

Genomics for Good

Genomics for Good

At Illumina, we are driven by the power of genomics to positively impact the world and shape a more sustainable and equitable future for all.

Our third annual Corporate Social Responsibility Report describes the evolution of our environmental, social, and governance (ESG) program from January 1 through December 31, 2021.

This report reflects the progress we have made and looks to the future with our continued commitment to deepen our impact on human health by serving as a champion for patients, our communities, our people, and our planet.



Singapore leaders celebrating 2021 International Women's Day
#ChoosetoChallenge #IWD2021

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A Message from Our CEO

We entered 2021 full of hope for a recovery from the pandemic, at the dawn of a new era of genomic medicine, and a recognition of the incredible opportunities for us to rebuild a healthier, more inclusive, and more sustainable global community.

In the past year, we saw countless examples of resilience, perseverance and progress as we continued to respond to the pandemic, push for greater equity, and protect our planet through genomic innovation.

Genomics has revolutionized response to the pandemic and the future of healthcare. The speed of development, and the high efficacy and safety of mRNA vaccines have been an unprecedented medical and scientific triumph. Genomics has now gone mainstream, and will be an increasingly critical part of public health, from fighting and preventing pandemics to revolutionizing diagnosis, treatment, and prevention of disease. We believe the life-changing benefits of genomics should be available to the many, not the few.

Guided by our Mission, we are taking action through our business strategy to Expand Access to Genomics, Empower our Communities, Integrate Environmental Sustainability, Nurture our People, and Operate Responsibly. We are working to expand access by enabling innovation and driving affordability, by broadening the reach of the genomic ecosystem, and ensuring equitable access with representative data to drive greater health equity.

This past year the world crossed a significant milestone for genomic testing, with over one billion people across 45 countries reimbursed for genomic tests, cancer therapy selection, genetic disease diagnosis, and non-invasive prenatal testing. We aim to reach two billion covered lives by 2026. Through innovation and investments in R&D, we are unlocking new possibilities for clinicians to power personalized medicine, improve patient outcomes, and drive down overall healthcare costs.

We expanded our operations with applications that build on the transformational impact genomics can provide for human health and the economics of healthcare. Our software portfolio has evolved to help geneticists and clinicians diagnose rare disease patients with Artificial Intelligence (AI) technologies that provide genomic interpretation at scale. In 2021, we acquired GRAIL, and it remains subject to an ongoing merger review in the European Union. It is being held and operated separately. We believe our acquisition of previously-spun off GRAIL will ultimately accelerate access and adoption of a breakthrough multi-cancer early detection blood test. GRAIL's Galleri® blood test can detect more than 50 types of cancer in asymptomatic patients, with the potential to improve patient outcomes and provide leaps forward in the fight against cancer.

By empowering our communities through philanthropic support, we are working to bridge the gaps for areas in need. In 2021, we committed \$60 million of in-kind product contributions for a Pathogen Genomic Initiative (PGI) to help create a comprehensive pathogen genomic surveillance network to build critical public health capabilities. In its foundational year, we delivered close to \$5 million in product donations to Africa and Southeast Asia. We also committed \$120 million of product donations to support the launch of the iHope™ Genetic Health initiative with a target of half of the donations outside the US and at least one-third dedicated to patients in Africa. The new effort aims to rapidly scale access to clinical whole genome sequencing at labs across the world and reach thousands of rare disease patients a year in resource-limited communities.

“*Genomics has revolutionized response to the pandemic and the future of healthcare.*”



Francis deSouza, CEO

A Message from Our CEO

We deepened the integration of environmental sustainability with our updated climate action plan and Net Zero commitments. We set ambitious science-based emission reduction targets for our entire value chain as part of our overall business strategy to minimize climate risk, build climate resilience, and identify opportunities. In September, our targets were officially verified by the Science Based Targets initiative (SBTi). This year, we reduced our global carbon emissions from our direct operations by 24%.

The exponential growth of Illumina provides expansive opportunities for our employees. Nurturing our people and creating an environment of inclusion is foundational to our current and future success. We continue to advance diversity and inclusion to create a culture of equity and belonging in our workplace, community, suppliers, and business partners. In 2021, we achieved 17% spend to diverse suppliers in the US. We expanded our employee resource groups with over 4,000 employees participating in diversity, equity, and inclusion programming and we are proud to have again confirmed a net zero gap in pay.



As macro-trends resulting from the pandemic continue to shape the labor market, we are well-positioned to attract top talent looking for a purpose-driven company, strong business performance, flexible working conditions, and a responsible corporate citizen."

Our current employees continue to report in quarterly surveys high Trust and Engagement Indexes of 90%, with 93% reporting they are proud to work for Illumina, and 92% reporting they believe Illumina values diversity. Our efforts are ongoing and we are committed to increasing the representation of women and ethnic and racial minorities in our workforce and leadership.

Operating responsibly as good corporate citizens, we do business in a way that reflects the very best of Illumina and honors the trust that patients, our employees, customers, community, and shareholders put in us. Our role as a genomics pioneer brings with it the responsibility to enable innovation for good with the technology we create, and the data collected is used safely, ethically, and responsibly.

Our holistic reporting strategy is designed to provide transparency on how environmental, social, and governance (ESG) topics affect our business internally, and how we impact the environment, and society externally. This year, we refreshed our materiality assessment to confirm the most material ESG issues and to remain attuned to our stakeholder feedback on where we can make the most impact. We continue to align our ESG reporting to the Global Reporting Initiative (GRI), the Sustainable Accounting Standards Board (SASB) standards, and the Task Force on Climate-related Financial Disclosures (TCFD). We remain focused on supporting the United Nations Sustainable Development Goals and the principles of the United Nations Global Compact.

As we look to the future, we view our CSR program through the lens of continuous improvement and we will continue to strive to be the best employer, the best environmental steward, and the best corporate citizen we can possibly be.

Many thanks to our partners, collaborators, and to the incredible researchers and clinicians we serve. A special thanks to our employees for helping Illumina thrive, for giving back to our communities, for taking care of one another, and bringing our Mission to life. Together, we are advancing genomics to improve human health and beyond.

Francis deSouza
Chief Executive Officer

2021 Highlights



Expanding Access to Genomics

- 1 billion covered lives
- \$5M in-kind donations supporting year 1 implementation of the Pathogen Genomics Initiative
- 30,000 medical education learners reached
- \$120M committed to launch iHope™ Genetic Health
- 18 new genomic companies funded through Illumina for Startups



Empowering Our Communities

- \$14.5M total donations
- 1,345 causes supported
- 31% Employee Participation in giving and volunteer programs
- >315,000 STEM learners
- >9,500 volunteer hours donated



Integrating Sustainability

- Committed to Net Zero in our operations and value chain by 2050
- 59% of global electricity consumption came from renewable sources
- Completed first Scope 3 assessment
- \$700K donations for sustainability and environmental justice initiatives
- 84% of our strategic suppliers committed to minimize their environmental footprint
- 24% reduction of global carbon emissions from our direct operations



Nurturing Our People

- Maintained a zero net pay gap
- 50% minority representation in the US workforce
- 45% global female workforce
- 5% increase in female executive leadership representation in last three years
- >4,000 participants in employee resource group programming



Operating Responsibly

- 100% Illumina facilities participated in third-party audit programs
- Human Rights Impact Assessment initiated
- Published first annual Transparency Report
- Developed and disclosed Ethical AI Principles
- 17% diverse supplier spend

2021 Recognition



Member of
Dow Jones Sustainability Indices
Powered by the S&P Global CSA



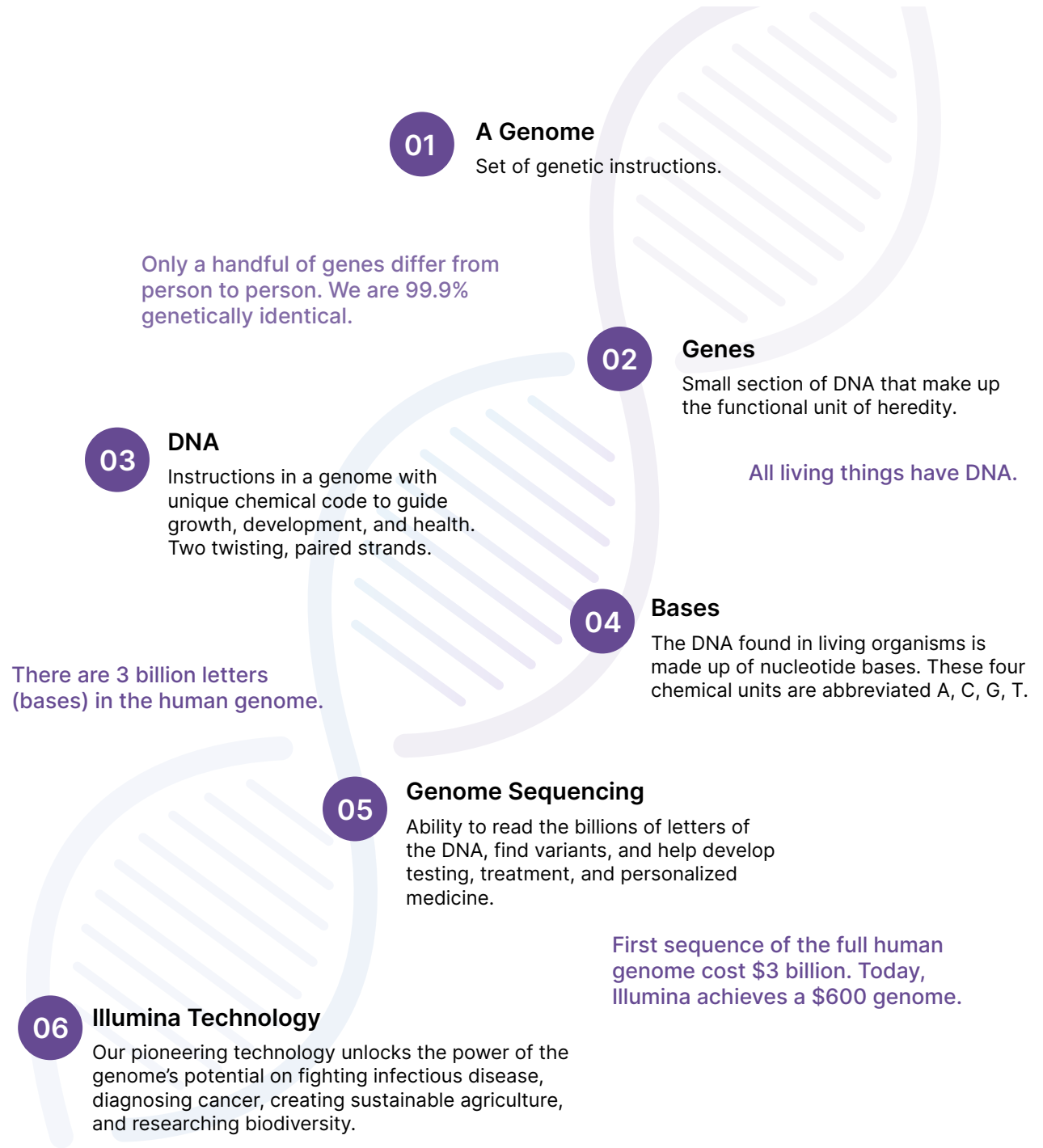


illumina Overview

As an engine of genomics innovation, we are enabling tomorrow's discoveries

Understanding Genomic Fundamentals

What causes a cancer cell to mutate? How do you identify a novel virus like COVID-19 and create a vaccine? How do we safeguard the world's food supply? What effect does climate change have on biodiversity? The answer to these and thousands of life's most pressing questions can be found in the world of genomics.



01 A Genome
Set of genetic instructions.

Only a handful of genes differ from person to person. We are 99.9% genetically identical.

02 Genes
Small section of DNA that make up the functional unit of heredity.

All living things have DNA.

03 DNA
Instructions in a genome with unique chemical code to guide growth, development, and health. Two twisting, paired strands.

There are 3 billion letters (bases) in the human genome.

04 Bases
The DNA found in living organisms is made up of nucleotide bases. These four chemical units are abbreviated A, C, G, T.

05 Genome Sequencing
Ability to read the billions of letters of the DNA, find variants, and help develop testing, treatment, and personalized medicine.

First sequence of the full human genome cost \$3 billion. Today, illumina achieves a \$600 genome.

06 illumina Technology
Our pioneering technology unlocks the power of the genome's potential on fighting infectious disease, diagnosing cancer, creating sustainable agriculture, and researching biodiversity.

About Illumina

Genomics is the single most important revolution of our time.

Illumina is a global genomics and human health company powering the future of personalized medicine and beyond. At Illumina, our efforts have turned ideas into innovations impacting millions of people and unlocking discoveries across the field of genomics. The results are all around you—in the care you receive, the decisions you make for your family, the environment, and the food you eat. Yet, we know we are just getting started.

We have the great honor of continuing the legacy of the Human Genome Project by providing new insights into the genetic code and having a profound impact on scientific research and healthcare. We are a leader in genomics, innovating at the intersection of biology, technology, and health.

We are re-imagining what is possible with unprecedented advances in next-generation sequencing. As a genomics pioneer, we have proven

through focused and continued innovation how unlocking the power of the genome can exponentially improve the human condition. Our ability to drive patient outcomes has made us a trusted partner in healthcare.

Today, we are providing tools that enable the next generation of researchers and clinicians to usher in the future of personalized medicine. In agriculture and the environment, we're developing microarray and sequencing technologies that will help our planet and food system support a rapidly growing human population, conduct research on biodiversity, and study climate change impacts.

Driven by our Mission, we are committed to making our technology more affordable and accessible, realizing health equity for billions around the world. Illumina is not just a company at the forefront of a global genomics movement, we are at the center of a global health transformation.

Our Mission: Improve Human Health by Unlocking the Power of the Genome

Our Values:



Innovation is in our DNA



We are relentless in the creation of great products



We collaborate deeply

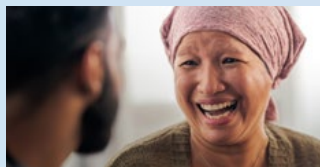


We move fast and embrace change



We are open

Illumina Innovation Vectors



Oncology



Reproductive Health



Genetic Disease



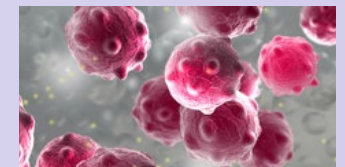
Research/Applied Genomics



Infectious Disease



Drug Discovery



Proteomics

illumina Impact at a Glance

<p>9,191 employees</p>	<p>45% women</p> <p>55% men</p>	<p>50% minority¹ representation in US workforce</p>
<p>Zero Net Pay Gap</p>	<p>64 average hours training per person</p>	<p>\$209M diverse supplier spend</p>
<p>\$4.5B 2021 revenue</p>	<p>\$885M R&D investment</p>	<p>20% total revenue invested in R&D</p>
<p>>20,000 cumulative sequencing installed base</p>	<p>>8,000 total illumina customers</p>	<p>140 countries receive our products</p>
<p>24% Scope 1 and 2 CO2e reduction</p>	<p>59% renewable electricity</p>	<p>\$14.5M donated</p>

¹US Minority Workforce: Asian, Black, Native, Pacific Islander, Hispanic or Latino, 2 or more

OUR LOCATIONS

Americas
Baltimore, MD, US⁴
Foster City, CA, US^{3, 4, 6}
Hayward, CA, US^{2, 4}
Madison, WI, US^{2, 4, 6}
San Diego, CA, US^{1, 2, 3, 4, 5, 6}
São Paulo, Brazil⁴

Greater China
Beijing, China⁴
Shanghai, China⁴
Taipei, China⁴

Headquarters
San Diego, CA

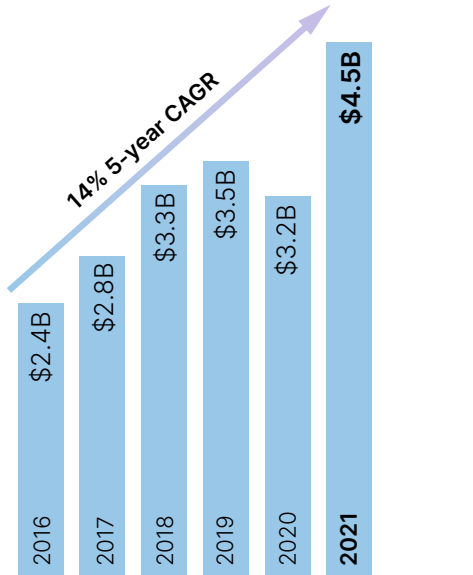
EMEA
Berlin, Germany⁴
Cambridge, UK^{4, 5, 6}
Eindhoven, Netherlands^{4, 5}
Evry, France⁴
Istanbul, Turkey⁴
Mechelen, Belgium⁴
Moscow, Russia⁴
Rennes, France⁴
Steenoven, Netherlands^{4, 5}
Tel Aviv, Israel⁴

Asia Pacific
Melbourne, Australia⁴
Osaka, Japan⁴
Seoul, South Korea⁴
Singapore^{2, 4, 5, 6}
Tokyo, Japan⁴

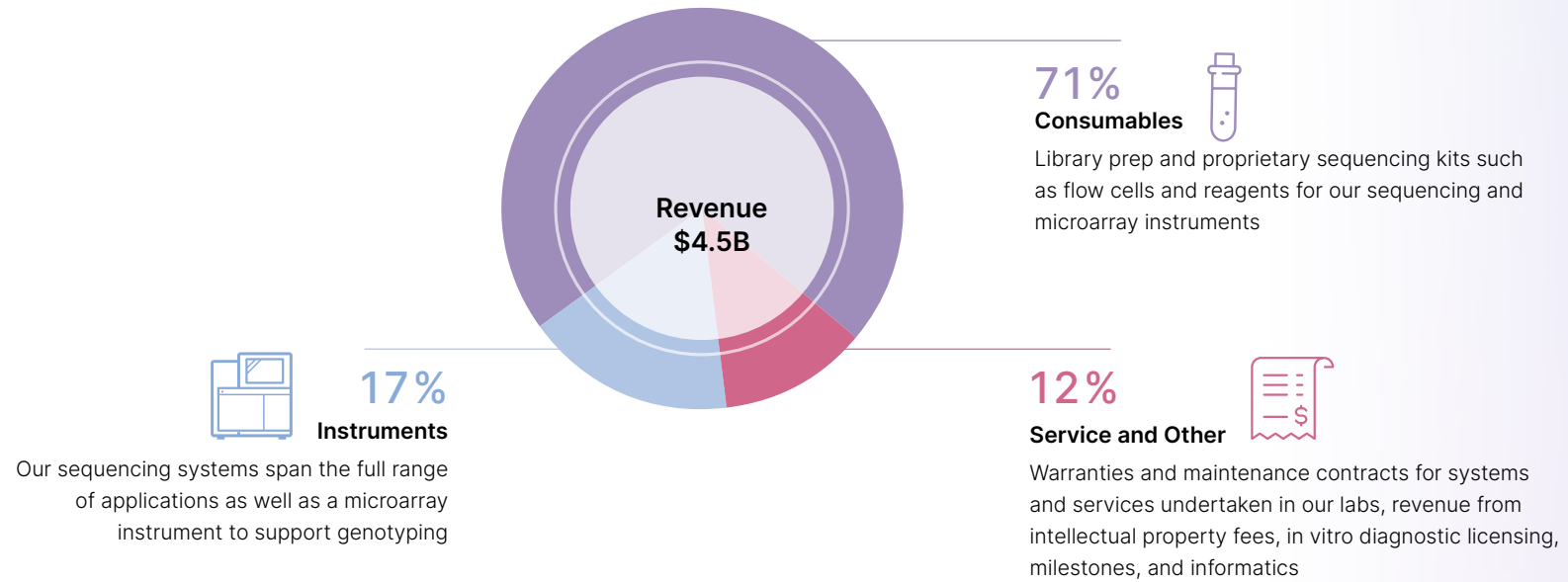
1 Headquarters, 2 Manufacturing, 3 Clinical, 4 Commercial, 5 Distribution Center, 6 R&D

Business Overview

Financial Performance



Revenue Details



Sequencing systems for virtually every application and every lab



iSeq™ 100
Affordable, simple, and powerful



MiSeq™ and MiSeq Dx™
Speed and simplicity for targeted and small genome sequencing



NextSeq™ 550, NextSeq™ 550Dx, and NextSeq™ 1000 and 2000
Deeper, larger studies on a benchtop platform



NovaSeq™ 6000
Flexible, scalable NGS system for virtually any application

Driving Long-Term Business Value through ESG

Q & A with our Chief Financial Officer, Sam Samad

Q: How do Illumina environmental, social, and governance (ESG) goals fit into the overall financial strategy of the company?

A: Furthering our ESG strategy is directly tied to furthering our business strategy. Stewardship of our fiduciary responsibility includes a strong emphasis on managing risk, driving performance, and ensuring business integrity. ESG provides a lens to evaluate opportunities that incorporate the voice of all our stakeholders.

There is tremendous data that supports the links between ESG strength with better business outcomes across several financial metrics. The financial links to ESG are about investment and value. ESG is not just a cost center...it is a center of value creation.

We are investing into more sustainable facilities, products, and our value chain. These investments are linked to our core business and to the UN Sustainable Development Goals for climate, innovation, and of course...health and well-being.

We have made ESG a strategic priority in how we do business. As CFO, I am looking for ways to ensure we are protecting the long-term value of the company and that includes both financial and non-financial inputs related to risk and opportunities.

We are committed to ensuring adequate investment in ESG programming, applying consistent and transparent reporting standards, requiring accountability on key ESG metrics, and utilizing our enterprise risk management approach.

ESG issues cover the span of our organization and has successfully been integrated in our business. For the Finance organization, it has been a natural expansion of our existing governance on cost optimization, accountability, risk analysis, internal monitoring, reporting transparency, and data assurance.

Q: What do you see for the future of ESG and how is Illumina positioned?

A: I believe increased recognition on the importance of ESG will drive mandatory reporting and more investment to support shifts to a carbon free economy.

At Illumina, we are already participating in comprehensive and voluntary reporting that represents the most material topics for our company and our industry. We are committed to transparency in our reporting and are well positioned for the evolving regulatory reporting requirements around the globe.

As CFO, I believe investing in our ESG initiatives can drive growth, create innovation, and contribute to our long-term success. I foresee that ESG will continue to link to customer satisfaction, the ability to attract and retain top talent, create operational and financial benefits, and help us understand risk and opportunities. Illumina has a great foundation in place, and we will continue to evolve and advance our ESG strategy for the future.

By engaging and empowering all our stakeholders, including customers, business partners, employees and communities, we will continue to build resilience, create long-term value and support science that advances public health and the health of our planet.



Sam Samad, CFO



ESG is not just a cost center...it is a center of value creation."

CSR Governance

CSR is integral to how we do business. Our governance structure facilitates accountability, transparency, and continuous improvement.

We govern CSR at the highest level with oversight from the full Board of Directors (Board).

- This strong leadership supports the management of material environmental, social, and governance issues, including climate action, diversity, equity and inclusion, human rights, cybersecurity, and ethical, responsible business practices
- The Board provides oversight and receives updates on current performance and future strategic plans at least annually or more frequently if material changes occur
- Select ESG targets are included in annual corporate goals and influence executive compensation through the management performance scorecard
- Learn more about our Board governance, member tenure, independence, and diversity in the [Integrity](#) chapter

CSR Executive Steering Committee

- Chaired by CFO
- Comprised of senior leadership team from across organization
- Provides guidance on CSR strategic plans and practices
- Approves major ESG programs and monitors progress toward 2030 and 2050 targets
- Members include Chief Medical Officer, General Counsel, Chief of Global Operations, Chief People Officer, Chief Technology Officer, Chief Marketing Officer, and Global Head of CSR

Giving Governance

- The Illumina Corporate Citizenship Steering Committee has oversight on philanthropic contributions from Illumina. Membership is comprised of the CEO, CFO, General Counsel, Chief Medical Officer, and Chief People Officer
- The Illumina Corporate Foundation Board governs the philanthropy associated with the Illumina Corporate Foundation, a separate entity and private foundation. The foundation board is comprised of Illumina senior leaders including the CEO, CFO, General Counsel, Chief Medical Officer, Chief People Officer, and VP Treasury



- The CSR function is responsible for strategy development, program implementation, and ESG reporting
- The CSR functional group focuses on long-term value creation and risk mitigation

- CSR programs are embedded into our business through several supporting cross-functional working groups
- These teams work to operationalize and integrate CSR in each of their respective programs

- We offer employees the ability to directly participate in our CSR program through a variety of grassroots efforts
- These teams provide a wealth of ideas and support for activation at local levels all aimed to link our CSR efforts back to our Mission

Connecting CSR Strategy to Our Business

Stakeholder Engagement

We are committed to operating with transparency and open communication to develop trusted relationships with all our stakeholders. Since the creation of our CSR program, we have routinely gathered feedback on environmental, social, and governance (ESG) topics from our stakeholders. As part of our ongoing engagement, we have used a variety of ways to gather feedback and gauge interests including customer surveys, employee surveys, industry trade group participation, and guidance from relevant frameworks such as the UN Global Compact and Sustainable Development Goals. In addition, we continue to use external benchmarking such as the Dow Jones Sustainability Index, CDP, Gender Equality Index, and Corporate Equality Index to identify areas of focus and opportunities.



Our strategy and reporting approach aligns with international ESG frameworks and a commitment to providing transparency on our progress.



Materiality Assessment Refresh

Our first materiality¹ assessment was conducted in 2018, engaging a range of internal and external stakeholders to assess ESG issues important to our business and our ability to create impact.

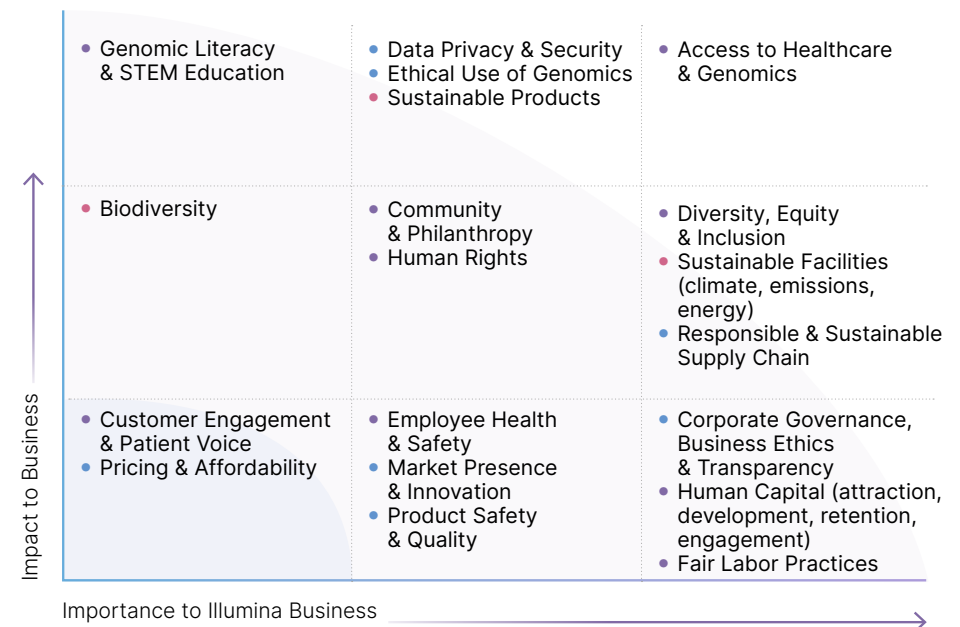
In 2021, we engaged with an external consultancy firm to refresh our materiality assessment. This gave us an opportunity to confirm the most material ESG issues and remain attuned to our stakeholder feedback on what is most important to our business, our stakeholders, and where we can make the most impact.

The updated assessment revealed the themes of access, diversity, and sustainability increased in leveling from the previous assessment. Grouping of themes was updated to align with reporting frameworks and relevant industry naming convention. There was no change in leveling of data privacy, philanthropy, human capital, or health and safety.

Based on the updated materiality assessment, our current CSR focus areas remain relevant, are still reflective of the most material topics for Illumina, and confirm appropriate prioritization of existing efforts.

2021 Materiality Results

● Environmental ● Social ● Governance



¹ In this report, we use the terms “material” and “materiality” to refer to topics that reflect Illumina’s meaningful environmental, social, and governance impact. The use of such terms shall not be deemed to constitute an admission as to the materiality of any information in this report for purposes of applicable securities laws or any other laws of the United States, nor are we using them as they are used in the context of financial statements and financial reporting.

Our CSR Strategy: Creating Unique Impact



As a mission-driven company, our CSR strategy focuses on delivering sustainable long-term value by addressing the most significant and material environmental, social, and governance areas. We align our priorities and targets to support the 17 United Nations Sustainable Development Goals and have identified eight we can most uniquely impact.

We are committed to integrating environmental stewardship into the way we operate. We recognize the importance of the environment in creating a healthy, sustainable future for all.



By sharing our time, talent, and technology, we aim to inspire, support, and empower patients, our communities, our employees, and the next generation.



We aim to drive down the cost of sequencing, expand access to genomic technology, and increase the diversity of data to bring the transformative benefits of genomics for all.



Harnessing extraordinary talent and helping them thrive allows us to make world-changing leaps in human health and beyond. Our aim is to nurture a culture of care that is fueled by supporting one another, promoting collaboration, inspiring innovation, and fostering diversity, equity, and inclusion.



OUR CSR VISION

Deepening our impact on human health by serving as a champion for patients, our communities, our people, and our planet.

Our role as a genomics pioneer brings with it the responsibility to enable innovation for good, ensuring that the technology we create and the data we collect are used safely, ethically, and responsibly.



GUIDING PRINCIPLE

We believe that pursuing our Mission to improve human health extends beyond bringing innovation to market. We have a responsibility to ensure that everyone can benefit from unlocking the power of the genome. It is in our DNA to lead with sustainable, responsible, and proactive corporate citizenship.



Expanding Access to Genomics

Expanding Access to Genomics:

Our Strategic Approach

We are committed to expanding access to the transformative benefits of genomics. We are driven by our conviction that genomics should be available to the many, not the few.

Overview

Genomics has the power to save lives and vastly improve the human condition. As a leader in genomics, we are focused on driving down the cost of sequencing, expanding access to diagnostics technology, and increasing the diversity of genomics data to realize health equity for billions of people around the world.

We are proud to help scientists make major discoveries as we make sequencing more accessible and affordable. While developments in genomics have led to enormous breakthroughs in human health, implementation has been almost entirely restricted to more developed nations.

To successfully fulfill our Mission to improve human health, we must expand access to genomic technology and precision medicine, regardless of social status, income, or geographic location. We must continue to bridge the gaps to ensure inclusion of data that represents our global diversity.



Global health inequities highlighted during this pandemic have intensified the urgency of enabling access to genomic testing for all. Our genomic knowledge should reflect the beautiful diversity of humankind and make sequencing more accessible, so that patients in all communities can benefit.”

Phil Febbo, Chief Medical Officer

Our Objectives

Enabling Innovation and Affordability

- Advance product innovation
- Invest in strategic acquisitions, partnerships, and collaborations
- Reduce the cost of genome sequencing

Ensuring Equitable Access and Data Diversity

- Increase diversity of genomic data
- Support philanthropic opportunities
- Champion patient advocacy

Improving Reach to Broaden the Genomic Ecosystem

- Provide genomic literacy education for health care professionals
- Engage with regulators, payers, and government authorities
- Catalyze genomic startups

Contributing to the UN SDGs



Expanding Access to Genomics:

Measuring Our Impact

2030 Targets



Achieve \$100 genome

2021 PROGRESS

\$600



Support 50,000 patients through philanthropic iHope™ programming

2021 PROGRESS

1,150

patients



Activate Pathogen Genomics Initiative donations enabling our \$60 million commitments by 2027

2021 PROGRESS

\$5M

in-kind donations



Achieve 2 billion covered lives by 2026

2021 PROGRESS

1 billion

covered lives



Support >200 genomic startups

2021 PROGRESS

63

startups since inception



Reach at least 25,000 medical education learners annually

2021 PROGRESS

30,000

learners

2021 Highlights



20%

revenue invested in R&D



\$120M

committed to launch iHope™ Genetic Health



18

new genomic companies funded through Illumina for Startups

2021 Recognition



Enabling Innovation and Affordability

As a genomics pioneer, we have proven through focused and continuous innovation that unlocking the power of the genome can exponentially improve the human condition.

There is urgency to our Mission because we understand that today's discoveries have the potential to help tomorrow's patients. Our ability to drive patient outcomes has made us a trusted partner in healthcare. Today, we're providing tools that enable the next generation of researchers and clinicians to usher in the future of personalized medicine.

Innovating at the intersection of technology, biology, and health, we are re-imagining what's possible for clinicians, transforming how they detect, diagnose, and treat cancer as well as other rare, infectious, and genetic diseases.

Unprecedented advances in next-generation genetic sequencing (NGS) are enabling patients to make more informed choices that can change lives. That's why we create cutting-edge technologies that diagnose patients more quickly, more accurately, and more

cost efficiently. Every technological breakthrough that increases yield, improves product quality, or reduces the cost of sequencing leads to the potential to improve lives.

Innovation for Every Stage of Workflow

As we continue to unlock the power of the genome, the amount of data generated from NGS is rapidly expanding. To reach the full potential of genomics in healthcare, there is a need not only for accessible sequencing and data creation, but also for advanced systems to easily analyze that data. In 2021, we made significant improvements to our platforms and product pipeline to provide ultra-rapid, highly accurate, comprehensive, and scalable analysis of this data.

Next-Generating Sequencing Workflow



Transforming Genomic Data into Catalysts

Launched in 2021, Illumina Connected Analytics (ICA) is a new integrated bioinformatics solution providing a comprehensive, private, cloud-based data platform. ICA empowers customers to manage, analyze, and explore large volumes of multi-genomic data in a scalable and flexible environment with security and privacy at its core. Harnessing the technology brought from the 2020 acquisition of BlueBee, ICA provides users the flexibility to run custom analyses and access our DRAGEN™ Bio-IT Platform.



50x faster*

5x lower data footprint**



*mapping/variant calling for whole-genome sequencing
**from compression

Enabling Innovation and Affordability

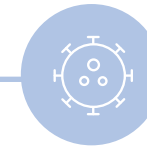
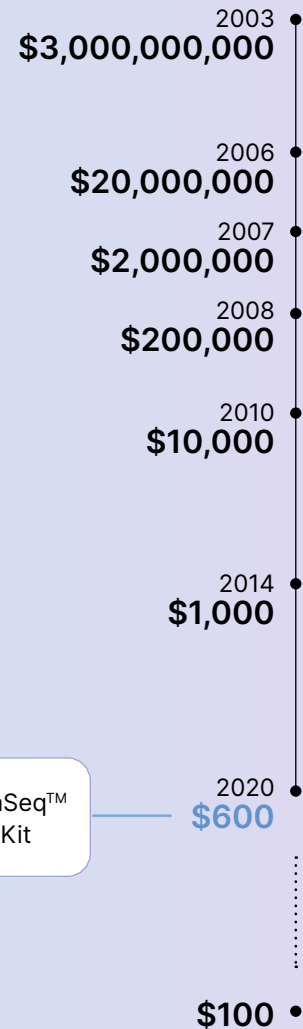
Driving Affordability

We've helped take the cost of sequencing the genome from \$3 billion to \$600, putting our dream of a \$100 genome within reach. We aim to make our technology affordable and accessible to as many patients as possible, while setting high standards for the ethical use and security of data.



Launch of our NovaSeq™ 6000 v1.5 Reagent Kit

Cost Per Genome



COVID-19 Focus:

Bringing Pandemic Surveillance Beyond Big Cities Through Innovation

Increasing surveillance for detection of emerging and prevalent variants is critical to the global efforts to control the virus. Many countries are sequencing positive cases of COVID-19 and reporting variants to support public health management. Most genomic data is coming from large genomic centers where labs have the capacity for high-throughput sample processing, while countries with limited resources have low submissions to COVID-19 surveillance networks.

With the debut of the COVIDSeq™ Assay, smaller labs are better enabled to participate in the global surveillance for the pandemic to identify SARS-CoV-2 virus mutations and provide critical information on the epidemiology of new variants.

