked remotely, leaving our non-manufacturing facilities functioning at significantly reduced capacity, likely contributed to year-on-year reductions in consumption of groundwater (down by 26%) and water for irrigation (down by 21%).

Our labs and manufacturing facilities account for the largest share of our global energy and water consumption. To help reduce consumption within the semiconductor industry, we are working with our customers on our ambitious 3x30 goals, which include boosting manufacturing efficiency and driving a 30% reduction in equivalent energy consumption for our semiconductor products.

Environmental Policies, Systems, and Governance

Applied Materials' Environmental Health and Safety (EHS) policy commits our company to protecting the environment. The policy is signed by our President and CEO, distributed to all Applied locations globally, and referenced often during site team and management meetings.

Our **EHS&S organization** is an integrated entity with teams responsible for EHS in on-site operations (including construction, fire and life safety, and contractor safety), hazard and risk identification, customer site support operations, emergency preparedness, environmental management, and product safety. These efforts are supported by company management and guided by our EHS policy. The Board's Corporate Governance and Nominating Committee receives a report on EHS and sustainability matters each quarter and a more in-depth environmental and sustainability update annually.

We implement our EHS policy through our **Environmental Health and Safety Management System (EHSMS)**, which conforms with international management system standards such as ISO 14001, ISO 45001, the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) Voluntary Protection Program (VPP), and EHS documentation to the requirements of ISO 9000.

See here for more information on ISO certifications for our manufacturing sites.

Applied Materials is working on an ambitious set of goals that includes a 30% energy consumption reduction for our semiconductor products

EHS Management System

Guiding Principles

Maximizing Energy Efficiency and Reducing Emissions

- Conserving energy
- Supporting renewable energy

Design for Safety and the Environment

- Improving resource efficiency
- Designing durable/ reusable/ recyclable products
- Designing efficient facilities
- Designing safe products

Ensuring Safe Work Environments

- EHS policies and procedures
- Safe chemicals policy
- Appropriate engineering controls

Reducing Waste

- Minimizing product and packaging materials
- Reuse and recycling

Conserving Natural Resources

- Using recycled materials
- Using process water

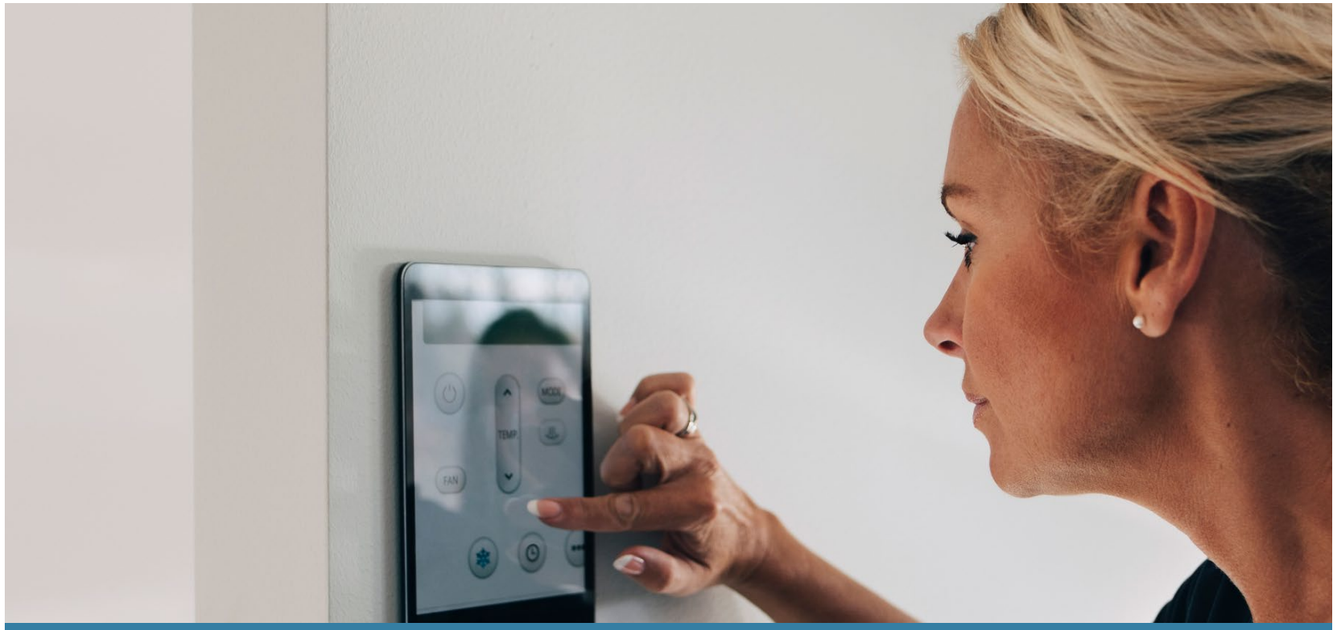
Energy Management

Applied Materials is committed to maximizing energy performance and minimizing consumption through:

- Continuously monitoring energy use and conducting energy audits
- Building optimal energy efficiency into all new facility construction
- Purchasing only the most energy-efficient new equipment
- Optimizing the temperature of water used in our operations
- Transitioning to 100% renewable energy in the U.S. by 2022 and worldwide by 2030

Recent years saw Applied's energy usage remain relatively flat despite rapid operational growth. In 2020, energy use increased as demand for our products grew.

See the Climate and Energy section of this report for more on Applied's emissions and renewable power policies and performance.



In 2019, Applied opened a second building for partial usage in Tainan, Taiwan, called **Tainan Manufacturing Center 2 (TMC2).** Awarded the Taiwan Green Building label in 2020, the center utilizes green construction materials and is outfitted with high-efficiency chillers and AI control for AC systems, high abatement efficiency for ozone-depleting gases, a high percentage of LED lighting, rainwater recycling, abundant outdoor planting, and other features promoting energy savings, efficiency, waste reduction, and employee health. Functioning as the new home to our Display manufacturing operation, TMC2 is expected to be fully operational beginning in 2023.

Waste Management

Applied is committed to minimizing waste across our locations and logistics operations, with a special focus on non-recyclable, landfill-bound waste.

Waste reduction, reuse, and recycling programs are managed at the site level, with waste management targets set for individual manufacturing sites based on the ISO 14001 framework. Site program targets are reviewed on an ongoing basis and scored annually, an approach that has led to a measurable reduction in solid waste and increased reuse and recycling of product and packaging materials.

In 2020, we achieved a nearly 34% reduction in overall waste from our 2019 performance through a combination of ongoing reduction/recycling program success and a drop in waste from office and cafeteria operations due to COVID remote work protocols. We also slightly increased our diversion rate from landfill/incineration to 80%, from 79.2% in 2019.

To reduce Applied's overall environmental impact, our facilities are working to minimize the amount of waste generated (for example, by reducing printed documentation), shifting to reusable/recyclable materials wherever possible, sorting recyclables at point of disposal, and maximizing composting of organic materials from our cafeteria operations.

See the Design for Sustainability section for information on our responsible product and packaging initiatives.

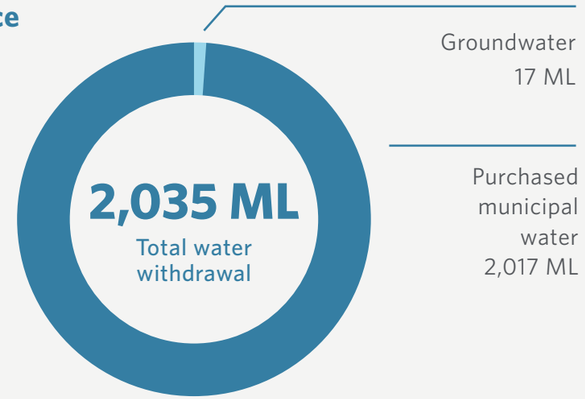
Hazardous Waste Management: Hazardous waste accounted for 2% of our annual waste output in 2020, representing a nearly 63% reduction in volume from 2019. We contract with licensed third parties to transport both solid and other waste (including hazardous waste) for off-site disposal, consistent with applicable laws and regulations. Our EHS and Sustainability organization provides additional oversight of third-party hazardous material disposal companies and ensures that all disposal sites and methods meet regulatory requirements. We also evaluate potential vendors via the CHWMEG Facility Review Program, which provides environmental, operational, and financial information on waste treatment, disposal, recycling, and storage facilities.

