Illumina Inc - Climate Change 2021

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Illumina is an applied genomics technology company in DNA sequencing and array-based technologies. We aim to drive progress in the transformative power of genomics for all and our mission is to improve human health by unlocking the power of the genome. Genomics is at the intersection of biology and technology. In 2020, Illumina's revenue exceeded $3.2 billion, our employee base was over 7800, and we invested over $680 million in R&D.

We are dedicated to making a positive impact on humanity, not just through our technology, but through our actions. By doing so, we aim to help shape a more sustainable and equitable future for all. Our Corporate Social Responsibility (CSR) strategy focuses on our most material issues and the unique ways we can impact the global community. We prioritize the following focus areas: access to genomics, empowering our community, and environmental sustainability. We support these with the foundational elements of our people and our integrity. Our CSR strategy ensures that business decisions benefit all of our stakeholders including employees, patients, customers, suppliers, investors, the environment, and the communities in which we operate.

Our focus areas include:

- Providing access to genetic testing, supporting programs to remove barriers of access and addressing the diversity of genomic data.
- Offering the time and talent of our employees as well as our technology to communities around the world.
- Reducing our environmental footprint by investing in sustainable solutions across facilities, within our products and in our supply chain.

Human health and the health of our environment are intertwined, connecting our company mission to improve human health with our commitment to operate responsibly and sustainably. We are integrating the risk and opportunities associated with climate impact into our business strategy and believe addressing climate change is one of the key topics to achieving a sustainable, just, and resilient future for all. To understand the potential risks and opportunities of climate change, we conducted an assessment using the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

We are responding to climate change risk such as increased severe weather events, potential policy changes, and reputational harm by investing in more renewable energy, integrating green design principles into our facilities and products, and continuing to drive innovation. Opportunities to support climate action through genomics research can create additional positive impacts. We are proud to see our products being used around the world to study climate change impact, conservation biology, and influence more sustainable agriculture practices. We are at the forefront of addressing this critical global issue by enabling our customers around the world to understand these issues through the lens of genomics.

For more details, visit

- CSR page at www.illumina.com/csr.

- Our second annual CSR report at https://www.illumina.com/content/dam/illumina-marketing/documents/company/illumina-csr-report-2021.pdf.

- Our Climate Change position statement at https://www.illumina.com/content/dam/illumina-marketing/documents/company/final-climate-position-statement.pdf.

Climate Change position statement:

Illumina's CSR vision is to deepen our impact on human health by serving as a champion for patients, the community, and our planet. Illumina recognizes the risk posed by global climate change. Illumina supports the conclusions of international frameworks that address climate change and the conclusions from the Intergovernmental Panel on Climate Change (IPCC). We acknowledge the need to keep the global temperature rise to well below 2 degrees Celsius to avoid consequences to human health and wellbeing. We support implementation of the United Nations Sustainable Development Goal 13: Take urgent action to combat climate change and its impacts. We endorse the use of scientific consensus and science-based targets to address carbon emissions reduction efforts. We believe all governments and businesses have important roles and responsibilities to address the issue of Climate Change, and we will continue to seek opportunities to do our part to achieve this critical goal. Illumina has set targets associated with emission reduction, increased renewable energy use, water conservation, landfill waste diversion, green design in new construction, integrating sustainability into new product design, and influencing our supply chain. We are committed to measuring our progress and reporting to stakeholders in a timely and transparent way through our annual CSR Report. At Illumina, we are committed to safeguarding, sustaining, and improving the environment for the benefit of current and future generations.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Reporting year	January 1 2020	December 31 2020	Yes	1 year