The COVIDSeq™ Assay provides low- and mid-throughput labs access to de-centralized surveillance on a smaller scale so they can sequence and identify viral variants—a critical enabler for public health agencies managing the COVID-19 pandemic. [Learn More](#)

Processing Power to Fight the Pandemic

DRAGEN™ (Dynamic Read Analysis for GENomics) Bio-IT Platform uses hardware technology to provide ultrarapid analysis, further improving quality and reducing secondary data analysis time—all with the goal of enabling insights from sequencing data faster. We continue to provide the Illumina SARS-CoV-2 Data Toolkit at no cost to the global research community in support of efforts to combat the pandemic.

1.25 million

samples processed through COVIDSeq™ protocol and analyzed through DRAGEN™ with the COVIDSeq™ BaseSpace Sequence Hub app

117

countries providing sequencing data from Illumina instruments

>75%

of COVID-19 data submissions to GISAID were performed on Illumina instruments

Enabling Innovation and Affordability

Powering the Future of Personalized Medicine Together

Enabling innovation and driving affordability goes beyond delivering sequencers and data. It includes delivering insights and accelerating the paradigm shift toward genomic sequencing as a standard of care to improve patient outcomes and drive down overall healthcare costs.

In addition to our internal innovation engine, we leverage strategic acquisitions, partnerships, and collaborations to further support our Mission, drive affordability, and expand access to genomics for all so that the potential of personalized medicine can be realized.

Emedegene

Emedegene (pronounced: imagine), helps geneticists and clinicians to diagnose rare disease patients by offering artificial intelligence technologies that provide genomic interpretation at scale. Adding Emedegene technology into our software portfolio will provide valuable data insights to clinicians for more personalized treatment decisions.

GRAIL

In 2021, we closed on the acquisition of GRAIL, a previous spin-off of Illumina. GRAIL is focused on life-saving early detection of multiple cancers—all through a simple blood test in a doctor's office. GRAIL's Galleri® blood test can detect more than 50 types of cancer in asymptomatic patients. Our acquisition of GRAIL will accelerate access and adoption of this life-saving test worldwide. The acquisition is subject to ongoing legal proceedings and pending the European Commission's ongoing merger review. GRAIL is currently being held and operated as a separate company, with oversight provided by an appointed, independent monitoring trustee during the European Commission's ongoing merger review.



Accelerating the Identification of Genetic Disease Through Innovation in Partnership

In some cases, the diagnostic odyssey to identify genetic disease is a race against time, when an early diagnosis can dramatically improve patient outcomes, save a child's life, or help a patient live a healthier life.

Cancer is a disease of the genome and treatment will increasingly leverage NGS-based tests—from early detection and diagnoses to therapy selection and monitoring. We are committed to innovating and diversifying our oncology product portfolio and partnerships. The continued expansion of our TruSight Oncology pipeline complements our acquisition of multi-cancer early detection company GRAIL.

A Diagnostic Breakthrough

Our TruSight™ Software Suite, powered by DRAGEN™ variant-calling, is making it possible for labs to cut through millions of variants to find the one (or two) that is making someone ill, and in turn, result in fast-tracking the right treatment for patients.

Our partnership with Kartos Therapeutics led to the co-development of a project to create a next-generation, sequencing-based companion diagnostic. The new companion diagnostic will use whole blood as a diagnostic sample type, enabling the detection of blood cancers such as leukemia and lymphoma.

By leveraging our technology and harnessing the expertise with commercial partnerships, we continue to advance the Illumina commitment to develop standardized, globally distributable tools for precision medicine.

Partnerships with a Common Goal

Oncology partnerships announced in 2021 included Bristol Myers Squibb, Kura Oncology, Myriad Genetics, Gilead, and Merck.

Partnerships can magnify impact and enhance common goals. The following partnerships reflect examples of collaborations and our approach to creating the connective tissue uniting industry.

- Access to Comprehensive Genomic Profiling Coalition
- Blood Profiling Atlas in Cancer Consortium
- Coalition for Access to Prenatal Screening
- DNA Data Storage Alliance
- European Confederation of Pharmaceutical Entrepreneurs
- Genomic Medicine Sweden
- German National Action League for People with Rare Diseases
- Harvard Pilgrim Health Care
- International Consortium on Acute Leukemia
- Medical Genome Initiative
- University of Melbourne Genomics Hub
- Weill Cornell Medicine and New York-Presbyterian Hospital

Ensuring Equitable Access and Data Diversity

Genomics has been integrated into clinical practice at a faster rate than almost any innovation in the history of medicine, but inequities still exist. Implementation has been almost entirely restricted to more developed nations, and 70% of the genomes we have today are of Caucasian descent.

Genomics is creating a path toward personalized medicine and inspiring hope worldwide, but there is a vital need to make genomic technology and precision medicine available to all, regardless of their social status, income, or geographic location. To ensure that genomes can be interpreted in the appropriate context of global diversity, we aim to increase the equity of representation in genomic data. With equitable representation in the data, therapies and solutions can be attuned to a broader set of genomes, decreasing this bias in our medicine for the future.

Commercial Initiatives: Genomic Diversity Projects

Several countries worldwide have initiated large scale population genomics projects as well as large collaborative efforts to increase diversity in human genetics. We are proud to be a part of these commercial initiatives that are bringing more focus to cover the diversity of world ancestries and ensure that genomic representation is part of equitable health care in the future.

Qatar Genome Program

Today, less than 1%¹ of the genome inventory represents ancestries from Arab and Middle Eastern populations. With this underrepresentation in genetics data, the ability to benefit from genomic applications is limited. The Qatar Genome Program (QGP) aims to correct that. This group is using Illumina technology to sequence individuals from the general population of Qatar. Insights from phase one of the QGP, which sequenced 6,045 individuals, identified more than 88 million variants, of which 24 million are novel.

Based on sequencing data, the results highlighted the value of advancing genetic studies in the Arab and neighboring Middle Eastern populations. This will significantly improve our understanding of global patterns of human variations, human history, and genetic contributions to health and diseases in diverse populations.



Human Heredity and Health in Africa

The African genome is the oldest human genome, with Africa containing more genetic diversity than any other continent. It is estimated, however, that fewer than 3% of analyzed genomes come from Africans, creating a gap in the representation of genetic information for health and diagnostic research. There is an enormous opportunity to utilize genomics to benefit African populations and to inform global health.

The Human Heredity and Health in Africa (H3Africa) consortium, led by African scientists for the African people, facilitates fundamental research into diseases on the African continent while also developing infrastructure, resources, training, and ethical guidelines to support a sustainable African research enterprise.

Illumina supports H3Africa's efforts with an open human consortia. The consortia helps biomedical researchers work together to design and run customer genomics assays. The H3Africa assays² use novel, genome-wide content from individuals across African populations, built on the MEGA Array backbone. These studies use genetic, clinical, and epidemiologic methods to identify hereditary and environmental contributions to health and disease.



Shanghai Genomics Alliance

Launched in 2021, the Shanghai Genomics Alliance brings together allies from across the industry. Over 50 industry and governmental partners have come together to collaborate in the genetic testing field in China. The Alliance is committed to improving the level of innovation in the field of genetic testing technology in China, accelerating the industrialization of technology, and promoting collaboration among members.



¹Genetics for all. Nature Genetics (2019)

²NIH provides funding to H3Africa as part of the Common Fund Global Health initiative; the use of any company, commercial product and/or service by H3Africa grantees does not imply endorsement by NIH.

Ensuring Equitable Access and Data Diversity

Philanthropic Initiatives: Genomic Data That Reflects Everyone, Everywhere

Democratizing sequencing can enable families, communities, and whole countries to harness the benefits of Next-Generation Sequencing (NGS). By doing so we can help to expand the genomics infrastructure in underserved areas and support the diversification of data.

We are proud to support projects that increase the diversity of genomic data, invest in philanthropic opportunities, and champion patients.

Supporting Native American Genomic Research

Native BioData Consortium (NBDC) is the first nonprofit research institute led and staffed by indigenous scientists and tribal community members in the US. Since its inception in 2018, the



*Joe Yracheta
Board Vice President, Native BioData Consortium
Cheyenne River Indian Reservation*

consortium's goal has been to ensure that Native people can benefit from advances in genetics and health research. NBDC's broader vision is to store and study research samples that not only pertain to human health, but also environmental and agricultural health.

Native American communities have been among the hardest-hit groups by the COVID-19 pandemic in the United States. To empower the Native community's response to the current pandemic and help them prepare for future risks, we supported the donation of a NextSeq™ 550, consumables, and training to the Cheyenne River Sioux Tribe. In addition to COVID-19 surveillance, NBDC will be able to study other diseases that disproportionately affect their population, such as diabetes, cardiovascular disease, and colon cancer. The donations will enable NBDC to keep samples and data local so that the findings can ultimately benefit the communities they serve, empower the Native community response to this pandemic, and help them prepare for future risks.

Broadening Genetic Research into Cancer Origins

The New York Genome Center (NYGC) Polyethnic-1000 Project (P-1000) focuses on cancer care inequities in underserved populations, with the objective of democratizing and broadening access to the power and potential of cancer therapies.

Cancers are diseases of the genome, caused and influenced by genetic variation whether inherited or acquired by environmental and behavioral factors. Significant research has identified the genetic variations that contribute to the start and progression of cancers. These studies, however, have been limited largely to patients of Western European descent and have focused on inherited, as opposed to acquired, genomic variation.

Illumina has committed \$2.4 million of in-kind product donations to support this initiative and help to identify differences between ethnicities that may account for disparities in occurrence, response to treatment, and survival for different cancer types.

[Learn more about the P-1000.](#)

COVID-19 Philanthropy in India

In May 2021, Mumbai was at the epicenter of a devastating wave of COVID-19 in India. In response, Illumina donated sequencers, reagents and support valued at US\$1 million to the Molecular Diagnostic Reference Laboratory at Kasturba Hospital, run by the Municipal Corporation of Greater Mumbai. This donation was aimed to expand SARS-CoV-2 sequencing capabilities in the State of Maharashtra, supporting the broader genomic surveillance effort across India.

Learn more in the [Community](#) section.

Increasing Global Access to Genomics



Ensuring Equitable Access and Data Diversity

Bringing iHope™ to More Families Around the World

The Illumina iHope™ program will change the trajectory of genomic medicine worldwide, helping patients who may have otherwise been invisible. Families of children with undiagnosed genetic diseases often face an uncertain and unpredictable future. These diagnostic odysseys may include years of multiple inconclusive tests, surgeries, and procedures.

In high income countries, these patients often remain undiagnosed for up to seven years, while in low- and middle-income geographies, many families never know the cause of their child's suffering. iHope™ is a philanthropic effort that provides comprehensive whole genome sequencing (cWGS) to underserved families around the globe. It was created in 2017, bringing together a wide range of organizations aimed to shorten the diagnostic odyssey, inspire hope by increasing access to genomics, and pilot the approach for potential scale.

In 2021, we announced an expansion of the program with a \$120 million commitment over the next five years to support the launch of the iHope™ Genetic Health program under the auspices of the nonprofit Genetic Alliance. The expanded program is designed to provide cWGS to tens of thousands of underserved families across the globe.

iHope™ Genetic Health was created to be a flagship program for Genetic Alliance, a global nonprofit focused on advancing genetics to benefit human health, to create networks of clinics, and laboratories equipped with the necessary genome technology to provide precision genomic diagnoses to patients suffering from rare genetic disease.



300 million

people affected with a genetic disease

>50%

percent of genetic disease affects young people

Measuring iHope™ Impact

Where We've Been

1,150

patients impacted since inception

40%

patients receive diagnosis after cWGS

60%¹

change management after cWGS

24

iHope™ clinical sites worldwide

Where We're Going

\$120M

commitment over the next five years

1/3+

directed toward patients in Africa

50,000

patients to be impacted by 2030

Learn more about [Illumina iHope™](#) and [iHope™ Genetic Health](#)

“

I applaud this important initiative to improve access to this life-changing technology. Access to medicine should always be a right, not a privilege.”

Francis S. Collins, M.D., Ph.D.
National Institutes of Health Director

“

Our vision is a genome for every patient that needs one, and a network of partners who will help them on every part of their journey to better health.”

Ryan Taft, PhD
Illumina iHope™ Lead and VP, Scientific Research

“

By establishing iHope™ Genetic Health, we are expanding our commitment to ensure that the benefits derived from whole genome sequencing are available to as many people as possible, as quickly as possible, regardless of disease, geography or income.”

Francis deSouza
CEO, Illumina

“

As the mother of two children, diagnosed with a genetic condition, I can't rest until we build equitable systems to meet the needs of all who experience the diagnostic odyssey.”

Sharon Terry
Genetic Alliance CEO

¹ Derived from >1000 cohort

Ensuring Equitable Access and Data Diversity

Boosting Pathogen Genomics Surveillance in Low- and Middle-Income Countries

Building pathogen genomics capabilities globally protects the health of everyone, since a threat in one place can quickly become a threat everywhere.

That's a driving idea behind the creation of the Pathogen Genomics Initiative (PGI), a collaboration between industry partners, the Bill & Melinda Gates Foundation, NGOs, and Public Health Agencies. PGI aims to integrate pathogen genomics and bioinformatics into public health surveillance, outbreak investigations, and improved disease control and prevention. The partnership is designed to expand access to next-generation genomic sequencing (NGS) tools and expertise to strengthen public health surveillance and laboratory networks across low-and-middle-income countries for COVID-19, as well as other epidemic threats and endemic diseases such as AIDS, tuberculosis, malaria, cholera, and other infectious diseases.

The initiative aims to create a comprehensive ecosystem for sustainable implementation of NGS for pathogen surveillance.

Expanding access to pathogen sequencing will aid in creating a global pandemic early warning system by enhancing geographic coverage and catalyzing efforts to detect new epidemics before they spread widely and to monitor their transmission in real-time for a more targeted and precise response. Pathogen sequencing will also contribute to research and development efforts for new vaccines, diagnostics, and treatments for current and emerging infectious diseases.

Illumina has committed \$60 million over the next five years with in-kind donations, including NGS platforms, reagents, and training support.

The initiative will bring us closer to the vision of an early warning system to detect new epidemics and apply genomics to benefit all.



Use and integration of advanced technologies such as next-generation sequencing into surveillance and emergency response programmes facilitates public health decision-making for better outcomes, as evidenced in two Ebola virus disease outbreaks and the current COVID-19 pandemic."

John Nkengasong, Director of Africa CDC believes strengthening genomic surveillance systems is key for early notification and control of these outbreaks.

Africa Pathogen Genomics Initiative

Africa PGI is a four-year collaboration between the Africa CDC Institute of Pathogen Genomics, the U.S. Centers for Disease Control, the Bill & Melinda Gates Foundation, Microsoft, Illumina, and other industry partners. The initial Africa PGI commitment included \$20 million and led to the expansion of a global model.



Africa Centre of Excellence for Genomics of Infectious Diseases (ACEGID) Training 2021

Expanding PGI to Southeast Asia

In 2021, we announced an expansion on our Africa PGI commitment with an additional \$40 million of product donations over the next five years to low-and middle-income countries, starting in South Asia. The PGI commitment will help create a comprehensive pathogen genomic network around the world, building critical public health capabilities in areas of need.

\$60M

Illumina commitment to PGI over five years

PGI Impact Year 1: Africa

\$3M

delivered in 2021

3x

increase in monthly deposited sequences to GISAID

12

countries

\$20M

committed over four years of in-kind product donations

15

organizations

11

new sequencers

PGI Impact Year 1: Southeast Asia

\$1.8M

delivered in 2021

3

new sequencers

3

countries
India, Bangladesh, Indonesia

11

organizations

Championing Patients

We are building a global community of genomics revolutionaries to help solve some of the most complex challenges of today. We seek the scientists, researchers, educators, clinicians, and patient ambassadors that are passionate about the responsible use of genomics to change and save human lives.

Together, we can guide the world into this new era innovating healthcare with patients at the center of it all. Patients are our constant source of inspiration to fulfill our Mission to unlock the power of the genome. We continue to advocate for the best clinical care for patients across the globe in these unprecedented times, actively engaging with medical organizations and governments to ensure that the genetic disease community has not only hope but also a voice. Arming patients with more information and knowledge empowers them to make better decisions about their health.

Illumina Patient Ambassadors

Illumina Patient Ambassadors are a coalition of patients and family members dedicated to increasing awareness of the importance of genetic testing. Connecting families to a wider community of people with similar experiences helps provide support and strength during the search for a diagnosis and can improve patient care and management. By sharing personal stories about their disease journey, the group can educate and motivate an entire ecosystem of support.



The Miller Family, Illumina Patient Ambassadors

The Childhood Dementia Initiative

Around the world, 700,000 children and young people are suffering from genetic disorders that cause childhood dementia. The Childhood Dementia Initiative is a new organization in Australia that recognizes September 22 as Childhood Dementia Day. They are raising awareness and working toward treatments and better care to improve the quality of life of children with dementia.

At Illumina, we joined their *It's time to FACE it campaign*, and we invited our employees to show their support by getting messy with face paints.



Renee Gallagher, Illumina Executive Sales Specialist, Australia

The Clarity Foundation

When it comes to cancer, knowledge is power, and sequencing can provide life-saving insight. The Clarity Foundation provides ovarian cancer patients with information on treatment and test options as well as emotional and social support.

The Clarity Foundation introduced comprehensive genetic profiling to Michelle and her wife Denise. Through the profiling, they found that one of her genetic markers has a potential response with new drug treatments. Genetic profiling has provided new targeted treatment for Michelle and hope for the future.



Michelle and Denise

#IlluminatingRareDisease

Our employees are passionate about the rare disease community. They understand the power of genomics to help end a patient's diagnostic odyssey and support their care management.

Since 2008, Rare Disease Day events have taken place around the world on the last day of February to raise awareness about rare disease, and highlight its impact on patients' lives. Each year, employees participate in a campaign by posting photos connected to the theme. For every photo posted, the Illumina Corporate Foundation donates to the chosen charities for the year. In 2021, we collectively raised over \$30,000. These funds were distributed to charities across our global communities.



Daniel Lv and Family, Illumina Safety Manager, China

Improving Reach to Broaden the Genomic Ecosystem

We are an engine of genomics innovation—the larger our network, the greater our collective impact. By contributing to the genomic ecosystem, we can amplify the power of genomics.

We expand the reach of genomics through genomic literacy, catalyzing genomic startups, advocating for healthcare coverage and genomics adoption, and empowering patients.

Expanding Genomic Literacy

illumina is committed to increasing the awareness of genomics in healthcare and the advancement of precision medicine. We aim to increase genomic literacy by supporting existing healthcare professionals, connecting genomic professionals, and inspiring the next generation of scientists, innovators, and researchers.



2030 Target

Reach **25,000+** health care professional learners annually

Expand

independent medical education (IME) partnerships with professional societies and the medical community, providing education across all clinical segments

Demonstrate **>95%** supported medical education programs increase participant knowledge and competence

HCP Impact in 2021

2021 PROGRESS



>30,000 learners reached through IME

>15,000

HCPs reached through illumina sponsored education including over 11,000 from our Greater China region



90% average self-reported knowledge change

The American Society of Human Genetics (ASHG) Online Education for Genetics Professionals

ASHG provides an online learning center where healthcare professionals can access a variety of digital learning experiences—webinars, workshops, podcasts, and more. In 2021, the illumina Corporate Foundation funded support of a new genomics education program. The program reached more than 12,000 professionals, with 36% of participants reporting an actual practice change due to the learning and 62% of those participants indicated that their implement change improved patient care.

illumina China NGS Industry Summit

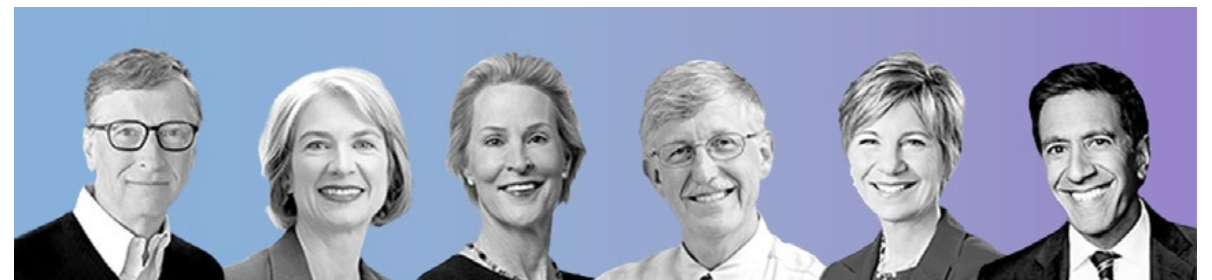
At the first illumina next-generation sequencing (NGS) Summit in Shanghai, genomic leaders discussed the future of oncology and healthcare. NGS can markedly improve human health, enabling earlier diagnoses, more precise pathogen monitoring, and better outcomes for cancer patients. Key themes also included the importance of accountability, collaboration, and the need to build a greater ecosystem to support NGS.



Connecting Genomic Professionals at illumina SPARK Event

Nearly 20 years since the Human Genome Project revolutionized healthcare, we convened leaders and innovators from around the world at this first-ever global idea forum, SPARK, to recognize the remarkable contributions of genomics to date and imagine the breakthrough innovations of tomorrow. Together, we spotlighted the efforts to make genomics-led precision healthcare a global reality for all and created a space for changemakers to share their experiences and cast a vision for what's next.

Bill Gates; Nobel Laureates Dr. Jennifer Doudna and Dr. Frances Arnold; NIH Director Francis Collins, MD, Ph.D.; Dr. Sue Desmond-Hellmann; Dr. Sanjay Gupta; and many more of the brightest minds in the industry gathered to discuss collaboration in precision medicine, inclusivity in healthcare, future pandemics, and more.



Improving Reach to Broaden the Genomic Ecosystem

Catalyzing Genomic Startups to Drive Innovation

Genomics startups are playing an increasingly important role internationally in the expansion of the genomic ecosystems. Illumina aims to catalyze this growth by supporting the Illumina Accelerator program and Illumina Ventures. The dramatic innovations emerging from these startups are helping to drive down costs and unlocking new areas of biology and market use.

Illumina for Startups

Illumina for Startups is our way of accelerating innovation in the entrepreneurial community by partnering with leading venture capital investors and entrepreneurs to create, launch, and grow genomics startups.

Illumina Accelerator is a company creation engine co-located with Illumina research and development sites in the San Francisco Bay Area and Cambridge in the United Kingdom. Illumina Accelerator provides select startups with access to seed investment and business guidance, Illumina sequencing systems and reagents, and fully operational lab space during each six-month funding cycle.

Scope of Programs



Novel drug discoveries to treat patients



New synthetic biology approaches for a more sustainable future



Impactful diagnostics to detect and prevent disease



Software and tools to further enable new insights



Important agriculture and food innovations to feed more with less

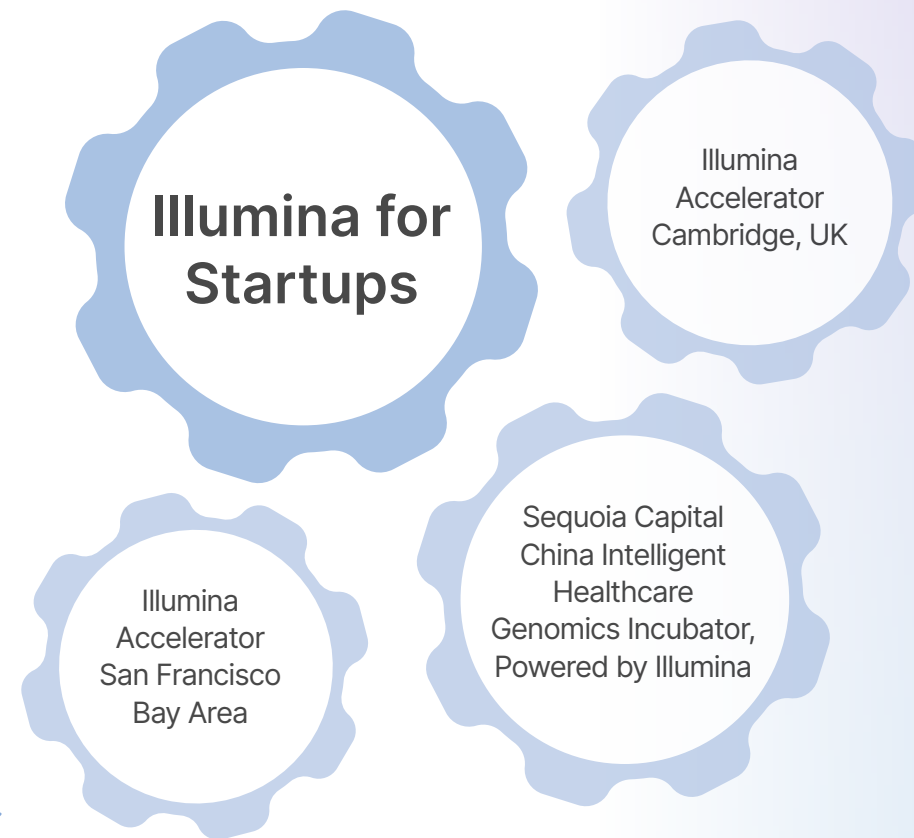


Consumer-driven applications to help us better understand ourselves



“The global reach of Illumina Accelerator is demonstrated by our investment in diverse startups from around the globe. This diversity is a testament to the strength and breadth of the talented entrepreneurs around the world focused on unlocking the power of the genome to improve human health and beyond.”

Amanda Cashin, PhD, co-founder and Global Head of Illumina for Startups



2030 Target

Achieve
200+
genomic startup supported¹

2021 PROGRESS
18
early-stage companies joined the 2021 global cohort

\$1B
raised in venture capital funding

Learn more about [our accelerators](#)

¹ From program inception

Improving Reach to Broaden the Genomic Ecosystem

illumina Accelerator Spotlight Genomics Startups in China

In 2021, we joined with Sequoia Capital China, a leading investment firm, to support the startup genomics ecosystem in China. The launch of Sequoia Capital China Intelligent Healthcare Genomics Incubator, Powered by Illumina, leverages the expertise of Illumina for Startups in building genomics companies with the unparalleled track record of Illumina Accelerator in San Francisco Bay Area and Cambridge, UK. Sequoia Capital China will dedicate to the genomics incubator its investment expertise and community of entrepreneurs to advance genomics founders.

By leveraging this first-of-its-kind platform, we will continue to grow China's biotechnology innovation and business presence, as well as foster groundbreaking discoveries with the aim to help millions of patients in China and around the world.

The startups selected for the inaugural funding cycle included:

- Mobidrop Biotechnology, a medical device and research tools company developing cutting-edge, single-cell sequencing microfluidic technologies for molecular diagnostics applications
- Sequanta Technologies, a multiomics company committed to building DNA, RNA, epitome, and proteomics technology platforms for research and clinical applications



[Learn more](#)

illumina Accelerator Spotlight Sustainability

Illumina Accelerator goes beyond investing in healthcare solutions. We are also passionate about investing in breakthrough startups pushing boundaries in sustainability. Genomics startups are pioneering new discoveries in synthetic biology, materials science, food science, and agriculture to create new industries built on products that are better for us, the planet, and society. Some of these investments include:



[Checkerspot, Inc.](#), an advanced materials company designing and commercializing the next generation of high-performance and sustainable materials enabled by genomics and chemistry. Checkerspot is using microalgae to create a sustainable alternative to petroleum.

[Pluton Biosciences, LLC](#), a microbial testing and discovery research company in St. Louis, Missouri, is developing next-generation products for carbon sequestration, agriculture, pharmaceutical, biomaterials and bioremediation.



[Yali Biosciences Inc.](#), a food tech company from San Francisco Bay Area, uses synthetic biology and genomics tools to make climate-smart, sustainable foods.

illumina Ventures

We further support the genomic startup community through Illumina Ventures, an independently managed firm founded in 2016. It is focused on assisting startups that are pioneering genomic applications and enabling precision medicine. We provide funding, strategic counsel, as well as access to the wealth of experience and expertise of the world's leading genomics solutions provider. Companies supported by Illumina Ventures are pioneering everything from new applications for advancing human health through genomics to applications that leverage genomics for sustainability, biodiversity, climate change research, food scarcity, and agrigenomics. Learn more about [Illumina Ventures](#).

illumina Alumni Network

In 2021, we launched the [Illumina Alumni Network](#). With over 7,000 alumni representing over 600 companies, we are broadening the genomic ecosystem and creating a community to forge the future of genomics together.

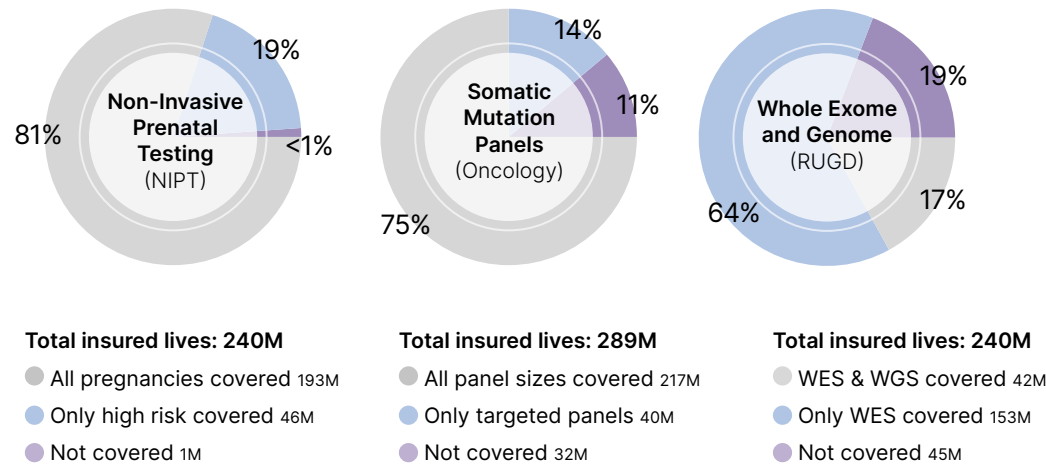
Improving Reach to Broaden the Genomic Ecosystem

Enabling Equitable Coverage and Reimbursement for Improved Patient Outcomes and Health Economics

Our ability to help improve patient outcomes has made us a trusted partner in healthcare. Today, we're providing tools that enable the next generation of clinicians to usher in the future of personalized medicine, but there is much work to do to increase awareness of genomic testing, its benefits to patients, the impact on health economics, and translate that into reimbursement policies that establish funding and allow for equitable access to genomic testing.

illumina is not just a company at the forefront of a global genomics movement. We're at the center of a global health transformation. The impossible is possible right now—not decades in the future. Through evidence generation, education community outreach, collaborations and partnerships, illumina is committed to advocating for healthcare coverage and accelerating the adoption of genomics as a diagnostic tool.

United States NGS Coverage Outlook



Outside the US: 598M, 505M, and 309M lives are covered for NIPT, somatic panels, and WES/WGS, respectively
WES: Whole exome sequencing **WGS:** Whole genome sequencing **CGP:** Comprehensive genomic profiling

Learn about our [public policy priorities](#).



Target

Achieve
2 billion
 covered lives globally
 by 2026

2021 PROGRESS
1 billion
 covered lives globally

Improving Reach to Broaden the Genomic Ecosystem

In 2021, several studies and programs focused on the use of whole genome sequencing (WGS) in clinical routine to help diagnose and treat critically ill infants demonstrating the power for patients and by measuring healthcare costs.

Project Baby Bear: Better Outcomes for Infants with Rare Diseases

Last year, we highlighted Project Baby Bear, the nickname for a \$2 million Med-Cal pilot program to provide rapid whole genome sequencing (rWGS) for babies in intensive care. In 2021, a study published in the American Journal of Human Genetics outlined the success of Project Baby Bear using rWGS® to diagnose and guide treatment for infants with unexplained rare diseases.

Employing the most comprehensive diagnostic testing available, Rady Children's Institute for Genomic Medicine used rWGS to analyze the genetic code of 184 infants in intensive care who were covered by Medi-Cal. The results provided doctors and families with vital information that empowered them to make life-altering medical decisions resulting in shorter hospital stays, targeted personalized care and fewer costly, invasive procedures.

Among the infants sequenced, rare genetic diseases that explained the baby's admission to intensive care were diagnosed in 74 babies or 40% of them. Guided by the information provided by rWGS, clinicians were able to provide precision medicine that changed care for 58 babies, or 32% of them. In addition to changes in treatment, rWGS resulted

in avoidance of other costly procedures such as tracheostomies or gastric tube insertions, eliminated the need for further testing and led to fewer days in the hospital.

Encouraged by the early success of Project Baby Bear, the State of Florida and State of Michigan have since initiated their own publicly funded rWGS demonstration projects and several similar programs have been deployed around the globe.

One Step Closer On the Path to Diagnostic Equity

Illumina scientists collaborated with investigators from five children's hospitals to co-author a study published in the Journal of American Medical Association (JAMA) Pediatrics. The Illumina-supported study, called NICUSeq, shows the impact of clinical whole genome sequencing (cWGS) in the ICU.

Expanded Medicaid Coverage in Michigan

In 2021, the State of Michigan expanded Medicaid coverage to include rWGS testing for critically ill infants suspected of having a rare genetic condition. By covering the costs for this testing option, more families will be able to get the answers they need to find the right course of treatment for their children.

The NICUSeq randomized time-delayed trial results show that use of cWGS outperforms standard of care by two-fold both in terms of diagnostic efficacy and change of clinical management of acutely ill newborns suspected of having a genetic condition. The study showed the importance of large-scale genetic testing in newborns, leading to early diagnosis of genetic conditions and helping to inform decision-making for physicians and families. Having this type of genetic information provides immediate and sustainable benefits that have lifelong value, providing a genetic 'report card' that can be used to help direct medical care. The data supports the widespread adoption and implementation of cWGS for newborns in crisis.

What makes this study important is that it mirrored real-world infant care, and showed that WGS is viable as a first-line diagnostic in diverse communities and healthcare institutions. This study highlights the reality of a future where genomics is for all.

We can't claim victory until every family with an infant or child with suspected genetic or rare disease has access to whole genome sequencing to increase their probability of receiving potentially life-saving care changes and a diagnosis.

Project Baby Bambi: Implementing WGS for Infants in the NICU in Israel

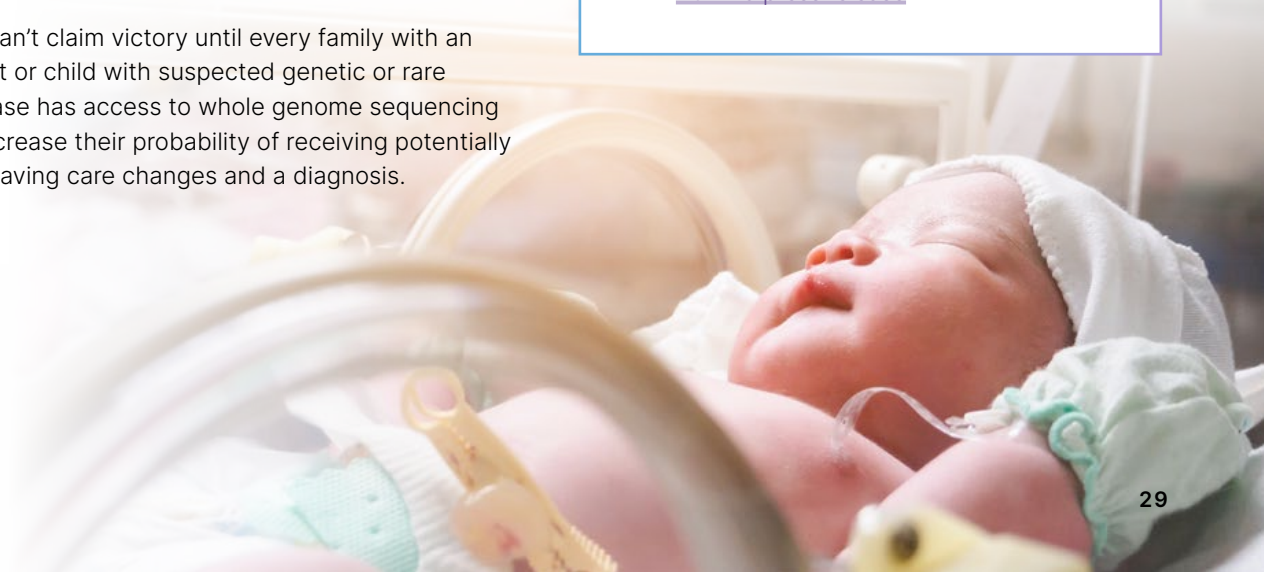
Through an agreement with Israel's Ministry of Health, Illumina is supporting a pilot program led by the Genetics Institute of the Tel-Aviv Sourasky Medical Center to implement the use of WGS for rapid diagnosis in newborns in critical conditions who are treated in neonatal intensive care units (NICU).