Wastewater Management: Applied strives to reduce the negative impacts of wastewater produced by our operations, monitoring to ensure sufficient removal of solids and adherence to permitted parameters (e.g., pH and fluoride content) before discharge to publicly owned treatment works. Each Applied facility is responsible for wastewater monitoring, with problems escalated to the site management team and applicable corporate staff for immediate correction.

2020 Waste Performance	Metric Tons
Total waste generation	**8,286.9**
Total hazardous waste*	163.6
Total non-hazardous waste	**8,123.2**
Diverted non-hazardous waste	6,629.5
Non-hazardous waste to landfill/ incineration	1,493.8
Diversion rate	80%

*Originating from Applied manufacturing facilities, including R&D and labs

Water Performance (ML) CY2020



Groundwater
17 ML

Purchased municipal water
2,017 ML

Water Management

Although Applied's operations are not conspicuously high-volume water consumers, we strive to optimize our water use efficiency across our global operations. Our R&D labs account for our highest consumption of high-quality fresh water, followed by our manufacturing operations, routine use at our offices, and landscape irrigation around our properties. In manufacturing, only a few of our toolsets require significant water, with others relying on efficient closed-loop cooling systems. In 2020, our total water withdrawal rose by 3.7% over 2019, owing to increased production and research and development demands. Our use of water for irrigation purposes at our facilities fell by nearly 21%.

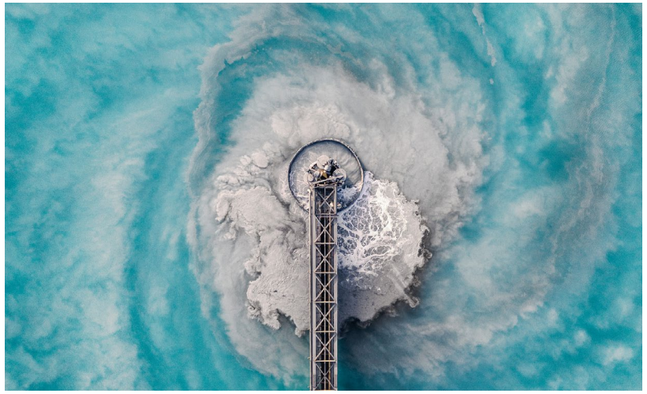
Facilities groups are responsible for water use management at specific Applied sites, with oversight from the company's EHS&S organization. Our Managing Director of EHS&S is responsible for ensuring that water-related risks and minimization opportunities are assessed as appropriate. Water reduction is covered under our EHS policy and ISO 14001 EHSMS, which call for our business operations to identify opportunities and make continual improvements on environmental preservation and natural resource conservation, and to meet or exceed all relevant regulatory requirements.

Our water conservation efforts include:

- **Water recycling and reuse** for applications that do not require potability, especially cooling and landscape irrigation
- **Designing water-efficient products,** following best practices for tool design and specifications for water use outlined in the SEMI industry requirements
- **Rainwater collection** for use in landscaping or non-production needs (at our Singapore Operations Center and Tainan Manufacturing Center 2)
- **Drought-tolerant landscaping and smart irrigation** to reduce the number of watering days

Looking forward, Applied is developing an official policy focused on the continued reduction of water use and consumption, reuse and recycling where feasible, and improved measurement and documentation of our water use. We are also conducting physical risk assessments of potential adverse climate change impacts to our global manufacturing facilities, including water-related impacts.

Assessing Water Risk: To gauge our water risks and identify water-stressed regions around the world, Applied Materials uses widely accepted tools such as the World Resources Institute (WRI) Aqueduct Tool and Aqueduct Water Risk Atlas. In 2020, 14% of our total water withdrawal occurred in water-stressed locations, notably at our California R&D facility. Our other most significant water risk is tied to changing demand as customers seek ever more sustainable products. We are responding to this risk by innovating more water-efficient tools.



Water Discharge and Wastewater: Applied Materials recognizes our responsibility to protect water sources in the communities where we operate, and to promote strong water stewardship practices throughout our value chain. To minimize both water consumption and wastewater discharge, our facilities recycle and reuse as much water as possible for cooling, landscaping, and other uses. Water that cannot be recycled or reused undergoes careful quality monitoring and is pre-treated consistent with local laws, regulations, and permit requirements before being discharged to publicly owned treatment works. Each Applied facility is responsible for wastewater monitoring, with issues escalated to the site management team and applicable corporate staff for immediate resolution.

Water Reclamation in Austin: In Austin, TX, our largest wet tool manufacturing facility operates an Industrial Waste Neutralization (IWN) program, reusing treated industrial wastewater in the cooling towers that provide building temperature management. The system provides over 90% of total cooling tower make-up water in cold months, and augments the original make-up water source during hotter months. Since 2017, the IWN system has reduced our usage of potable water by approximately 104 megaliters.

Innovate for Progress

We embrace our unique opportunity to shape and empower a more inclusive and sustainable future by delivering transformative innovation that works in harmony with nature.

The core of Applied Materials' 2030 sustainability vision is our commitment to innovating transformative solutions that empower a digital society. As the leader in materials engineering solutions used to produce virtually every new chip and advanced display in the world, we recognize Applied has an exceptional opportunity to effect change across the technology industry.

Throughout 2020 and into 2021, we have been strengthening our infrastructure to transform our own portfolio and advance our customers' roadmaps for a more sustainable future. We are taking an end-to-end, data-driven approach to identify opportunities across our full network manufacturing, logistics, and supply chain—and focusing where we can have the greatest impact.

Our Design for Sustainability Center of Excellence is driving groundbreaking sustainability innovation across our product lines, resulting in lower consumption and cost savings for both Applied and our customers.

We are piloting new packaging solutions to reduce weight and waste and increase recyclability, and shifting to intermodal shipping, which will significantly decrease the carbon footprint associated with airfreight. Following the launch of our new Supply Chain Certification for Environmental and Social Sustainability (SuCCESS2030) initiative in July 2020, we established a SuCCESS2030 Center to oversee and support implementation.

Through our single and two-layer recyclable flexible packaging product innovations, we are working to address one of the world's largest contributors to ocean pollution and other environmental degradation: discarded food and consumer product packaging. We are developing packaging materials that are more easily recyclable and working with partners to innovate renewable and biodegradable paper-based materials that deliver the barrier performance needed to extend product shelf life and reduce food waste.

Key Highlights

- Launched the **Growth Technical Advisory Board** to accelerate technology solutions that address global challenges
- Expanded scope of Design for Sustainability COE to **design, model, test, and quantify innovations that reduce environmental impact** across our portfolio and business units
- Shifted **75%** of airfreight between China and Singapore to **lower-emission road freight**
- Established the **SuCCESS2030 Office** to oversee metrics and conduct compliance audits, training, and coordination with participating suppliers
- Reduced the **weight of our packaging** crate design by **50%**
- Advanced innovations in recyclable mono- and two-layer **flexible packaging solutions**