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Australia
Belgium
Brazil
China
France
Germany
Japan
Netherlands
Republic of Korea
Russian Federation
Singapore
United Kingdom of Great Britain and Northern Ireland
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	The Illumina CEO is responsible for directing all aspects of company strategy, planning, and operations. Climate-related issues and projects associated with the reduction of our environmental footprint are escalated to the Board of Directors (Board) through Illumina's CEO and their direct reports. Each direct report manages responsibilities associated with their functional area. The Board provides oversight to the CSR program covering environmental, social, and governance (ESG) topics, including climate-related issues. The Board receives updates at least annually on current performance and future strategic plans, with additional updates provided if material changes occur. The Board provides guidance and direction on ESG risk and opportunities that have potential impact on reputation and long-term economic viability, including climate action.
Other, please specify (CSR Executive Steering Committee)	The Chief Financial Officer chairs the Executive CSR Steering Committee, which comprises a team of senior leaders drawn from across the organization, including the Chief People Officer, Chief Medical Officer, Chief Marketing Officer, Chief Compliance Officer, Chief Product Officer, and Chief Operating Officer. The CSR Executive Committee has overall responsibility for reviewing company activities related to CSR, including climate change. The CSR Executive Committee sets the strategy for environmental sustainability including establishing reduction targets and monitoring annual progress. A council of leaders from each CSR strategic focus area report to the CSR Executive Committee on a quarterly basis with progress updates. Reports to the broader CEO staff are scheduled as needed to provide updates on status regarding CSR elements including environmental matters. On at least an annual basis, updates on CSR projects are provided to the Board of Directors.
Chief Financial Officer (CFO)	The CSR Functional group that manages environmental, social, and governance programs reports directly to the CFO.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding business plans Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	The CEO participates on the Board of Directors and is the liaison from the CSR Executive Steering Committee. Information on projects, strategy, and targets are escalated on an as-needed or requested basis. The CEO reports to the Board at least annually on Illumina's progress towards its 2030 environmental sustainability targets. The CSR executive steering committee, led by the CFO, reviews quarterly updates against long term environmental sustainability targets. This committee also approves additional environmental sustainability targets and provides guidance to the CSR functional team and CSR working groups on strategy and project roadmaps to reduce greenhouse gas emissions.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Reporting line	Responsibility	Coverage of responsibility	Frequency of reporting to the board on climate-related issues
Chief Financial Officer (CFO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Annually
Corporate responsibility committee	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Annually
Facility manager	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Not reported to the board
Environmental, Health, and Safety manager	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Not reported to the board
Sustainability committee	<Not Applicable>	Other, please specify (Awareness and grass roots projects)	<Not Applicable>	Not reported to the board
Safety, Health, Environment and Quality committee	<Not Applicable>	Other, please specify (awareness and grass roots projects)	<Not Applicable>	Not reported to the board
Other, please specify (Global Lead, Corporate Social Responsibility)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Annually
Chief Operating Officer (COO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Annually
Chief Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Annually
Other C-Suite Officer, please specify (Chief Technology Officer)	<Not Applicable>	Other, please specify (Integrating sustainable product design into new products)	<Not Applicable>	As important matters arise

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

Chief Executive Officer

Sits on Board of Directors (Board) and supports annual updates to the board related to elements of sustainability, climate change, and broader corporate responsibility strategy and updates. Additional updates are brought to the Board on an as-needed basis.

Chief Financial Officer (CFO)

Manages the CSR functional team and chairs the CSR Executive Steering Committee. CSR encompasses environmental sustainability and social responsibility elements. CFO oversees responsibility for supporting the organization on all aspects of finance for commercial, product development, operations, and R&D. The team also performs the following functions: investor relations, accounting, audit, tax, and treasury.

Chief Operations Officer

Oversees Environmental Health & Safety, Facilities, Real Estate Management, Quality, and Manufacturing. Responsibilities related to CSR & sustainability include facilities management and environmental, health and safety. Leads the organization that manages energy, water, and waste reduction projects at our facilities including new facility design and utility data tracking. This team also embeds sustainability into business strategies.

Chief People Officer

Responsible for supporting the elements of People within CSR strategy such as employee development, talent recruitment, diversity & inclusion, pay equity, benefits, wellness, etc.

Chief Technology Officer

Leads the organization tasked with design and development of new products and technology. Responsible for embedding design for environment into the product development programming and support of the environmental targets for product related footprint reduction (reduced packaging, lowering energy consumption of products, etc.).

Global Lead, Corporate Social Responsibility

Leads the functional CSR group and directly reports to the CFO. Responsible for overall CSR program, goals, and targets including environmental sustainability target tracking.

Chief Marketing Officer

Responsible for supporting external communication on climate related goals, targets, projects, and community engagement.

CSR Executive Steering Committee

Chaired by the CFO and compromised of executives from across the organization. The committee is responsible for setting and supporting environmental sustainability targets. Committee conducts a quarterly review of targets and CSR program development.

CSR Working Groups

Cross functional team of leaders that provides direction and leads implementation of programs that support the CSR commitments including environmental sustainability and climate related goals.

Facility Managers

Responsible for the execution of energy, water, and waste related goals including management of conservation projects, establishing roadmap of projects to meet 2030 targets, and support of climate related goals.