The program is intended to include all NICUs in hospitals in Israel. Doctors from participating hospitals will evaluate the use of WGS as a first-tier diagnostic tool to enable faster identification of disease-causing genetic abnormalities in infants and identify the correct treatment course. The project could lead to the creation of national reimbursement for WGS as a diagnostic tool in hospitals across Israel.



Learn More

[Illumina press release](#)





Empowering Our Communities

Empowering Our Communities: Our Strategic Approach

We are committed to giving back, creating shared value through our business, and seeking opportunities to enable a more equitable and sustainable future for all.

Overview

Giving back is in our DNA. By investing in our communities and collectively leveraging our skills, passion, time, and resources. Together, we can make a meaningful contribution to creating a better future.

Community Investment Areas



Equitable access to genomics



STEM education for all



Diversity, equity, and inclusion



Disaster response



Sustainability and environmental justice



Local efforts and employee interests

How We Give Back

Corporate Giving:

Supports key CSR focus areas with grants and in-kind donations

illumina Corporate Foundation:

Supports our CSR focus areas and the employee match program

illumina Cares:

Supports employee volunteerism and the causes they are passionate about



“Fostering a culture that emboldens our employees to give back is integral to our Mission.”

Sharon Vidal, Global Lead Corporate Social Responsibility

Our Objectives

By sharing our time, talent, and technology, we aim to inspire, support, and empower our communities, our employees, and the next generation.


- **Engage Our People:** Create opportunities for employees to give back to the community and feel connected to our Mission
- **Inspire Future Generations:** Deepen the impact of our genomic literacy efforts
- **Provide Strategic Philanthropy:** Partner with nonprofits to address unmet needs locally and globally in support of our CSR focus areas

Contributing to the UN SDGs




Empowering Our Communities: Measuring Our Impact


2030 Targets

 Reach 5 million learners through direct programming and nonprofit donations


2021 PROGRESS
816,170
learners¹

 Donate >100,000 volunteer hours and increase the impact of our skills-based volunteering

2021 PROGRESS
>25,000
hours¹

 Achieve 50% employee participation through Illumina Cares programs

2021 PROGRESS
31%
employee participation


 Achieve 90% positivity rate on employee surveys evaluating Illumina Cares programming

2021 PROGRESS
96%

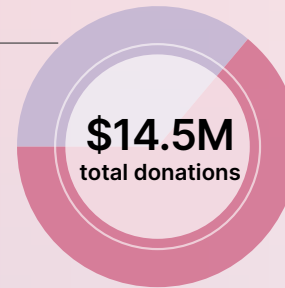
¹2019 baseline

2021 Highlights

 **44**
countries

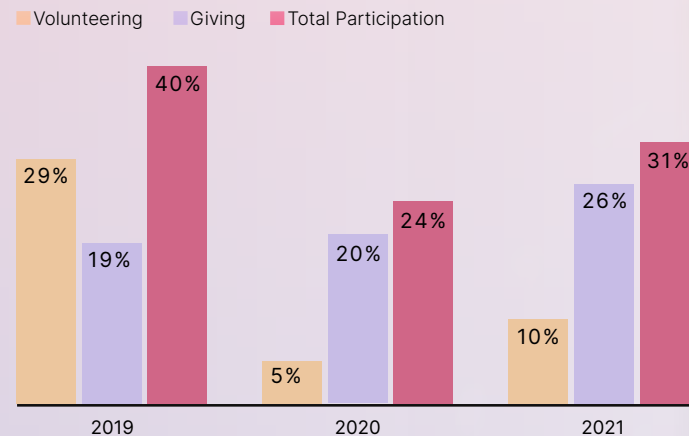
 **1,345**
supported causes

\$5M
Corporate
Foundation



\$9.5M
Illumina, Inc.

Employee Participation in Giving and Volunteer Programs



2021 Recognition



Deepening Our Impact Through Philanthropy

We focus our community impact strategy with investments that support our CSR efforts for patients, our communities, our people, and our planet.

We drive collective impact and leverage our resources to help address local and global needs with philanthropic activities and nonprofit partnerships. Our philanthropic efforts leverage cash grants and in-kind donations. To ensure we can make a meaningful difference, our community investments align to our CSR focus areas and are designed to target where we can make the greatest impact.



COMMUNITY INVESTMENT FOCUS	APPROACH	SAMPLE PROGRAMMING
EQUITABLE ACCESS TO GENOMICS	Enable access to genomics for patients in need and increase the diversity of genomic data.	<ul style="list-style-type: none"> iHope™ Genetic Health Initiative \$120M in-kind donations over next five years Pathogen Genomics Initiative \$60M philanthropic in-kind donations over next five years Foundation for Innovative New Diagnostics (FIND) for equitable Drug-resistant Tuberculosis (DR-TB) test access <p>Learn more in Access</p>
STEM EDUCATION FOR ALL	Increase genomic literacy and inspire future generations.	<ul style="list-style-type: none"> illumina Genomic Discoveries Salk Institute Mobile Science Lab I Am A Scientist Genomic Comic Education Project with Hunzhi DNA Decoded Genomics 101 SD2 <p>Learn more in Community</p>
DISASTER RESPONSE & HEALTH CRISES	Support natural disaster response and global health crises.	<ul style="list-style-type: none"> Mumbai COVID-19 donation CDC COVID-19 surveillance reagent donations China floods, EMEA floods, US wildfires Red Cross Sickle Cell Initiative <p>Learn more in Access</p>
SUSTAINABILITY & ENVIRONMENTAL JUSTICE	Invest in sustainability projects and efforts to protect vulnerable populations as we transition to a decarbonized future.	<ul style="list-style-type: none"> \$20M investment to support sustainability initiatives by 2030 iConserve illumina Agricultural Greater Good Initiative Turtle Survival Alliance CSUEB Green Biome Institute <p>Learn more in Environment</p>
LOCAL EFFORTS & EMPLOYEE ENGAGEMENT	Engage in local efforts to address the issues and challenges where we live and work and support the causes employees care most about.	<ul style="list-style-type: none"> Regional community grants Local volunteer initiatives <p>Learn More in Community</p>

Across all our giving investments, we prioritize and promote equitable representation and support for vulnerable populations. Learn more about our Diversity, Equity, and Inclusion efforts in [People](#).

Engaging Our People to Make a Difference in Their Communities

We strive to create a purpose-driven culture with opportunities for employees to volunteer in their community through organizations that matter most to them.



Employee Giving and Volunteer Benefits

\$500
donation match

16
hours paid volunteer time off (VTO)

\$25
new hire seed donation deposit

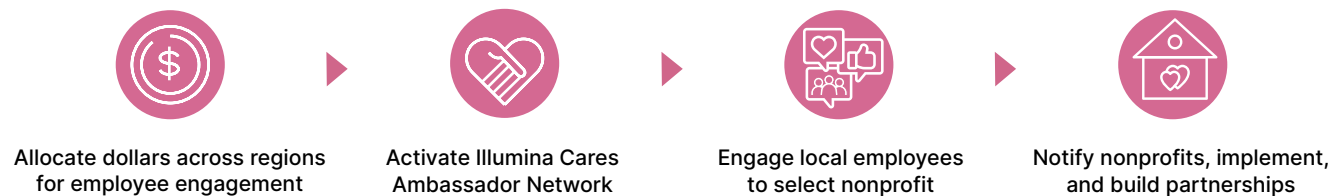
\$10
Volunteer Rewards donation earned for each hour of volunteer work



UK and US: [Hope for Hasti](#)

Chris Brannigan, father of rare disease patient Hasti, walked barefoot across the UK and the eastern US to raise funds and awareness to champion the cause of those suffering with rare disease around the world. He was inspired by his daughter who was diagnosed with Cornelia de Lange Syndrome (CdLS) when her genomic profile was sequenced with Illumina technology. Illumina employees were inspired by Chris' action and walked with him along portions of his journey in an act of solidarity. Over \$13,000 was raised for Hope for Hasti through our employee donation match program.

Regional Community Grants



In addition to the strategic corporate philanthropy that supports our CSR focus areas, we empower our employees with a Regional Community Grant Program. In 2021, employees helped direct over \$500,000 to local organizations in their communities.

Inspiring Future Generations in STEM

We are committed to equitable access to STEM education, with the goal of empowering students to envision themselves as future scientists, innovators, and trailblazers.

Our approach includes direct programming, philanthropy, and employee engagement with particular investment in minority and vulnerable populations.

The future of our Mission to improve human health is reliant on nurturing and equipping our future generations. We aim to inspire our youth to pursue STEM careers, support educators to bring genomics into the classroom, and remove barriers for under resourced groups.



2030 Target

Reach
5 million
STEM learners

2021 PROGRESS
>800,000
STEM learners reached

Sparking Interest in Genomic Literacy

Engage Our Employees to Inspire the Next Generation to Usher in the Future of Personalized Medicine

Provide access to diverse talent role models, career mentors, and stories to help break down misconceptions on systemic bias. Lift employee journeys to counteract stereotypes in classrooms, labs and the workplace through partnerships with [I Am A Scientist](#) and [SD2](#).

Develop Tools for Educators

Help educators understand genomics through curriculum partners like [Discovery Education](#) and [Birch Aquarium](#). Provide ready-to-go standards-aligned lessons and activities for teachers and students to explore genomics applications.

Creating an Educational Community

In partnership with Biocom Institute California, [illumina Genomic Discoveries](#) continues to build an educational community where teachers can learn and connect with the world of genomics. The program provides genomics-focused professional development, a real-world curriculum, in-classroom activations, and industry connections.

Remove Barriers to Ensure Equitable Access to STEM

Remove barriers of access by providing equipment and expertise for under resourced groups like [Future Kings](#) and [GenSpace](#).

Inspire Community Partners & Educators

Inspire community partners and educators to bring genomics into their classroom by participating in our annual [The Future is Bright](#) campaign celebrating DNA Day globally.

illumina

STRAWBERRY DNA EXTRACTION PROTOCOL

'Protocol' is a fancy word for 'Experiment'

Cells are the basic unit of life and make up all plants, animals, and bacteria.

Deoxyribonucleic acid, or DNA, is the molecule that controls everything that happens in the cell. DNA contains instructions that direct the activities of cells and, ultimately, the body. This activity will demonstrate how DNA can be isolated from a strawberry using common household materials.



Inspiring Future Generations in STEM

Taking Students from Curiosity to Career

An important element of our philanthropic support is to nurture a diverse and inclusive STEM workforce for the future. We do this through collaborations with a range of community partners to reach and inspire students of all backgrounds.

The Future Is Bright

In celebration of DNA Day each year, we host the “Future Is Bright,” a month-long genomic literacy initiative. Illumina employees connect with students by hosting career panels, implementing genomics curriculum, and leading hands-on experiments. This learning opportunity ties together genomic research, education, and community impact.

2021 Campaign Impact



165
Illumina employees volunteered



42,000+
teachers, students, and learners reached



210
classroom events



550+
organizations participated in the month-long activities



7
public-facing events



16
different countries and 44 of the US states were represented



54%
under resourced community classrooms

Advancing STEM Diversity in Our Hometown

In response to systemic issues of racial inequality found in education and STEM studies, we are proud to be a founding sponsor of San Diego STEM Diversity, also known as [San Diego Squared \(SD2\)](#). The organization focuses on creating diversity in STEM careers by inspiring, supporting, and mentoring San Diego area students at every stage of the talent pipeline.

Illumina has committed \$500,000 over three years to support the program. In 2021, we sponsored four SD2 scholarships totaling \$10,000 for minority high school students who are pursuing a degree in a STEM-related field and two \$5,000 educator grants for minority STEM teachers. In addition, Illumina employees engage directly with SD2 by volunteering their time to mentor students interested in STEM over an immersive, 10-week program.



Jennifer Hairston (left), Illumina Mentor, and her SD2 mentee Manal Mohamed. Every student who participates in the SD2 program receives an industry mentor who shares some life experience and is committed to support them for at least one year.



Future Kings

Future Kings delivers immersive STEM programs to middle and high school boys from underserved communities through a multi-year, hands-on curriculum, and dedicated mentorship.

In addition to basic lab skills, students receive training on science communication, entrepreneurship, and a research project. This year, the cohort of students chose to study why African Americans are more susceptible to COVID-19 as their capstone research project. To support their research and commitment to diversity in STEM, Illumina donated Illumina iSeq technology, consumables, and an education grant for program support. [Learn more](#) about our partnership with Future Kings’ biomedical program.

“My vision for Future Kings and my ongoing commitment to the organization is to break the cycle of poverty in African American and Hispanic communities by introducing students to STEM professions.”

Dr. Arik King, Future Kings Founder and Executive Director

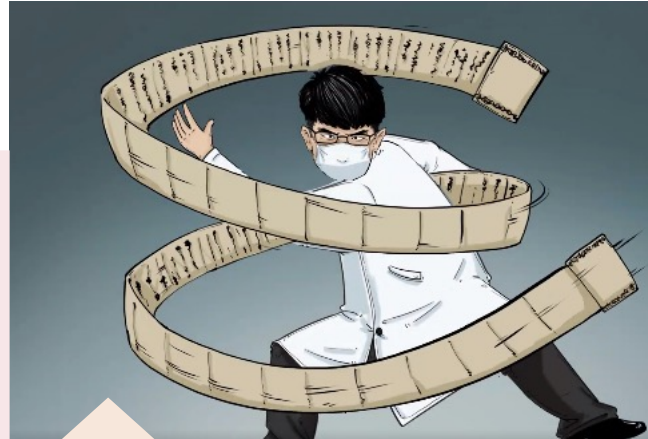
Inspiring Future Generations in STEM

Sharing Knowledge to Promote STEM



Seeing Is Believing

That's the idea behind our YouTube series of videos that show what it is like to work at Illumina and to introduce students to the diverse range of careers our industry offers. [Meet our employees](#)



Every Student Deserves a Chance to See Themselves in Science

We have partnered with "[I Am A Scientist](#)" to support initiatives bringing no-cost educational resources to the classroom that challenge stereotypes and inspire the next generation of STEM leaders. We believe **if a student can see themselves in science, they can dream it, and they can build their future to be it.**

Black Girls Do STEM

Marie Kamsi, Illumina Intern, was the project lead for the nonprofit Black Girls Do STEM, and has since joined Illumina full time as a product engineer. Our interns worked with [Black Girls Do STEM](#) to help them hit their fundraising goal. The interns developed social media experiences to help raise awareness of the organization, drive engagement, and increase donations.

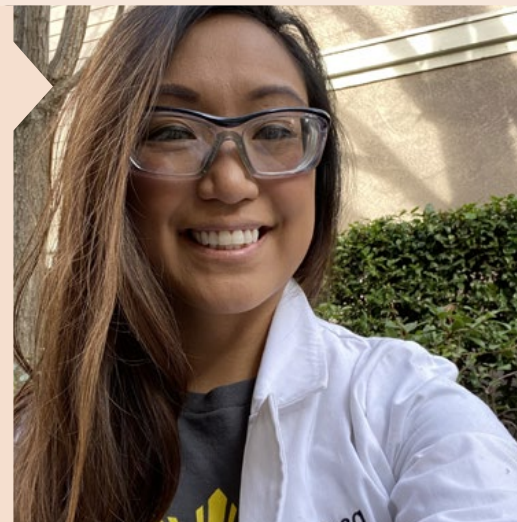


Putting the Fun in Sequencing Technology

Illumina Greater China and a well-known social media key opinion leader, Hunzhi, partnered to create a series of light-hearted comics and videos demonstrating the positive impact of next generation of sequencing (NGS). Each collaboration, published on WeChat and Weibo, relates scientific knowledge to daily life to help the general public gain a better understanding NGS and this value.

“ We have 16 hours of paid volunteer time off. I've been helping to coordinate virtual Genomics 101 classes for young students and professional development sessions for college students. I love giving back to the community that helped me become who I am today and being able to help promote representation in STEM fields.”

*Tesa Dinio Abad
Illumina Systems Engineering Manager*



**Janina Jeff, PhD, MS
Illumina Bioinformatics Scientist**

I Am A Population Geneticist

[Learn More](#)



**Alexander Bennett, PhD
Illumina Development Engineer**

I Am A Mechanical Engineer

[Learn More](#)



**Cesar Arcasi-Matta
Illumina Research Associate**

I Am An Analytical Chemist

[Learn More](#)





Integrating Environmental Sustainability

Integrating Environmental Sustainability: Our Strategic Approach

Human health and the health of our environment are intertwined, connecting our Mission to improve human health with our commitment to operate responsibly and sustainably.

Overview

We are committed to integrating environmental stewardship into the fabric of how we operate. We recognize the importance of the environment in creating a healthy, sustainable future for all. We view sustainability through the lens of continuous improvement, knowing there will always be more opportunities for us to protect our planet and do our part.

Our expanded climate action targets are an important part of our overall business strategy to minimize risk associated with climate change, build resilience, and identify opportunities for long-term sustainable growth.

Our climate action goals include commitments for Net Zero emissions across our operations and value chain by 2050.

As the world seeks innovative solutions to tackle climate challenges and protect our natural capital, we recognize the incredible opportunity the field of genomics and our technology will provide. Currently, our technology is leveraged for studies used around the world on biodiversity, endangered species protection, ecosystem conservation, sustainable agricultural practices, and climate change research. Unprecedented advances in next-generation sequencing are benefiting patients, developing sustainable food supply, and protecting our natural capital.



“Our customers look to us to support them on their sustainability journeys, and we are responding to that call with action. By investing in sustainable, responsible operations, we create a decarbonized future that will enable resilience, innovation, and market differentiation while driving down our operational costs.”

Kevin Pegels, Chief of Global Operations

Our Objectives

Our approach to environmental sustainability prioritizes the implementation of sustainable solutions in our facilities and products, as well as across our supply and value chain.

Facilities:

- Incorporate green building design
- Reduce Scope 1 and 2 emissions
- Increase renewable electricity
- Reduce water footprint
- Reduce waste to landfill

Supply Chain & Value Chain:

- Reduce Scope 3 emissions
- Drive sustainable and responsible practices in our value chain
- Engage strategic suppliers to reduce their environmental footprint

Contributing to the UN SDGs



Product:

- Integrate Design for the Environment
- Optimize sequencer power and processing
- Replace chemicals of concern wherever possible with greener alternatives
- Reduce petroleum-based plastics
- Reduce packaging

Community:

- Help ensure a just transition to a decarbonized future through philanthropy and community investments

Integrating Environmental Sustainability: Measuring Our Impact

2030 Targets¹



Achieve Net Zero and reduce absolute Scope 1, 2, and 3 emissions 100% by 2050^{2,3,4}

2021 PROGRESS
In progress



100% renewable electricity^{2,5,7}

2021 PROGRESS
59%



90% landfill diversion at core sites^{2,8}

2021 PROGRESS
49%
diversion



10% reduction in water intensity at core sites^{2,8,9}

2021 PROGRESS
8%
increase



75% reduction in packaging²

2021 PROGRESS
In progress



Reduce absolute Scope 1 and 2 emissions 46%^{2,3,7}

2021 PROGRESS
24%
reduction



Reduce absolute Scope 3 emissions 46%^{2,4,7}

2021 PROGRESS
36%
increase



Achieve carbon neutrality in direct operations (Scope 1 & 2) by 2023^{2,3,6}

2021 PROGRESS
24%



100% of strategic suppliers commit to minimizing their environmental footprint

2021 PROGRESS
84%
committed



Invest \$20M in charitable contributions to sustainability initiatives

2021 PROGRESS
\$714K
in philanthropic support enabled

2021 Recognition

Member of
Dow Jones Sustainability Indices
Powered by the S&P Global CSA

Sustainability Award
Gold Class 2022

S&P Global



¹ 2030 Targets, unless otherwise specified

² Baseline data 2019

³ Boundary of Scope 1 and 2 greenhouse gas emissions includes sites that represent jurisdictional control plus material locations, accounting for 96% of our total Scope 1 and 2 footprint

⁴ Scope 3 GHG emissions reductions from the categories: purchased goods and services, capital goods, upstream transportation and distribution, business travel, employee commuting, and investments

⁵ Illumina commits to increase annual sourcing of renewable electricity from 0.6% in 2019 to 100% by 2030

⁶ Carbon offset investments are applied in addition to meeting our verified science-based target for the short-term goals to offset the natural gas impact. All offsets are green e certified and nature based solutions

⁷ Emission reduction targets have been third-party verified by the Science Based Targets initiative in line with 1.5 degree C climate ambition

⁸ San Diego (I3, HQ, Distribution Center), Foster City, Hayward, Madison, UK Illumina Centre, Netherlands, and Singapore Woodlands

⁹ Water target is normalized for intensity by square footage

Climate Action

Climate change represents a threat to human health, the environment, and the global economy.

With our commitment to responsible and sustainable practices, we set a long-term target of Net Zero carbon emissions by 2050 across our operations and value chain to align with the most aggressive climate action goals of keeping global warming to 1.5 °C above pre-industrial levels.

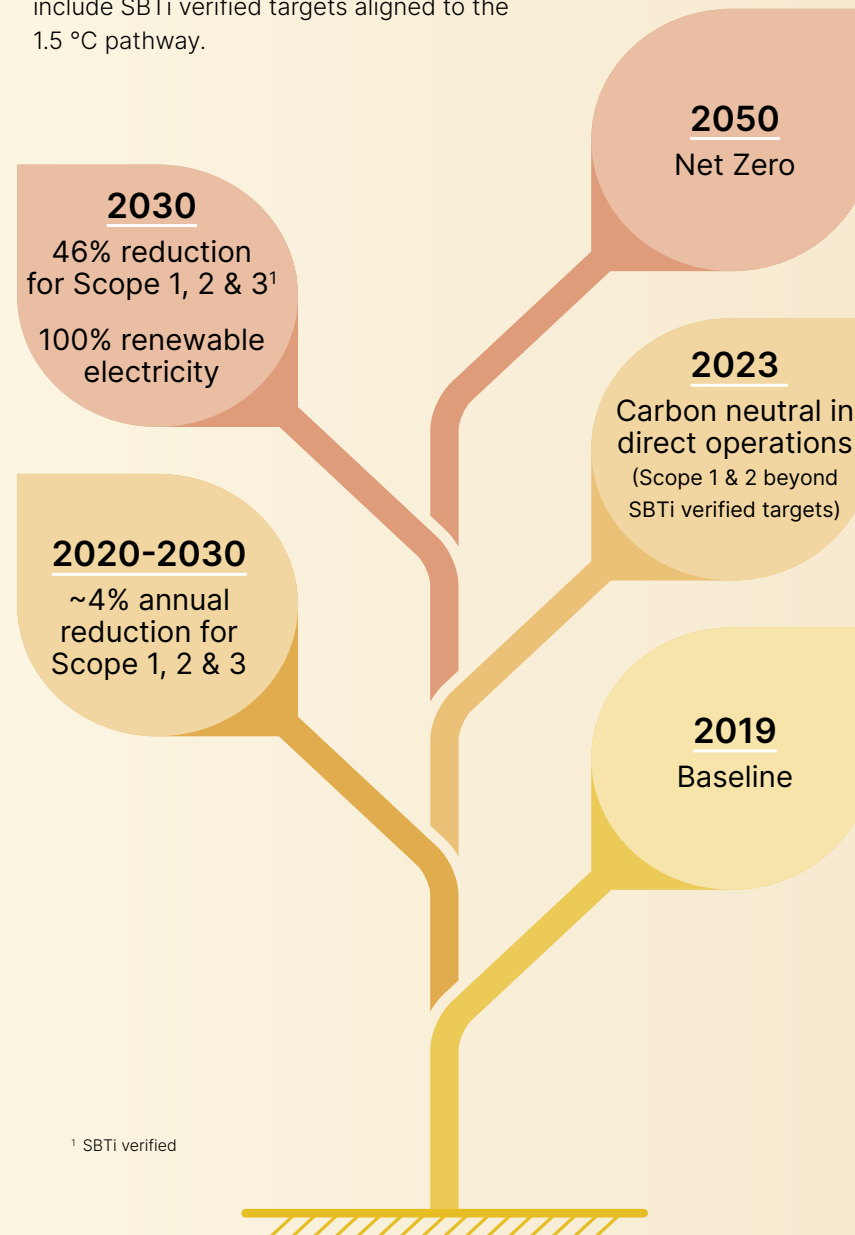
On the path to Net Zero, we have established milestone targets through 2030 including a 46% reduction of emissions from direct operations and indirect operations with a focus on the value chain elements associated with purchased materials and services, transportation and distribution, investments, business travel, and employee commuting.

We have also joined other corporate leaders in committing to decarbonization and demonstrating our commitment to leadership in environmental sustainability.

As a science-based organization, we are compelled to ensure our reduction targets are aligned and verified to a science-based approach. In 2021, our Scope 1, 2, and 3 emission targets were aligned to a 1.5 °C climate ambition and externally verified by the Science Based Targets initiative (SBTi). In January 2022, we submitted our request for verification of our Net Zero targets.

Our Path to Net Zero

To ensure we hit critical milestones on our path to Net Zero, we created short-, medium-, and long-term targets. These climate commitments include SBTi verified targets aligned to the 1.5 °C pathway.



¹ SBTi verified

We have committed to:

- Business Ambition for 1.5 °C
- Science Based Targets initiative
- We Mean Business Coalition
- United Nations Race to Zero
- The implementation of UN SDG 13: climate change
- Task Force on Climate Disclosure

Climate Action

Risks and Opportunities

Climate Risk Management

Addressing climate change is critical to achieving a sustainable, just, and resilient future for all. We are committed to the integration of climate resilience planning into our enterprise risk management program. We continue to evaluate our approach as external conditions evolve, recognizing that both physical risks, such as extreme weather, and transition risks such as regulatory and technological developments, may affect our operations.

We also seek ways to increase our climate resilience. Our approach to manage the physical and transition risks and opportunities presented by climate change aligns with the Task Force on Climate-Related Financial Disclosures (TCFD) framework. We have updated our TCFD reporting to reflect to our SBTi verified goals to keep global warming well below 1.5 °C. Additional details on our climate scenario insights are located in the TCFD Index.



Learn More

- [Climate Change Position Statement](#)
- [Net Zero Climate Action Plan](#)
- [TCFD Index](#)
- [CDP Disclosure](#)

Natural Capital and Biodiversity

Nature underpins all economic activities and human well-being. It is the world's most important asset. As part of our approach to sustainable and responsible business operations, we have reviewed potential risk and opportunities beyond our climate footprint to incorporate a holistic look at natural capital and biodiversity. Natural capital assets are elements in nature that provide the goods and services that the economy depends on. We reviewed the links between our potential direct impacts and dependencies on natural capital.

As the Task Force on Nature-related Financial Disclosures develops a risk management and disclosure framework for organizations to report and act on nature-related risk, we have conducted preliminary reviews using ENCORE¹ as a tool to offer early insights on potential impact and opportunities. We used the following parameters for our review: Sector of Health Care, Sub-Industry of Life Sciences Tools & Services, and Production Process of Life Science, Pharma and Biotech.

The impact materiality for our selected sub-industries and production process indicated zero very high materiality, zero high materiality, and only 1 medium materiality rating across the potential natural capital categories. The medium materiality rating for our industry was linked to solid waste and

the intersection of ecosystem services associated with species (plants, animals, fungi, algae, and genetic resources).

At Illumina, our existing environmental-related targets currently include efforts that prioritize reducing the impact of waste in our facilities, supply chain, and product. We will continue to monitor and assess the natural capital elements of our environmental footprint.

As evidence between biodiversity, natural capital, and the economy become more defined, we recognize there are opportunities for the application of genomics and Illumina sequencing to protect and innovate in future nature positive economies. Our technology is currently used in research to understand and guide conservation of species, to implement more sustainable agriculture and food security pathways, and as a tool for innovation to create new synthetic materials that minimize natural resources use or create alternatives to natural capital withdrawals.

We are excited about the opportunities Illumina and the field of genomics can support as we march toward a more sustainable future.

¹ Exploring Natural Capital Opportunities, Risks and Exposure



Sustainable Facilities

Our direct environmental impact in our operations and facilities represents 13% of our total emissions footprint.¹

Creating Sustainable Facilities

We focus on green building design; optimization of existing energy, water, and waste systems; and expanding use of renewable energy. We continually seek initiatives to reduce our environmental footprint.

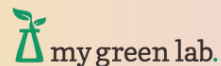
- Incorporating green building design into all new construction projects
- Utilizing renewable electricity
- Installing green roofs
- Using sustainable building materials
- Incorporating energy-conservation technologies
- Optimizing natural light and opportunities for connecting employees to the outdoors

Currently, we have four of our core campus locations around the world that have earned certifications for green building practices.



Greening Our Labs

We have partnered with My Green Lab® to improve the sustainability of our laboratories around the world. In 2022, we will initiate the process of certifying five of our global labs through the My Green Lab® Certification Program as part of our commitment to a Net Zero future. Participating in this program will help us identify and implement sustainability best practices around energy, water, and waste, while increasing employee engagement in our labs.



Energy Efficiency

We regularly evaluate energy-efficiency measures and renewable energy projects to reduce our operational carbon emissions. Each of our sites maintains a pipeline of energy projects to contribute to emission reductions.

2021 Initiatives

- Enrolled in Community Power offering, shifting all three of our San Diego locations to 100% renewable electricity. All existing San Diego sites will be fully transitioned by the end of 2022 resulting in an estimated 1,500 metric tons CO2e reduction annually.
- Replaced two air handler units and two AC units with newer, more reliable, and efficient units at our Hayward site. This upgrade will save an estimated 243,000 kWh per year, representing 10% of the entire site's annual electricity usage.
- Initiated energy audits at our San Diego, Madison, Hayward, Foster City, Cambridge, and Singapore facilities to further identify opportunities to reduce energy consumption across our global operations.



2030 Target
100%

renewable electricity

2021 PROGRESS

59%
Renewable electricity²

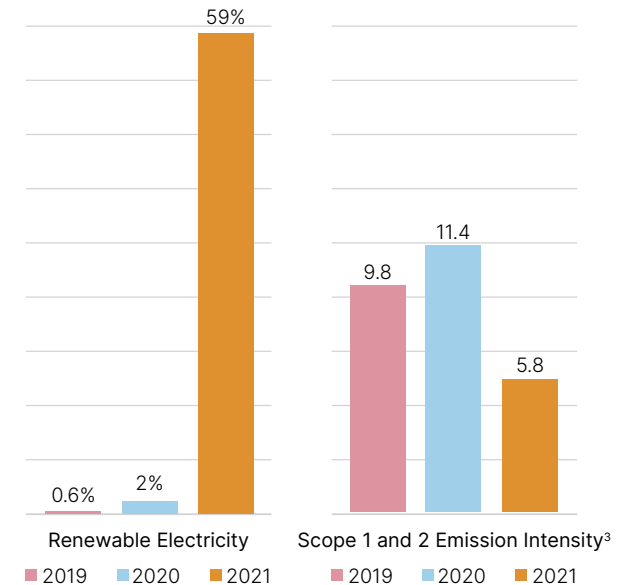
24%
Reduction in Scope 1 and 2 emissions since 2019

SBTi verified targets



2030 Target
46%

reduction Scope 1 and 2



¹ 2019 baseline
² Onsite generation, purchased renewable electricity, and renewable energy credits
³ Scope 1 and 2 emission intensity per million dollars revenue

Sustainable Facilities

Waste Management

We take a hierarchical approach to waste management, where source reduction is the most preferable option, and landfill is the least preferable. We will continue to prioritize innovative waste management efforts as part of our 2030 landfill diversion target.

Hazardous Waste

Our hazardous waste management program is designed to minimize impact and manage materials in the most environmentally responsible manner. The process follows a hierarchy that specifies: reclamation/reuse, recycling, waste to energy recovery, fuel blending, wastewater treatment, incineration, autoclave, and landfill when alternatives are not available.

San Diego Site Waste

140,000 lbs

hazardous waste diverted annually through waste segregation project

Producer Responsibility

We participate in required compliance schemes for producer responsibility to ensure proper collection, management, and disposal. This includes the recycling of packaging, batteries, and [waste electrical and electronic equipment \(WEEE\)](#). Under the EU's Batteries and Accumulators Directive and Packaging Waste Directive, and regulations in several EU member states, we comply with requirements to finance the collection and recycling of batteries and packaging supplied with our products at end of life.

Responsible eWaste Disposal

Through our waste management programs, we aim to reduce the environmental impact from electronic waste and ensure responsible management at end of life. We partner with E-Steward, R2, and other certified recyclers to refurbish, rebuild, and reuse devices to help organizations around the world.

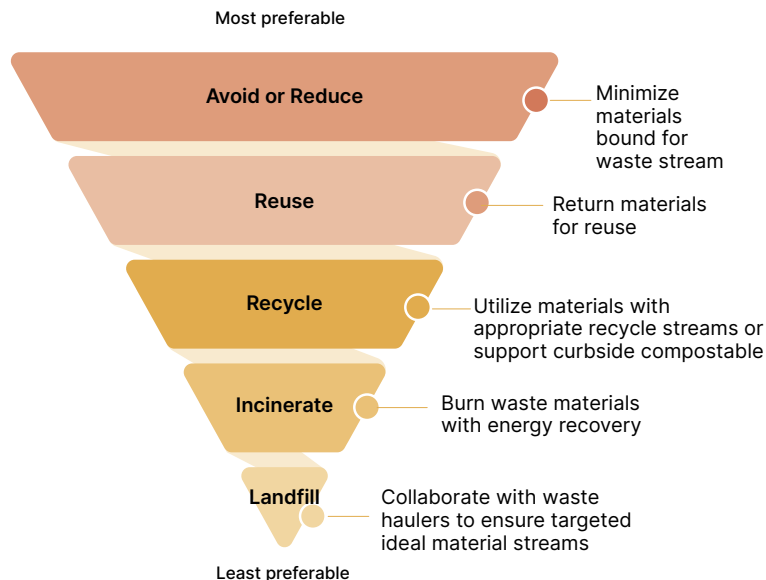


2030 Target

90%

landfill diversion at all core sites¹

How We Tackle Waste



Water Stewardship

We continuously seek opportunities to reduce our water footprint by improving operational efficiencies and assessing potential risks to protect this vital natural resource. We assessed our water usage by comparing the locations of our sites with the baseline water stress risk ranking according to the World Resource Institute and its Aqueduct atlas.² For facilities that have been identified as operating in water-stressed regions, we are committed to focusing additional efforts on water management planning.

Water Risk at Core Site Locations²

- San Diego, CA
- Steenoven, Netherlands
- Madison, WI
- Cambridge, UK
- Foster City, CA
- Hayward, CA
- Singapore

Water risk assessment by site

- Extremely High
- High
- Medium-High
- Low-Medium
- Low



2030 Target

10%

reduction in water intensity at core sites¹



San Diego Water Highlights

At our largest location and highest water risk location, we employ a variety of water conservation applications:

- Reclaimed water used for landscape, cooling towers, and water features
- Low flow fixtures
- Smart timers for irrigation linked to forecasted weather conditions
- Synthetic grass in amphitheater
- Succulent and native plant landscaping

50% of water used at San Diego locations is sourced from reclaimed water

¹ San Diego (i3, HQ, Distribution Center), Foster City, Hayward, Madison, UK Illumina Centre, Netherlands, Singapore Woodlands.

² [Water Stress and the Aqueduct Project](#)

Developing Sustainable Products

We continue to develop innovations that reduce the environmental impact of our products, technologies, and solutions. We apply the principles of environmental stewardship to address impact throughout the product life cycle.