Goal	Progress	U.N. SDG
3x30 Goals		
Reduce equivalent energy consumption for semiconductor products by 30% by 2030	Set energy consumption baseline for semiconductor products (2019 basis) and completed key energy use models	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Reduce chemical consumption for semiconductor products by 30% by 2030	Established chemical impact metric and completed key chemical impact models	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Reduce tool footprint per production-unit ratio (sqm/wph) for semiconductor products by 30% by 2030	Completed key models for tool footprint to production rate ratios	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
SuCCESS2030 Goals		
Reduce supply chain carbon emissions by moving from airfreight to intermodal shipping, with interim emissions reduction target of 15% by 2024	Conducted pilot tests to demonstrate the feasibility of intermodal shipping; our progress was slowed by the unprecedented demand for semiconductor products in 2020	13 CLIMATE ACTION
Transition the supply chain to recyclable content packaging,* with a target of 80% by end of 2023	Achieved nearly 60% recyclable packaging in 2020	12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Goal	Progress	U.N. SDG
SuCCESS2030 Goals (continued)		
Eliminate 100% of phosphate-based pre-treatment of metal surfaces by 2024	Conducting pilot trials and evaluating results	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Increase the percentage of spend with, and representation of, women- and minority-owned businesses by 2024	On track to increase global diverse supplier spend by 2% year-over-year	5 GENDER EQUALITY 10 REDUCED INEQUALITIES
Comply with RBA Code of Conduct and Applied Materials' Standards of Business Conduct	Developed supply chain ESG risk assessment model; conducted supplier training and outreach and initiated supplier audits	5 GENDER EQUALITY 10 REDUCED INEQUALITIES

* In our 2019 Sustainability Report, we erroneously committed to a goal of transitioning to recycled content packaging, rather than recyclable content packaging. While we use recycled content in packaging when it meets performance specifications (e.g., stacking strength, plastic purity), it is infeasible for all applications.

Design for Sustainability

In the same way our innovations make possible the technology shaping the future, our innovations in sustainable design are helping lead the technology industry toward cleaner, greener manufacturing.

Since 2018, all in-development Applied Materials products and processes across our semiconductor business lines reflect the application of "Design for Sustainability" methods and principles, which focus on designing long-lasting and reusable or recyclable products to minimize the use of natural resources and help our customers boost sustainability in their own manufacturing operations.

In our semiconductor business, we continue to work with our customers to drive our ten-year 3x30 goals, seeking to reduce the high energy and chemical impacts of semiconductor manufacturing industry-wide.

Covering both designed-in efficiencies in new products and processes and hardware/software improvements for existing products, our comprehensive, industry-leading effort encompasses three core elements:

- **Our Design for Sustainability Center of Excellence (CoE)**, which includes a dedicated lab in India, providing design support for more sustainable technologies and processes
- **A proprietary modeling tool**, quantifying energy, chemical, and footprint impacts of past, present, and future tool designs
- **A dedicated customer effort**, ensuring our tools and processes can deliver broad benefit to the planet

As a result of our Design for Sustainability program, we have active sustainability development projects across our SPG product lines.

Consistent Quality, Consistent Improvement

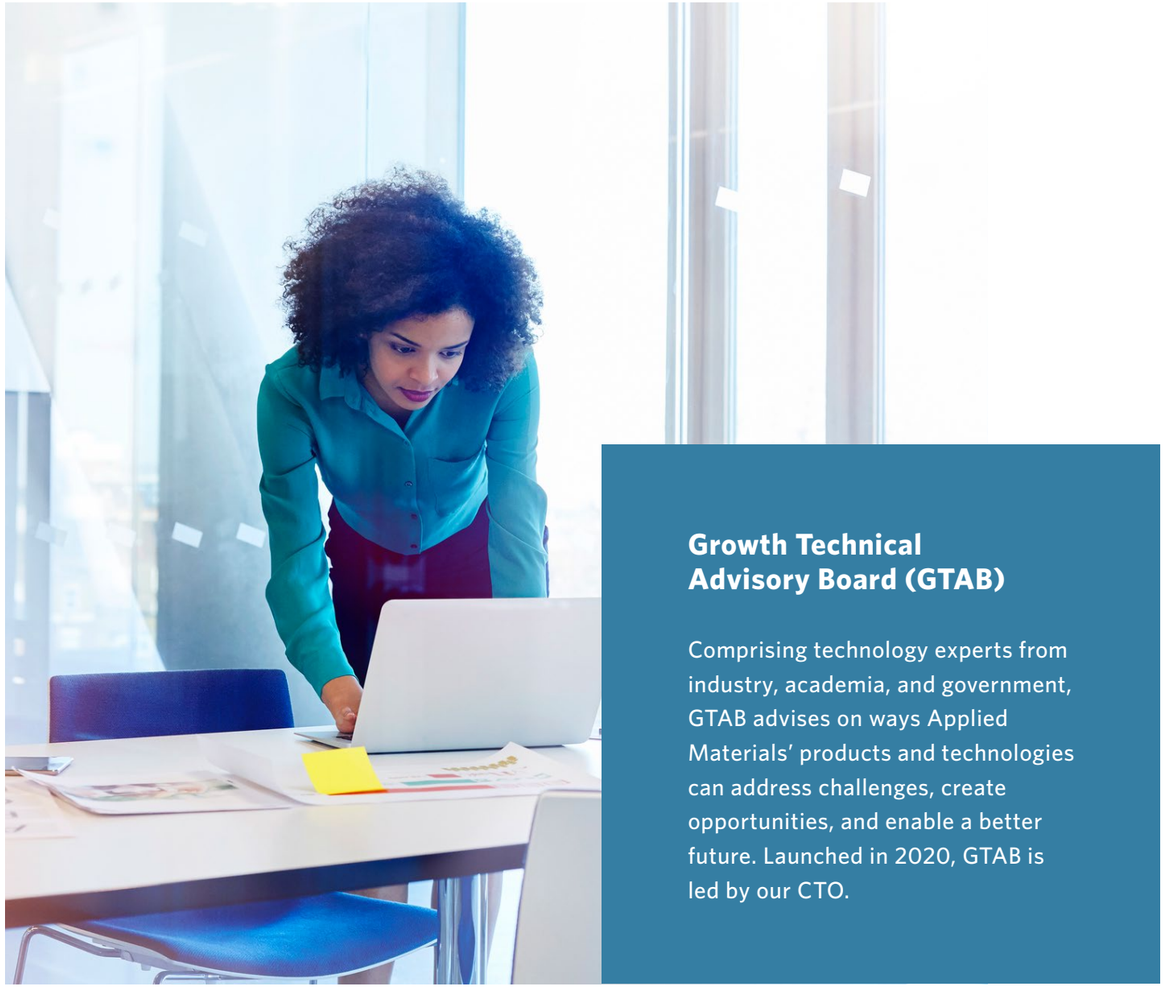
Among other quality certifications, Applied is globally certified to ISO 9001:2015 for quality management.

Design for Sustainability Center of Excellence

Part of our Systems Engineering organization, Applied's Design for Sustainability CoE analyzes both in-design and existing semiconductor product sets to identify new energy, water, waste, and chemical reduction opportunities.

With this design support, our product groups' responsibilities extend beyond traditional performance attributes to encompass sustainability performance as well—adding new features to our existing portfolio of energy-saving product enhancements, passing on substantial energy saving opportunities to our customers, and modeling sustainability leadership industry-wide.

In Bengaluru, India, our concept and prototyping lab works closely with our CoE and U.S. labs, doing development work dedicated to improving sustainability performance—for example, redesigning chillers and chilling processes to reduce energy and water consumption, locating sensors optimally to collect data and inform sustainability improvements, etc.



Growth Technical Advisory Board (GTAB)

Comprising technology experts from industry, academia, and government, GTAB advises on ways Applied Materials' products and technologies can address challenges, create opportunities, and enable a better future. Launched in 2020, GTAB is led by our CTO.

Modeling Sustainability and Efficiency

Designed in-house, our web-based modeling and quantification tool analyzes design and end-user data to pinpoint sustainability improvements for legacy, in-production, and design-stage semiconductor manufacturing tools. Modeling efforts focus on our 3x30 goals of reducing energy use, chemical consumption, and the equipment's physical footprint to increase throughput density per square foot of cleanroom space. Where possible, we try to create standardized methodologies that drive reductions across multiple tools.