EHS Managers

Responsible for support of data collection associated with environmental metrics, employee engagement, grass roots sustainability green teams, and environmental compliance.

Site Sustainability Green Teams & EHS Committees

Employee volunteer network participating in events to promote environmental stewardship onsite and in our communities. Conduct local environmental projects to support the CSR goals on a local level.

CSR is increasingly embedded into all areas of our business, including several supporting working groups with targeted focus such as: Diversity & Inclusion Steering Committee; Environment, Health & Safety Steering Committee; Quality Council; Public Policy Committee; Illumina Cares Champions; Sustainability Green Teams; and employee resource groups (ERGs).

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Business unit manager	Monetary reward	Emissions reduction project Energy reduction project Efficiency project Behavior change related indicator	Individual monetary performance bonuses can be achieved by completing projects to reduce greenhouse gas emissions and meeting annual environmental goals (water, waste, energy, and carbon). Applicable projects include supporting energy conservation emission reduction projects and carbon reduction projects. Financial awards and other forms of recognition are also presented to employees who have developed a noteworthy project during the year which could be related to environmental or energy efficiency enhancements including completing projects in line with 2030 environmental sustainability targets.
All employees	Non-monetary reward	Energy reduction project Efficiency project Behavior change related indicator	Giveaways and prizes when participating in sustainability events. Environmental benefits for employees include access to: charging stations on campus for electric vehicle owners; bike lockers and showers for bike commuters; ride sharing vehicles; stipends for commuter programs; and free electric shuttles between train station and work locations.
All employees	Monetary reward	Emissions reduction project Energy reduction project Efficiency project Behavior change related indicator Supply chain engagement	All employees are eligible for monetary rewards for special projects and innovative ideas related to improving environmental sustainability. This includes rewards for energy consumption reduction and greenhouse gas emission reduction projects. Employees can be rewarded through Values Awards and Spot Bonuses.
Environment/Sustainability manager	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator Environmental criteria included in purchases Supply chain engagement	Environmental managers and EHS leaders are eligible for monetary rewards for special projects and results related to improving environmental sustainability. This includes rewards for energy consumption reduction, greenhouse gas emission reduction, hazardous and non-hazardous waste reduction. The recognition can occur through our Values Awards and Spot Bonuses. Financial awards and other forms of recognition are also presented to employees who have developed a noteworthy project during the year, and this could be related to environmental or energy efficiency enhancements.
All employees	Monetary reward	Behavior change related indicator	Grass roots sustainability green team provide on the spot vouchers titled 'Caught Being Green' for project recognition and reinforcement of positive environmental behaviors.

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Energy manager	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target	Personal compensation could be connected to energy and emission targets and projects. All employees are eligible for special recognition for innovative ideas and projects related to improving environmental sustainability. These rewards include projects/ideas that lead to energy consumption reduction and greenhouse gas emission reduction.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	5	Environmental performance metrics are monitored consistently and reported quarterly. Energy or carbon reduction projects are reported at project scoping level with expected impacts and timeline for returns on investment. Long term targets aligned with UN Sustainable Development Goal (SDG) 2030 timeline and science-based emission reduction approach, result in functional group projects and goals for shorter term timeline.
Medium-term	5	8	Illumina has established 2030 targets associated with our commitment for reduction of environmental footprint. Targets are based on commitment to reduce scope 1 and 2 emissions, increase use of renewable energy, and divert waste from landfill. Long term targets aligned with UN SDG 2030 timeline and science-based emission reduction approach result in functional group projects and goals for shorter term timeline.
Long-term	8	10	Illumina has established 2030 targets associated with our commitment for reduction of environmental footprint. Targets are based on commitment to reduce scope 1 and 2 emissions, increase use of renewable energy, and divert waste from landfill. Quantitative targets include a 30% absolute reduction of Scope 1 and 2 emissions from 2019 baseline. This target was identified using the science-based methodology to align with well below 2°C and the Paris Climate Accord. We recently completed our scope 3 assessment and plan to incorporate goals for the full value chain into the long-term horizon.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Illumina defines a substantive financial or strategic impact as those with a potential financial impact greater than 5% of revenue impact. This could be the result of business interruption due to climate related risk or business operational impact. Additional factors considered include the climate related risk that would cause a business interruption and exposure to critical operations.

To understand the potential risks and opportunities of climate change, Illumina conducted an assessment using the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The assessment measured impact utilizing the following definitions:

· Low Impact- Ability to absorb financial, operational, and reputational impact.