Design for the Environment

Design for the Environment (DfE) is our approach to incorporate sustainability and lower the environmental impact of products through design. Through DfE, we apply environmental criteria to resource selection, design, packaging, energy use, data processing efficiency, size, weight, stability, shelf life, temperature requirements, end-of-life management, and more. Insights from these assessments help inform our work toward our 2030 targets. In 2022, we aim to complete additional product life cycle assessments (LCA) to inform further opportunities.

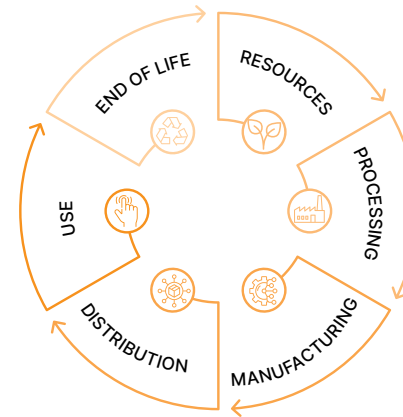


2030 Targets in Progress

- Integrate Design for the Environment (DfE)
- Optimize sequencer power consumption and processing efficiency
- Reduce amount of petroleum-based plastic in new product designs
- Replace use of chemicals of concern wherever possible with greener alternatives
- Seek additional opportunities to engage in circular economy

Sustainable Product Highlights

- Reduction in reagent size
- Ambient flow cell shipping
- Biodegradable inserts
- Plant based insulated shipping containers
- Disassembly optimization for recycling
- Improved energy intensity and compression efficiency of sequencers



NovaSeq™ compared to HiSeq™

- Data footprint reduced by 25%
- Gigabase per hour increased data rates
- Increased shelf life from 3 to 12 months on v1.5 RUO kits

NextSeq™ 2000 compared to NextSeq™ 550

- 4x smaller reagent size
- 2.5x output
- 75% decrease in waste footprint
- 6x faster on board secondary analysis

Through our DfE approach, we seek to find more opportunities to shift the standard linear economy of take, make, waste to a circular economy addressing the full life cycle of materials and their end of life.

Lowering the Energy Use of Our Products

We are seeking ways to optimize sequencing power consumption and processing efficiency to reduce the environmental impact of our products. The DRAGEN™ (Dynamic Read Analysis for GENomics) Bio-IT platform provides accurate, ultra-rapid secondary genomic analysis of sequencing data. This platform requires 20x less energy to analyze one whole human genome compared to the DRAGEN™-GATK.



Developing Sustainable Products

Sustainable Packaging

We lead with sustainable, responsible, and proactive business practices, which extend to how our products are developed and produced, and how we move materials throughout our value chain. Through the integration of DfE, we continue to assess opportunities to optimize packaging for products currently on the market and incorporate sustainable packaging design into the development of new products.

Many of our products are temperature sensitive, which creates unique requirements for packaging, shipping, and storage. We utilize a packaging LCA tool to provide an additional lens to make informed and evidence-based decisions about packaging materials and designs.



2030 Target

75%

reduction of packaging from 2019 baseline

90%

of our secondary and tertiary packaging will be recyclable, reusable or compostable



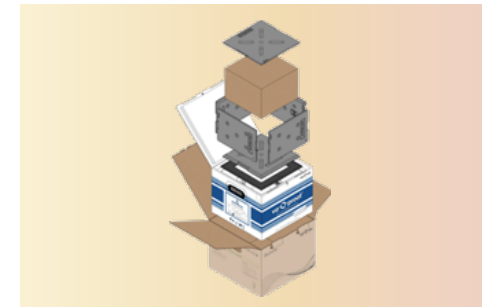
Returnable. Reusable. Recyclable. Our packaging is more sustainable than ever.



Recyclable Insulated Containers

A move to plant-based paper insulated containers results in a recyclable solution.

- 100% curbside recyclable and compostable using standard paper-recycling streams
- Insulated containers for frozen and refrigerated shipping are made with plant-based renewable materials, which require less energy and are diverted from the landfill
- We experienced pandemic-related supply disruptions with these containers in AMR and EMEA throughout 2021. We were able to redeploy the containers in AMR in October and are again in full use throughout the region. We will continue to scale up use in EMEA in 2022 and are currently evaluating solutions for use in APAC.



Returnable Insulated Containers

Insulated containers used for refrigerated and frozen *in vitro* diagnostic (IVD) product shipments can be returned to us for reuse.

- Returned containers are inspected, sterilized, reworked, and reused
- 70 lbs of tertiary packaging waste diverted from landfill with each use and subsequent reuse



Reusable Bulk Sustainable Solutions

Insulated pallet shippers for frozen and refrigerated products are validated for multiple uses and returnable for refurbishment and reuse.

- Supplier return facilities inspect and refurbish for return shipments to Illumina
- Pallets are modular and break down flat for easy return of multiple units via land or ocean transport
- Supports internal movement network and customer bulk orders

Additional Packaging Highlights

- Elimination of bubble wrap with dunnage paper
- Bulk palletized packaging solution for NextSeq™ 500/550
- Continued dry ice optimization resulting in 80 kg less dry ice per frozen pallet

Sustainable Value Chain

As a global organization, we recognize our environmental footprint extends beyond our facility walls.

Scope 3 Emissions

In early 2021, we launched our first Scope 3 emission inventory assessment across all relevant categories for our value chain to better understand the holistic impact of our business and to identify the greatest opportunities.

Using 2019 as our baseline, the results revealed that 87% of our global emissions are attributable to elements in our value chain.

Of the fifteen categories assessed, we selected the most material categories contributing to our emission inventory. Categories that represented 7% or more were defined as material and account for 92% of our total Scope 3 footprint. These categories will be the focus of our reduction efforts:

- Upstream transportation and distribution
- Purchased goods and services
- Capital goods
- Investments
- Business travel
- Employee commuting

After reviewing the Scope 3 data, we established targets for reduction. In September of 2021, we successfully received verification from the Science Based Targets initiative on our emission reduction approach aligned to a 1.5 °C pathway. Our verified targets include reducing absolute Scope 3 emissions 46% by 2030 compared to 2019.

We are working with each functional group on projects to continue to drive down the value chain impact. Initial projects and sample initiatives include updates to our investment policy, communication campaign to our supplier base, supplier mapping optimization, expanding green travel policy, and shifting purchased goods from air to ocean freight wherever possible. We will continue to report on progress as these evolve.



2030 Target

46%

Reduction Scope 3



2050 Target

Net Zero

2021 PROGRESS

Emission change since 2019

Scope 1 and 2:

↓ **24%**

Scope 3:

↑ **36%**

2021 % of total emission footprint

Scope 1:

6%

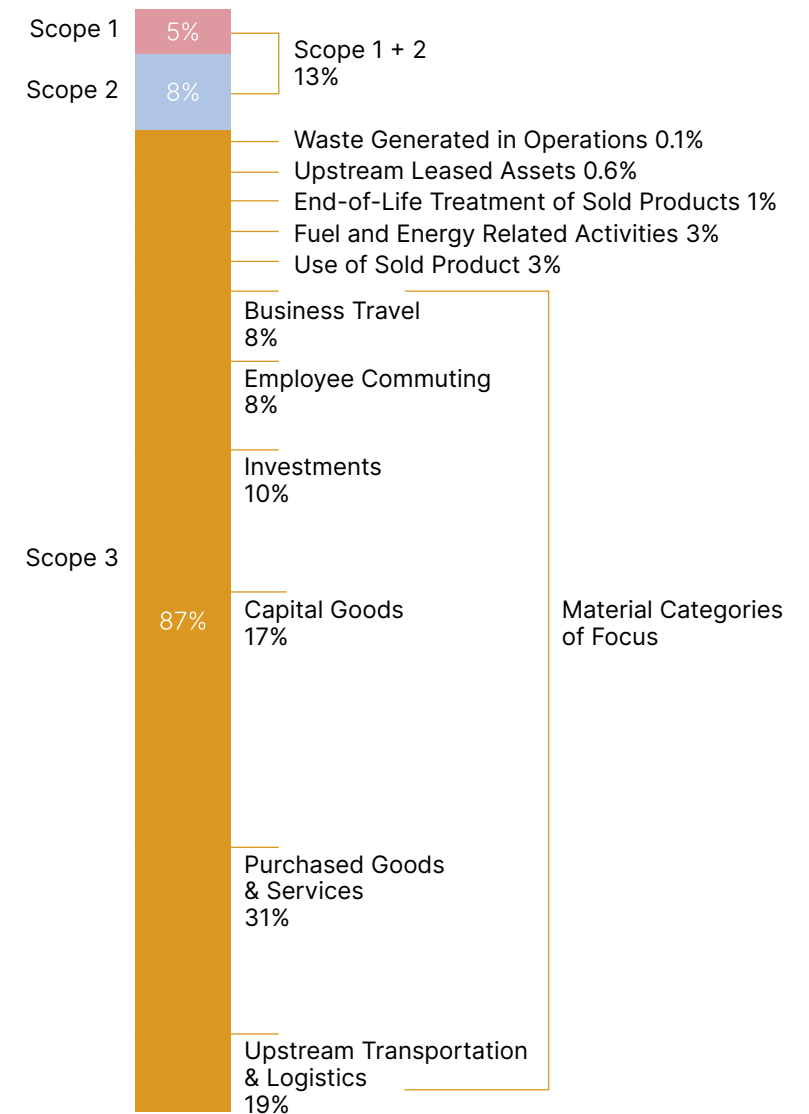
Scope 2:

2%

Scope 3:

92%

2019 Baseline Scope 1, 2, 3



Sustainable Value Chain

Engaging Our Partners in Reduction Efforts

We consider it business-critical to work with suppliers and partners across our value chain who share our commitment to the environment.

We engage with strategic suppliers and business partners on climate-related issues and hold them to the same high standards of business conduct that we set for ourselves. We require strategic suppliers to commit to reducing their own environmental footprint.

Through our strategic suppliers scorecard program, we assess environmental sustainability commitments made by our suppliers. Our goal is to empower our suppliers to reduce their collective carbon footprint and encourage transparent reporting on their progress. In turn, this will help us to reduce our overall Scope 3 emissions.

Sustainable Investments Policy

The emissions associated with our investments accounted for 10% of the impact in our value chain in our 2019 baseline study and was one of the top five areas contributing to our Scope 3 greenhouse gas inventory. Following review of the Scope 3 data, we modified our investments policy to eliminate investing in Energy and Utilities sector bonds unless the associated issuance is identified as a Green, Social or Sustainability (GSS) Bond. The analysis showed we could adjust our approach without any expected impact to our returns, helping to green our investments without financial impact.

Learn more about our supplier engagement efforts in the Responsible Supply Chain section of the [Integrity](#) chapter.



2030 Target

Ensure
100%
of strategic suppliers
commit to minimizing their
environmental footprint

2021 PROGRESS

84%

More Sustainable Business Travel

illumina enables employees to effectively avert travel for business meetings with a host of digital and virtual tools, reducing carbon emissions associated with business travel. For our highest traveled routes, we are curating preferred partnerships with airlines where sustainable aviation fuel and increased aircraft efficiency are options.

Leveraging Genomics for a Healthier Planet

The positive power of genomics is helping solve some of the world's most challenging and pressing issues for human health and beyond.

Today, scientists are using our technology to research climate change adaptation, study conservation, and utilize environmental DNA (eDNA) to gain insights to develop innovative environmental solutions. Genomics is proving to be an invaluable tool to understand how climate change is impacting biodiversity, such as cataloging endangered species and identifying new ones.

Conservation Genomics focuses on characterizing genetic diversity of endangered species and applying molecular tools like Illumina sequencing to support sustainable management of threatened species and populations. For agricultural genomics, Illumina technologies help researchers on everything from developing more heat-resistant crops to helping breeders raise healthier livestock.

As we address the carbon footprint of our business, we also seek to support a collective global improvement. To ensure a just transition to a decarbonized future, we have added an element of philanthropic and community investment.



2030 Target

Invest

\$20M

in philanthropic contributions to sustainability initiatives and projects to ensure a just transition to a decarbonized future.

Learn more in the [Community](#) section.

Honoring a Just Transition to a Carbon Free Future

[GRID Alternatives](#) helps advance economic and environmental justice in the US through renewable energy projects. We partnered with GRID Alternatives on projects near each of our main campus locations to provide clean energy, solar industry job training, and job placement to low-income and tribal communities in San Diego, the San Francisco Bay Area, Washington DC, and Wisconsin.

The University of Sydney's Australasian Wildlife Genomics Group is using genomics to battle decreased genetic diversity threatening koalas. Illumina whole genome sequencing technology provides insights to researchers to help protect the species from climate change, disease, and other risks.

[Learn more](#)

Leveraging Genomics for a Healthier Planet

How Illumina Technology Is Helping to Support Biodiversity and Sustainable Agriculture



Returning Turtles Home with Genomics

The [Turtle Survival Alliance](#) (TSA) is using genomics to save endangered turtles from extinction. 20% of global turtle diversity lies within the US, making it an ideal hub for trafficking. Over 10,000 trafficked turtles from unknown locations have been confiscated by US authorities. We contributed two MiSeq™ platforms and reagents for fast processing of gene samples enabling TSA to return up to 5,000 more turtles to their original homes each year.



Accelerating Conservation with Illumina iConserve

Our philanthropic initiative iConserve seeks to bring the community together to accelerate wildlife conservation. This year, the team is partnering with Dr. Tomas Marques-Bonet at the Universitat Pompeu Fabra in Barcelona to map the genetic variability of gorilla populations across their habitat range. Despite international laws of protection, illegal trafficking of great apes is an ongoing challenge. Once gorillas are confiscated, it is challenging to genotype and identify their source of origin to facilitate reintroduction to the wild.

The project will determine the geographical origins to create a first-of-its-kind atlas of individual apes confiscated over the last decade and now living in sanctuaries, maximizing the probabilities of reintroduction to the wild. This project will also serve to boost regions in Africa as centers of excellence in conservation genomics. Learn more about this iConserve project [here](#). Explore additional initiatives below:

- [Bottlenose Dolphin Genome Made Available to Researchers](#)
- [Sequencing to Save the Lemurs](#)

Illumina Agricultural Greater Good Grant

The most recent awardee of our annual [Agricultural Greater Good](#) Initiative grant program funded a project by the International Institute of Tropical Agriculture (IITA) to develop genomic resources for yams, a significant agricultural crop and a rich source of nutrition. The IITA aims to conduct WGS of guinea yams from Nigeria and Benin to investigate their evolutionary development and to tap into specific genes for optimizing hybrids in the breeding program.



Sequencing Genomes of All Species

We are a contributing member of the [Earth Biogenome Project](#), a massive undertaking that aims to sequence the genomes of all species on Earth to help uncover the solutions for preserving and restoring biodiversity. We have provided an in-kind donation of 100 reference-quality genomes and participated in the development of technology for the sequencing of genomes from single-cell and small multicellular organisms.



Profiling Endangered Plants

California State University, East Bay, located in the same community as our Hayward manufacturing location, has launched the [Green Biome Institute](#) using genomics to profile California's endangered plants. The Institute aims to create molecular profiles of nearly 380 threatened or endangered plant species to promote conservation and document their biology, ecological interactions, and potential human benefits.

The Illumina Corporate Foundation provided the Institute with a \$50,000 grant for the advancement of genomic literacy and STEM education through hands-on genomics research for high school, undergraduate, and graduate students, while contributing to the knowledge and preservation of California's endangered flora.



Nurturing Our People

Nurturing Our People: Our Strategic Approach

We are committed to engaging extraordinary talent and helping them thrive. Together our impact is amplified, and our potential is unlimited.

Overview

Every day at Illumina, we have the chance to do once-in-a-lifetime work, transforming human health and driving scientific innovation. With an extraordinary mission comes the need for extraordinary people and leaders at every level. By nurturing a culture of care, we enable Illumina employees to fully contribute to our Mission and deliver on the transformative power of genomics.

By focusing on inclusion and enabling a culture of care, we amplify the value of collaboration and building community. Fostering an inclusive and healthy workforce is a foundational principle and essential for innovation. We invest in our people, offer flexible working conditions, and provide a portfolio of benefits that support the variety of their personal needs.

Our shared purpose and collective efforts result in common bonds and pride among all at Illumina as we help drive the positive progress of genomics for all.



The COVID-19 pandemic created extraordinary opportunities for reinvention. Our foundation of innovation and our culture of care set us up well for recovery and beyond to continue allowing us to thrive into the future."

Aimee Hoyt, Chief People Officer



Our Objectives

We strive to embody a culture of care that is fueled by supporting one another, promoting collaboration, inspiring innovation, and advancing diversity, equity, and inclusion.

- Foster an environment where people feel Illumina is a great place to work for everyone
- Relentlessly practice diversity and inclusion in all that we do to advance equity and belonging
- Acquire, invest, and grow extraordinary talent, leaders, and teams to create a deep and diverse pipeline
- Offer employees the resources and support they need to bring their personal best every day
- Steward employee safety and well-being

Contributing to UN SDGs



Nurturing Our People:

Measuring Our Impact

2030 Targets

Increase gender representation in global leadership¹
2021 PROGRESS
42%

Increase minority representation in executive leadership (US)^{1,2}
2021 PROGRESS
27%

Increase representation Black, Native, Pacific Islander, Hispanic or Latino, 2 or more in leadership¹ (US)
2021 PROGRESS
12%

Maintain zero net pay gap³
2021 PROGRESS
Zero Net Pay Gap

Increase representation Black, Native, Pacific Islander, Hispanic or Latino, 2 or more in our workforce (US)
2021 PROGRESS
17%

Reduce recordable injury & illness rate⁵
2021 PROGRESS
.54

2021 Highlights

45% female workforce representation

5% increase in female executive leadership in last three years

50% minority representation in US workforce

>4,000 participants in ERG⁴ programming

>1,000 new roles added for growth

2% increase in representation of Black, Native, Pacific Islander, Hispanic or Latino, 2 or more communities in leadership¹ since 2019

6% increase in minority representation in executive leadership (US)^{1,2} since 2019

2021 Recognition



¹ Leadership = Manager, equivalent, and above

² Minorities (US): Asian, Black, Native, Pacific Islander, Hispanic or Latino, 2 or more

³ Zero net pay gap: no statistically significant difference in pay for the same or similar work, regardless of gender ethnicity, or race

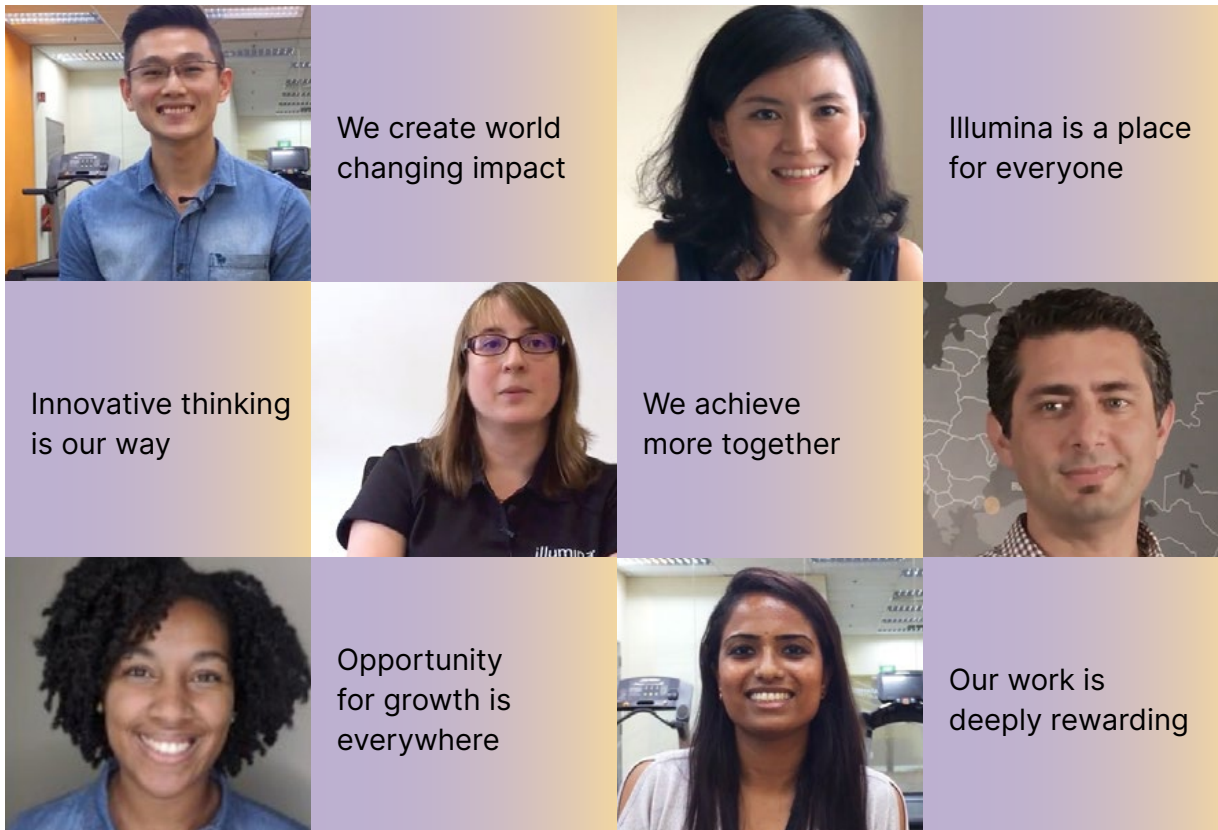
⁴ ERG: Employee Resource Group

⁵ Rate calculated using total hours worked from employees + contingent workers. Incident per 100 employees based on 200,000 hours worked.

Our People

Everyone at Illumina is driven by the power of genomics to positively impact the world. We seek opportunities. We embrace challenges. We work tirelessly to move genomics and humanity forward. Together, our team of passionate people amplify impact and unleash unlimited potential.

At Illumina, you will do more and become more than you ever thought possible.



Listening to our Employees

We regularly ask our employees to complete our survey and in 2021, we surveyed quarterly. These insights help leaders, at all levels, better understand and respond to employees' needs.

Trust and Engagement

90%

I have confidence in the continued growth and success of Illumina

What Our Employees Think About Illumina

93%

I am proud to work for Illumina

Diversity, Equity, and Inclusion

92%

I feel that Illumina values diversity

84%

I would gladly recommend Illumina as a great place to work to people I know and respect

86%

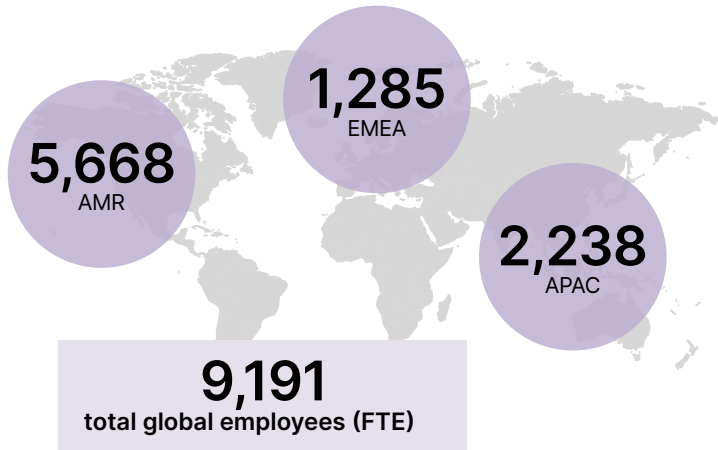
I feel like I belong at Illumina

83%

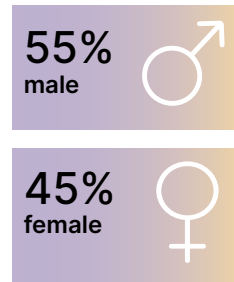
Illumina really cares about my well-being

Workforce Demographics

Regional Employee Distribution

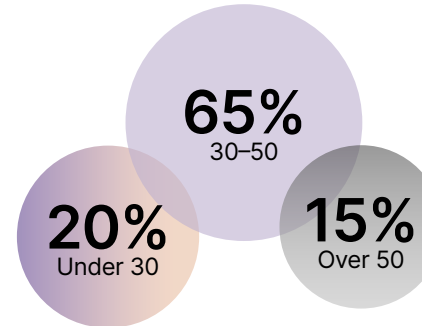


Gender Representation

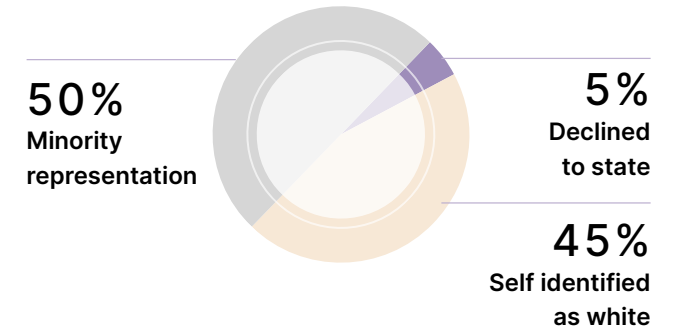


38% Female Director and above
(5% increase from 2019)

Employee Age Distribution



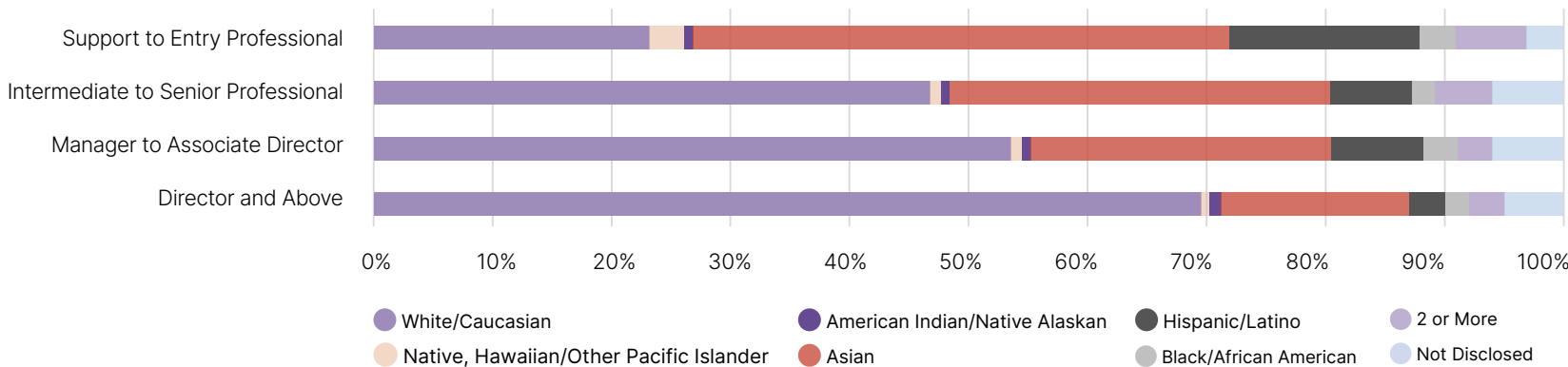
Minority Representation Workforce (US)



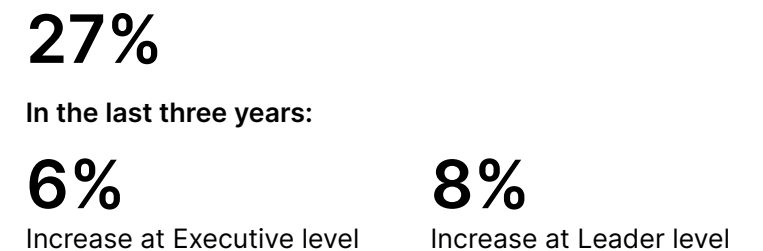
Representation of Black, Native, Pacific Islander, Hispanic or Latino, 2 or more communities (US)



2021 US Minority Data By Level¹



Minority Representation in Leadership



¹ For additional data points on EEOC, refer to [ESG Appendix](#). Though we do not use the [Federal Employer Information Report EEO-1](#) to measure progress, we publish our most recent filing.

Executive: Director and above
Leadership: Manager, equivalent, and above
Minorities (US): Asian, Black, Native, Pacific Islander, Hispanic or Latino, 2 or more

Advancing Diversity, Equity, and Inclusion

Inclusion is core to our purpose. It is essential to the work we do, the communities we serve, the partners we choose, and the teams we build.

We relentlessly practice diversity and inclusion in all we do to advance equity and belonging. We strive to foster an inclusive and diverse culture in which all employees feel valued and appreciated. This kind of environment helps people engage at their best, knowing they have an equal opportunity to grow and succeed based on their performance, fueled by their individual differences. We know our path to creating and sustaining a fully inclusive culture requires investment in our employees with a keen focus on inviting diverse perspectives, experiences, and opportunities to learn from one another. We celebrate our employees' unique life experiences, backgrounds, talents, passions, and contributions to innovation.

Diverse perspectives are valued and needed to drive discovery and innovation. As a business committed to advancing genomic technologies and pushing science to new limits, we depend on harnessing the full engagement of employees and their most creative ideas. We appreciate these outcomes are achieved when everyone feels safe, respected, valued, and supported.

In addition to the reported workforce demographics, we also collect self-reported employee data for the identities such as LGBTQIA+, people with a disability, and veteran status in the US workforce. This is important because providing the option to identify provides the message: “we see you” and that we are actively welcoming those who often feel marginalized in the broader society into our community. We are expanding this effort and aim to create a working environment where neurodiversity and people with disabilities can thrive. We will continue seeking opportunities to help us get better at our practice of inclusion and building community.

Our strategy is integrated across the following areas: our employees and culture; our suppliers and business partners; and our community. Learn more about our supplier diversity program in the [Integrity](#) chapter, our philanthropy to increase equitable access in the [Access](#) chapter, and STEM for all in the [Community](#) chapter.

As part of our commitment to DEI, we are the proud signatories of:

- UN Women Empowerment Principles
- CEO Action for Diversity and Inclusion
- UN Global Compact



Advancing Diversity, Equity, and Inclusion

Our DEI Focus Areas

Our efforts to practice DEI include setting targets, investing in programs to drive improvement, and expanding the transparency of diversity data. We aim to:

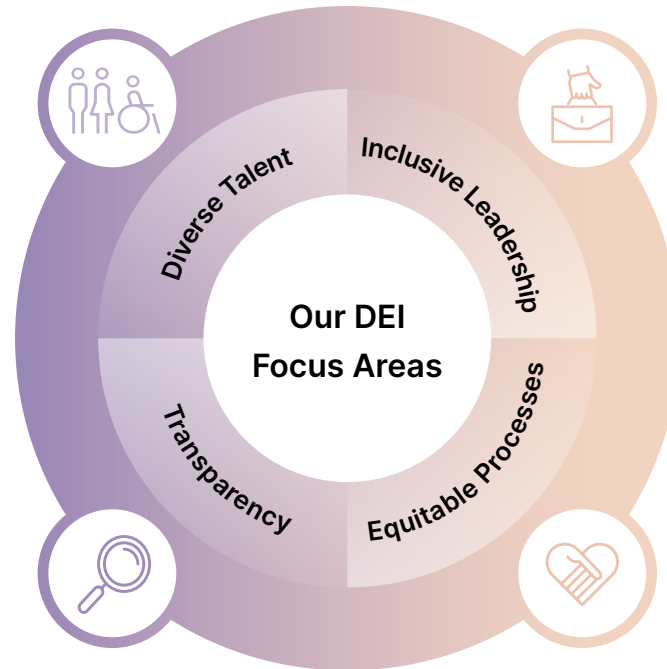
- Build our global workforce to represent the communities where we operate and the world we are working to serve
- Create a working environment where neurodiversity and people with disabilities can thrive
- Create an innovative organization where young and mature talent feel involved, respected, connected, and inspired to contribute new ideas
- Establish a culture where minorities can thrive and progress with the company as we build a strong pipeline of diverse talent

Acquire and Develop Diverse Talent

- Advance DEI in talent initiatives and HR processes
- Create strong, mutually beneficial relationships with HBCUs¹, other educational institutions, diversity groups, professional organizations, and networks
- Expand formal mentorships and add sponsorship programs supportive of minority and women employees
- Commit to diverse candidate pools (final slates) for Director and above
- Build ERG groups as diverse pipeline of leadership

Communicate with Transparency

- Disclose commitments and measurements, and celebrate successes
- Share data to inspire trust and action on key processes
- Publish DEI goals and commitments externally
- Spotlight diverse employee stories of inclusion and belonging
- Maximize impact of leader DEI dashboards to deliver insights and drive change



Diversity, equity, and inclusion are important aspirations that are only built over time through practice. We relentlessly work to get better and celebrate the milestones.”

Dr. Lisa Toppin, Global Head of Diversity, Equity, and Inclusion

Build Inclusive Leadership

- Build and practice leadership inclusion capability amongst our teams
- Provide opportunities for representation of women and racial/ethnic minorities in senior leadership roles globally
- Launch DEI learning journey for leaders empowering their use of the talent cycle
- Provide assessment tools to help leaders understand opportunities for themselves and the team
- Recognize leaders making a difference in DEI

Enhance Equitable Processes

- Reduce bias in people processes and strengthen DEI outcomes
- Leverage data and consistent structure to make people processes more equitable
- Embed DEI lens in promotion and mobility process
- Continue momentum on net zero pay gap policy and outcomes

¹ HBCU: Historically black colleges and universities

Advancing Diversity, Equity, and Inclusion

Equal Opportunity


Pay Equity

We strive to offer meaningful development opportunities and rewards for impact, performance, and potential to attract and retain outstanding and diverse talent. Our pay practices are designed to compensate employees based on factors such as job performance, expertise, and experience relevant to individual geography. Everyone should be paid equitably, regardless of gender, race, age, ethnicity, sexual orientation, or national origin. We monitor our pay equity status and market competitiveness on an annual basis.¹ Our 2021 global compensation cycle once again confirmed a zero net gap² in pay.

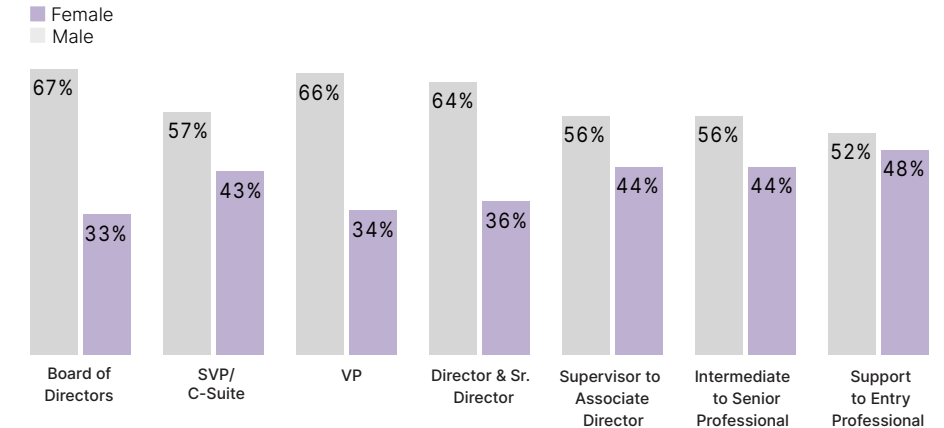
When we examine the average pay³ between women and men in our organization, we recognize opportunities still exist to improve. Our objective is to achieve equality with women's representation in senior roles. We acknowledge that senior positions typically pay more and we will reach parity when women hold as many of the higher paying roles as their male counterparts.

 **Flexible**
workplace policies

 **Gender**
neutral policies

 **100%**
employees eligible for bonus plan

Gender Representation by Level



5% Increase in Female Executive Leadership⁴ since 2019

Gender Representation	2019	2020	2021
% of women in management positions in revenue-generating function	35%	36%	42%
% of revenue-generating roles held by women	41%	36%	48%
% of women in STEM-related positions (as % of total STEM positions)	37%	37%	39%
% of IT workforce that are women	24%	23%	24%
% of engineering workforce that are women	37%	36%	29%

¹ Equal pay refers to paying a woman and man equally for the same or similar work

² Zero net gap in pay means no statistically significant difference in pay for the same or similar work, regardless of gender, ethnicity, or race

³ A pay gap is the difference in average pay between women and men in an organization

⁴ Executive Leadership: Director and above



Equal Opportunity and Nondiscrimination Policies

We support the elimination of discriminatory practices with respect to employment. We are committed to fair and respectful treatment of all employees, promoting equal opportunity and diversity in the workplace and in all aspects of our business. Our policies prohibit discrimination based on race, color, age, gender, sexual orientation, marital status, gender identity and expression, ethnicity, religion, physical or mental disability, medical condition, genetic information, veteran status, national origin, or any protected class.