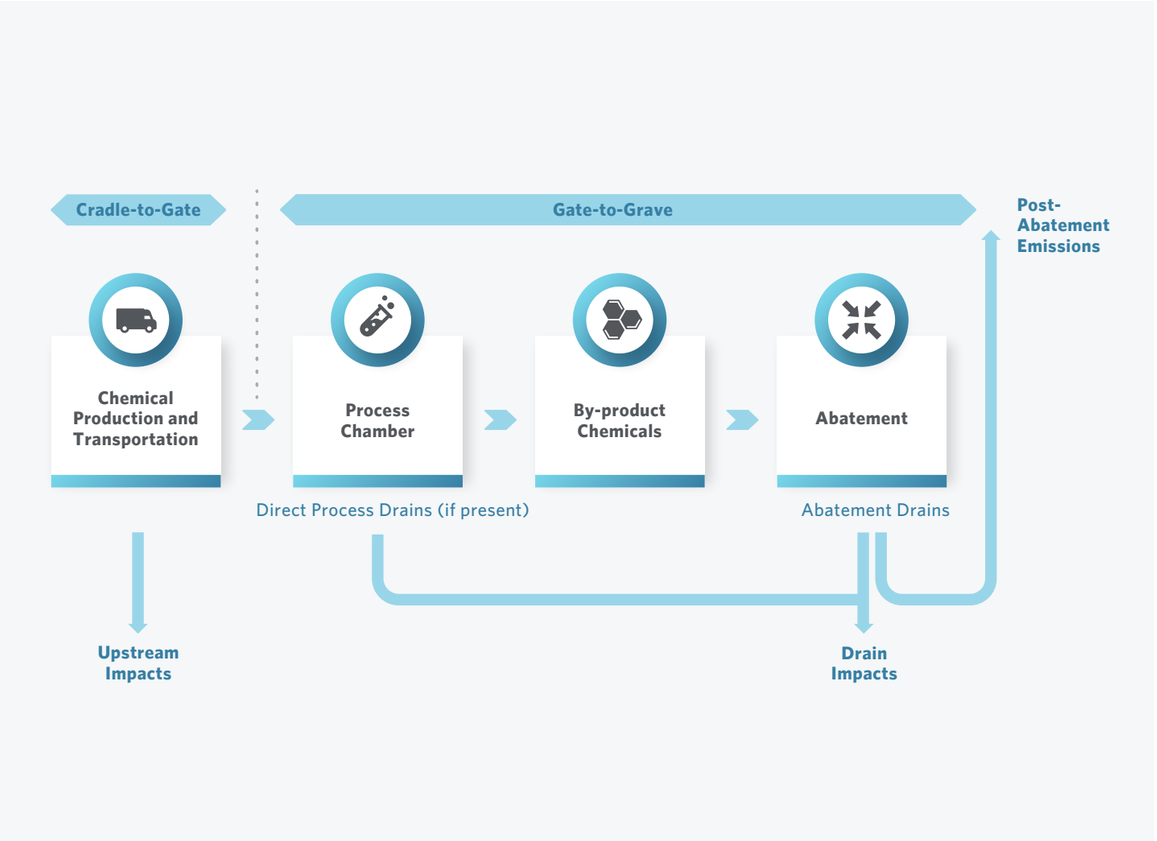
Analysis of tools in the design stage provides design engineers with data on the tool's projected resource consumption and other environmental impacts, allowing improvements before the tool goes into production. Analysis of existing tools supports identification of process efficiency improvements that we can communicate to our customers to boost sustainability performance.

To date, our analyses have focused primarily on energy consumption, examining every tool component for potential savings, with a particular focus on components known to be particularly energy-intense (heater chuck, chillers, pumps, etc.). These analyses have surfaced insights we've used to deploy energy-reduction projects with multiple customers.

Our analyses to support tool footprint reductions have also yielded real-world success, leading to design changes that will shave nearly 20% off the footprint of certain tool sets in their next generation.

As of mid-2021, we are nearing completion of our first-in-the-industry chemical consumption analysis and expect to begin leveraging these results for design and process improvements before year-end.

3x30 Chemical Impact Metric



Cradle-to-grave envelope captures global warming impact from production/transport of input chemicals to post-abatement wafer process emissons.

OLED Displays: Superior Viewing and Efficiency

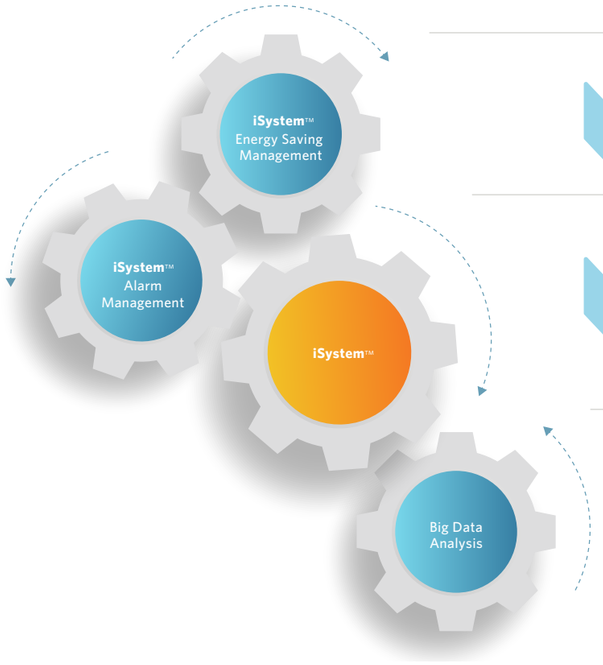
In the 2000s, Applied Materials' advanced equipment ushered in the era of flat-panel LCD displays, a transformative technology that consumes less than half the energy of older CRT displays. Now Applied's displays business is poised to drive the next evolution in screen technology through tools that simplify fabrication of OLED (organic light-emitting diode) displays, driving down production costs and consumer prices.

Unlike LCDs, which use liquid crystals to modulate light from an always-on backlight unit, the pixels in OLED technology are self-illuminating. This simplified architecture makes possible thinner and more flexible panels with superior color range and contrast, cooler running temperatures, and lower energy consumption. Since OLED screens consume power in direct ratio to the brightness of the picture they're displaying, darker display colors, modes, and schemes consume between 30% and 60% less energy than LCDs in similar display modes.

Leading Industry-Wide Change

Through our focus on improving the sustainability performance of new and existing tools, Applied Materials is helping semiconductor manufacturers realize substantial energy savings, meet their own sustainability goals, and shrink the industry's overall energy and chemical footprint.

Recently, Applied partnered with one of our key customers, TSMC, to introduce our iSystem™ intelligent controller at its Fab 15B facility in Taichung City, Taiwan. Collecting data from the operation of semiconductor fabrication tools, iSystem™ enables tracking of resource consumption, GHG emissions, and other environmental factors. At TSMC, energy-saving measures developed from iSystem™ data have resulted in annual savings of 13.4 million kWh of electricity, GHG reductions of 13,800 MT CO_2e, and cost benefits of NT$85 million (US$3 million).



Achieve Energy Saving Efficiency

- All-time and dynamic energy saving
- Development of Sleep Mode and Rest Mode

Ensure Energy Saving Performance

- Adoption of ISO 50001 EnMS and Development of EnPI and EnB, and automatic calculation of energy saving
- Development of alarm management system and energy reporting system to precisely manage energy usage

Learn more here

TSMC also recently announced sustainability advances in its supplier collaborations aimed at developing green fab equipment for chip manufacturing. Applied is a key partner in this initiative, helping TSMC achieve a major milestone of 200 GWh energy savings for N5/N3 nodes.

Working closely with another leading-edge customer, Applied Materials has implemented process equipment improvements that are expected to enable annual consumption reductions of:

- >185,000 liters nitrogen trifluoride (NF3), eliminating ~9,000 MT CO_2e upstream and downstream impacts
- 24.5 million liters de-ionized (DI) water, saving an equivalent amount in city water consumption plus the >220 MWh energy required for its conversion to high-purity DI water
- 8.2 million liters helium (a non-renewable resource), eliminating 32 MT CO_2e from manufacturing energy

In 2020, we achieved reductions of >30% in area per wafer pass on selected products for metal deposition, dielectric deposition, and ALD, and a >18% reduction in selected etch process products. Available energy-saving features on our CMP and Epi products reduced energy consumption by >5% and >7%, respectively. Product enhancements have also resulted in savings through optimizing the flow of Clean Dry Air (CDA) and chilled water, reducing chemical exhaust by switching heat-exchange settings and reducing pump speeds, and introducing an idle/sleep mode setting when tools are not processing wafers. Implementing peripheral components with the ability to operate at less than maximum power is a key enabler of reducing total tool energy consumption.