· Moderate Impact - Some impact to finances, operations, and reputation.

· High Impact- Substantive financial, operational, strategic, and reputational impact.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
Annually

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process

To understand the potential risks and opportunities of climate change, we conducted an assessment in 2020 using the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We engaged with BSR (Business for Social Responsibility) to develop three 2030 climate scenarios linked to global warming by 2100. Our goal was to better understand the implications of climate change for our business and identify opportunities to build resilience. Climate scenario analysis was completed using three plausible narrative future representations of our operating environment respectively aligned to a well below 2°C, a 3°C , and a 4°C level of warming. To map assumptions for each trajectory, we utilized standardized third-party climate modeling data, such as the Shared Socioeconomic Pathways (SSPs) and the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP). Illumina's 2021 CSR Report outlines the results of the assessment including short, medium, and long term opportunities and risks identified for Illumina's business operations: https://www.illumina.com/content/dam/illumina-marketing/documents/company/illumina-csr-report-2021.pdf. To identify and manage climate-related issues, Illumina is integrating climate impact into our existing risk management structure using the Environment, Health & Safety team management system, the CSR materiality assessment, business continuity program management, supply chain risk reviews, and internal audit risk program. As our enterprise risk management program evolves, we plan to integrate climate as a key component. The climate change elements that have most influenced our strategy are physical risk to operations, supply chain impact, and reputation. These risks have been incorporated into business continuity planning, future product development, redundancy in supply chain where possible, and site selection for future growth. We are actively reviewing opportunities to further integrate climate into our processes and path to further expand resilience. Examples of incorporation include: targets to align with the UN Sustainable Development Goals and utilization of the Science Based Targets initiative (SBTi) methodology for a well below 2°C scenario (2DS); holistic goals of reducing the environmental footprint of our products throughout the life cycle; incorporation of Design for Environment into our new product design; and addition of a new logistics location to our network on the east coast resulting in cost savings, improved supply chain planning, and a reduction of air emissions. We have implemented redundant planning and maintained safety stock to provide resilience during severe weather events. For financial planning, we include risk and opportunities evaluated through our standard budget planning. Investment in energy-reduction projects that require capital expenditures are evaluated through the Capital Committee planning process. Potential indirect cost associated with supply chain, future tax, or increased operating costs from extreme weather would connect with these internal workstreams. In 2018, we announced our 2030 sustainability targets with a focus around energy, water, and waste at our facilities. We created targets on engaging our strategic suppliers in our supply chain and incorporating Design for Environment into our products and packaging. In 2021, we assessed our Scope 3 footprint and initiated planning for addressing our more holistic environmental footprint. The 2030 sustainability target for a 30% reduction in Scope 1 and 2 emissions is aligned with the SBTi methodology. We aim to establish scope 3 targets based on the recent scope 3 assessment completed. Additional processes for identifying, assessing, and responding to climate-related risks and opportunities have been developed. We utilize our enterprise risk management program, emergency preparedness & response program, our environmental management system, and our business continuity program to leverage existing workflows. We review the environmental management system framework annually as part of the global aspect and impacts clause. Output from this data influences environmental performance and greenhouse gas emission (GHG) reduction objectives. Illumina also uses our ISO14001 environmental management system as one of the mechanisms to monitor and reduce our environmental impacts from GHG emissions. Long term targets for GHG emission reductions were established using science-based methodology in line with a 2°C reduction and progress is reviewed annually. We are currently working toward a net zero 2050 goal aligned to the 1.5 degree model. The EHS team monitors legislation related to climate change and general environmental regulations at the global, regional, country, and local level. Supply chain data is reviewed through data collection during the RFP process, new supplier onboarding, and regular supplier reviews. Input from government affairs, EHS, regulatory, and compliance teams is also incorporated to overall risk culture and various workstream assessments. Addressing risk at the site level is performed by our site emergency management cross functional group which plan for and react to immediate and near-term physical risks caused by climate change.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Illumina has a formal EHS review process for monitoring environmental regulatory developments globally and in areas where we do business. This includes external service subscriptions to organizations that monitor regulatory development and an internal system to capture and manage identified issues. We highlight the potential impact and identify action plans for compliance and to internally communicate impacts. We track all relevant emission regulations, ESG related reporting regulations, and chemical related requirements to ensure we have strategies to meet operational and regulatory needs. Current regulatory frameworks such as CAA, CWA, CERCLA, NEPA, TSCA, RCRA, and EU regulatory requirements may begin to include emission specific items and expanded reporting requirements. Additional climate related risks are assessed including the monitoring of local regulation on carbon taxes and emission trading. Changes in current regulations could present a financial risk. Some sites are exposed to high utility costs which could increase cost of goods for manufacturing.
Emerging regulation	Relevant, always included	Illumina continuously monitors new and emerging regulations, to ensure that all operations are prepared to comply with all legal requirements. Assessments are made for proposed regulations that could impact the company and/or specific locations. Legal registers are maintained as part of the management system approach for compliance assessments and future potential impacts. Emerging regulations are considered as part of EHS compliance and environmental management strategies to ensure that local operations meet compliance expectations and that in areas where we sell products, we are compliant with product requirements. Supply chain and regulatory teams also monitor potential and emerging regulatory requirements for product impact. We have incorporated design for environment into our product development pipeline as well. Review of emerging regulation ensure that operations and products will continue to meet compliance expectations. Local operational and product compliance is also essential for long term business continuity. Developing products and manufacturing capabilities that stay ahead of emerging regulatory constraints allows us to proactively prepare for future supply, products, and service needs. For example, Illumina continues to develop instruments to stay ahead of ROHS regulations and to also ensure compliance with any REACH obligations. New and proposed regulations regarding carbon emissions are monitored on a company-wide basis. To manage internal risk from potential regulation changes, Illumina continues to work on reducing energy usage, increasing renewable energy use, and has initiated work within the supply chain to magnify impact.