Advancing Diversity, Equity, and Inclusion

Employee Resource Groups

We celebrate and connect employees through our Employee Resource Groups (ERGs). ERGs deepen our respectful, inclusive culture by engaging employees around issues they care about.

Our ERGs are the cornerstone of DEI at Illumina. They provide a formal way to engage employees on diversity and create a positive impact for the company. The ERGs are a key lever to identify, develop, and retain untapped, early in career talent for future senior level roles. They help employees develop connections with their peers and allies, and collectively advocate for diversity initiatives. Our growing ERGs also deliver expanded career and development experiences. We are proud to have ERGs represented globally that support young professionals, LGBTQIA+, veterans, people of color, minorities, and women.

In 2021, we launched two new ERGs: iLatinx for employees who identify as Latinx and their allies and Green Team EMEA for employees in the EMEA region who are committed to advancing sustainability at Illumina by improving awareness and promoting practices that have a positive impact on our environment. We also expanded our core ERGs to additional regions around the globe, taking our count of chapters from six to eleven.

This year, we deepened the connections between ERGs and our CSR program. Each ERG completed a social impact project and provided a donation to a local organization aligned with their mission. Our ERGs created meaningful business and social impact, as well as directing over \$50,000 of CSR funds to their local chosen charities. To read more about our philanthropic efforts, see the [Access](#) and [Community](#) chapters.



Our ERG Program Philosophy

Our four contribution pillars ensure programming supports ERG member needs and aligns with Illumina values. This focused work educates our teams about the value of difference and uses the power of diversity to drive innovative problem-solving for our business. Our ERG program aims to:



Develop diverse leaders



Enable skills practice

COMMUNITY SERVICE	CAREER DEVELOPMENT	EDUCATION	BUSINESS IMPACT
<ul style="list-style-type: none"> Support our communities with social impact projects Strengthen employee engagement and Illumina awareness 	<ul style="list-style-type: none"> Building the skills of diverse employees as future leaders Identify internal talent from many different backgrounds and develop them Offer specific programming to ERG participants and exposure to executives 	<ul style="list-style-type: none"> Educate the organization about our values Create more understanding, deeper collaboration, and more meaningful work 	<ul style="list-style-type: none"> Leverage the power of diversity to drive imaginative problem-solving Enhance innovation with diverse teams identifying and solving business challenges



SHADES: Employees of color from diverse backgrounds and allies



iLatinx: Employees connected to Latin-American/Hispanic culture



iServed: Employees who served or currently serve in the military and allies



Green Team: Dedicated to educating employees on how to be more sustainable



iPride: Employees of the LGBTQIA+ community and allies



Horizons: Employees early in their careers and allies



WIN: Women at all levels and stages of their careers and allies



BE GREAT: Dedicated to Black/African American employees and allies

Advancing Diversity, Equity, and Inclusion

Increasing DEI Awareness and Engagement

Enabling Supplier Diversity Program Improvements

The SHADES ERG, which is a group of employees of color and allies, has worked to strengthen our supplier diversity program. ERG members volunteered their time to identify, research, and verify over 400 diverse suppliers, improving the accuracy of our supplier data. They also increased outreach to diverse suppliers to provide new opportunities to work with Illumina.



We see you.
We stand with you.
#StopAsianHate
illumina®

Monthly D&I Sessions

In 2021, we began hosting a monthly speaker series on diversity and inclusion to further integrate D&I into our company culture, spread awareness of important issues, and address unconscious bias. Approximately 500 employees tuned in to hear sessions on:

- Understanding Masculine and Feminine Communications Styles
- What You Need to Know About Caregiving
- How to Be an Ally
- Disability Employment and Awareness
- Understanding Neurodiversity—Autism

Inclusive Leadership Training

In 2021, 200 employees trained on The Fundamentals of Inclusive Leadership, a strengths-based training.

Raising Awareness of Asian Hate

The US has seen a deeply unsettling rise in racism and violence against members of the Asian community. Illumina condemns all racism and stands with our Asian community. To provide awareness and strengthen our internal community, our ERGs hosted listening sessions as a safe space to share thoughts and feelings, hear the voices of others, and learn about their experiences.



Celebrating Black History Month

Our BE GREAT ERG coordinated STEM volunteer activities.

Walk the Talk on DEI

In 2021, we invited our employees to support their well-being and give back by connecting charity to a fitness challenge. The “Walking the Talk on Inclusion” challenge helped raise awareness about ‘power and privilege’ while encouraging active, healthy lifestyles. Collectively, our employees walked over 100 million steps—and raised \$25,000, which was donated through the Illumina Corporate Foundation to five charities around the world that help make an impact on DEI in their communities.

Enabling Inclusive Representation

Labels and signals can be a source of unconscious bias in society. With that in mind, leaders of iPride, our LGBTQIA+ ERG selected a project for their business impact initiative that coordinated the addition of Mx (pronounced “mix”) to the Illumina Salesforce customer interface and internal HR platforms. ‘Mx’ is a widely used gender neutral honorific.

“When we launched the project idea, we were met with support from our internal allies and external business partners. This project signals that as a company, Illumina is sensitive to the diverse needs of our community, and we are fully committed to being a safe space for all,” explained Shadow Seacliff, a staff web designer and iPride leader.



Investing in Our People

We are committed to engaging extraordinary talent and helping them thrive.

Our vision requires a People strategy that attracts, nurtures, and retains industry-leading talent and leaders.

To ensure that our employees enjoy long and fulfilling careers at Illumina, we invest in recruiting extraordinary talent, providing varied training and development opportunities, and rewarding our employees meaningfully for their contributions.

The path to realizing the world-changing possibilities of genomics is both challenging and rewarding. Our dedicated and brilliant professionals each do their part to create this future. We seek opportunities. We persevere together. And we support one another in delivering innovations that move humanity forward.

We believe in the importance of creating a workplace in which all employees:

- Are empowered to grow, contribute, and make an impact
- Work in a culture that prioritizes learning and continuous improvement
- Collaborate and build relationships with colleagues, regardless of their position or seniority
- Embrace our culture of innovation and respect
- Are rewarded and recognized for their contributions
- Participate in giving back to the communities and causes that matter most to them
- Understand that diversity is strength



“There isn’t just one career path at Illumina. In every role, we approach our work with curiosity, and apply our passions to support a mission that truly matters. We work to create a space where there is unwavering support to grow as an individual and bring out the best of our teams.”

Karen Wetherholt, Head of Global Talent

Investing in Our People

Opportunity Is Everywhere at Illumina

The exponential growth of our business means there is no shortage of opportunities for those who continue to challenge themselves. We encourage employees to pursue their passions, learn beyond their discipline, and create their own path.

Our training and development programs embody our belief that opportunities always exist to grow and to learn regardless of where you are on your career path. From soft skills to technical knowledge, online learning to coaching clinics, we empower our employees to shape their own careers, taking advantage of the opportunities to progress at Illumina.

We have enhanced our people development and training programs to effectively serve the dual purpose of growing the overall workforce capabilities and elevating the skills of unique talents and roles.

The right tools are critical in navigating career development. Through regular performance conversations, employees have meaningful discussions about their work, their aspirations, and their development. Development resources are curated so that employees can explore, share, plan, and act to get on the path that is the best fit for them.

- External speaker series
- Open career panel discussions
- TEK Talks (technical education knowledge)
- 360-degree and 180-degree assessments for individual and team feedback
- Tuition assistance/financial assistance for job-related education
- LinkedIn learning, an on-demand learning resource



100%

employees are provided opportunities for regular performance and career development reviews



64

average hours of annual training per employee



11%

roles filled with internal candidates



27%

new hires referred by Illumina employees



Quarterly

career development and performance review cycles



Quarterly

promotion cycles



Investing in Our People

Supporting the Full Career Journey

We are investing in the growth and development of our people at every stage of their career journey. Opportunity is everywhere for our early in career, our scientific and technical tracks, and our leadership paths.

Internship Program

We provide several paid internship opportunities around the world, enabling students to grow and make an impact by working on business-critical projects. Working alongside our engineers, scientists, and corporate employees, our internships span multiple business functions and varying academic levels (Bachelor's, Master's, and PhD). We actively nurture a diverse early in their career talent pipeline who can help advance the future of genomics. These are the future innovators, leaders, and game changers.

Leadership at Illumina

We care for each other in service of our Mission. Our exceptional leaders inspire confidence, lead change, and foster an environment where we can collectively deliver results. They continuously inspire others to live their passion and achieve their own career goals. We provide a series of leadership programs for both new and experienced leaders:

- **Power Hours:** A leadership development program for frontline leaders, run by subject matter experts, to develop the skills and knowledge required to lead teams effectively.
- **Discussion and Lean In Circles:** Our business leaders host discussions on important topics such as "Moving into Management" and "Managing Your Career." We also support Lean in Circles through our Women at Illumina (WIN) ERG.

- **Mentoring Programs:** The Horizons ERG hosts Jedi-Padawan buddy programs, connecting early career professionals with seasoned employees, and the Women in Illumina (WIN) ERG offers a mentor program called iMentor.
- **Culture of Coaching:** Our Coaching Learning Path highlights a variety of options to help leaders learn, practice, and build their coaching skills.
- **Crucial Conversations:** We facilitate workshops that teach communication skills for a variety of situations in which opinions may differ significantly, and emotions run high.
- **Leaders in Action:** Leaders helping leaders grow their skills and expand their impact.
- **Thrive New Leader Orientation:** Targeted to newly hired and promoted leaders at Illumina, this takes our global new leaders and provides insight into leading at Illumina and our leadership philosophy.
- **Ignite:** Leadership training series bringing contemporary topics to provide ongoing and regular development.
- **Elevate for Executive Leaders:** Over a several week journey, Directors and Sr. Directors engage with peers around the globe in a cutting-edge social and interactive learning experience. Leaders learn from other executives through activities and guided discussions, share expertise, and deepen insights with a dedicated executive coach.



Distinguished Scientists, Engineers, and Medical Scientists

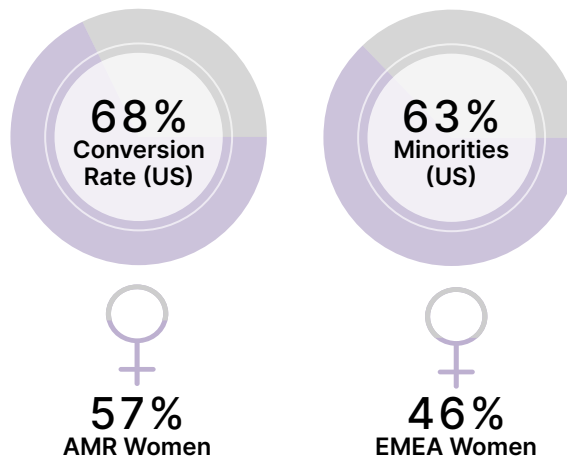
We are proud to support our Distinguished Scientists and Distinguished Engineers, who have risen through our leadership track that emphasizes the highest level of scientific and technical contributions. These leaders are our internal experts in key areas of science and technology. They drive ground-breaking innovations, make the big calls on research and development directions, lead focused teams pushing the envelope to create our next products, represent us in the scientific community, and mentor future talent.

6

promotions to the VP level of Distinguished Scientist in 2021



Intern Cohort 2021



Investing in Our People

Recognizing Success

We have designed several award programs to recognize employees' outstanding achievements, including:

- **Values Award:** presented to individuals and teams nominated by their peers for exemplifying our values
- **Innovation Award:** recognizes this core element of our culture and success by annually celebrating our pioneering scientists for their extraordinary contributions
- **Inventor Award:** recognizes employee inventors who annually contribute to our patent applications



illumina Inventors by the Numbers

In 2021, illumina employees filed a record 171 new patent applications, a 69% increase over the previous year.



328
total inventors



43%
Singapore inventors are female



2x
illumina female inventors compared to the national rate of women receiving patents¹



130
first time inventors



37%
UK inventors are female



31%
female inventors



29%
US inventors are female



40%
US inventors are minority²



From Patents to Patients: Meet a Few of the Women Making a Difference at illumina

Sarah Munchel, Associate Principal Scientist, has filed 13 patent applications and Suzanne Rohrback, Senior Scientist, has filed three. They were both part of a team of illumina employees whose recent work contributed to a patent application for a circulating RNA signature they discovered in early-onset preeclampsia. [Learn more](#) about how they fell in love with genomics, making discoveries, and what's ahead in the years to come.

¹USPTO: Women inventor rate is 12.8% as of 2019

²US Minority: Asian, Black, Native, Pacific Islander, Hispanic or Latino, 2 or more

Caring for Our Employees

Our goal is for everyone to feel valued in the way that resonates most with them. This means investing to create an inspiring work environment, unmatched experiences, and meaningful benefits.

Building extraordinary teams starts with caring for our employees and putting their welfare at the heart of all we do by:

- Offering a world-class portfolio of employee benefits and wellness programs
- Caring for our employees through life events
- Supporting their diverse personal needs
- Extending all our benefits to employees, spouses, domestic partners, and dependents

Our employee benefits program recognizes the tremendous value our people bring to the business. While benefits vary by country and region, we provide all employees with an array of meaningful programs.

Reproductive Health Program

Employees, their spouses, and domestic partners may be eligible for the company-sponsored reproductive health program either through insurance or financial support:

- In vitro fertilization
- Pre-implantation Genetic Screening
- Pre-implantation Genetic Diagnoses
- Non-invasive prenatal testing

Through our partner, Progyny, we offer a comprehensive fertility benefit program to eligible US-based employees that provides coverage for fertility preservation, providing equitable access to care for our diverse employees, including those pursuing nontraditional paths to parenthood.

Workplace Genomics Program (US)

Through our partner, Genome Medical, we provide access to genetic experts who can provide consultations, guidance, and facilitate testing for employees and their families. In addition, we offer financial support for cancer tests, reproductive health tests, and clinical whole genome sequencing (cWGS) for rare and undiagnosed diseases.

Cancer Testing Benefit

Every day, our technology is being used to improve human health—enabling advancements that were not possible just a few years ago. It seems only fitting that our employees be able to access these new technologies to help better inform their healthcare decisions. GRAIL’s multi-cancer early detection test Galleri® is available at no cost to eligible US employees and their dependents as part of our Workplace Genomics Program.

Fostering Wellness Inside and Out

- ✓ **Medical, dental, and vision**
- ✓ **Flexible spending** accounts
- ✓ **Health savings** accounts
- ✓ **Employee Assistance** program (EAP)
- ✓ **Wellness** rooms for nursing, meditation, and prayer
- ✓ **Business travel medical** insurance
- ✓ **Gym access** or membership
- ✓ **Onsite health screenings**, blood pressure monitoring, and flu shots
- ✓ Offices equipped with **ergonomic workstations**, abundant natural light, and opportunities to work outdoors
- ✓ Cafeterias offering **sustainable, healthy food options**, including vegetarian choices
- ✓ **Genetic counseling**
- ✓ **Global well-being** program
- ✓ **Mental health advocates and first aiders (EMEA)**

Health Solutions

- ✓ **Cancer support** and expert advisory review through Access Hope (US)
- ✓ **Expert guidance** for diagnosis, treatment, or finding the best physician through Included Health (US)
- ✓ **Comprehensive musculoskeletal (MSK) care** solution through Hinge Health (US)

Supporting Growing Families

- ✓ Up to six weeks of **paid parental leave**
- ✓ **Comprehensive family support** system through Cleo
- ✓ **Bring Your Child to Work Day**
- ✓ **Back-up care** with Bright Horizons for **child and elder care**
- ✓ **Flexible work** schedules and **remote working** opportunities
- ✓ **Gender-neutral parental leave** policies

Providing Time to Recharge

- ✓ **Flexible time off**
- ✓ **20 days of paid time off** (non-exempt US)
- ✓ **Two days of paid volunteer time off**
- ✓ **Minimum 10 days of holiday paid time off**

Investing for the Future

- ✓ **Employee stock purchase program**
- ✓ **Retirement savings plans**
- ✓ **Pensions (EMEA)**
- ✓ **Life and accident insurance**
- ✓ **Disability insurance**
- ✓ **Independent financial advice**
- ✓ **Tuition assistance**

Additional Perks and Benefits

- ✓ **Site amenities**, including car washing, dry cleaning, mobile hair salons, food service, mindfulness, and self-improvement courses
- ✓ **Employee referral** program
- ✓ **Donation matching** program
- ✓ **Special interest clubs**
- ✓ **Commuter support**
- ✓ **Broadband allowance** (hybrid + remote employees)



Caring for Our Employees

We Recognize the Importance of Promoting Well-being

To help our employees thrive, we provide activities to help meet their physical, mental, and social well-being needs.

We offer a free digital wellness platform to all full-time and part-time employees. This platform enables them to track well-being related activities, as well as participate in quarterly fitness challenges, and build healthy habits.

Though the pandemic has altered many aspects of working, our culture of giving back and commitment to employee well-being has remained strong. We addressed both as part of our 2021 employee fitness challenges.



APJ Spotlight: Fitness Challenge for Charity for Singapore Red Cross

Our Steps for Charity initiative motivated employees to get moving while staying safe from COVID-19 and supporting their local community. APJ employees registered for the challenge through our well-being portal app, synced their wearable fitness devices with the app, and then got busy walking, running, and even sprinting. The challenge attracted 131 participants who took over 15 million steps, earning a \$15,000 donation from the Illumina Corporate Foundation to the Singapore Red Cross Society.



EMEA Spotlight: Wellness Wednesdays and Mental Health Advocacy

Our EMEA team members continued to focus on mental health in 2021 including holding workshops and mental health drop-in sessions. Over 20 mental health advocates and 8 mental health first aiders support the region.

US Spotlight: Virtual Wellness Fair

As many of our employees continued to work from home, our Wellness Day provided employees a chance to explore and experience our well-being offerings virtually. We hosted sessions with physicians, meditation gurus, well-being experts, and even an employee panel.

Healthy Selfie

To promote self care for our employees and their loved ones we offer an annual \$500 Health and Lifestyle Allowance to all employees globally. To help build excitement around this annual event, we held a #HealthySelfie campaign to have employees share how they plan to use the allowance.



Global Spotlight: 2nd Annual Virtual 5K

Over 2,000 employees joined the annual charity virtual 5K raising over \$5,000 for the Ronald McDonald House Charities.

Committed to Workplace Health and Safety

We are committed to a safe and healthy work environment for all our employees, contractors, and the communities in which we operate.

EHS Management System

We continue to work under an integrated management system framework to measure performance and continually seek improvement. Our Singapore site attained recertification to ISO 14001 and ISO 45001 and our other manufacturing locations continue to work toward conformance. Due to COVID-19 related delays, the goals for conformance by 2021 were extended until the end of 2023.

EHS Programs

Creating an environment of collaboration among all to identify safety risks, we have established a series of grassroots safety culture teams that drive continuous improvement projects. We apply software tools to manage incidents and assess risks, enabling employees to easily report and measure safety performance focusing on prevention.

Prevention and Preparedness

EHS's Global IIPP describes basic processes our employees can take to maintain a safe and compliant workplace. Our Emergency Action teams work together to create awareness and lead regular preparedness drills and activities. The precautionary approach¹ is embedded in our risk assessments, our environmental aspects/impacts, our EHS Policy, Product Stewardship, and the engagement of our people.

Learn More

[EHS Policy](#)

[14001 Certificate](#)

[45001 Certificate](#)

[Injury & Illness Prevention Program \(IIPP\)](#)

¹The UN Global Compact Principle 7 and The UN Global Compact Principle 15 state in order to protect the environment, the precautionary approach shall be applied.

²Recordable Injury & Illness Rate calculated using total hours worked from employees + contingent workers. Incident per 100 employees. Lost Time Incident rate calculated using total hours worked from employees + contingent workers. Rates have been calculated based on 200,000 hours worked.

2021 Safety Performance

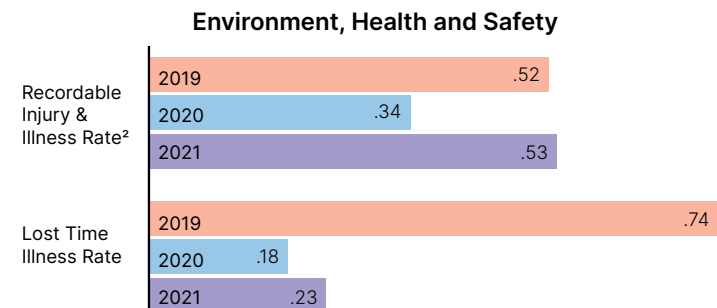
1,452
prevention reports

214
EHS risk assessments completed globally

324
ergonomic evaluations completed

>43,000
hours of EHS-related training

.53
recordable injury and illness rate



Environment, Health and Safety (EHS) Policy

We embrace our Mission through the establishment, implementation, and maintenance of an integrated EHS management system. This commits us to:

- Prevent injury, illness, or ill health by proactively managing risk through minimizing health and safety risks in the workplace
- Respect and protect the environment by preventing pollution, minimizing waste, and conserving resources
- Review and improve our EHS processes while meeting or exceeding compliance and other obligations
- Provide an environment for open communication and collaboration for employees at all levels
- Evaluate and manage the EHS aspects and risks of our processes, equipment, and services based on hierarchy of control
- Measure and enhance EHS performance and provide a framework for setting objectives to achieve continual improvement
- Require all employees to be accountable for their commitment to our EHS policy

Committed to Workplace Health and Safety

Ergonomics

We provide a number of prevention-based ergonomic resources:

- Implementation of EHS Global Standards for ergonomics
- Maintain effective management of inherently high-risk operations
- Ergonomic and material handling training
- In-person and virtual ergonomic evaluations
- Proactive processes and ergonomic assessments of equipment
- EHS Guidance for working from home



Singapore Spotlight:

National “Safety Starts with Me” Competition

Every year, the [Safety Starts with Me Competition](#) is organized to provide a platform for members of the public to showcase their creativity in promoting workplace safety and health (WSH) through art, design, photography, film, and writing. We are thrilled to announce that two of our employees, Lee Hong Kwan and Ahmad Mustaqim bin Md Abdul Bakki each won an award for their entry this year! As winners in this national competition, their works will be featured on the WSH Council website, exhibitions, and their social media channels.

- **Workplace Safety and Health Performance Awards–Silver**
- **Workplace Safety and Health Innovation Awards–Gold for Vega lifter**
- **Workplace Safety and Health Innovation Awards–Silver for SAFE platform**
- **BizSAFE Star Certification**
- **National Safety Starts with Me Competition**



China Spotlight:

Safety and Wellness Week in China

At Illumina, everyone is a Safety Leader. The safety and health of our employees are always the top priority of our work. During the China National Safe Production Month in June, the Greater China EHS and Facilities teams jointly planned and successfully organized the first Illumina (China) Safety Week series. This series included a rich and diverse teaching practice, knowledge competition, professional safety, and first aid training.

Together we're advancing genomics for all.



[Join us, and you can make a difference!](#)



Operating Responsibly

Operating Responsibly:

Our Strategic Approach

We are committed to conducting ourselves with honesty, integrity, and respect for all.

Overview

Our role as a genomics pioneer brings with it the responsibility to enable innovation for good, ensuring that the technology we create and the data we collect are used safely, ethically, and responsibly.

That responsibility starts within our own business and is the foundation for magnifying our positive impact on humanity. For us, doing the right thing is more than just compliance. It is having a deep sense of integrity and honoring the trust placed in us by employees, patients, customers, shareholders, and communities. We recognize that the longevity of our success is linked to creating sustainable value for our shareholders and society. As our business and genomics continues to evolve, we strive to set the highest standard for ethical use of our technology, as well as the security and privacy of data.



“At Illumina, as we unlock the power of the genome, we act with integrity in all that we do—interacting with customers and suppliers; bravely advocating on behalf of patients and our unwavering commitment to health equality.”

Gwen Chapman, Chief Compliance Officer

Our Objectives

The tenets of strong governance are foundational to doing business responsibly. We put this into action through our Code of Conduct and compliance programs.

- Maintain a corporate governance framework to promote ethics and integrity in all we do
- Ensure all Illumina political activities promote ethical and transparent engagement, advance the company purpose, and comply with applicable laws and reporting requirements
- Continue working to ensure human rights are respected in our workplace, our supply chain, and the marketplace
- Achieve a mix of Board members that represents a diversity of backgrounds and experience, including age, gender, ethnicity, race, and specialized experience
- Demonstrate responsible data stewardship with strong privacy and cybersecurity practices

Contributing to UN SDGs



Operating Responsibly: Measuring Our Impact

2030 Targets



100% strategic suppliers committed to reducing their environmental footprint

2021 PROGRESS

84%



Expand green travel policy governance to support reduction of emissions associated with business travel

2021 PROGRESS

Initiated



Achieve 20% spend with diverse suppliers (US)

2021 PROGRESS

17%



Position Illumina as the most trusted company in genomic privacy and ethics

2021 PROGRESS

Ongoing

2021 Highlights



33%

Board members women



33%

Board members represent racial/ethnic diversity



\$209M

diverse supplier spend



100%

Illumina facilities participated in third-party audit programs



97%

Tier 1 suppliers participated in third-party audit programs



Initiated

Human Rights Assessment and updated human rights policy



Published first annual

Privacy Transparency Report



Developed and disclosed

Ethical Artificial Intelligence Principles

2021 Recognition



Guiding Genomics into the Future

By creating a culture of compliance, strong corporate governance, and ethical leadership, we aim to inspire confidence in the work we do and in our company's future.

Board of Directors

Our culture of compliance and ethics starts at the Board level and is incorporated into every level of our business. We put that strong governance foundation in action through our Code of Conduct and compliance programs. We anchor to that Code in how we run the company, and require annual certification. Our [Board of Directors](#) is a diverse group of leaders who champion scientific innovation. The Board's aim is to ensure the company is equipped with the tools it needs to accelerate the power of genomics. The Board has adopted [Corporate Governance Guidelines](#) which are founded on a commitment to building shareholder value, with an emphasis on responsible governance. These guidelines, together with the [Code of Conduct](#) and [Board Committee Charters](#), provide the framework for corporate governance at Illumina.

Diverse and Independent Board

As stipulated in our Corporate Governance Guidelines, our company seeks to achieve a mix of Board members that represents a diversity of background and experience, including with respect to age, gender, international background, race, and specialized experience. Our Corporate Governance Guidelines also require that independent directors constitute at least a majority of the Board. In order to be independent directors of the Company, directors must meet the criteria for director independence established by the Nasdaq Stock Market.

Our Board has established four committees.

Learn more in each committee charter:

- [Audit Committee](#)
- [Compensation Committee](#)
- [Nominating/Corporate Governance Committee](#)
- [Science and Technology Committee](#)

Board of Directors



John W. Thompson
(Chair)

Francis deSouza

Frances Arnold, PhD

Caroline Dorsa

Robert S. Epstein, MD



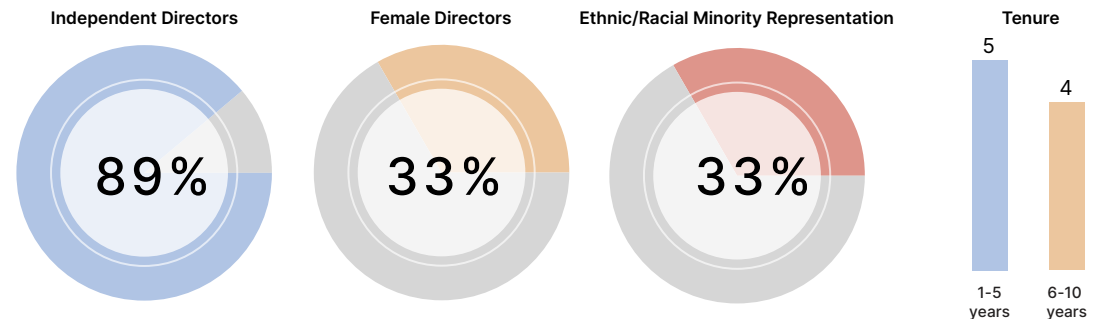
Scott Gottlieb, MD

Gary S. Guthart, PhD

Philip Schiller

Sue Siegel

Board Profile



More details about the Board can be found in our [Proxy](#) and on our [corporate website](#)

Ethics and Compliance

We are committed to reflecting the very best of our people, practices, and purpose. We take pride in conducting our business with honesty, transparency, and in accordance with legal standards and ethical principles.

A Culture of Compliance

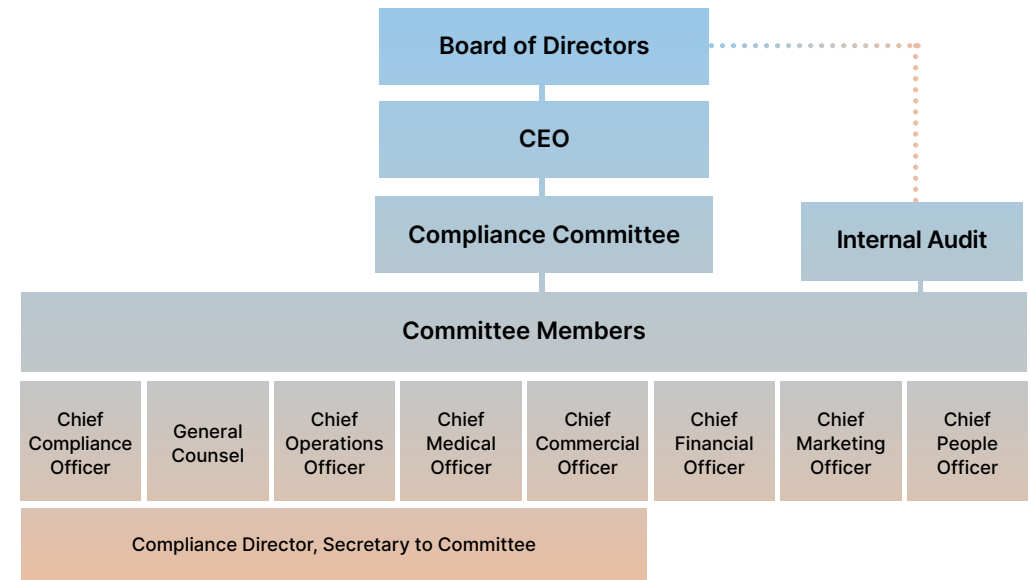
Our policies guide employees on how to apply a culture of compliance to their daily work. The Illumina [Code of Conduct](#) promotes honest and ethical conduct, compliance with applicable laws and regulations, and protection of our business interests. The Code applies to all Illumina employees, consultants, temporary workers, officers, and members of the Board of Directors, regardless of location, seniority level, business unit, function, or region. Key topics of our Code of Conduct include fraud prevention, bribery and corruption, anti-discrimination, anti-harassment, human rights, diversity and inclusion, employee safety, corporate social responsibility, marketing and sales claims, and government interaction.

We uphold the rigor and fulfillment of our Code of Conduct with written programs, training, investigations, root cause analysis, risk assessment, and monitoring. We provide annual training on our Code of Conduct and Anti-Bribery and Anti-Corruption Policies for all employees globally and more focused training on other Illumina compliance-related policies.

All employees receive training when onboarded and annually through our enterprise learning management system. Employees must acknowledge in writing that they have read, understood, and will abide by our Code of Conduct.

At Illumina, we are at the forefront of the evolution of genomics from pure research to in vitro diagnostic (IVD) medical devices. With this evolution we operate in the ever-changing, highly regulated IVD market and often interact with healthcare professionals and government officials, representatives, and agencies that regulate the markets in which we do business. Illumina is committed to high standards of ethical business conduct, including compliance with all applicable anti-bribery/corruption and anti-kickback laws, as well as relevant medical device industry codes. Based on this commitment, Illumina has adopted a Code of Conduct and implements a robust anti-corruption Compliance Program aimed at ensuring that every employee has the knowledge and awareness to operate appropriately in this market.

Compliance Model



Code of Conduct



8

languages



Employees certified to the code annually

Compliance Committee

Illumina has established a Compliance Committee to direct and oversee our compliance activities, including administration of the Code of Conduct and Compliance Program. The Committee is composed of senior executives and chaired by the Chief Compliance Officer. It is the responsibility of the Compliance Committee to foster a culture of ethics and compliance and promote global awareness of the company's compliance program efforts. The committee has also adopted a [program framework](#) based upon the seven fundamental elements of an effective compliance program established by the US Office of Inspector General.

Ethics and Compliance

Ethics and Compliance Reporting

We are committed to fostering a culture in which employees feel comfortable raising compliance and ethics concerns without fear of retaliation. We promote an open-door policy that encourages our employees to raise concerns to their managers, HR, and the Compliance Department directly and have established a third-party Compliance and Fraud Prevention Hotline that Illumina employees and third parties may use to report concerns anonymously.

To facilitate the reporting of good faith concerns, we have a third-party operated hotline and website that Illumina employees and others may use to report concerns. Our nonretaliation policies, confidentiality policies, and mechanisms ensure

anonymity and protect employees. Callers may choose to self-identify or remain anonymous, where permitted by law, when reporting.

We track and respond to all compliance concerns raised, acting promptly to identify offenses and take corrective action when necessary while observing a strict non-retaliation policy. When an actual or potential instance of noncompliance or ethics violation is identified, our Compliance Department investigates. They swiftly address instances of noncompliance and engage relevant stakeholders to develop risk mitigation and monitoring plans, as appropriate.

Ethics Advisory Board

We seek guidance from our [Ethics Advisory Board](#) on a range of strategic issues, including recommendations on emerging ethics matters, policies, and regulations that are relevant to the genomics industry. We meet with the Ethics Advisory Board on a quarterly basis. Work includes providing strategic advice to Illumina about:

- Emerging policies and regulations relevant to the genomics industry and the company's interests
- Ethical issues arising from specific technology or products



Learn More

- [Code of Conduct](#)
- [Compliance Program Framework](#)
- [Anti-Corruption/Anti-Bribery](#)
- [Anti-Competitive Behavior](#)
- [Interactions with Healthcare Professionals](#)
- [Compliance Information](#)
- [Ethics Information](#)
- [Ethics Advisory Board Charter](#)
- [Ethics Advisory Board Members](#)

The Compliance and Fraud Prevention reporting resources are available to both employees and third-party partners, 24/7 at (800-461-9330), or electronically at [Compliance and Fraud Prevention Reporting](#).

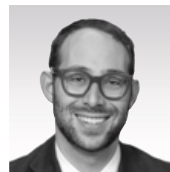
Ethics Advisory Board



Clement Adebamowo, BM, ChB, ScD, FWACS, FACS



Leslie Biesecker, MD



Glenn Cohen, JD



Freda Lewis-Hall, MD, DFAPA, MFPM



Nita Farahany, JD, PhD



Charmaine Royal, MS, PhD



1:1

Ratio of women to men on Ethics Advisory Board

Ethics and Compliance

Affordability and Pricing Transparency

illumina is committed to offering prices that enable broad access to genomic technology. We maintain a responsible approach to pricing our products. We negotiate and partner with healthcare systems, payers, and research institutions to provide availability of our products at a fair net price. As in past years, we limited our annual aggregate list price increase while continuing to offer new technologies that lower our customers' costs per genome and provide increasing access.

In 2021, in response to the COVID-19 pandemic, illumina offered direct, simple, transparent pricing to non-governmental organizations (NGOs) and non-profit public health organizations in low and middle income countries for pathogen surveillance and early detection.

In the interest of ensuring continued access to sequencing technology and a level playing field in the clinical oncology NGS market, illumina made an open offer to its oncology customers that guarantees supply of sequencing instruments and consumables on the same terms as GRAIL (illumina's recently acquired cancer screening company).