A robust communications program informs our customers of new tools, upgrades to their existing systems, and advanced service products, stressing yield improvements, cost reductions, and sustainability benefits.

Promoting the Circular Economy

Applied Materials works to promote the circular economy vision by eliminating waste through design, creating efficiencies across the product lifecycle and employing materials that can be reused or recycled at the end of a product's functional life.

Remanufacturing Semiconductor Systems and Parts

Our systems are designed to last, to support upgrades and repurposing for new applications, and to be easily repairable if parts fail or performance falls below acceptable standards. To support the sustainability, speed, and cost-effectiveness of these operations, we maintain a two-pronged approach to spare parts: engineering our newly manufactured parts for greater repairability and using refurbished parts whenever possible for repair and remanufacture.

Expanding repairability: The process of converting from consumable to repairable parts is continuous, resulting in our percentage of repairable parts increasing from 65% to over 70% over the past three years. In a cross-functional effort, our product design and manufacturing engineers identify parts that can be reengineered for repairability, while parts and service engineers from our Applied Global Services (AGS) business collaborate to develop service routines and grow their familiarity with process operations, parts, kits, and replacement cycles.

Recovery and reuse: Within AGS, a dedicated team specializes in recovering parts and assemblies from the market and reconditioning them for reuse, reducing our manufacturing operation's need for virgin materials. Each recovered part goes through an exacting process of inspection, decontamination, refurbishment, and repair, and is then recertified by AGS as "like new" for reuse and recirculation, with a full warranty and the same service level as a new part. On average, 40% of the parts used for servicing Applied Materials tools have been refurbished after previous use in an Applied system. We are constantly improving our refurbishment processes to grow that number by encompassing more part categories—for example, electrostatic chucks, whose reuse rate has increased 11% over the past three years. We maintain one of the industry's largest global inventories of spare parts, with recovered parts searchable in our inventory management system and ready to be pulled for cleaning and reconditioning.

Enabling Recycling of Flexible Packaging

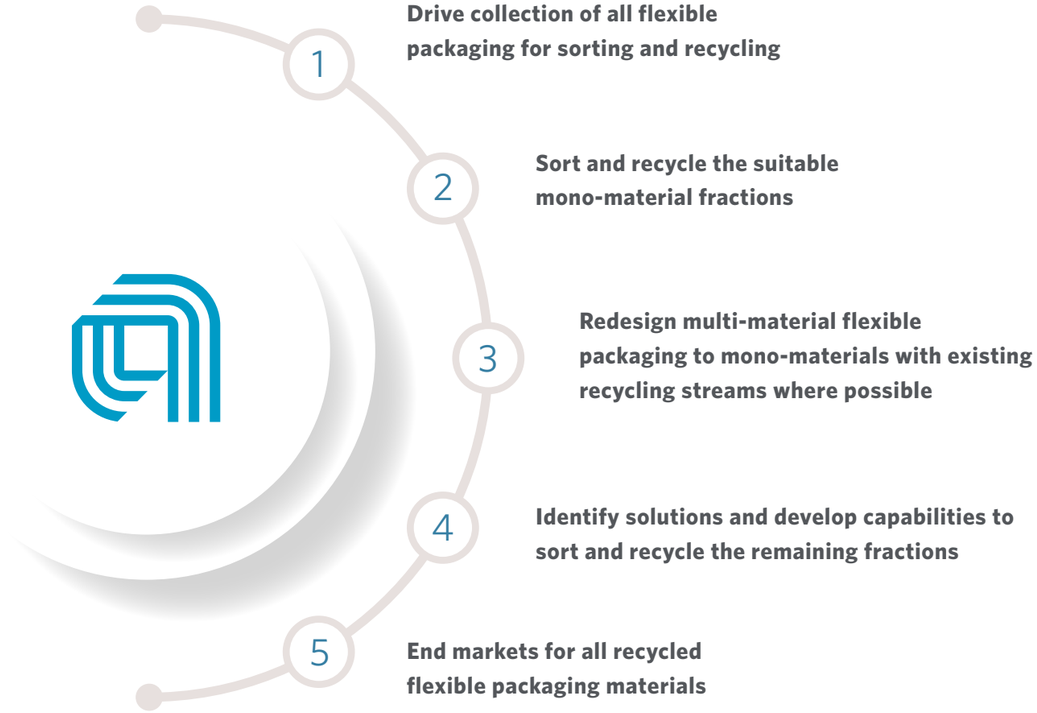
At our Flexible Technology Group business unit in Germany, our sales, business development, and design functions are working with customers to develop new solutions to increase the recyclability of food packaging materials. Spurred by impending regulatory targets for reducing packaging waste, companies are committing to a full transition to biodegradable, recyclable, or renewable materials within the decade, and leveraging Applied's expertise with roll-to-roll vacuum coating systems to help them get there.

The focus of this work is replacing aluminum foil layers with barrier films made on our tools that enable the transition to more easily recyclable structures made from a single polymer material (e.g., all-polypropylene pouches). We are partnering with various companies to find ways to create barrier paper that is both renewable and biodegradable. Applied Materials' oxide coating technology is also enabling improvements to the barrier of new pouches made from BOPEF film, a 100% bio-based polyester created from renewable feedstocks.

Through these and other solutions, we're helping to build a circular economy that retains the value embedded in packaged food by extending shelf life and preventing food waste (which accounts for as much as one eighth of global GhG emissions), while also mitigating packaging's effects on our land, seas, and resources.

Building a Circular Economy for Flexible Packaging

Applied Materials is a member of **CEFLEX**, a collaborative initiative representing the full value chain of flexible packaging. CEFLEX stakeholders have endorsed a **five-step roadmap to building a circular economy** for flexible packaging, together with needed actions in each part of the value chain to make it happen.



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Product Safety

Applied Materials develops and implements comprehensive product design, manufacturing, labeling, and testing policies and programs to ensure our products are safe to use and comply with applicable legal requirements and industry standards and guidelines. Third-party assessments validate that our products meet applicable safety requirements.

We follow all relevant country- and region-specific requirements. For example, products distributed in China are marked with a mandatory "China RoHS 25" label to comply with the administrative measure on the control of pollution from electronic information products. Products sold in the European Union comply with regional manufacturing and labeling requirements, including the CE mark affirming conformity with European health, safety, and environmental standards. Products sold in the UK bear the similar UKCA (UK Conformity Assessed) mark.

Any business unit or group that develops, sells, or distributes products ensures such products have been engineered to protect personnel, the user's facilities, and the environment from exposure to risks, and that any residual risks remain below a minimum acceptable level when the products are operated, maintained, and serviced in accordance with the instructions and information provided to the user. Our Product Safety group partners with other company functions to oversee the design of products and services, monitors their safety during the product's lifecycle, and drives compliance with our product safety policy and procedures.

Risk Assessment

Our risk-assessment standards follow the applicable SEMI S10 industry risk assessment guideline, with potential enhancements currently under review.

Supply Chain Responsibility

In 2020, Applied Materials introduced our new SuCCESS2030 initiative, a 10-year roadmap that extends our sustainability vision across our supply chain for semiconductor and display manufacturing.

Under SuCCESS2030, Applied's assessments of supplier performance and capabilities now require shared commitments in five main ESG focus areas, most of which include defined performance targets. In three of these areas, we are running pilot programs to test efficiency and waste-reduction processes, with the intention of sharing key learnings with our supplier partners, magnifying positive impacts across the industry.