	Relevance & inclusion	Please explain
Technology	Relevant, always included	New product technology and advances in infrastructure technology reduce risk and reliance on power consumption from a single source such as the grid. To minimize risks associated with transition to lower carbon systems in our operations, we have implemented on-site solar, battery storage, and fuel cells. Installation of solar and fuel cells offers resilience and cleaner energy options. We also established a commitment that all new construction will incorporate green design principles (i.e. LEED or equivalent). These projects incorporate green elements such as LED lighting, automatic sensors, and recycled water for landscape where available. A technology implemented in our labs at the San Diego campus included a system called Aircuity that continuously monitors the level of potential hazardous chemicals in the air. With this technology, we are able to keep operating conditions at a much lower air exchange rate as the system has built in safety controls to ramp up the air if it detects any chemicals. We have also used technology to tie HVAC to our occupancy sensors which allows a reduction in energy use associated with both lighting and HVAC when areas are not being used. When we design and install new equipment at our existing or new facilities, we consider the implications of not only capital costs, but also the operating costs and emissions produced. We have provided guidance on purchasing energy star devices for items such as stand alone cold storage units used in our labs and other facilities. Within our own products we see opportunities to use technology and innovation to reduce energy needs. For example, the new Enancio compression technology has reduced energy use by 20.8 kwh per NovaSeq run.
Legal	Relevant, always included	Our corporate policies outline how our business principles align with our core values, ethical responsibilities, and legal obligations. These policies demonstrate our commitment to operate with the highest standards of excellence, while delivering integrated solutions that advance the understanding of genetics and health. Illumina is committed to conducting its business in compliance with all applicable laws and regulations, and with the highest ethical standards. Legal compliance is built into our EHS Management System Policy. Our Board of Directors has adopted the Code of Conduct that applies to all of our employees, consultants, temporary workers, officers, and members of the Board of Directors, regardless of location, seniority level, business unit, function, or region. The Code of Conduct includes various topics including fraud prevention, bribery & corruption, anti-discrimination, anti-harassment, marketing & sales claims, and government interaction. We have established a Compliance Committee to direct and oversee our compliance activities, including administering the Code of Conduct. The Compliance Committee is comprised of senior executives, one of which is our Chief Compliance Officer. Our General Counsel has been designated as the Company's Chief Compliance Officer. Illumina provides training on its Code of Conduct for new and existing employees, as well as training on other company policies. Training is conducted through Illumina's Learning Management System and training records are documented for all employees. Our Legal department and Internal Audit department regularly evaluate conformance with code of conduct elements and assess compliance internally. The sites with management systems in place utilize a legal register to document all applicable legal requirements. Climate-related litigation claims have not been deemed to pose a risk to our business. This is due to the nature of our business and our activities which do not expose us to litigation on the basis of climate change. Our climate actions are conducted on a voluntary basis. To date, no such climate-related claims have been raised and none are anticipated. Based on 2020 data, emissions from our own activities (Scope 1 and 2 footprint) are approximately 11% of our global business footprint and Scope 3 emissions are approximately 89%.
Market	Relevant, always included	During our TCFD climate scenario modeling, the two potential market risks identified for Illumina were carbon/energy tax and supply chain raw material availability/cost. Both of these risks had a medium time horizon of 5 - 8 years but were rated as not likely to occur with a low to moderate level of impact that would not trigger material financial reporting. With our high growth, global electricity consumption is estimated to increase from 2020 to 2030 which will result in an increase in energy demands accompanied by high electricity prices. While renewable energy is projected to increase, there may not be enough renewable energy generated to offset the carbon associated with traditional fossil fuels. Increasing energy cost, whether due to lack of availability or high carbon prices, as well as increasing