Prices are available to customers through their account managers or online on myillumina.com. Customers can and are encouraged to place orders electronically. Prices are also visible to customers on their invoices and billing statements. Most illumina

customers are not on a supply/purchasing agreement. When such an agreement is in place, illumina uses general confidentiality clauses in most cases. Examples of factors that may affect price include region and volume. illumina sets and adjusts list prices based on several factors, including but not limited to costs, inflation, and market dynamics. In 2021, the illumina annual price change was below the U.S. Consumer Price Index (CPI).

illumina pricing reflects its value proposition and enables illumina to continue to innovate for our customers and accelerate access to genomics for all.

Risk Management

illumina has adopted a company-wide approach, through various mechanisms, to assess and manage risks. We endeavor to ensure that all employees adhere to our ethics and compliance protocols.

Our Enterprise Risk Management (ERM) framework has been established to anticipate, assess, monitor, manage and report on risks that could impede our business, and to identify emerging issues and opportunities.

We have implemented a corporate, global, Business Continuity Planning (BCP) program to reduce risk exposure and mitigate negative events to business operations. The ISO 22301:2019 standard is used as a business continuity framework for this program.

Additionally, the Internal Audit Department independently and objectively assesses risk and reports insights to the Audit Committee of the Board of Directors on a quarterly cadence.

Our risk assessments consider various quantitative and qualitative inputs, including:

- Business and Finance
- Operational
- Legal and Regulatory
- Brand and Reputation
- Product Quality
- Employee
- Environmental, Health and Safety
- Climate (physical and transition)

Climate Resilience

At illumina, we believe addressing climate change is one of the key topics to achieving a sustainable, just, and resilient future for all. We are committed to climate action and the integration of climate resilience planning into our risk management program.

See the [Appendix](#) for additional details on our Task Force on Climate-related Financial Disclosures (TCFD) index and climate scenario insights and the [Environment](#) section for additional information.



Upholding Human Rights for All Stakeholders

We are committed to respecting human rights and treating every stakeholder with dignity and respect.

Integrity and fairness are central to our values, how we operate in the workplace, and the marketplace. We acknowledge and respect the fundamental principles contained in both the Universal Declaration of Human Rights and the United Nations Global Compact. We are committed to integrating these principles into our strategy, our culture, and our operations.

Key Pledges of Our Human Rights Policy

-  Ethical business conduct
-  Supplier Code of Conduct
-  Right to exercise freedom of association
-  Fair wages and working hours
-  Protection of privacy
-  Safe workplace
-  Elimination of child and forced labor
-  Equal opportunity

Human Rights Impact Assessment

In 2021, we initiated a human rights impact assessment in alignment with the UN Guiding Principles as a framework for review. The assessment will continue in 2022 as we evaluate internal policies, external disclosures, and work to map actual and potential human rights impacts.

Ethical Artificial Intelligence Principles

illumina is dedicated to improving human health by unlocking the power of the genome. That mission drives everything that we do, including the technology that we develop. illumina creates and uses artificial intelligence (AI) systems to power industry-leading sequencing quality, fuel data insights, improve understanding of genomic variation in relation to health and disease and to advance genomic science. We define AI systems to include machine learning, deep learning and predictive modeling. illumina is committed to developing and using artificial intelligence (AI) according to applicable laws and the following guiding principles:

- Transparency
- Diversity, non discrimination, and fairness
- Values-driven design
- Accountability

Ethical Use of Genomic Technologies

illumina is steadfast in our commitment that genomic technologies should be used to benefit humanity, and we will only work with partners who further this mission. Our Human Rights Policy and customer agreements outline our expectations regarding ethical business conduct, the use of our technology, and the steps we can take in the event of a possible violation. We have expanded and enhanced our oversight and accountability processes to monitor and enforce these commitments and prevent sales that could result in misuse or human rights concerns before they happen. illumina is committed to investigating potential reports of product misuse and will not hesitate to cease sales to business partners in the event of a confirmed ethics or human rights concern.



Learn More

- [Human Rights Policy](#)
- [Human Rights Policy—Japanese](#)
- [Conflict-Free Minerals Policy](#)
- [California Transparency in Supply Chain and Modern Slavery](#)
- [Responsible Stem Cell Use Position Statement](#)
- [Animal Testing Position Statement](#)
- [Ethical Artificial Intelligence Principles](#)

Protecting the Privacy of Those We Serve

As we expand access to genomics around the world, we must also respect and properly secure the resulting data.

We are committed to developing, upholding, and promoting the highest standards for genomic data privacy. Our Privacy Policy defines the way we use, maintain, protect, disclose, and transfer personal information. Genomics data is powering positive progress around the world.



Learn More

[Privacy Policy](#)

[Privacy Principles](#)

[Privacy Transparency Report](#)

Our Privacy Principles

Our Privacy Policy defines how we may use, maintain, protect, disclose, or transfer certain types of personal information in the provision of our products and services. How we handle personal information is aligned to our four fundamental privacy guiding principles:

- Transparency
- Ethical Use
- Responsible Stewardship
- Accountability



Protecting the Privacy of Those We Serve

Cybersecurity Framework

Our technologies and services inherently involve handling large amounts of genomic and health data that must be protected, making cybersecurity integral to achieving our company's mission. All Illumina instruments are equipped with an instrument control computer, and users are offered [protection guidance](#).

Key References

- **NIST Cybersecurity Framework**
- **ISO 27001**
- **ISO 13485**
- **General Data Protection Regulation (GDPR)**
- **California Consumer Privacy Act (CCPA)**
- **Health Insurance Portability and Accountability Act (HIPAA)**
- **Clinical Laboratory Improvement Amendments (CLIA)**



Learn More

[Cybersecurity Illumina Security Resources and Best Practices](#)

The Five Pillars of Our Cybersecurity Commitment

Program Governance

- Led by Chief Information Security Officer (CISO)
- CISO reports at least quarterly to the Board of Directors' Audit Committee
- Annual assessment against National Institute of Standards and Technology (NIST) Cybersecurity Framework
- Employees and contractors trained annually
- Third-party work requires cybersecurity risk assessment prior to engagement

Partnerships

- Healthcare Information Sharing and Analysis Center (H-ISAC)
- Domestic Security Alliance Council (DSAC)
- Information 2 Systems Security Association International (ISSA)
- Society for Information Management San Diego (SIM)
- Chief Information Security Officer Roundtable
- InfraGard

Secure Product Design and Placement

- Products and systems secured and maintained throughout life cycle
- Risk mitigation at earliest stages of product design and placement
- Security design requirements
- Cloud-based products aligned with ISO 27001
- Privacy by design
- Strong encryption standards
- Strict data access controls

Risk Analysis and Security Testing

- Continuously assess cybersecurity risk
- Perform internal and external security testing for all cloud software products
- Regularly put cloud software products through static analysis
- Incident response plan and team in place to handle cyber-related disruption, with business continuity and contingency plans
- Internal vulnerability analysis conducted
- Internal tests deployed to represent simulated hacker attacks

Data Protection

- Data protected in compliance with applicable laws and cybersecurity best practices
- Data privacy and data protection align with standards set by GDPR, CCPA, HIPAA, other regulations, and our Privacy Policy
- CLIA laboratories ensure data quality and security with CLIA and regular HIPAA framework assessments
- Backup capabilities encrypt and store data in immutable formats for data confidentiality and integrity
- Amazon Web Services (AWS) hosts the Illumina BaseSpace Suite, with additional security features



2,250

employees participated in our Cybersecurity Awareness Month activities

Cybersecurity Awareness Week

Each October, we recognize Cybersecurity Awareness Month (CSAM), which provides heightened awareness regarding cybersecurity events, threats, attacks, and best practices that all employees can follow to help keep Illumina and its data safe from cyberthreats.

Public Policy

Proactive, responsible engagement with public policy stakeholders enables sharing accurate and reliable information about genomics and advocating for policies that ensure and promote broad access.

illumina participates in the political and public policy process with governments and organizations around the world to engage and educate policymakers and key stakeholders on issues that impact our Mission and business.

Our interactions with policymakers must align with our core values, ethical responsibilities, and legal obligations. The illumina Nominating/Corporate Governance Committee of our Board of Directors oversees our political policies and contribution practices. The Committee maintains responsibility for ensuring all illumina political activities promote ethical and transparent engagement, advance the company’s mission, and comply with applicable laws and reporting requirements. On an annual basis, we provide an update on

our [public policy priorities](#), political contributions, lobbying expenditures, and information about significant memberships. Our Global Government Affairs team is responsible for advocacy activities. illumina does not have a Political Action Committee but does retain outside strategic advisors who support our global engagement with policymakers and key stakeholders. These advisors may also provide expertise on policy and specific regional issues.

illumina complies with all applicable laws and requirements in connection with our global political and public policy activities. These laws generally require reporting on lobbying activities and compliance with applicable gift laws.

Reports filed on behalf of illumina are publicly available in the following government-hosted databases:

- [Office of the Clerk, US House of Representatives](#)
- [Secretary of the Senate, US Senate](#)
- [Lobbying Disclosure, California Secretary of State](#)
- [Transparency Register, European Commission](#)
- [Texas Ethics Commission](#)

Advocating for public policies that ensure and enable broad access to genomic technologies is a priority. In 2021, we focused engagement with public policy stakeholders around:

- Advancement of precision medicine
- Adoption and reimbursement for genetic testing
- Adoption and reimbursement for NIPT
- Adoption and funding for genomic infectious disease surveillance
- Promoting STEM opportunities



Trade Associations and Memberships

illumina participates in various trade associations for collaboration and the exchange of ideas. We pay annual dues to a number of trade and industry associations, some of which use a portion of membership dues for nondeductible state and federal lobbying and political expenditures. We disclose memberships in trade associations for which we contributed over \$5,000 in the immediately preceding year, as well as the total amount of such dues.

For trade association payments in excess of \$50,000, we also disclose the portion of payments that are nondeductible under Section 162(e)(1)(B) of the Internal Revenue Code, such as payments to organizations designated as 501(c)(4) and 501(c)(6).



Learn More

- [Political Contribution Policy](#)
- [Political Contributions Spend Report, Trade Association and Significant Membership Report](#)



“We are dedicated and committed to expanding access to the power of genomics to patients across the globe through constructive and transparent engagement with governments.”

Brian Toohey, Global Head of Government Affairs

Responsible Supply Chain

Our suppliers are critical to our Mission. Together, we magnify the positive impact to the scientists and clinicians we serve and the communities where we operate.

Supply Chain Overview

illumina's global supply chain consists of suppliers, sub-contractors, channel partners, manufacturing sites, distribution centers, and customers. We consider it business critical to work with suppliers who share our commitment to integrity, and who support an ethical and compliant culture. We view our suppliers as partners in our effort to work toward a more equitable and sustainable future for all.

We hold our suppliers to the same standards of business conduct that we set for ourselves. We require them to comply with the standards of behavior outlined in our Supplier Code of Conduct and exhibit social responsibility and environmental stewardship. The Supplier Code of Conduct is consistent with commitments we made both as a signatory of the [United Nations Global Compact](#) and as a member of the Dow Jones Sustainability World Index.

We expect our suppliers to:

- Comply with local regulations and applicable US and international regulations

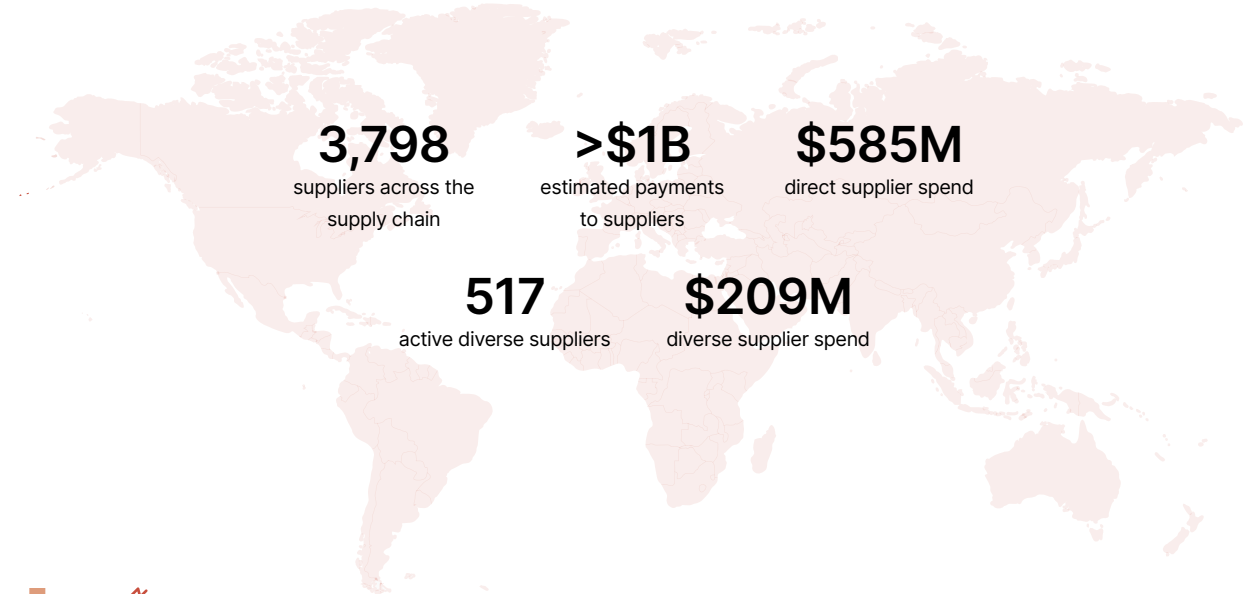
- Uphold their employees' human rights and the illumina [Human Rights Policy](#)
- Ensure a safe and healthy workplace
- Demonstrate social and environmental responsibility
- Conduct business in an ethical manner

Social impact and environmental screening are included in our Request for Information (RFI) tools when evaluating potential suppliers.

All new suppliers are required to acknowledge the Supplier Code of Conduct to complete the onboarding process.

Our suppliers range from off-the-shelf packaging material to highly sophisticated reagents. We define our supplier base by categories, segments, and classification. The categories include direct and indirect with subcategories within each. Suppliers are then segmented. A sample segment definition includes Strategic Suppliers. Classifications of suppliers depend on the product or service they provide such as finished medical devices, spec, off the shelf, and services. We source components, software, equipment, and services from 48 countries across the Americas, Asia, Europe, and Africa.

Our Supply Chain



2030 Target

100%

strategic suppliers to commit to reduce their environmental footprint

2021 PROGRESS

84%



Learn More

[Supplier Code of Conduct](#)

Responsible Supply Chain

Supplier Diversity

Our supplier diversity efforts aim to cultivate a supplier base that reflects the diversity of our communities, customers, employees, and the local economies where we operate.

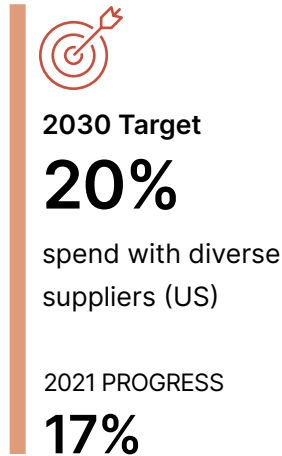
We recognize that a diverse supplier base provides a competitive business advantage by harnessing suppliers' unique experiences and creative solutions. Our program, overseen by a Supplier Diversity Governance Committee, promotes partnership opportunities for suppliers in the US that are at least 51% owned, managed, and controlled by a qualifying diverse group.

These include, but are not limited to:

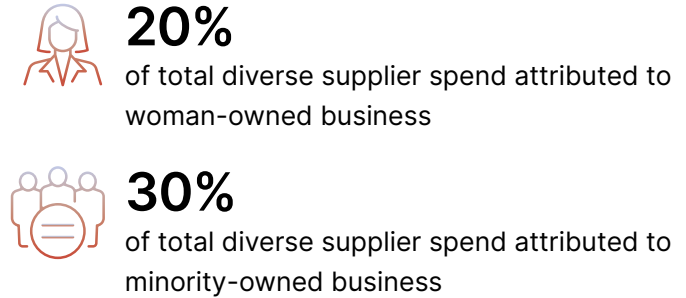
- Woman-owned
- Minority-owned
- Veteran-owned
- Disabled person-owned
- LGBTQ-owned
- Socially and economically disadvantaged-owned businesses
- Certified small business

Globally, we encourage the use of local businesses wherever possible to support the economies where our employees work and live. Our program is expanding to include woman-owned businesses in APAC and small businesses in Great Britain.

In 2021, we rolled out a mandatory internal training certification on supplier diversity for our procurement sourcing managers through our learning management system (LMS). The core intent of this training is to ensure the Illumina Sourcing & Procurement team leverages our robust Diverse Supplier Network to purchase goods and services. To further support our diverse suppliers, the Employee Resource Group, SHADES partnered with the Supplier Diversity team to verify address and contact information for close to 500 diverse suppliers in our network, while raising internal awareness about the benefits of utilizing diverse suppliers. Read more about their efforts and contributions in [People](#). In 2021, we included diversity screening in our Request for Information and Request for Proposal process. In 2022, we plan to start gathering Tier 2 diversity spend from select suppliers in an effort to magnify potential impact and reach.



Supplier Diversity Highlights



Learn More
[Supplier Code of Conduct](#)
[Supplier Diversity Program](#)



Responsible Supply Chain

Modern Slavery

Illumina is committed to conducting its business lawfully and with integrity. We work to continually strengthen our practices to ensure no human trafficking, slavery, or forced or compulsory labor occurs in any part of our supply chains and global operations. We also seek to ensure that our global business partners do not use modern slavery in any of its forms in providing goods or services. Additional information is available in our [California Transparency in Supply Chains Act & UK Modern Slavery Act disclosure statements](#).

Conflict-Free Minerals

Illumina supports international efforts to ensure no conflict minerals directly or indirectly benefit armed groups in the Democratic Republic of Congo or adjoining countries. To this end, Illumina expects all suppliers to commit to the [Responsible Business Alliance \(RBA\) Code of Conduct](#). Through our [Conflict-Free Minerals Policy](#) we expect all our suppliers to establish their own due diligence program to ensure supply chains are free of conflict minerals and make those due diligence measures available to us upon request. Illumina routinely evaluates its suppliers to ensure they are adhering to our expectations and values.



Learn More

[Channel Partner Code of Conduct](#)

[California Transparency in Supply Chains Act & UK Modern Slavery Act Disclosure Statement](#)

[Conflict-Free Minerals Policy](#)

Verification and Due Process

We only build relationships with business partners that share our commitment to fulfilling all legal and ethical obligations. We never knowingly conduct business with business partners that employ underage individuals, employ forced labor, or use corporal punishment to discipline employees, regardless of whether such practices are permitted by law.

We perform due diligence on new business partners to verify that they meet our standards. This process involves conducting initial risk assessments when onboarding new suppliers and conducting periodic assessments of performance. In addition, for supply chain areas of higher risk, we take steps to enhance our risk mitigation strategies. Prior to engaging in business with any supplier, we utilize tools that provide up-to-date sanction lists from governments around the world that identify companies and individuals involved in criminal activities such as money laundering, financing paramilitary groups, etc. In addition, we utilize tools to continuously monitor our supplier base on potential risk elements such as financial stability, leadership changes, global news, and other.

We encourage all employees and business partners to report potential violations or concerns through a variety of formal channels, including our Legal team and/or our [Compliance and Fraud Prevention Reporting](#) website or hotline.

Channel Partners

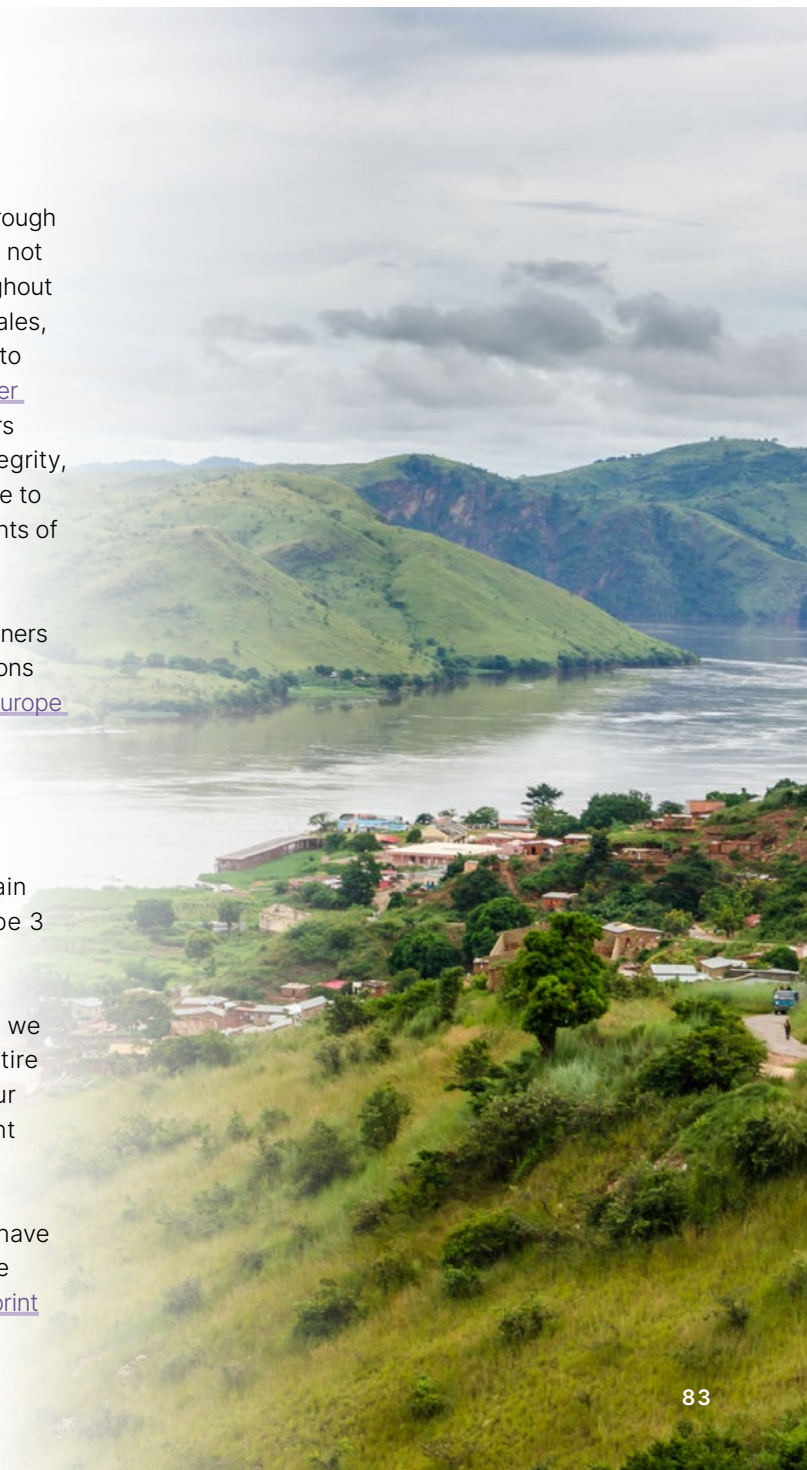
Our products are available around the globe through a robust channel partner network. Our partners not only offer critical access to our products throughout the world but also provide the same level of sales, marketing, service, and support that we offer to customers directly. The [Illumina Channel Partner Code of Conduct](#) requires that channel partners match the Illumina commitment to business integrity, ethical conduct in the marketplace, adherence to all applicable laws, and the fundamental elements of human rights. Illumina is a member of the Advanced Medical Technology Association (AdvaMed) and MedTech Europe. Channel Partners are required to adhere to the applicable provisions of the [AdvaMed Code of Ethics](#) and [MedTech Europe Code of Ethical Business Practice](#).

Supplier Sustainability

In 2021 we assessed 100% of our supply chain for environmental impact as part of our Scope 3 data collection.

In 2022, as part of our supplier engagement we plan to share our Net Zero goals with our entire supplier base and invite them to join us in our race to zero. We will require acknowledgment of all our strategic suppliers.

Through our supplier scorecard program, we have identified 84% of our strategic suppliers have committed to reduce their [environmental footprint](#) with our goal to achieve 100% by 2030.



Responsible Supply Chain

Product Quality

Quality Policy: Illumina is dedicated to being the leading provider of integrated solutions that advance the understanding of genetics and health. We achieve this through our focus on the customer experience, our commitment to continual improvement, maintaining the effectiveness of our quality management system, and complying with regulatory requirements.

During 2021, we issued zero medical device product recalls that were reported to the FDA. There was one medical device voluntary recall that was not required to be reported to the FDA. There were four voluntary medical device recalls/field action that were reported to non-US national regulatory authorities and removed from the market or corrected.

Quality Management Systems

The following locations are certified to the ISO 13485 Standard, which specifically covers the quality of medical devices:

- Foster City, CA
- San Diego, CA
- Hayward, CA
- Madison, WI
- Netherlands
- Singapore
- Cambridge, UK

Supplier Quality Vision and Values

To ensure the quality of our products, we have to ensure the quality of the components that we source. That is the rationale behind the Illumina Supplier Quality Vision, which is to construct and foster a leading supplier base that ensures safe and quality products every time.

The supplier quality management life cycle incorporates the following phases:

- Initial risk assessments
- Audits
- Qualification
- Monitoring

Working with our suppliers, we focus on the customer experience, continual improvement, effectiveness of our quality management system, and compliance. In 2021, 100% of Illumina-owned or -operated facilities participated in third-party audit programs. Additionally, 97% of Tier 1 suppliers participate in some form of third-party audit program, based on our supplier qualification requirements. All products have traceability and inventory is tracked via our inventory management system, SAP. Products may contain bar code, lot numbers, and/or unique identifiers.

Learn More

[Supplier Quality Manual](#)

[Quality Policy Statement](#)

Supplier Quality Management Cycle

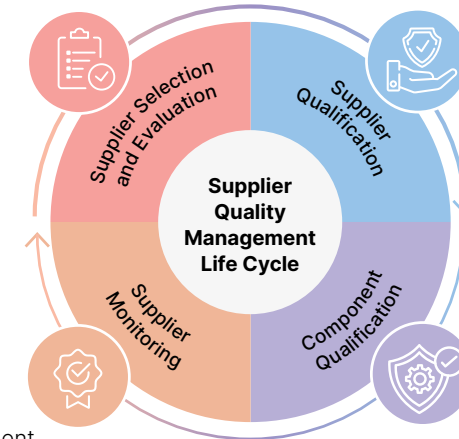
A quality management system is a critical aspect at every stage of the product life cycle to ensure that policies and objectives are in place and product quality standards are of the highest caliber.

Supplier Selection and Evaluation

- Supplier selection
- Supplier evaluation

Supplier Monitoring

- Non-conformance management
- Supplier Corrective Action Request (SCAR)
- Performance management
- Business reviews
- Scorecard



Supplier Qualification

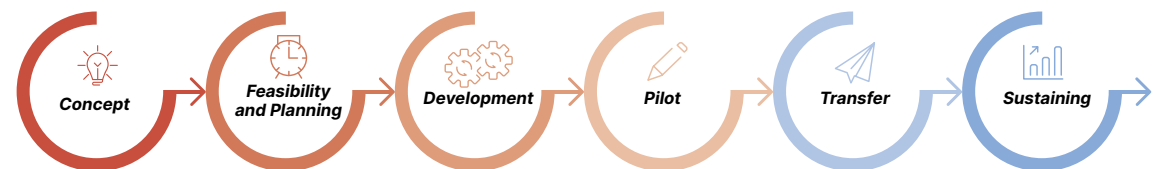
- Change notification agreement
- Quality agreement
- Qualification audit

Component Qualification

- First article inspection
- Measurement system analysis
- Process capability
- Process Failure Mode and Effects Analysis (PFMEA)
- Control plan
- Sub-tier supplier control

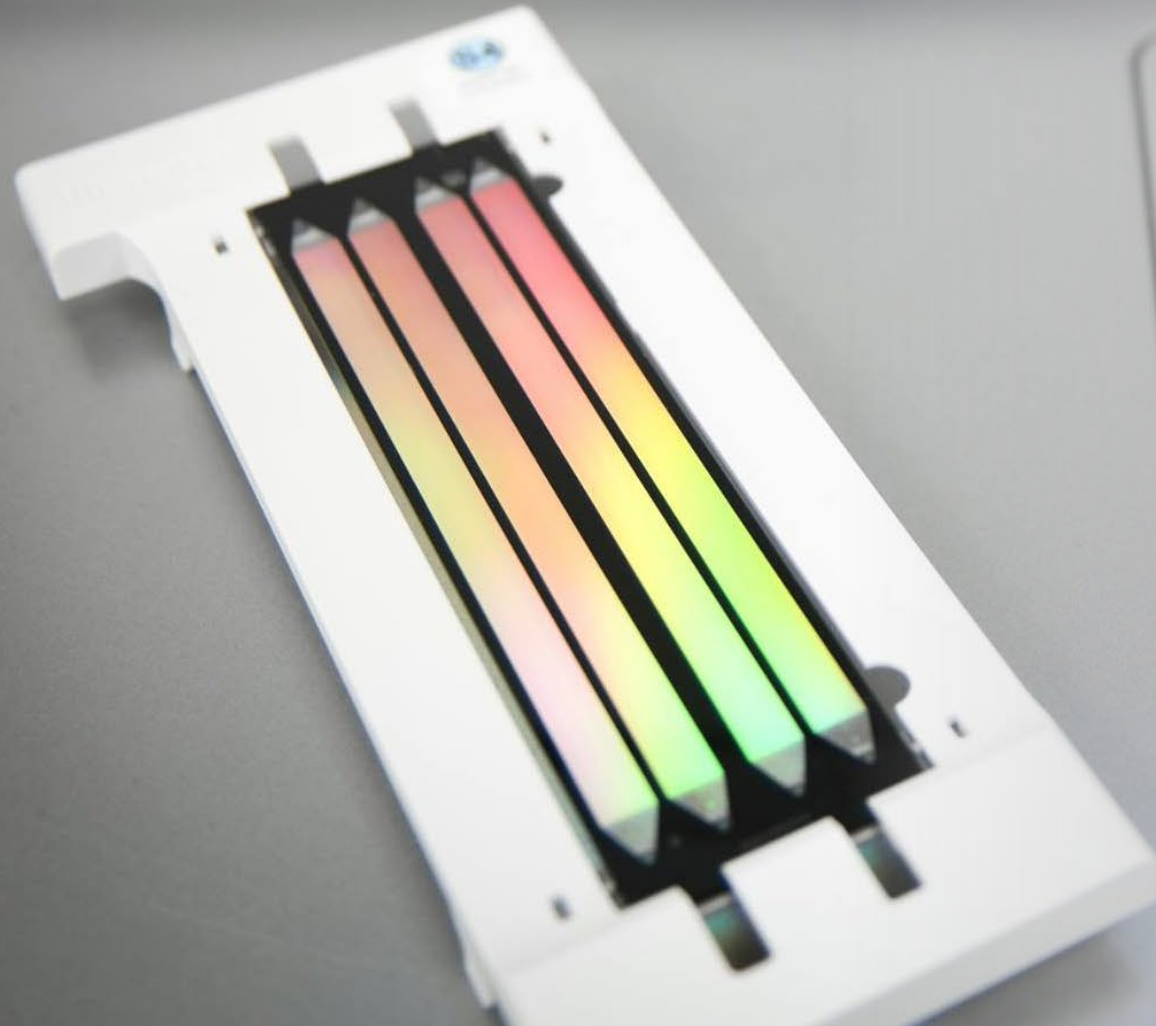
Quality Control in Product Life Cycle

Quality teams play a role throughout the product life cycle.





NovaSeq™ 6000



Appendix

Reporting Overview

About This Report

Our report has been designed to provide a comprehensive and integrated view of our commitments, progress, and activities related to our corporate social responsibility program and most material environmental, social, and governance themes.

Our voluntary reporting is informed by the following frameworks:

- In accordance with the GRI Standards: Comprehensive
- Sustainability Accounting Standards Board (SASB)
- Task Force on Climate-related Financial Disclosures (TCFD)
- UN Sustainable Development Goals
- UN Global Compact
- UN Universal Declaration of Human Rights
- Dow Jones Sustainability Index
- CDP
- Bloomberg Gender Equality Index
- HRC Corporate Equality Index

We also recognize ISO 26000 as a reference document that provides guidance for integration of social responsibility.

CSR and ESG Industry Peer Groups

- Business for Social Responsibility (BSR)
- Association of Corporate Citizenship Professionals (ACCP)
- Chief Executives for Corporate Purpose (CECP)
- CSR Board
- World 50
- Sustainable Packaging Coalition
- My Green Labs

Signatories

- UN Global Compact
- We Mean Business Coalition 1.5°
- UN Race to Zero
- CEO Action for Diversity & Inclusion
- UN Women Empowerment Principles

Entities Excluded in This Report

In 2021, Illumina acquired GRAIL. Pending the outcome of the European Commission's review of the acquisition, GRAIL is required to be held and operated separately. Data contained in this report does not reflect any GRAIL operations, financial results, or ESG data.

Reporting Period

January 1, 2021, to December 31, 2021, unless otherwise indicated.

Baseline Year

2019, unless otherwise indicated.

Materiality

Based on the [materiality assessment refresh](#) completed in 2021.

Assurance

[Limited assurance](#) has been provided in accordance with ISAE 3000 and ISAE 3410 on the following topics

- Scope 1, 2, and 3 GHG emissions data
- Energy data
- Water data
- Human capital data

Currency References

US Dollars

Re-statements

We conduct ongoing data review to ensure accuracy and consistency. Any material data changes quoted in the current CSR report that reflect a revision from previous reports have been adjusted and are called out with the symbol '†'.

Contact

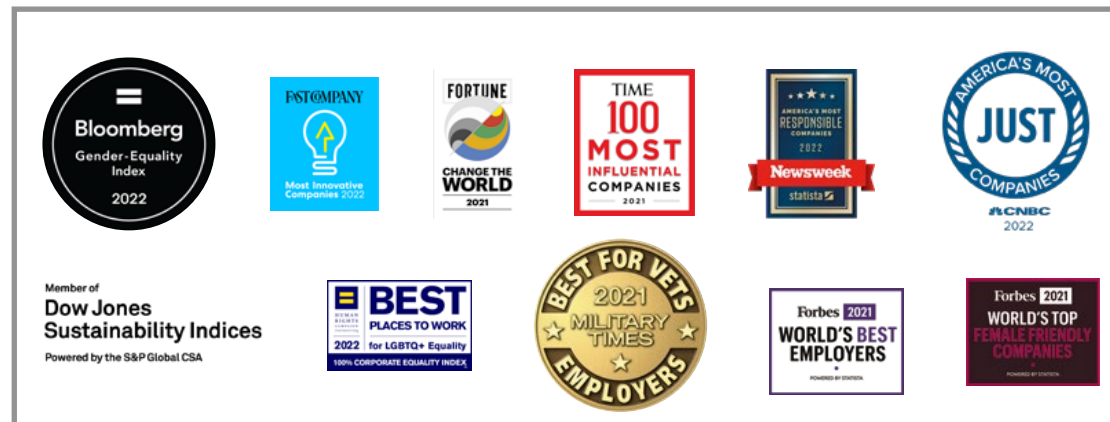
We welcome your feedback at csr@illumina.com

Learn More

www.illumina.com/csr
[ESG reporting hub](#)

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Key Performance Indicator Summary

About Illumina

General	2021
Name of organization	Illumina, Inc.
Location of headquarters	San Diego, California, US
Number of global locations	28
Nature of ownership and legal form	Public Corporation
Revenue	\$4.52 billion
Total capitalization (stockholder's equity) market value as of 12/31/2021	\$10.74 billion
5Y CAGR	14%
10Y CAGR	16%
R&D % revenue investment	20%
R&D spend	\$885 million
Building footprint ¹	2,541,548 square feet
Facility additions ²	3
Facility closures ³	1

Expanding Access to Genomics

Access to Genomics	2021
Cost per genome	\$600
iHope™ patients supported in 2021	300
Total iHope™ patients supported since program inception	1,150
Clinical iHope™ network sites	24
Professional healthcare learners	30,000
Illumina Accelerator companies funded through December 2021	63
NGS coverage outlook: Total insured lives	>1 billion

Notes:

¹ Average square feet during reporting year.

² Emedgene Acquisition, new commercial office in Dubai, and new distribution center in Steenhoven.