- **Supplier Responsibility, Engagement, and Assessment**: Applied strives to be a partner to our suppliers, providing resources, guidelines, tools, and trainings to build capacity on advancing sustainable practices and supporting our suppliers and their sub-tier suppliers in their efforts to conform to the Responsible Business Alliance (RBA) code of conduct. From this baseline, we can better gauge progress using RBA assessments and audits.

- **Packaging:** Our precision tools and products require carefully designed packaging to avoid damage during transport, and we are continuously exploring reuse, reduction, and recycling options. We are piloting the balance of all three with certain packaging materials and types. Cases and crates are designed for reuse, whereas boxes contain recyclable content such as corrugated fiberboard and plastics. Testing and measurement drive the feasibility of reducing the use of virgin materials. Our goal is to reach 80% recyclable content for targeted plastics and corrugated fiberboard by year-end 2023.

- **Transportation and Logistics:** To reduce emissions from airfreight, we are exploring use of intermodal shipping options that can deliver product within a reasonable time frame. As an interim goal, we have a target of using these methods to achieve a 15% reduction in logistics GHG emissions by year-end 2023.

- **Wastewater:** Though our own operations are neither water-intensive nor large emitters of wastewater, we are cognizant of the need to reduce our industry's large footprint in both areas. Currently, we are piloting a program to test the efficacy of removing all phosphates used in pre-treatment of metal surfaces and shifting to zinc oxide. Our goal is to eliminate 100% of phosphates employed in this process by year-end 2023, throughout our supply chain.

- **Inclusion and Supplier Diversity**: Mirroring our own I&D journey, SuCCESS2030 promotes development of robust diversity strategies throughout our supply chain. Our own near-term supplier diversity targets include increased representation of women and other underrepresented groups and increased percentage spend with women- and minority-owned businesses, all by 2024. We are also working with our trade associations to significantly grow the pipeline of diverse talent available to the industry by 2030.

SuCCESS2030 strengthens Applied's ESG supply chain strategy, building on our foundation of supporting ethical labor practices, environmentally responsible operations, responsible minerals sourcing, and other programs promoting adherence to industry standards and international human rights standards. SuCCESS2030 is managed through our new SuCCESS2030 Office, which oversees metrics and compliance audits and conducts training and coordination with participating suppliers.

Supplier Engagement, Training, and Assessment

SuCCESS2030 is a series of best practices for building a more sustainable business, society, and planet. As we raise the bar, we're also building our suppliers' competencies to reach it.

Contract Obligations

For direct suppliers, our ESG requirements are incorporated into our Global Supplier Agreements and other supplier agreements via our "Supplier ESG Requirements" attachment, and are also included in the terms and conditions for all purchase-order transactions. These requirements are also enumerated in our most commonly used agreements for indirect services. In 2021, we are adding the requirements to logistics supplier terms. By contract as applicable, Applied's supplier are required to:

- Implement Applied's Standards of Business Conduct and the RBA Code of Conduct in their own operations and ensure RBA code compliance among their sub-tier suppliers
- Comply with our Responsible Minerals Sourcing Policy and meet related statutory and regulatory requirements
- Meet Applied's other environmental, social, and governance requirements in their own operations and ensure compliance among their sub-tier suppliers
- Comply with Applied's Environmental Health and Safety Policy and "any applicable environmental, health or safety law, rule, regulation, order, decree or ordinance"
- Comply with Applied's minimum product EHS requirements
- Comply with the California Transparency in Supply Chains Act of 2010, addressing the risk of slavery and human trafficking in supply chains
- Provide information requested by Applied to enable our company to comply with material content restriction regulations, including but not limited to REACH (EC number 1907/2006) and the U.S. Toxic Substances Control Act

Engagement and Training

We want this work to be a partnership, with collaboration driving benefit to all parties. In 2021, we began offering a structured program of webinars, trainings, and assistance to help our suppliers close any gaps across our ESG focus areas:

- Weekly live webinars on each key area of ESG focus
- Online training on Applied Materials Supply Chain ESG Requirements
- Training through the RBA e-Learning Academy and RBA workshops
- Ability to contract for social responsibility and sustainability assistance from a consultant at pre-negotiated rates

Our Applied commodity business managers are required to complete these trainings, assuring that the people who engage most frequently with our suppliers can knowledgeably communicate our sustainability expectations.

These SuCCESS2030 trainings extend our existing supplier training program, which offers web-based training on our Standards of Business Conduct, EHS trainings on maintaining safe work environments, and other resources related to our policies and procedures.

Supplier Assessments and Audit

Applied Materials employs a metrics-based approach to assessing supply chain ESG risks and reflects these assessments in our supplier scorecards. To secure baseline data, we require subsets of our suppliers (as applicable) to:

- Complete annual self-assessment questionnaires to measure their conformance to the RBA Code of Conduct (top 80% of direct suppliers, by spend)
- Submit Conflict Minerals Reporting Templates as part of our Conflict Minerals due diligence
- Report on their performance under environmental regulations

We conduct detailed evaluations of reported information and assign suppliers risk scores using a weighted risk matrix that encompasses ESG and other risk indicators. Rather than focusing corrective action solely on suppliers identified as high ESG risks, we are implementing our SuCCESS2030 holistically, identifying gaps at every level and giving suppliers the resources and tools they need to comply and thrive.

Internal audits of suppliers identified as having high ESG risk began in 2020, though COVID-19 forced us to curtail a planned pilot program of on-site ESG audits for certain high-risk direct suppliers. Consistent with RBA provisions, Applied required 25% of our high-risk suppliers to undergo an RBA external audit in 2020. This percentage grew to 33% in 2021 and will reach 50% in 2022. We have contracted with an RBA-approved third-party audit firm to conduct such audits consistent with RBA audit standards.

Protecting Human Rights in Our Supply Chain

Applied Materials is unequivocally committed to protecting human rights and conducting business in an ethical and responsible manner around the world. We condemn and are committed to ending forced and bonded labor in all its forms, including child labor, indentured labor, slavery, and human trafficking.

Our commitment to protecting human rights wherever we do business is detailed in the policies and statements listed on page 41. We communicate our human rights commitments and requirements clearly to our supply chain and business partners to ensure compliance with our expectations around humane treatment of the workforce and forbidding forced and bonded labor. We conduct due diligence on human rights risk in our supply chain, and flag zero-tolerance issues in our supplier scorecards.

View our Human Rights Statement of Principles here.

Responsible Minerals Sourcing

Applied Materials is committed to the responsible sourcing of minerals used in our products.

Key to this commitment is our policy around tantalum, tin, tungsten, and gold, commonly referred to as 3TG or conflict minerals for their frequent origin in the Democratic Republic of Congo (DRC) and adjoining countries affected by conflict and human rights abuses.

While our products include components manufactured with 3TG minerals, we neither purchase these minerals directly nor maintain any direct relationship with mines, smelters, or refiners that process these minerals. To communicate our commitment to due diligence and disclosure and guide our direct suppliers' sourcing of 3TG minerals, we adopted a Responsible Minerals Sourcing Policy in 2020. To assure the efficacy of our policy, we utilize the Responsible Minerals Initiative (RMI) Responsible Minerals Assurance Process as well as independent third-party audits. In calendar 2020, we increased the number of suppliers we surveyed as part of our due diligence efforts by approximately 58% over 2019, to cover 91% of our total supplier spend (versus 80% in 2019). We have maintained a near 100% response rate to the Conflict Minerals Reporting Template issued to suppliers.

In 2020, we extended our responsible minerals commitment beyond 3TG by conducting due diligence on our supply chain's use of cobalt, a frequently DRC-sourced mineral that has been tied to child labor, unsafe working conditions, and adverse environmental impacts. This effort, which encompassed suppliers likely to employ cobalt in products sold to Applied Materials (and who represent 42% of our annual spend), garnered an 86% response rate. Looking ahead, we intend to expand due diligence to the copper, nickel, lead, zinc, and mica used in our products, consistent with RMI guidance.

Packaging Reduction and Reuse

Our precision products require carefully designed packaging to avoid damage from shock and vibration during transport.