³ Moved out of Eindhoven distribution center into larger distribution center in Steenoven.

⁴ In order to be included in the Causes Database, an organization must meet their country's NGO guidelines. Organizations are then evaluated against 1,200 watch lists and a number of National Taxonomy of Exempt Entities Codes (NTEE) that are also excluded from matching eligibility. Illumina currently blocks charitable organizations that have been found to discriminate against a specific race, religion, ethnicity, sexual orientation, or gender identity.

Empowering Our Communities

Total Giving	2019	2020	2021
Illumina, Inc. + Illumina Corporate Foundation + employee giving	\$1,185,088	\$13,829,496	\$14,966,331
Illumina, Inc. + Illumina Corporate Foundation	\$873,088	\$13,255,768	\$14,446,500
Number of causes supported ⁴	1,021	1,034	1,345
Illumina, Inc. Giving			
In-kind product donations + cash grants	\$560,088	\$7,146,450	\$9,409,966
Illumina Corporate Foundation Giving			
Employee giving	\$312,000	\$573,728	\$519,831
Employee participation (giving)	19%	20%	26%
Foundation match & volunteer rewards (Dollars for Doers)	\$208,000	\$721,111	\$546,884
Charitable grants	\$105,000	\$5,388,207	\$4,489,650
Total Foundation giving (not including employees)	\$313,000	\$6,109,318	\$5,036,534
Volunteer Hours			
Employee hours	13,980	4,236	8,772
Employee volunteering	29%	5%	10%
Intern hours	140	1,237	800
Employee Participation			
Total employee participation (giving + volunteering)	40%	24%	31%
Summary of International Giving (Outside US)			
Illumina, Inc.	NA	\$2,894,129	\$7,044,842
Illumina Corporate Foundation	NA	\$635,126	\$1,089,892
Number of countries	24	29	44
STEM			
Number of teachers and students engaged in Illumina STEM programs	306,170	195,000	315,000



Key Performance Indicators

Integrating Environmental Sustainability

Energy Consumption (Units: Gigajoules)	2019	2020*	2021*
Total fuel consumption from non-renewable sources	247,576	390,564	403,211
Total fuel consumption from renewable sources	0	0	0
Generation from renewable sources consumed by the organization	1,566	3,333	2,417
Total energy consumption from non-renewable sources	503,658	561,258	581,067
Total energy consumption from renewable sources	1,566	3,333	9,077
Total energy consumption	505,224	564,591	590,144
Energy Consumption by Activity and Region (Units: Gigajoules)	2019	2020*	2021*
Total electricity (purchased + generated)	257,648	174,028	187,297
Purchased electricity	256,082	170,694	184,882
Generated electricity (on-site solar)	1,566	3,333	2,417
Total fuel	247,576	390,564	403,211
Natural gas	247,576	390,564	403,211
Total steam	0	0	0
Electricity, heating, cooling, steam sold	0	0	0
Total energy consumption AMR region	380,106	445,190	469,104
Total energy consumption EMEA region	47,779	35,072	36,358
Total energy consumption APAC region	75,752	80,996	84,681
Renewable Electricity Consumption	2019	2020	2021*
Percentage of global electricity consumption that is renewable	0.6%	2%	59%
On-site solar generation	0.6%	2%	1%
Renewable electricity purchased	0%	0%	3%
Covered by Renewable Energy Credits	0%	0%	55%

Emissions (Units: Metric Tons CO₂e)	2019	2020*	2021*
Total Scope 1 & 2 (market-based) GHG emissions	34,404	36,573	26,265
Total Scope 1 & 2 (location-based) GHG emissions	34,404	36,573	36,914
Gross direct GHG emissions (Scope 1)	12,489	19,701	20,296
Gross market-based energy indirect GHG emissions (Scope 2)	21,915	16,872	5,968
Gross location-based energy indirect GHG emissions (Scope 2)	21,915	16,872	16,618
Regional Emissions (Units: Metric Tons CO₂e)	2019	2020*	2021*
Scope 1 & 2 market-based emissions AMR region	22,903	25,207	25,060
Scope 1 & 2 market-based emissions EMEA region	3,014	2,253	864
Scope 1 & 2 market-based emissions APAC region	8,488	9,113	341
Country-Specific Scope 1 (Units: Metric Tons CO₂e)	2019	2020*	2021*
China	0	0	0
Netherlands	73	73	74
Singapore	0	0	0
United Kingdom of Great Britain and Northern Ireland	1,132	801	768
United States of America	11,284	18,827	19,454
Country-Specific Scope 2 Market-Based (Units: Metric Tons CO₂e)	2019	2020*	2021*
China	388	518	0
Netherlands	384	368	8
Singapore	8,099	8,595	341
United Kingdom of Great Britain and Northern Ireland	1,425	1,011	14
United States of America	11,619	6,380	5,605

Notes:

* Denotes data has been assured.

- Boundary definition for energy and Scope 1 & 2 emission inventory: sites >30,000 square feet or contain manufacturing, distribution, or significant R&D activities. These sites represent our jurisdictional control plus material locations. This scope accounts for 96% of our total 2019 baseline footprint.
- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard is utilized as the methodology to calculate Scope 1 and Scope 2 emissions.
- Some segments may not add up to total due to rounding.



Key Performance Indicators

Integrating Environmental Sustainability continued

Facility-Specific Emissions (Units: Metric Tons CO ₂ e) ¹	2021 Scope 1*	2021 Scope 2 Market-Based*	2021 Scope 2 Location-Based*
Cambridge, United Kingdom	749	0	903
Eindhoven, Netherlands	72	0	203
Foster City, California	1,359	1,403	1,403
Hayward, California	634	592	592
Madison, Wisconsin	1,458	2,138	2,138
San Diego Headquarters, California	15,248	1,291	1,580
San Diego i3, California	756	134	200
San Diego Warehouse, California	0	47	74
Shanghai, China	0	0	358
Steenoven, Netherlands	2	8	218
Watson, United Kingdom	19	14	23
Woodlands, Singapore	0	341	8,927
Emission Intensity Ratios	2019	2020*	2021*
Scope 1 and 2 Emissions			
GHG emission intensity per million dollars revenue	9.8	11.4	5.8
GHG emission intensity kgCO ₂ e/square feet	13.8	15.1	10.4
GHG emission intensity per employee	4.4	4.7	2.9
Scope 3 Emissions ²			
GHG emission intensity per million dollars revenue	72.6	71.3	66.1

Scope 3 Emissions (Units: Metric Tons CO ₂ e)	2019	2020	2021*
Purchased Goods and Services (Category 1) ³	72,915	100,351	138,563
Capital Goods (Category 2) ³	39,940	44,057	79,530
Fuel- and Energy-Related Activities (Category 3)	6,956	5,785	9,048
Upstream Transportation & Distribution (Category 4) ³	46,327	48,256	68,934
Waste Generated in Operations (Category 5)	236	617	1,055
Business Travel (Category 6) ³	19,350	8,913	3,959
Employee Commuting (Category 7) ³	18,012	7,567	7,616
Upstream Leased Assets (Category 8)	1,480	733	547
Downstream Transportation & Distribution (Category 9)	Assessed, not relevant		
Processing of Sold Products (Category 10)	Assessed, not relevant		
Use of Sold Products (Category 11)	6,968	4,850	9,221
End-of-Life Treatment of Sold Products (Category 12)	2,368	2,245	5,230
Downstream Leased Assets (Category 13)	Assessed, not relevant		
Franchises (Category 14)	Assessed, not relevant		
Investments (Category 15) ³	23,559	19,038	0
Total Scope 3 Emissions	238,110	242,411	323,702
Scope 3 Emissions: % of Total Scope 3 Emissions	2019	2020	2021*
Purchased Goods and Services (Category 1) ³	31%	41%	43%
Capital Goods (Category 2) ³	17%	18%	25%
Fuel- and Energy-Related Activities (Category 3)	3%	2%	3%
Upstream Transportation & Distribution (Category 4) ³	19%	20%	21%
Waste Generated in Operations (Category 5)	0.1%	0.3%	0.3%
Business Travel (Category 6) ³	8%	4%	1%
Employee Commuting (Category 7) ³	8%	3%	2%
Upstream Leased Assets (Category 8)	0.6%	0.3%	0.2%
Use of Sold Products (Category 11)	3%	2%	3%
End-of-Life Treatment of Sold Products (Category 12)	1%	0.9%	2%
Investments (Category 15) ³	10%	8%	0%

Notes:

¹ Facilities included in Scope 1 & 2 emission boundary.

² Emission intensity for Scope 3 categories included in 2050 net zero target.

³ Categories included in 2050 net zero target.

* Denotes data has been assured.

• Some segments may not add up to total due to rounding.

• The Greenhouse Gas Protocol: A Corporate Value Chain (Scope 3) Accounting and Reporting Standard.



Key Performance Indicators

Integrating Environmental Sustainability continued

Water (Units: Megaliters)	2019	2020	2021*
Interactions with water: total water withdrawal (potable source + recycled source)	225†	294†	268
Water withdrawal (potable)	147†	208†	195
Water withdrawal (recycled)	78	86	74
Percentage of total water withdrawal in water stressed regions ¹	63%	62%	70%
Water intensity (kiloliters normalized by rentable square feet for core site locations) ²	0.10†	0.12†	0.11
% water withdrawal in AMR	97%	97%	97%
% water withdrawal in EMEA	2%	1%	1%
% water withdrawal in APAC	1%	2%	2%
Total Waste (Units: Metric Tons)	2019	2020	2021
Total (hazardous + non-hazardous)	4,934	4,979	5,975
Global average non-hazardous diversion from landfill	51%	49%	49%
Regional Waste Data AMR (Units: Metric Tons)	2019	2020	2021
Non-hazardous waste total	2,619	2,869	3,326
Hazardous waste total	902	699	605
Madison Site % diversion ³	39%	43%	43%
Foster City % diversion ³	54%	48%	49%
Hayward % diversion ³	32%	22%	22%
San Diego % diversion ³	33%	36%†	31%
Regional Waste Data EMEA (Units: Metric Tons)	2019	2020	2021
Non-hazardous waste total	451	397	590
Hazardous waste total	67	35	55
Cambridge, UK % diversion ³	100%	100%	100%
Netherlands % diversion ³	100%	100%	100%
Regional Waste Data APAC (Units: Metric Tons)	2019	2020	2021
Non-hazardous waste total	424	437	504
Hazardous waste total	471	542	894
Singapore % diversion ³	100%	100%	100%

Notes:

¹Water stressed regions listed on [page 44](#).

²Core site locations: San Diego HQ, I3 and Warehouse, Hayward, Foster City, Madison, Netherlands, Cambridge, and Singapore Woodlands.

³% Diversion calculated using non-hazardous waste and % diverted from landfill.

* Denotes data has been assured.

† Updated data to reflect most current information.

Effluent & Waste by Type and Disposal Method (Units: Metric Tons)	2019	2020	2021
Non-Hazardous Waste			
Non-hazardous waste total	3,494	3,703	4,421
Reuse	0	0	0
Recycling	887	872	937
Composting	149	203	259
Recovery (including energy recovery)	760	729	977
Incineration	0	0	0
Deep well injection	0	0	0
Landfill	1,698	1,899	2,247
On-site storage	0	0	0
Other	0	0	0
Hazardous Waste			
Hazardous waste total	1,440	1,276	1,554
Reuse	0	0	0
Recycling	413	489	332
Composting	0	0	0
Recovery (including energy recovery)	850	707	1,169
Incineration	62	34	41
Deep well injection	0	0	0
Landfill	37	20	6
On-site storage	0	0	0
Other	77	26	4



Key Performance Indicators

Nurturing Our People

Workforce Data	2019	2020	2021*
Total employees	7,802	7,828	9,191
Full-time employees	7,749	7,782	9,137
Part-time employees	53	46	54
Contingent workers	1,247	1,459	1,647
Age Group			
Employees under 30	1,527	1,363	1,820
	20%	17%	20%
Employees 30–50	5,090	5,235	5,992
	65%	67%	65%
Employees over 50	1,185	1,230	1,379
	15%	16%	15%
AMR			
Total employees	4,973	4,937	5,668
Full-time employees	4,954	4,918	5,650
Part-time employees	19	19	18
Contingent workers	971	1,182	884
APAC			
Total employees	1,883	1,871	2,238
Full-time employees	1,882	1,871	2,238
Part-time employees	1	0	0
Contingent workers	164	146	588
EMEA			
Total employees	946	1,020	1,285
Full-time employees	913	993	1,249
Part-time employees	33	27	36
Contingent workers	112	131	175

Notes:

¹ Percentage of all part-time employees.

² Leadership: Manager, equivalent, and above.

³ Executive leadership: Director and above.

* Denotes data has been assured.

• For all people metrics unless specified, the values include only regular Illumina employees, not contingent workers.

• Some segments may not add up to total due to rounding.

Gender Data	2019	2020	2021*
Workforce			
Total women	3,334	3,342	4,076
	43%	43%	45%
Full-time women	3,293	3,305	4,036
	43%	43%	45%
Part-time women ¹	41	37	40
	79%	80%	76%
Temporary women	N/A	N/A	N/A
	N/A	N/A	N/A
Leadership			
Women in leadership ²	571	610	746
	39%	40%	42%
Women in executive leadership ³	112	136	174
	33%	36%	38%
Women on Board of Directors	3	3	3
	33%	30%	33%
Total Women by Region			
AMR	2,071	2,067	2,474
APAC	847	826	1,037
EMEA	416	449	565
Women in Leadership by Region			
AMR	404	421	506
APAC	95	104	135
EMEA	72	85	105
Functional Group			
Women in revenue-generating roles	41%	36%	48%
Women in revenue-generating roles—management	35%	36%	42%
Women in STEM-related roles (% of total STEM roles)	37%	37%	39%
Women in IT roles	24%	23%	24%
Women in engineering roles	37%	36%	29%



Key Performance Indicators

Nurturing Our People continued

Percentage Female of Each EEOC Category (US)	2019	2020	2021*
White/Caucasian	41%	41%	43%
Native Hawaiian or Other Pacific Islander	31%	27%	33%
American Indian or Native Alaskan	50%	45%	50%
Asian	44%	44%	45%
Hispanic or Latino	39%	40%	44%
Black or African American	37%	41%	45%
2 or More	45%	46%	51%
Choose not to self disclose	40%	40%	41%
Percentage Male of Each EEOC Category (US)	2019	2020	2021*
White/Caucasian	59%	59%	57%
Native Hawaiian or Other Pacific Islander	69%	73%	67%
American Indian or Native Alaskan	50%	55%	50%
Asian	56%	56%	55%
Hispanic or Latino	61%	60%	56%
Black or African American	63%	60%	55%
2 or More	55%	54%	49%
Choose not to self disclose	60%	60%	59%

EEOC Minority Summary (US)	2019	2020	2021*
Total employees identifying in minority race and ethnicity statistics	2,429	2,422	2,830
Minority of total employees	49%	49%	50%
Non-Minority of total employees	46%	46%	45%
Decline to state of total employees	5%	5%	5%
Representation of Black, Native, Pacific Islander, Hispanic or Latino, 2 or more communities in workforce	17%	17%	17%
Representation of Black, Native, Pacific Islander, Hispanic or Latino, 2 or more communities in leadership	10%	11%	12%
EEOC Minority by Category (US)	2019	2020	2021*
White/Caucasian	2,284	2,253	2,514
	46%	46%	45%
Native Hawaiian or Other Pacific Islander	62	56	67
	1%	1%	1%
American Indian or Native Alaskan	10	11	13
	<1%	<1%	<1%
Asian	1,601	1,601	1,863
	32%	33%	33%
Hispanic or Latino	447	435	510
	9%	9%	9%
Black or African American	121	121	130
	2%	2%	2%
2 or More	188	198	248
	4%	4%	4%
Choose not to self disclose	240	238	294
	5%	5%	5%
Veteran	143	141	145
	3%	3%	3%
Disabled	248	235	230
	5%	5%	4%

Notes:

- * Denotes data has been assured.
- Minority defined as any EEOC category that is non-white/non-Caucasian. Does not include those who choose not to specify a race/ethnicity.
- Some segments may not add up to total due to rounding.



Key Performance Indicators

Nurturing Our People continued

EEOC Data by Level (US)	2019	2020	2021*
Support to Entry Professional			
White/Caucasian	261	226	264
	24%	23%	23%
Native Hawaiian or Other Pacific Islander	29	31	34
	3%	3%	3%
American Indian or Native Alaskan	3	2	3
	<1%	<1%	<1%
Asian	489	452	514
	45%	45%	45%
Hispanic or Latino	173	160	185
	16%	16%	16%
Black or African American	48	38	38
	4%	4%	3%
2 or More	57	56	65
	5%	6%	6%
Choose not to self disclose	38	34	35
	3%	3%	3%
Intermediate to Senior Professional			
White/Caucasian	1,403	1,389	1,555
	50%	48%	48%
Native Hawaiian or Other Pacific Islander	22	16	21
	1%	1%	1%
American Indian or Native Alaskan	4	6	7
	<1%	<1%	<1%
Asian	895	938	1,078
	32%	33%	33%
Hispanic or Latino	199	201	243
	7%	7%	7%
Black or African American	51	56	63
	2%	2%	2%
2 or More	105	115	150
	4%	4%	5%
Choose not to self disclose	143	146	191
	5%	5%	6%

EEOC Data by Level (US)	2019	2020	2021*
Manager to Associate Director			
White/Caucasian	413	421	452
	54%	56%	55%
Native Hawaiian or Other Pacific Islander	11	9	11
	1%	1%	1%
American Indian or Native Alaskan	2	2	1
	<1%	<1%	<1%
Asian	182	174	214
	24%	23%	26%
Hispanic or Latino	65	61	70
	9%	8%	8%
Black or African American	17	21	22
	2%	3%	3%
2 or More	22	21	23
	3%	3%	3%
Choose not to self disclose	46	48	51
	6%	6%	6%
Director and Above			
White/Caucasian	207	217	243
	75%	75%	70%
Native Hawaiian or Other Pacific Islander	0	0	1
	0%	0%	<1%
American Indian or Native Alaskan	1	1	2
	<1%	<1%	1%
Asian	35	37	57
	13%	13%	16%
Hispanic or Latino	10	13	12
	4%	4%	3%
Black or African American	5	6	7
	2%	2%	2%
2 or More	4	6	10
	1%	2%	3%
Choose not to self disclose	13	10	17
	5%	3%	5%

Notes:

- * Denotes data has been assured.
- Some segments may not add up to total due to rounding.



Learn More [Federal Employer Information EEO-1 Report](#)



Key Performance Indicators

Nurturing Our People continued

New Hire Data	2019	2020	2021*
New Hire by Age Group			
Employees under 30	458	380	990
	30%	28%	54%
Employees 30–50	716	586	1,358
	14%	11%	23%
Employees over 50	89	88	156
	8%	7%	11%
New Hire by Gender			
New female employee hires ¹	566	490	1,185
	17%	15%	29%
New male employee hires ¹	684	560	1,262
	15%	12%	25%
New Hire by Region			
AMR new employee hires ¹	707	629	1,479
	14%	13%	26%
APAC new employee hires ¹	376	249	621
	20%	13%	28%
EMEA new employee hires ¹	180	176	404
	19%	17%	31%
Percentage New Hire per EEOC (US)			
White/Caucasian	44%	47%	40%
Native Hawaiian or Other Pacific Islander	1%	<1%	1%
American Indian or Native Alaskan	<1%	<1%	<1%
Asian	32%	33%	34%
Hispanic or Latino	10%	7%	10%
Black or African American	2%	4%	2%
2 or More	7%	6%	7%
Choose not to self disclose	5%	3%	6%

Promotion Data	2019	2020	2021*
Total number of employees promoted	1,502	1,568	2,583
Promotion Rate by EEOC (US)			
White/Caucasian	22%	20%	34%
Native Hawaiian or Other Pacific Islander	19%	10%	34%
American Indian or Native Alaskan	0%	29%	33%
Asian	23%	20%	37%
Hispanic or Latino	19%	19%	34%
Black or African American	14%	15%	33%
2 or More	20%	18%	37%
Choose not to self disclose	21%	22%	35%
Veteran Data (US)			
Number of US employees, regardless of whether they have any military connection	4,908	4,866	5,561
Number of employees as defined by the federal government as meeting the criteria for protected veteran status	87	87	90
Number of veteran and active duty employees, regardless of protected status	143	141	145
Number of disabled veteran employees	2	2	3
Number of women veteran employees	24	20	26
Number of minority veteran employees—minority veterans include, but are not limited to, people of color, women, LGBTQIA+, and (non) religious minorities	67	68	75

Notes:

¹ % data for new hire by age represents the percentage of the total age group headcount for the reporting year.

* Denotes data has been assured.

• For all gender statistics, percentage of women is based on number of employees who identify as male or female, not total number of Illumina employees.

• Some segments may not add up to total due to rounding.



Key Performance Indicators

Nurturing Our People continued

Employee Turnover Data	2019	2020	2021*
Total Turnover			
Total number of employee turnover	856	1,028	1,154
Rate of employee turnover	11%	14%	14%
Total number of voluntary terminations	644	714	1,048
Rate of voluntary terminations	9%	9%	12%
Turnover by Age			
Employees under 30	229	224	246
	15%	16%	15%
Employees 30–50	489	638	749
	10%	12%	13%
Employees over 50	138	166	159
	12%	14%	12%
Voluntary employee turnover under 30	195	182	233
	13%	13%	15%
Voluntary employee turnover 30–50	366	456	686
	7%	9%	12%
Voluntary employee turnover over 50	82	76	129
	7%	6%	10%
Turnover by Level			
Voluntary turnover support to entry professional	11%	11%	14%
Involuntary turnover support to entry professional	3%	5%	1%
Voluntary turnover intermediate to senior professional	8%	8%	12%
Involuntary turnover intermediate to senior professional	2%	4%	1%
Voluntary turnover manager to associate director	6%	8%	11%
Involuntary turnover manager to associate director	4%	4%	2%
Voluntary turnover director and above	6%	13%	17%
Involuntary turnover director and above	4%	4%	3%

Employee Turnover Data	2019	2020	2021*
Total Turnover by Region			
AMR	530	666	763
	11%	13%	14%
APAC	223	261	251
	12%	14%	12%
EMEA	103	101	140
	11%	10%	12%
Voluntary Turnover by Region			
AMR	384	442	701
	8%	9%	13%
APAC	188	207	224
	10%	11%	11%
EMEA	72	65	123
	8%	7%	11%
Voluntary Turnover Percentage by EEOC (US)			
White/Caucasian	8%	10%	13%
Native Hawaiian or Other Pacific Islander	11%	10%	5%
American Indian or Native Alaskan	0%	0%	25%
Asian	7%	8%	13%
Hispanic or Latino	8%	7%	14%
Black or African American	11%	12%	16%
2 or More	6%	11%	21%
Choose not to self disclose	6%	8%	13%

Notes:

* Denotes data has been assured.

• Some segments may not add up to total due to rounding.



Key Performance Indicators

Nurturing Our People continued

Parental Leave ¹	2019	2020	2021
Total number of employees who were entitled to parental leave	4,714	4,900	5,302
Total number of employees who took parental leave, by gender	Female 116 Male 65	Female 181 Male 121 Blank 1	Female 173 Male 89
Total number of employees who returned to work in the reporting period after parental leave ended, by gender	Female 116 Male 65	Female 191 Male 138 Blank 1	Female 166 Male 123
Total number of employees who returned to work after parental leave ended that were still employed 12 months after their return to work, by gender	Female 100 Male 54	Female 177 Male 123 Blank 1	Female 150 Male 107
Return to work and retention rates of employees who took parental leave, by gender	Return to Work: Female 100% Male 98% Retention: Female 86% Male 83%	Return to Work: Female 100% Male 98% Retention: Female 86% Male 83%	Return to Work: Female 98% Male 99% Retention: Female 93% Male 89%
Benefit Plan and Other Retirement	2019	2020	2021
Percentage of salary contributed by employee or employer	US 401(k): Employee elected between 0–80%, Illumina matching contribution of 50% up to the first 6% employee election (3% of eligible salary)		
Level of participation in retirement plans, such as participation in mandatory or voluntary schemes, regional or country-based schemes, or those with financial impact	US 401(k): 97% employee voluntary participation		US 401(k): 98% employee voluntary participation
Employee Bonus and Stock Program	2019	2020	2021
Employees eligible for annual VCP bonus	All employees		
Employees eligible to participate in employee stock purchase plan	All employees		
Performance & Career Development Review	2019	2020	2021
Percentage of employees receiving regular performance and career development reviews (includes all administrative, production, technical, middle management, and senior management)	100%	100%	100%
Employee Survey ²	2019	2020	2021
Participation rate for employee iPulse survey	89%	79%	80%

Notes:

¹ Following the birth of a child or placement of a child for adoption or foster care, we provide 100% pay continuity to eligible US-based employees for up to six weeks to help ensure peace of mind during this essential time. In some cases, a mother could receive up to 28 weeks of pay continuity depending on the combination of leaves associated with childbirth. Our parental leave policies in the other locations where we operate either meet or exceed local legal entitlements.

² Employee survey participation rates in 2019 are calculated using an average of two surveys per year (Q2 and Q4 of each year). For 2020, the participation rate is based on an average of three quarterly surveys (Q2–Q4). For 2021, the participation rate is based on an average of four quarterly surveys (Q1–Q4).

• For all training hour metrics, the values include only regular Illumina employees, not contingent workers.

† Updated data to reflect most current information.

Average Compensation Ratio—Women to Men	2019	2020	2021
Across all employee categories	100%	100%	100%
Support to entry professional	102%	102%	101%
Intermediate to senior professional	100%	100%	99%
Supervisor to associate director	98%	99%	100%
Director and above	101%	98%	99%
Annual Compensation Ratio	2019	2020	2021
Ratio of annual total compensation for the organization's highest-paid individual in each region to the median annual total compensation for all employees	Refer to Proxy Filing	Refer to Proxy Filing	Refer to Proxy Filing
Training	2019	2020	2021
Average hours of training per employee per year	60	64	64
Hours of training by gender: Male	60	66	66
Hours of training by gender: Female	61	61	63
Hours of training by employee category: Individual Contributor	64	68	68
Hours of training by employee category: Middle Management	71	76	76
Hours of training by employee category: Senior Management	38	38	44
Hours of training by employee category: Executive Leadership	22	24	30
Hours of training by functional category: Commercial Operations	50	46	52
Hours of training by functional category: General Operations	23	25	27
Hours of training by functional category: Manufacturing	91	104	98
Hours of training by functional category: Research & Development	53	57	62
Total number of hours devoted to training on human rights	1,737	5,578	3,333
Applicable employees certified to Code of Conduct	99% [†]	98% [†]	97%



Key Performance Indicators

Nurturing Our People continued

Health & Safety	2019	2020	2021
Global recordable injury or illness incident rate (incident per 100 employees)	0.52	0.34	0.54
Lost time incident rate	0.74	0.18	0.23
Environment, Health & Safety notices of violations	0	0	0
Environmental fines	0	0	0
Prevention reporting statistics	3,611	3,018	1,452

Employee Safety	2019	2020	2021
Number of work-related fatalities	0	0	0
Rate of work-related fatalities	0	0	0
The number of high-consequence work-related injuries and illnesses (excluding fatalities)	49	29	51
The rate of high-consequence work-related injuries and illnesses (excluding fatalities)	0.62	0.39	0.16
The number of recordable work-related injuries and illnesses	49	29	51
The rate of recordable work-related injuries and illnesses	0.62	0.39	0.16
The main types of work-related injury and illness	Ergonomics (repetitive stress injury), strain, contusion, and sprain		Repetitive stress injury and strains
The number of hours worked	15,647,395	15,344,520	15,946,780

Safety Workers Who Are Not Employees but Whose Work and/or Workplace is Controlled by the Organization	2019	2020	2021
Number of work-related fatalities	0	0	0
Rate of work-related fatalities	0	0	0
The number of high-consequence work-related injuries and illnesses (excluding fatalities)	0	3	2
The rate of high-consequence work-related injuries and illnesses (excluding fatalities)	0	0.07	0.13
The number of recordable work-related injuries and illnesses	0	3	2
The rate of recordable work-related injuries and illnesses	0	0.07	0.13
The main types of work-related injury and illness	Ergonomics (repetitive stress injury), strain, contusion, and sprain		Fracture and strains
The number of hours worked	2,741,396	2,798,888	2,986,473

Environmental, Health & Safety Training			
Total hours of EHS training	26,758	30,054	43,066
Average hours per employee	3.7	3.4	4.1

Notes:

- Recordable injury & illness rate calculated using total hours worked from employees + contingent workers.
- Contingent workers: workers who are not employees but whose work and/or workplace is controlled by the organization.
- Lost time incident rate calculated using total hours worked from employees—contingent workers.
- High-consequence work-related injuries are defined as all recordable injuries.
- Rates have been calculated based on 200,000 hours worked.



Key Performance Indicators

Operating Responsibly

Governance	2019	2020	2021
Non-compliance with environmental laws and regulations; Significant fines and non-monetary sanctions for non-compliance with environmental laws and/or regulations	0	0	0
# of FDA recalls	0	0	0
Number of substantiated complaints concerning breaches of customer privacy and losses of customer data	0	0	0
Number of public legal cases regarding corruption brought against the organization or its employees during the reporting period	0	0	0
Anti-competitive	2	0	See notes 1 and 2
Nature and total number of critical concerns communicated to highest governance body regarding CSR topics	0	0	0
Total employees covered by collective bargaining agreements	0	0	0
Incidents of discrimination and corrective actions taken	See note 3		
Transparency Reporting Law Enforcement & National Security Requests	N/A	2020 Privacy Transparency Report	2021 Privacy Transparency Report
<p>1. On January 11, 2021, Complete Genomics, Inc., BGI Americas Corp., and MGI Americas, Inc. (collectively BGI) filed a complaint in the US District Court for the Northern District of California alleging that Illumina violated federal antitrust and state unfair competition laws, based on a patent infringement suit Illumina filed against BGI in the same court. Illumina denies the allegations, which are without merit, and will vigorously defend the case.</p> <p>2. On March 30, 2021, the United States Federal Trade Commission filed an administrative complaint alleging that Illumina's acquisition of GRAIL, Inc. violates federal antitrust laws. Illumina denies the allegations, which are without merit, and will vigorously defend the case.</p> <p>3. During the past twelve years, neither the EEOC nor any court or administrative agency has issued a finding against Illumina in a claim involving discrimination. No incidents were filed during the reporting period. The matters that were pending during the last reporting period have been resolved. We do not tolerate acts of discrimination, and promote an open culture to report concerns (including anonymously). Illumina takes all reports of misconduct seriously and has a strict non-retaliation policy. If a report is substantiated, the company would respond as it deems appropriate or necessary, consistent with the law, and will act swiftly to correct the problem and deter future occurrences. Depending on the circumstances, this may include training and/or disciplinary action up to, and including, termination. Individuals may also be subject to civil or criminal prosecution for violating the law.</p>			
ESG Governance Topics	Position	Level from CEO	Level from Board
Corporate Social Responsibility	SVP, Chief Financial Officer	1	2
Environment, Health & Safety, Supply Chain, Facilities, Operations	SVP, Chief of Global Operations	1	2
People, Employment, Diversity, Equity, and Inclusion	SVP, Chief People Officer	1	2
Compliance, Ethics, Legal	SVP, General Counsel	1	2
Product	SVP, Chief Technology Officer	1	2

Board of Directors (BoD)	2019	2020	2021
BoD level oversight for CSR and ESG (including themes of sustainability and climate action; diversity, equity, and inclusion; human rights; cybersecurity; data privacy; and ethical and responsible business practices)	Yes	Yes	Yes
Clawback provision	Yes	Yes	Yes
Commitment to gender diversity on BoD	Yes	Yes	Yes
BoD composition by gender (% female)	33%	30%	33%
BoD composition by racial/ethnic minority representation	N/A	N/A	33%
Supply Chain	2019	2020	2021
Quantity of product shipped	3,118,142 units	3,297,561 units	3,862,839 units
Spend with direct suppliers	\$440 million	\$396 million	\$585 million
Supplier Code of Conduct in place	Yes		
Geographic location of suppliers	Countries: AE, AM, AR, AT, AU, BE, BS, CA, CH, CL, CN, CO, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HK, ID, IE, IL, IN, IS, IT, JP, KR, LT, LU, MO, MX, MY, NL, NO, NZ, PA, PE, PH, PL, PT, RO, RU, SE, SG, SI, TH, TR, TW, UA, US, UY, VN, ZA	Countries: AE, AM, AR, AU, AU, BE, BR, BY, CA, CH, CL, CN, CR, CZ, DE, DK, EE, ES, FI, FR, GB, GH, HK, ID, IE, IL, IND, IS, IT, JP, KR, LT, LU, MY, MX, NL, NO, NZ, PE, PH, PL, PT, RU, SA, SE, SG, TH, TR, TW, UA, US, UY, ZA	Countries: AE, AM, AR, AT, AU, BE, BG, BR, CA, CH, CN, CO, CZ, DE, DK, ES, FI, FR, GB, GH, HK, ID, IE, IL, IN, IT, JP, KR, LK, LT, LU, LV, MY, NL, NO, NZ, PL, RO, RU, SA, SE, SG, SI, TH, TR, TW, US, ZA
A description of the organization's supply chain	Illumina's global supply chain consists of suppliers, sub-contractors, channel partners, manufacturing sites, distribution centers, and customers		
Types of suppliers	Direct, indirect, strategic, finished medical device, custom spec, off the shelf, and services		
Number of suppliers engaged by organization	3,891	3,704	3,798
Estimated monetary value of payments made to suppliers	>\$1 billion	\$935 million	>\$1 billion
Number of active diverse suppliers (US)	>400	334	517
Diverse supplier spend	\$190 million	\$152 million	\$209 million
Percentage of total PO spend with diverse suppliers	19%	16%	17%
Percentage of strategic suppliers that have committed to minimizing their environmental footprint	N/A	75%	84%

Key Performance Indicators

Operating Responsibly continued

Political Contributions	2019	2020	2021
Total monetary value of financial and in-kind political contributions made directly and indirectly by the organization by country and recipient/beneficiary	\$50,000	\$0	\$0

Trade Association & Memberships	2021
Illumina participates in various trade associations and industry memberships for collaboration and exchange of ideas. Some of these organizations may utilize a portion of membership fees for non-deductible state and federal lobbying and political expenditures. As part of our transparency practices, we disclose trade memberships for which we contribute at least \$5,000 annually in fees.	
Trade and Industry Group Memberships Above \$5,000 Threshold Annually	
Global	
World Economic Forum	\$330,000
U.S. Trade Association Memberships	
World 50, Inc	\$393,766
US Chamber of Commerce	\$150,000
Coalition for Access to Prenatal Screening (CAPS)	\$100,000
Access to Comprehensive Genomic Profiling Coalition	\$80,813
Procurement Leaders	\$57,000
Biocom	\$56,300
American Clinical Laboratory Association (ACLA)	\$50,000
Coalition for 21st Century Medicine	\$50,000
Personalized Medicine Coalition (PMC)	\$32,000
California Chamber of Commerce	\$25,000
San Diego Economic Development Corp. (SDEDC)	\$25,000
National Association of Manufacturers (NAM)	\$24,500
AdvaMed	\$19,950
American Cancer Society—Cancer Action Network (ACS-CAN)*	\$10,000
San Diego Regional Chamber of Commerce (SD Chamber)	\$7,650
Industrial Environmental Association (IEA)	\$6,000
Healthcare Businesswomen's Association (HBA)	\$5,000

Trade Association & Memberships	2021
EMEA Trade Association Memberships	
All.Can (ASBL)	\$35,000
EUCOPE	\$27,892
US Qatar Business Council	\$10,000
US Saudi Arabian Business Council	\$10,000
US UAE Business Council	\$10,000
International Quality Network for Pathology (IQN Path)	\$5,000
APJ and Greater China Trade Association Memberships	
US India Business Council	\$27,500
US Chamber — China	\$25,000
US-China Business Council (USCBC)	\$15,000
US-ASEAN	\$11,686
AmCham China	\$7,413
Pathology Technology Australia	\$7,309

Organization	Total Annual Membership Fee	% Membership Fees Used for State or Federal Lobbying	Dollars Applied to State or Federal Lobbying From Membership Fees
For the trade associations with membership fees greater than \$50,000, the portion of such payments that is non-deductible under Section 162(e)(1)(B) of the Internal Revenue Code, such as payments to organizations designated as 501(c)(4) and 501(c)(6) associated with state and federal lobbying efforts annually.			
US Chamber of Commerce	\$161,625	25%	\$40,406
Coalition for Access to Prenatal Screening (CAPS)	\$100,000	25%	\$25,000
American Clinical Laboratory Association (ACLA)	\$50,000	33%	\$16,500
Biocom	\$56,300	10%	\$5,630



GRI Index

GRI Description	GRI Section	illumina CSR Report Section	Page Number
GENERAL: DISCLOSURE 102			
Organizational Profile			
Name of organization	GRI 102-1	illumina, Appendix	7 , 87
Activities, brands, products and services	GRI 102-2	illumina	7 , 9
Location of headquarters	GRI 102-3	illumina, Appendix	8 , 87
Location of all operations	GRI 102-4	illumina	8
Ownership & legal form	GRI 102-5	Appendix	87
Markets served	GRI 102-6	illumina, Appendix	7-9 , 87
Scale of organization	GRI 102-7	illumina, People, Appendix	8-9 , 55 , 87 , 91 , 98
Information on employees and other workers	GRI 102-8	illumina, People, Appendix	8-9 , 53 , 55 , 58 , 63-64 , 87 , 91-95
Supply chain	GRI 102-9	Integrity, Appendix	72 , 81-84 , 98
Significant changes to organization and its supply chain	GRI 102-10	Integrity, Appendix	72 , 81-84 , 86 , 98
Precautionary principle or approach	GRI 102-11	Environment, People, Integrity	39 , 42 , 45-48 , 81-83
External initiatives	GRI 102-12	illumina, Environment, Integrity, Appendix	12 , 41 , 56 , 79 , 86
Membership of associations	GRI 102-13	illumina, Integrity, Appendix	12 , 79-80 , 86 , 99 , 106
Strategy			
Statement from senior decision maker/CEO	GRI 102-14	illumina	2-3
Key impacts, risks, and opportunities	GRI 102-15	illumina, Access, Community, Environment, People, Integrity, Appendix	2-3 , 7 , 10-13 , 15-16 , 31-32 , 39-40 , 52-53 , 71-72 , 98 , 106 , 108
Ethics & Integrity			
Values, principles, standards, and norms of behavior	GRI 102-16	illumina, Access, Community, Environment, People, Integrity	7 , 15 , 31 , 39 , 52-68 , 71-84
Mechanisms for advice and concern about ethics	GRI 102-17	Integrity	71-77 , 81-83
Governance			
Governance structure	GRI 102-18	illumina, Integrity, Appendix	11 , 73-75 , 97
Delegating authority	GRI 102-19	illumina, Appendix	11 , 97
Executive level responsibility for economic, environmental, and social topics	GRI 102-20	illumina, Integrity, Appendix	10-11 , 73-75 , 98
Consulting stakeholders on economic, environmental, and social topics	GRI 102-21	illumina	11-12
Composition of the highest governance body and its committees	GRI 102-22	illumina, Integrity, Appendix	11 , 73-75 , 98
Chair of the highest governance body	GRI 102-23	illumina, Integrity, Appendix	11 , 73-75 , 98
Nominating and selecting the highest governance body	GRI 102-24	illumina, Integrity, Appendix	11 , 73-75 , 98
Conflicts of interest	GRI 102-25	Integrity	73-75
Role of highest governance body in setting purpose, values, and strategy	GRI 102-26	illumina, Integrity, Appendix	11 , 73-75 , 98



GRI Index

GRI Description	GRI Section	Illumina CSR Report Section	Page Number
GENERAL: DISCLOSURE 102 (cont.)			
Governance (cont.)			
Collective knowledge of highest governance body	GRI 102-27	Illumina, Integrity, Appendix	11 , 73-75 , 98
Evaluating the highest governance body's performance	GRI 102-28	Integrity	73
Identifying and managing economic, environmental, and social impacts	GRI 102-29	Illumina, Integrity, Appendix	12-13 , 73 , 98
Effectiveness of risk management processes	GRI 102-30	Illumina, Integrity, Appendix	11 , 73 , 98 , 106
Review of economic, environmental, and social topics	GRI 102-31	Illumina, Integrity, Appendix	11 , 73 , 98
Highest governance body's role in sustainability reporting	GRI 102-32	Illumina, Integrity, Appendix	11 , 73 , 98
Communicating critical concerns	GRI 102-33	Illumina, Integrity, Appendix	11 , 73 , 98
Nature and total number of critical concerns	GRI 102-34	Illumina, Integrity, Appendix	11 , 73 , 98
Remuneration policies	GRI 102-35	People, Appendix	56-58 , 98
Process for determining remuneration	GRI 102-36	People, Appendix	56-58 , 98
Stakeholders' involvement in remuneration	GRI 102-37	People, Appendix	56-59 , 98
Annual total compensation ratio	GRI 102-38	Appendix	96
Percentage increase in annual total compensation ratio	GRI 102-39	Appendix	96
Stakeholder Engagement			
List of stakeholder groups	GRI 102-40	Illumina, Appendix	12 , 86
Collective bargaining agreements	GRI 102-41	Integrity, Appendix	77 , 98
Identifying and selecting stakeholders	GRI 102-42	Illumina	12
Approach to stakeholder engagement	GRI 102-43	Illumina	12
Key topics and concerns raised	GRI 102-44	Illumina	12-13
Reporting Practice			
Entities included in the consolidated financial statements	GRI 102-45	Appendix	86
Defining report content and topic Boundaries	GRI 102-46	Appendix	86
List of material topics	GRI 102-47	Illumina	12
Restatements of information	GRI 102-48	Appendix	86
Changes in reporting	GRI 102-49	Appendix	86
Reporting period	GRI 102-50	Appendix	86
Date of most recent report	GRI 102-51	Appendix	86
Reporting cycle	GRI 102-52	Illumina, Appendix	1 , 86
Contact point for questions regarding the report	GRI 102-53	Appendix	86 , 109-110
Claims of reporting in accordance with the GRI Standards	GRI 102-54	Appendix	86
GRI content index	GRI 102-55	Appendix	100-104
External Assurance	GRI 102-56	Appendix	109



GRI Index

GRI Description	GRI Section	Illumina CSR Report Section	Page Number
ECONOMIC: DISCLOSURE 200			
Economic Performance			
Management Approach: Economic Performance	GRI 103-1, 103-2, 103-3	Illumina, Access, Community, Environment, People, Integrity	6-10 , 15-16 , 31-32 , 39-40 , 52-53 , 71-72
Direct economic value generated and distributed	GRI 201-1	Illumina, Appendix	8-9 , 87
Financial implications and other risks and opportunities due to climate change	GRI 201-2	Environment, Integrity, Appendix: TCFD Index	39-50 , 81 , 83 , 106
Defined benefit plan obligations and other retirement plans	GRI 201-3	People, Appendix	65 , 96
Indirect Economic Impact			
Management Approach: Indirect Economic Impact	GRI 103-1, 103-2, 103-3	Access, Community, Environment, Integrity, Appendix	15-16 , 31-32 , 39-40 , 71-72
Significant indirect economic impacts	GRI 203-2	Access, Community, Environment, Integrity, Appendix	15-29 , 31-37 , 39-40 , 49-50 , 71-72 , 81-83
Anti-Corruption Behavior			
Management Approach: Anti-Corruption	GRI 103-1, 103-2, 103-3	Integrity, Appendix	71-72 , 74-77 , 81 , 83
Operations assessed for risks related to corruption	GRI 205-1	Integrity, Appendix	71-72 , 74-77 , 81 , 83
Communication and training about anti-corruption policies and procedures	GRI 205-2	Integrity, Appendix	71-72 , 74-77 , 81 , 83
Confirmed incidents of corruption and actions taken	GRI 205-3	Appendix	98
Anti-Competitive Behavior			
Management Approach: Anti-Competitive Behavior	GRI 103-1, 103-2, 103-3	Integrity, Appendix	74-77 , 81-84 , 98
Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	GRI 206-1	Appendix	98
ENVIRONMENTAL: DISCLOSURE 300			
Energy			
Management Approach: Energy	GRI 103-1, 103-2, 103-3	Environment, Integrity, Appendix	39-43 , 47-48 , 81 , 83
Energy consumption within the organization	GRI 302-1	Illumina, Environment, Integrity, Appendix	8 , 39-43 , 83 , 88
Energy consumption outside of the organization	GRI 302-2	Environment, Integrity, Appendix	39-41 , 47-48 , 81 , 83 , 89
Energy intensity	GRI 302-3	Environment, Appendix	43 , 88-89
Reduction of energy consumption	GRI 302-4	Environment, Appendix	39-43 , 47-48 , 88-89
Water			
Management Approach: Water	GRI 103-1, 103-2, 103-3	Environment, Integrity	39-40 , 43-44 , 81
Interactions with water as a shared resource	GRI 303-1	Community, Environment, Appendix	33-34 , 39-40 , 43-44 , 47-49 , 81-82
Water withdrawal	GRI 303-3	Environment, Appendix	40 , 44 , 90
Biodiversity			
Management Approach: Biodiversity	GRI 103-1, 103-2, 103-3	Illumina, Community, Environment	8 , 31 , 33-34 , 39-40 , 42
Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	GRI 304-1	Illumina, Environment	8 , 42-44 , 49-50
Habitats protected or restored	GRI 304-3	Community, Environment	33-34 , 42-44 , 49-50



GRI Index

GRI Description	GRI Section	Illumina CSR Report Section	Page Number
ENVIRONMENTAL: DISCLOSURE 300 (cont.)			
Emissions			
Management Approach: Emissions	GRI 103-1, 103-2, 103-3	Environment, Integrity	39-41 , 43 , 47-48 , 81 , 83
Direct (Scope 1) GHG Emissions	GRI 305-1	Illumina, Environment, Appendix	8 , 39-41 , 43 , 88-89
Energy indirect (Scope 2) GHG emissions	GRI 305-2	Illumina, Environment, Appendix	8 , 39-41 , 43 , 88-89
Other indirect (Scope 3) GHG emissions	GRI 305-3	Environment, Integrity, Appendix	39-41 , 47-48 , 81 , 83 , 89
GHG emissions intensity	GRI 305-4	Environment, Integrity, Appendix	43 , 89
Reduction of GHG emissions	GRI 305-5	Illumina, Environment, Integrity, Appendix	8 , 40-41 , 43 , 47-48 , 81 , 83 , 88-89
Effluent and Waste			
Management Approach: Effluent and Waste	GRI 103-1, 103-2, 103-3	Environment, People, Integrity	39-40 , 43-44 , 45-49 , 67 , 81 , 83
Waste by type and disposal method	GRI 306-2	Environment, Integrity, Appendix	40 , 44 , 45-46 , 90
Environmental Compliance			
Management Approach: Environmental Laws & Regulations	GRI 103-1, 103-2, 103-3	Environment, People, Integrity, Appendix	39-42 , 67-68 , 81 , 83
Non-compliance with environmental laws and regulations	GRI 307-1	Environment, People, Integrity, Appendix	39-42 , 44 , 67-68 , 81 , 83 , 97
Supplier Environmental Assessment			
Management Approach: Supplier Environmental Assessment	GRI 103-1, 103-2, 103-3	Environment, Integrity, Appendix	39-41 , 47-48 , 81 , 83
New suppliers that were screened using environmental criteria	GRI 308-1	Integrity, Appendix	40 , 47-48 , 81 , 83 , 89
SOCIAL: DISCLOSURE 400			
Employment			
Management Approach: Employment	GRI 103-1, 103-2, 103-3	People, Integrity	52-69 , 71-77
New employee hires and employee turnover	GRI 401-1	People, Appendix	53 , 55 , 57 , 62-63 , 94-95
Benefits provided to full-time employees that are not provided to temporary or part-time employees	GRI 401-2	People, Appendix	61-66 , 96
Parental leave	GRI 401-3	People, Appendix	65 , 96
Occupational Health & Safety			
Management Approach: Occupational Health & Safety	GRI 103-1, 103-2, 103-3	People, Appendix	52-53 , 67-68 , 97
Occupational health and safety management system	GRI 403-1	People, Appendix	52-53 , 67-68 , 97
Hazard identification, risk assessment, and incident investigation	GRI 403-2	People, Appendix	52-53 , 67-68 , 97
Worker participation, consultation, and communication on occupational health and safety	GRI 403-4	People, Appendix	52-53 , 67-68 , 97
Worker training on occupational health and safety	GRI 403-5	People, Appendix	52-53 , 67-68 , 97
Promotion of worker health	GRI 403-6	People, Appendix	52-53 , 67-68 , 97
Workers covered by an occupational health and safety management system	GRI 403-8	People, Appendix	52-53 , 67-68 , 97
Work-related injuries	GRI 403-9	People, Appendix	52-53 , 67-68 , 97
Work-related illness	GRI 403-10	People, Appendix	52-53 , 67-68 , 97



GRI Index

GRI Description	GRI Section	Illumina CSR Report Section	Page Number
SOCIAL: DISCLOSURE 400 (cont.)			
Training & Education			
Management Approach: Training & Education	GRI 103-1, 103-2, 103-3	People, Integrity, Appendix	52-54 , 56-65 , 67 , 71-72
Average hours of training per year per employee	GRI 404-1	Illumina, People, Integrity, Appendix	8 , 52-53 , 62 , 67 , 74 , 96-97
Programs for upgrading employee skills and transition assistance programs	GRI 404-2	People	59-65
Percentage of employees receiving regular performance and career development reviews	GRI 404-3	People, Appendix	62 , 96
Diversity & Equal Opportunity			
Management Approach: Diversity & Equal Opportunity	GRI 103-1, 103-2, 103-3	Community, People, Integrity	31-37 , 52-53 , 56-60 , 71-73 , 82
Diversity of governance bodies and employees	GRI 405-1	Illumina, People, Integrity, Appendix	5 , 8 , 53 , 55 , 58 , 63-64 , 72-73 , 75 , 82 , 91-95
Ratio of basic salary and remuneration of women to men	GRI 405-2	Illumina, People, Appendix	4 , 8 , 53 , 58 , 96
Child Labor			
Management Approach: Child Labor	GRI 103-1, 103-2, 103-3	Integrity	71-72 , 77 , 81 , 83
Operations and suppliers at significant risk for incidents of child labor	GRI 408-1	Integrity, Appendix	71-72 , 77 , 81 , 83 , 98
Forced or Compulsory Labor			
Management Approach: Forced or Compulsory Labor	GRI 103-1, 103-2, 103-3	Integrity	71-72 , 77 , 81 , 83
Operations and suppliers at significant risk for incidents of forced or compulsory labor	GRI 409-1	Integrity, Appendix	71-72 , 77 , 81 , 83 , 98
Human Rights			
Management Approach: Human Rights	GRI 103-1, 103-2, 103-3	Integrity	71-72 , 77 , 81 , 83
Operations that have been subject to human rights reviews or impact assessments	GRI 412-1	Integrity, Appendix	71-72 , 77 , 81 , 83 , 98
Employee training on human rights policies or procedures	GRI 412-2	Integrity, Appendix	77 , 96
Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	GRI 412-3	Integrity, Appendix	71-72 , 77 , 81 , 83 , 98
Local Communities			
Management Approach: Local Communities	GRI 103-1, 103-2, 103-3	Access, Community, Environment, Integrity	15-16 , 31-32 , 39-40 , 71-72
Operations with local community engagement, impact assessments, and development programs	GRI 413-1	Illumina, Access, Community, Environment, Integrity	4 , 11-13 , 15-16 , 21-27 , 31-37 , 39-42 , 47-50 , 71-72 , 77 , 81-83
Supplier Social Criteria Screening			
Management Approach: Supplier Social Criteria Screening	GRI 103-1, 103-2, 103-3	Integrity	81-83
New suppliers that were screened using social criteria	GRI 414-1	Integrity, Appendix	81-83 , 98
Public Policy			
Management Approach: Public Policy	GRI 103-1, 103-2, 103-3	Integrity, Appendix	71-72 , 80 , 99
Political contributions	GRI 415-1	Integrity, Appendix	71 , 80 , 99
Customer Privacy			
Management Approach: Customer Privacy	GRI 103-1, 103-2, 103-3	Integrity	71-72 , 78-79
Substantiated complaints concerning breaches of customer privacy and losses of customer data	GRI 418-1	Integrity, Appendix	71 , 78-79 , 98



SASB Index

The Sustainability Accounting Standards Board (SASB) is an independent standards-setting organization that promotes disclosure of material sustainability information to meet investor needs. Illumina is classified officially in the Health Care Sector and Medical Equipment & Supply Industry. We have also chosen to add relevant sections from the industry categories of Biotechnology & Pharmaceuticals as well as Software & IT Services.

Dimension	General Issue Category	Disclosure Topic	Code	Accounting Metric	Response
PRIMARY SICS SECTOR: HEALTHCARE PRIMARY SICS INDUSTRY: MEDICAL EQUIPMENT & SUPPLIES					
Social Capital	Access & Affordability	Affordability and Pricing	HC-MS-240a.1	Ratio of weighted average rate of net price increases to the annual increase in the U.S. Consumer Price Index	Integrity, 76
		Affordability and Pricing	HC-MS-240a.2	Description of how price information for each product is disclosed to customers or to their agents	Integrity, 76
	Product Quality & Safety	Product Safety	HC-MS-250a.1	Number of FDA recalls issued, total units recalled	Integrity, 84
		Product Safety	HC-MS-250a.2	List of products listed in the FDA's MedWatch safety alerts for human medical products database	0
		Product Safety	HC-MS-250a.3	Number of fatalities related to products as reported in FDA Manufacturer and User Facility Device Experience	0
		Product Safety	HC-MS-250a.4	Number of FDA enforcement actions taken in response to violations of Current Good Manufacturing Practices (cGMP)	0
	Selling Practices & Product Labeling	Ethical Marketing	HC-MS-270a.1	Total amount of monetary losses as a result of legal proceedings associated with false marketing claims	0
Ethical Marketing		HC-MS-270a.2	Description of code of ethics governing promotion of off-label use of products	Integrity, 74-76 Illumina Code of Conduct	
Business Model & Innovation	Product Design & Lifecycle Management	Product Design & Lifecycle Management	HC-MS-410a.1	Discussion of process to assess and manage environmental and human health considerations associated with chemicals in products, and meet demand for sustainable products	Environment, 39, 45-48
		Product Design & Lifecycle Management	HC-MS-410a.2	Total amount of products accepted for takeback and reused, recycled, or donated, broken down by: (1) devices and equipment and (2) supplies	Environment, 44-46 Appendix, 90
	Supply Chain Management	Supply Chain Management	HC-MS-430a.1	Percentage of (1) entity's facilities and (2) Tier I suppliers' facilities participating in third-party audit programs for manufacturing and product quality	Integrity, 84
		Supply Chain Management	HC-MS-430a.2	Description of efforts to maintain traceability within the distribution chain	Integrity, 81-84
		Supply Chain Management	HC-MS-430a.3	Description of the management of risks associated with the use of critical materials	Integrity, 81-84
Leadership & Governance	Business Ethics	Business Ethics	HC-MS-510a.1	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	Appendix, 98
		Business Ethics	HC-MS-510a.2	Description of code of ethics governing interactions with health care professionals	Integrity, 74-75 HCP Policy
Other	Activity Metrics	Activity Metrics	HC-MS-000.A	Number of units sold by product category	Illumina, 9 Appendix, 98
SUPPLEMENTAL SICS INDUSTRY: BIOTECH & PHARMA					
Human Capital	Employee Engagement, Diversity & Inclusion	Employee Recruitment, Development & Retention	HC-BP-330a.1	Discussion of talent recruitment and retention efforts for scientists and R&D personnel	People, 61
		Employee Recruitment, Development & Retention	HC-BP-330a.2	1) Voluntary and 2) involuntary turnover rate for a) executive/senior managers b) mid-level managers c) professionals d) all others	Appendix, 95
SUPPLEMENTAL SICS INDUSTRY: SOFTWARE & IT SERVICES					
Human Capital	Employee Engagement, Diversity & Inclusion	Recruiting & Managing a Global, Diverse & Skilled Workforce	TC -SI-330a.3	Percentage of gender and racial/ethnic group representation for 1) management 2) technical staff 3) all other employees	Appendix, 91-95



Task Force on Climate-related Financial Disclosures (TCFD) Index

TCFD voluntary climate-related disclosure recommendations have been used to guide our reporting. We believe addressing climate change is key to achieving a sustainable, just, and resilient future for all. We are committed to transparency and will continue to share progress in our annual CSR Report and CDP submissions.

TCFD Disclosure Element	Topic	Description	illumina CSR Report Section/2021 CDP Questionnaire Response
Governance: Describe organization's governance around climate-related risks and opportunities.			
Governance	Board oversight	Describe Board's oversight of climate-related risks and opportunities.	illumina, 11 ; CDP C1.1, C1.1a, C1.1b
	Management role	Describe management's role in assessing and managing risks and opportunities.	illumina, 11 ; Integrity, 73 ; CDP C1.2, C1.2a
Strategy: Describe the actual and potential impacts of climate-change risks and opportunities on the organization's business, strategy, and financial planning where such information is material.			
Strategy	Climate risk and opportunities timeline	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Environment, 39-50 ; Integrity, 83 ; CDP C2.1a, C2.1b, C2.2, C2.2a, C2.3, C2.3a, C2.4, C2.4a
	Climate risk and opportunities impact	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Environment, 39-50 ; Integrity, 76, 81, 83 ; CDP C2.2, C2.2a, C2.3b, C2.4b, C3.1, C3.1d, C3.1e, C3.1f, C3.3, C3.4
	Targets to manage climate risk and opportunities	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Environment, 39-50 ; Integrity, 76, 81, 83 ; CDP C2.2, C3.1a, C3.2, C3.2a, C3.3
Risk Management: Disclose how the organization identifies, assesses, and manages climate-related risks.			
Risk Management	Process to identify climate risk	Describe the organization's processes for identifying and assessing climate-related risks.	illumina, 11-13 ; Environment, 39-50 ; Integrity, 71-72, 76, 81, 83 ; Appendix, 88-90 ; CDP C2.1, C2.1a, C2.1b, C2.2, C2.2a, C3.2a
	Process to manage climate risk	Describe the organization's processes for managing climate-related risks.	Community, 31-33 ; Environment, 39-50 ; Integrity, 71-72, 76, 81, 83 ; CDP C2.1, C2.1a, C2.2
	Process to integrate climate risk in overall risk management	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Environment, 41-42 ; Integrity, 71-72, 76, 81, 83 ; CDP C2.2
Metrics & Targets: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.			
Metrics & Targets	Climate-related metrics	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Environment, 39-50 ; Integrity, 71-72, 81, 83 ; Appendix, 88-90 ; CDP C4.1, C4.1a, C4.2, C4.2a, C4.2b, C9.1
	GHG emission data	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Environment, 39-44, 47-48 ; Integrity, 81, 83 ; Appendix, 88-89 ; CDP C6.1, C6.3, C6.5, C6.10, C7.2, C7.3b, C7.5, C7.6b
	Targets to manage climate risk and performance to targets	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	Environment, 39-40 ; Integrity, 71-72 ; Appendix, 88-90, 108 ; CDP C4.1, C4.1a, C4.1b, C4.2, C4.2a, C4.2b

UNGC Communication on Progress



February 17, 2022

UN Global Compact Communication on Progress

United Nations Global Compact Support
 Secretary-General
 United Nations
 New York, NY 10017
 USA

Dear Mr. Secretary-General,
 Illumina, Inc. is proud to be a member of the Global Compact. I am pleased to re-confirm our support of and continued commitment to the Ten Principles of the United Nations Global Compact. In this annual Communication on Progress, we describe our actions to integrate the Global Compact and its principles into our business strategy, culture, and daily operations. We are also committed to share this information with our stakeholders using our annual Corporate Social Responsibility report available on our [website](#).

My signature below affirms our company's ongoing commitment and our intent to support and advance the Compact's ten universally accepted principles in the areas of human rights, labor, environment, and anti-corruption. We are committed to support of achieving the United Nations Sustainable Development Goals.

Sincerely yours,

Francis de Souza
 Chief Executive Officer
 Illumina, Inc.

United Nations Global Compact Communication on Progress Index: Illumina has been a member of the United Nations Global Compact (UNGC) since December 2019. We remain committed to aligning our business practices to the 10 UNGC principles in the areas of human rights, labor, environment, and anti-corruption. This report serves as our annual UNGC Communication on Progress. The table below shows the reference location of our disclosures against the UNGC.

Principle		Response/Illumina CSR Report section	Cross Reference Applicable GRI Section
Human Rights			
1	Businesses should support and respect the protection of internationally proclaimed human rights.	Integrity	GRI 102, 205, 401, 403, 405, 408, 409, 412, 413, 414
2	Businesses should make sure that they are not complicit in human rights abuses.	Integrity	
Labour			
3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Integrity	GRI 401, 402, 405, 408, 409, 412, 414
4	Businesses should uphold the elimination of all forms of forced and compulsory labor.	Integrity	
5	Businesses should uphold the effective abolition of child labor.	Integrity	
6	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	Integrity , People	
Environment			
7	Businesses should support a precautionary approach to environmental challenges.	Environment , Integrity	GRI 302, 303, 305, 306, 308
8	Businesses should undertake initiatives to promote greater environmental responsibility.	Environment , Integrity	
9	Businesses should encourage the development and diffusion of environmentally friendly technologies.	Environment , Integrity	
Anti-Corruption			
10	Businesses should work against corruption in all its forms, including extortion and bribery.	Integrity	GRI 205, 206, 414, 415, 417

Our CSR Goals and SDG Connections

We align our priorities and targets to support the 17 United Nations Sustainable Development Goals and have identified eight we can most uniquely impact.



CSR Focus Area	CSR Goal Description	SDG Link
Expanding Access to Genomics	\$100 Genome	
	2 billion covered lives by 2026	
	50,000 patients supported through iHope™ programming	
	Enable \$60 million PGI philanthropic commitment by 2027	
	Reach over 200 organizations through Illumina for Startups	
Empowering Our Communities	50% employee participation (giving + volunteering)	
	100,000 volunteer hours	
	Achieve 90% positive employee survey rate on Illumina Cares programming	
	5 million STEM learners reached through direct programming and nonprofit partners	
Nurturing Our People	Maintain Net Zero Pay Gap	
	Increase representation of women in leadership	
	Increase representation of women in executive leadership	
	Increase representation of Black, Native, Pacific Islander, Hispanic or Latino, 2 or more communities in US workforce and leadership	
	Improve representation of Veteran workforce	
	Improve representation of disability workforce	
	Increase prevention-based safety reporting and decrease injury and illness rates	

CSR Focus Area	CSR Goal Description	SDG Link
Integrating Environmental Sustainability	Net Zero in operations and value chain by 2050	
	46% emission reduction (Scopes 1, 2, and 3)	
	Carbon neutral in direct operations (Scopes 1 and 2) by 2023 beyond SBTi	
	\$20 million philanthropic support for sustainability initiatives	
	100% renewable electricity	
	10% reduction water intensity	
	90% landfill waste diversion	
	Green design principles in new construction with LEED elements or equivalent	
	Reduce energy intensity of sequencers	
	Reduce petroleum-based plastic use	
	Replace chemicals of concern with green alternatives wherever possible	
	Seek additional opportunities to engage in circular economy	
	100% of strategic suppliers commit to minimizing their environmental footprint	
75% reduction in packaging		
90% of our secondary and tertiary packaging will be recyclable, reusable or compostable		
Operating Responsibly	20% of yearly spend with diverse suppliers (US)	
	Demonstrate responsible data stewardship with strong privacy and cybersecurity practices	
	Position Illumina as the most trusted company in genomic privacy and ethics	
	Continue working to ensure human rights are respected in our workplace, our supply chain, and the marketplace	
	Maintain a corporate governance framework promoting ethics and integrity in all we do	
	Achieve top industry ESG ratings, indices, and rankings	

Notes:

¹2030 target year unless different target date is specified.



Independent Limited Assurance Report to Illumina, Inc.

Background and introduction

ISOS Group, Inc. (“ISOS” or “we”) were engaged by Illumina, Inc. (“Illumina” or “Company”) to undertake a limited assurance engagement in accordance with ISAE 3000 and ISAE 3410 covering select information reported within Illumina’s 2022 Corporate Social Responsibility Report (“2022 CSR Report”) for the period beginning January 1, 2021, and ending December 31, 2021 (“FY21”).

We have performed our limited assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (ISAE 3000), Assurance other than Audits or Reviews of Historical Financial Information, as well as the International Standard on Assurance Engagements 3410 (ISAE 3410) Assurance Engagements on Greenhouse Gas Statements, issued by the International Auditing and Assurance Standards Board. The engagement covered all entities and all facilities under the operational control of Illumina.

Our review was limited to the data reported in the following Key Performance Indicator Summary sections (pages 88 - 95) and marked with the symbol * (“Reported Information”), comprising of:

Integrating Environmental Sustainability:	Nurturing Our People:
<ul style="list-style-type: none"> • Energy Consumption • Energy Consumption by Activity and Region • Renewable Electricity Consumption • Emissions • Regional Emissions • Greenhouse Gas Breakdown • Country-Specific Scope 1 • Country- Specific Scope 2 Market-Based • Facility-Specific Emissions • Emission Intensity Ratios • Scope 3 Emissions • Scope 3 Emissions: % of Total Scope 3 Emissions • Water 	<ul style="list-style-type: none"> • Workforce Data • Gender Data • Percentage Female and Male of Each EEOC Category (US) • EEOC Minority Summary (US) • EEOC Minority by Category (US) • EEOC Data by Level (US) • New Hire Data • Percentage New Hire per EEOC (US) • Promotion Data • Promotion Rate by EEOC (US) • Veteran Data (US) • Employee Turnover Data

We have not performed any procedures with respect to other information included in the Illumina 2022 Corporate Responsibility Report and, therefore, no conclusion on the Report as a whole is expressed.

Reporting criteria

The reporting criteria are the standards identified in the 2022 CSR Report – Reporting Overview (“Reporting Criteria”).

Inherent uncertainty

The nature of non-financial information and the methods used to determine non-financial information, allow for different, but acceptable measurement techniques, which can result in materially different measurements and can impact accuracy and comparability. Furthermore, the nature and methods used to determine such information, as well as the measurement criteria and the precision thereof, may change over time.

The Reported Information has been measured applying the Reporting Criteria, which has been adopted solely for the purpose of providing this non-financial information. As such the Reported Information may not be suitable for another purpose. Where significant assumptions or deductions are utilized, they are disclosed. Where direct data was unavailable, the company used industry standards as estimates. The assurance provided therefore does not guarantee or provide certainty over the completeness of reported data.

Illumina’s responsibilities

The Company’s management are responsible for:

- The accuracy and completeness of the information contained in the Reported Information.
- The design, implementation, and maintenance of internal controls relevant to the preparation of the report to provide reasonable assurance that the report is free from material misstatement, whether due to fraud or error.
- Ensuring the Reported Information is fairly stated in accordance with the applicable criteria (“Reporting Criteria”) and for the content and statements contained therein.

Assurance Statements

Our responsibilities

Our responsibility is to express a limited assurance conclusion in accordance with ISAE 3000 and ISAE 3410 whether the Reported Information has been properly prepared in accordance with the Reporting Criteria and to provide this in a report to Illumina.

Work performed

The procedures we performed were based on our professional judgment. Our work included, but was not limited to:

- Assessing the appropriateness of the Reporting Criteria for the Reported Information.
- Carrying out interviews with key personnel to understand the systems and controls in place during the reporting period.
- Assessing the systems, processes, and controls to collate, aggregate, validate and report the data.
- Reviewing a selection of factors and formulae used and calculations performed over the Reported Information.
- Considering the appropriateness of the Reported Information provided by Illumina and any third-party data management system service providers.
- Testing a sample of records against underlying records, which were either individually material or where there was potential for errors to accumulate to material amounts included:
 - Testing of energy consumption, scope 1 and 2 emissions, and water consumption at company facilities across 12 countries in scope of the reporting.
 - Testing of scope 3 emissions across the 11 calculated scope 3 emissions categories.
 - Testing of human capital data aggregated across three regions and 28 countries where company operates, including against EEO-1 reporting for US operations.
- Reperforming a selection of calculations of the Reported Information.

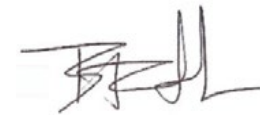
The relative effectiveness and significance of specific control procedures at Illumina and their effect on assessment of control risk at a facility level are dependent on their interaction with the controls and other factors present at individual facilities. We have not performed any procedures to evaluate the effectiveness of controls at individual facilities. We have not conducted any work outside the agreed scope and therefore restrict our conclusion to the above-mentioned subject matter.

Restriction of use

This assurance report is made solely to Illumina in accordance with the terms of our engagement, which include agreed arrangements for disclosure. Our work has been undertaken so that we might state to Illumina those matters we have been engaged to state in this limited assurance report and for no other purpose. Our limited assurance report should not be regarded as suitable to be used or relied on by any party wishing to acquire rights against us other than Illumina for any purpose or in any context. Any party other than Illumina who obtains access to our limited assurance report or a copy thereof and chooses to rely on our limited assurance report (or any part thereof) will do so at its own risk. To the fullest extent permitted by law, we accept or assume no responsibility and deny any liability to any party other than Illumina for our work, for this independent limited assurance report, or for the conclusions we have reached.

Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Reported Information, noted in the Key Performance Indicator Summary (pages 88 - 95) for FY21 ended on December 31, 2021, has not been prepared, in all material respects, in accordance with Illumina's Reporting Criteria.



Brian Noveck

CSAP Practitioner for, and on behalf of, ISOS Group, Inc.

31 March 2022

Disclosures

This release may contain forward-looking statements that involve risks and uncertainties. Among the important factors to which our business is subject that could cause actual results to differ materially from those in any forward-looking statements are: (i) the impact to our business and operating results of the COVID-19 pandemic; (ii) changes in the rate of growth in the markets we serve; (iii) the volume, timing and mix of customer orders among our products and services; (iv) our ability to adjust our operating expenses to align with our revenue expectations; (v) our ability to manufacture robust instrumentation and consumables; (vi) the success of products and services competitive with our own; (vii) challenges inherent in developing, manufacturing, and launching new products and services, including expanding or modifying manufacturing operations and reliance on third-party suppliers for critical components; (viii) the impact of recently launched or pre-announced products and services on existing products and services; (ix) our ability to further develop and commercialize our instruments, consumables, and products, including Galleri®, the cancer screening test developed by GRAIL, to deploy new products, services, and applications, and to expand the markets for our technology platforms; (x) the risks and costs associated with the integration of, and our ability to integrate, GRAIL's business successfully to achieve anticipated synergies, including the restrictions on integration during the hold separate period or any delay in integration following the hold separate period; (xi) the risk that disruptions from the consummation of our recent acquisition of GRAIL or any associated legal or regulatory proceedings or obligations will harm our business, including current plans and operations; (xii) potential adverse reactions or changes to business relationships resulting from the consummation of our recent acquisition of GRAIL; (xiii) our ability to obtain approval by third-party payors to reimburse patients for our products; (xiv) our ability to obtain regulatory clearance for our products from government agencies; (xv) our ability to successfully partner with other companies and organizations to develop new products, expand markets, and grow our business; (xvi) our ability to successfully identify and integrate acquired technologies, products, or businesses; (xvii) the application of generally accepted accounting principles, which are highly complex and involve many subjective assumptions, estimates, and judgments and (xviii) legislative, regulatory and economic developments, together with other factors detailed in our filings with the Securities and Exchange Commission, including our most recent filings on Forms 10-K and 10-Q, or in information disclosed in public conference calls, the date and time of which are released beforehand. We undertake no obligation, and do not intend, to update these forward-looking statements, to review or confirm analysts' expectations, or to provide interim reports or updates on the progress of the current quarter.



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Illumina Staff Engineer

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