In 2020, approximately 60% of our packaging materials were made from recyclable materials (polyethylene, polypropylene, corrugated fiberboard, steel, and wood), many of which are also reusable. In 2021, we are developing new specifications that require suppliers to report materials data to enable better tracking of our packaging's recyclable content. Other current initiatives include:

Lighter Polyethylene Bags

To save materials, we are moving from 6 mil to 4 mil thickness for our low-density polyethylene (LDPE) bags. As of mid-2021, the changeover is 90% complete at our Singapore manufacturing facility.

Hybrid Crate Design

In Q2 2021, we began replacing cleated-plywood and lumber crates with hybrid crates for lighter product shipments. Using the same wooden base but replacing the top with corrugated kraft board, the new crates offer a 50% reduction in packaging weight, saving the equivalent of 3,917 trees annually. They also cut transport emissions and packaging material cost, ease recycling, and increase safety for freight handlers. Parts inside are well-packed and fully moisture-barrier bagged. In one recent shipment, the new crates saved 208 pounds in shipping weight.

Reusable Packaging

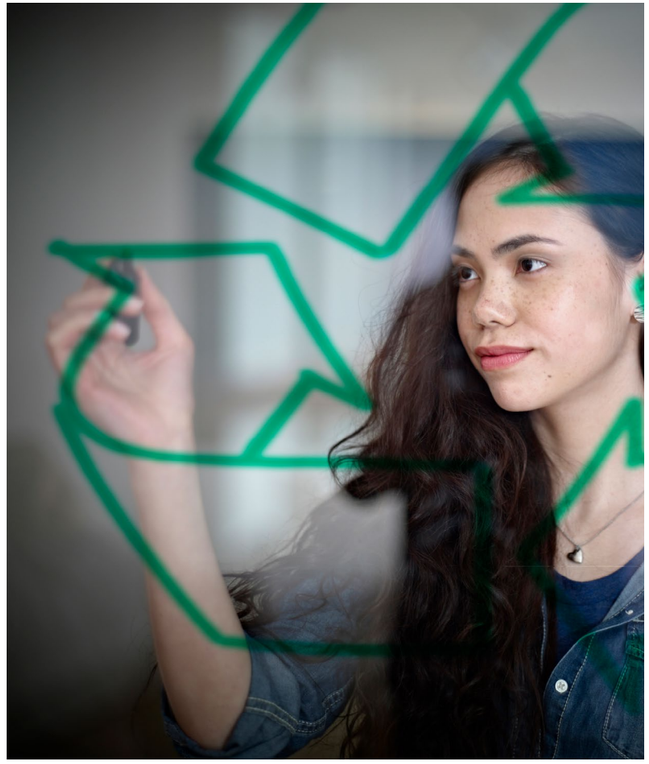
In 2021, we began piloting a program to collect packaging materials (wooden crates, metal fixtures) post-install from customer sites and return them to the manufacturing location for reuse. Beginning with a domestic loop from Singapore, we are testing international loops in Q3 2021. A current pilot project is using our Logistics Tracking System to enable packaging collection and reuse. We are also exploring a reusability process for our 500-pound pallets.

Reusable Packaging Labels

In 2020, we introduced new labels that communicate to the end user that the packaging is reusable and must not be discarded.

Waste Reduction

To keep our packaging out of landfills, Applied prohibits the use of non-recyclable materials such as Styrofoam. We also plan to restrict the use of non-recyclable and environmentally burdening materials such as PVC and toxic foams.



Transportation and Logistics

In line with our SuCCESS2030 emissions-reduction goals, Applied Materials is taking steps to shift our airfreight operations to lower-emission modes such as road and ocean transport. Additional cross-functional planning allows us to buffer against slower shipping times, preventing negative impact on operations.

In July and November 2020, respectively, we began the process of shifting from air to road transport for freight from Vietnam and China to Singapore. On the Vietnam to Singapore route, we've succeeded in shifting nearly 100% of shipments. The China-to-Singapore shift currently stands at approximately 75%. In Rehovot, Israel, we were able to divert 51% of air-shipments to sea-shipments during 2020, reflecting an overall increase of 5% compared to 2019. Ninety-five percent of these shipments were imported from suppliers located in Asia.

We are also piloting a process of moving to ocean transport for trans-Pacific deliveries. Shipping and port-operations constraints during COVID-19 have limited our ability to expand that shift, but our work setting processes and procedures will facilitate a quicker rollout once conditions and shipping capacity improve.

Austin: Better Logistics, Smaller Footprint

In Austin, TX, consolidation from multiple regional sites into our new, purpose-built logistics center will dramatically reduce our overall footprint, significantly cutting electricity consumption and intercampus transportation emissions and costs. Rooftop solar panels will allow us to offset 40% of the new building's total electrical consumption, further reducing our environmental impacts. The new center will begin operation in January 2022, with consolidation expected by year-end.

Supplier Diversity

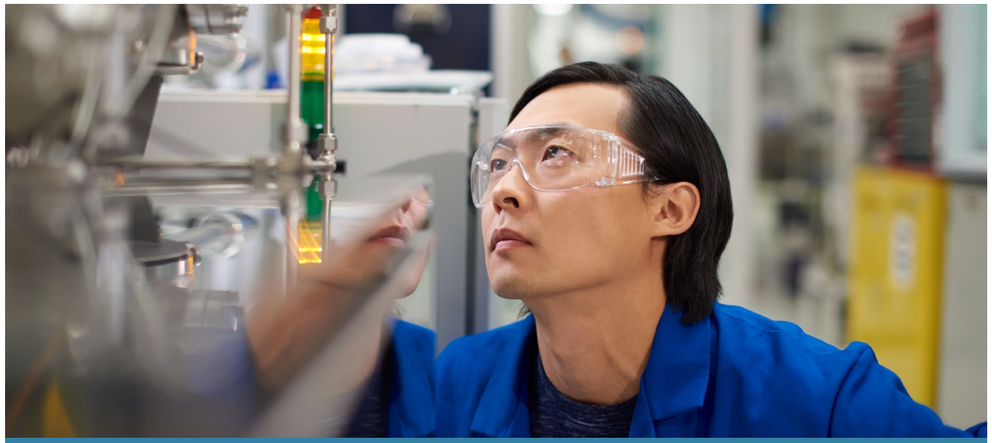
To Make Possible a Better Future, Applied Materials' inclusion and diversity efforts cannot be limited to our own workforce goals but must extend to our supply chain—an imperative the social justice movement brought into stark clarity in 2020.

With our supplier diversity program as one of the main pillars of SuCCESS2030, we have committed to increasing our diverse spend by at least 2% year on year, through both existing and newly onboarded diverse suppliers. In addition, we are partnering with existing suppliers to pursue their diversity certifications through the National Minority Supplier Diversity Council (NMSDC) and Women's Business Enterprise National Council (WBENC).

Beyond expanding our diverse supplier base, we are also working to integrate equity and inclusion across our procurement operations, adding resiliency to our supply chain. As our supplier diversity initiative grows, we are using the RGMA Five Levels of Supplier Diversity framework to measure our progress in alignment with other supplier diversity programs. Our near-term objectives include:

- Hiring a dedicated mid-level professional to manage our supplier diversity program
- Providing trainings for senior executives, procurement professionals, and commodity business managers
- Evaluating opportunities to increase diverse spend within our Tier 1 and Tier 2 supplier base
- Hosting webinars for our suppliers to boost their own supplier diversity efforts

Over the long term, we strive to build a true partnership with our suppliers to drive diversity throughout our supply chain and to set a positive example for our industry.



Defining Diversity

Applied Materials' diverse suppliers must be certified by a third-party auditor as being at least 51% diverse owned, controlled, and operated by U.S. minorities (African-American/Black, Hispanic/Latin-American, Native American, Asian-Pacific American, Asian-Indian American), women, minority women, LGBTQ, persons with disabilities, veterans, or service-disabled veterans. Applied Materials also tracks additional diverse suppliers that could potentially be registered as diverse if they proceed with certification. As a founding member of SEMI's Manufacturing Ownership Diversity (MOD) working group, Applied Materials is working to provide best practices for supplier diversity in the semiconductor industry.

About this Report

Published on behalf of Applied Materials, Inc. and its subsidiaries (collectively referred to as "Applied Materials," "Applied," or "the company"), this report continues the work begun with our first Corporate Social Responsibility (CSR) report in 2005. This report builds on Applied's previous disclosures and expands transparency through:

- Providing additional data and disclosures, including expanded workforce and global voluntary turnover data which can be found in the report Annex
- Continuing to improve and refine the accuracy of our reported data, as described in the Environmental Data section of the Annex
- Enhancing the credibility of our data through third-party assurance
- Publishing our Human Rights Statement of Principles

This report has been prepared in accordance with the **Global Reporting Initiative Standards: Core option**. A GRI Index is included in the report Annex. Throughout the report, we demonstrate alignment and contribution to key **United Nations Sustainable Development Goals (SDGs)**. Disclosures following the **Sustainability Accounting Standards Board (SASB)** Semiconductor Standard are also provided in the report Annex. We are increasing our alignment with the **Task Force on Climate-related Financial Disclosures (TCFD)** disclosure framework in anticipation of full TCFD reporting next year. TCFD is discussed in the report's Climate and Energy section.

Applied Materials produces its Sustainability Report on an annual basis and data is reported by fiscal year unless clearly marked otherwise. Report data covers all global operations unless otherwise noted. In 2021, Applied Materials completed the process of migrating its environmental data tracking to a new, more robust system called Intelex SPI. With this transition, Applied Materials has identified updates and corrections to its 2019 environmental data, which have been incorporated throughout the report and Annex.

Report Information and Data Assurance

Limited assurance of select indicators included in the Sustainability Report and Annex has been conducted by ERM CVS, whose assurance statement is provided on page 74. Further, all Applied manufacturing sites maintain ISO 14001:2015 and ISO 45001:2018 certifications, which require annual third-party audit of our management systems and processes.

This report contains forward-looking statements, including our commitments, targets, and other statements that are not historical facts. These statements are subject to risks and uncertainties and are not guarantees of future performance. Factors that could cause actual results to differ materially from those expressed or implied by such statements are set forth in the "Risk Factors" of our SEC filings, including our recent Forms 10-K, 10-Q, and 8-K. All forward-looking statements are based on management's current estimates, projections, and assumptions, and we assume no obligation to update them.

Third-Party Data Assurance Statement

Independent Assurance Statement to Applied Materials

ERM Certification and Verification Services ("ERM CVS") was engaged by Applied Materials, Inc. to provide assurance in relation to the performance data set out below and presented in the Applied Materials 2020 Sustainability Report (the "Report") for the FY2020 reporting period from October 28, 2019 to October 25, 2020.

Engagement summary	
Scope of our assurance engagement	Whether the FY2020 performance data for the following indicators are fairly presented, in all material aspects, with the reporting criteria. **GHG Emissions[1]:** • Total direct (Scope 1) GHG emissions (excluding mobile sources) [metric tonnes CO_2e] • Total indirect (Scope 2, location & market-based) GHG emissions [metric tonnes CO_2e] • Total Scope 1 and 2 GHG emissions [metric tonnes CO_2e] • GHG emissions intensity - Total Scope 1 and Scope 2 [tonnes CO_2e/employee and tonnes CO_2e/million dollars of revenue] **Energy[1]:** • Total energy consumption [MWh] • Total renewable energy [MWh] • Total electricity consumption [MWh] • Percentage renewable energy consumption [%] • Percentage renewable electricity consumption [%] • Energy intensity [MWh/employee and MWh/million dollars of revenue] **Workforce:** • Total Workforce [number] • Workforce by category (by contract type) [Regular Full-Time Employees, Temp and Interns] [number] • Female representation – Global and US workforce (including New College Graduates, excluding interns) by category (career level and engineering specifically) [Executives, Managers, Professionals] [%] • Ethnicity & Race Representation of the U.S. Workforce [%] • Female representation of new hires, interns and New College Graduates [%] (US only) • Voluntary turnover – Global rate [%] and Global rate by gender [%] **Health & Safety:** • Total case incident rate (TCIR) • Days away, restricted, or transferred (DART) rate • Number of fatalities **Community Impact:** • Total community investments [million dollars] • Total giving through the Foundation Match Program [million dollars] • Total Volunteer Time Grant hours logged[1] [hours] • Total contributions issued by Applied Materials Foundation based on Time Grant hours[1] [dollars] [1]Calendar year reporting period.
Reporting criteria	WBCSD/WRI GHG Protocol (2004, as updated January 2015) for the Scope 1 and 2 GHG emissions, OSHA Injury and Illness Recordkeeping and Reporting definitions, and Applied Materials' internal reporting criteria and definitions for community impact and workforce data.
Assurance standard	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).
Assurance level	Limited assurance.
Respective responsibilities	Applied Materials is responsible for preparing the Report and for the collection and presentation of the performance data and information within it. ERM CVS' responsibility is to provide conclusions on the agreed scope based on the assurance activities performed and exercising our professional judgement.

Our conclusion

Based on our activities, as described below, nothing has come to our attention to indicate that the 2020 performance data listed under 'Scope of our assurance engagement' above are not fairly presented, in all material respects, with the reporting criteria.

Our assurance activities

Our objective was to assess whether the performance data in scope are reported in accordance with the principles of completeness, comparability (across the organisation) and accuracy (including calculations, use of appropriate conversion factors and consolidation). We planned and performed our work to obtain all the information and explanations that we believe were necessary to provide a basis for our assurance conclusion.

A multi-disciplinary team of sustainability and assurance specialists performed a range of assurance procedures which varied across the scope covered by our assurance engagement, as follows:

- A review of internal reporting guidelines, including conversion factors, estimations and assumptions used and reporting systems and controls used;
- A walk-through of the systems used for each indicator group (Workforce, Environmental, Health & Safety and Community Impact data programs);
- Interviews with data owners at corporate level (e.g. environmental, social, health & safety and community impact);
- An analytical review of 2020 full year data by conducting a year-over-year analysis per site for the selected indicators which included testing the completeness and accuracy of data;
- Virtual site visits to four countries (Israel, Singapore, Taiwan and USA) to understand local reporting processes, data management and reporting;
- Desktop review of underlying source data for site visits and for renewable energy calculations;
- A review alignment of indicators with the established reporting criteria;
- Virtual head office visit to review outcomes of Applied Materials internal QA/QC process – including changes made including reviewing changes made to 2020 data following the findings from the site visits carried out; and
- Reviewing the presentation of information relevant to the scope of our work in the Report to ensure consistency with our findings.

The limitations of our engagement

The reliability of the assured performance data is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusion in this context. We do not, in giving this opinion, accept or assume responsibility for any third party using or placing reliance on our opinion in order to make a decisions related to Applied Materials.

For the assurance of the intensity metrics included in the scope of this engagement, ERM CVS has place reliance on the SEC 10K annual filing stated revenue which has been taken as read.

Prior to our assurance engagement, travel restrictions were imposed following the outbreak of COVID-19. As a result of these, we agreed to replace in person head office and site visits with 'virtual' visits via conference and video calls for this year's assurance engagement. While we believe these changes do not affect our limited assurance conclusion above, we draw attention to the possibility that if we had undertaken in person visits, we may have identified errors and omissions in the assured information that we did not discover through the alternative assurance program.

Our Observations

We have provided Applied Materials with a separate Management Report with our detailed findings and recommendations. Without affecting the conclusions presented above, we have the following key observation:

- During this engagement, Applied Materials has identified opportunities to improve its global environmental reporting procedures and management of change processes.

Beth Wyke
Partner, Head of Corporate Assurance Services
29 June 2021

ERM Certification and Verification Services, London
www.ermcvs.com Email: post@ermcvs.com

ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities and auditor training. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS and the staff that have undertaken work on this assurance engagement provide no consultancy related services to Applied Materials in any respect.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