customer expectations for more energy efficient products, may create risks, but these are not projected to be a material impact for the Illumina product portfolio. The other potential climate-related market risk could include fluctuations in availability of raw materials such as fossil fuel-based substances including plastics used in our cartridges and portfolio of products. This could potentially impact fluctuating prices in carbon and fossil fuels. Mitigation for the above factors include design for environment application in our product development, initiatives to reduce plastic in the design phase, packaging reduction efforts, and assessment of alternative materials. We will also continue to assess increasing use of renewables at our sites. In the extreme 4D climate models, Illumina could be subject to potential changes in raw material access. Supply chain hot spots that were identified for Illumina include raw material availability, cold chain, and supplier community climate resilience. Access to critical raw materials may become more difficult due to either geopolitical tensions or competition for resources with other sectors. Mitigation includes utilizing data from our scope 3 emissions assessment to target specific opportunities, supply chain redundancy, and linkage to our business continuity planning. Enterprise Risk Management (ERM) uses a risk identification process that incorporates both quantitative and qualitative factors that support risk scoring and prioritization of potential substantive financial or strategic impacts to our business. Considerations include financial, operational, employee, legal & regulatory, and reputational risks.
Reputation	Relevant, always included	Illumina recognizes being a leader in genomics means there is an opportunity and responsibility to be a leader and good steward for the environment. Enterprise Risk Management (ERM) uses a risk identification process that incorporates both quantitative and qualitative factors that support risk scoring and prioritization of potential substantive financial or strategic impacts to our business. Considerations include financial, operational, employee, legal & regulatory, and reputation risks. During our TCFD climate scenario modeling, reputational risk for increased stakeholder concern or negative stakeholder feedback was identified for Illumina with a medium time horizon and a moderate impact but rated as not likely to occur. Climate related reputation risk is assessed through strategy planning, customer feedback, ongoing stakeholder engagement, and our materiality assessment. Reputation risk could impact recruitment and retention of top talent. We recognize the competitive opportunity for recruitment and retention when employees align with the values of our company. Our employee engagement survey demonstrates strength in this area and we look forward to continuously improving. We recognize that having a reputation for adopting a strong environmental approach could provide a competitive advantage. Reputation loss could lead to a risk in sales. There could be reputational risk with investors, customers, current employees, and potential employees based upon the quality of our response to take climate action. To communicate our achievements and continue to benchmark for continuous improvement opportunities, we participate in many external surveys including Dow Jones Sustainability Index and CDP. We also report transparent progress in our annual CSR Report.
Acute physical	Relevant, always included	During our TCFD climate scenario modeling, two acute physical risks were identified for Illumina: increased severity and frequency of extreme weather and increased severity and frequency of wildfires. Both of these risks had a medium time horizon and were more likely than not to occur but were rated with only a moderate impact. Illumina's potential risks associated with physical impacts of climate change such as wildfires, flooding, and solar heat gain include risks to operational footprint and the supply chain. For the operational footprint, acute physical risks are factored into infrastructure development and business continuity planning. An example of impact already experienced includes our Bay Area sites that were closed due to poor air quality from surrounding wildfires. Updates to facility maintenance programs and infrastructure were made as part of lessons learned from events such as these. The US, UK, Netherlands, and Singapore were identified as having an increased likelihood of severe drought and probability of heatwave from 2020-2030, increasing the risk of fires and water scarcity. Extreme weather events could affect our manufacturing sites, potentially causing reduction or disruption in production capacity. With our insurance carrier FM Global, facilities in higher risk areas are improved based on recommendations during FM risk evaluation. For potential physical impact to supply chain, climate change may disrupt logistics such as shipping routes as well as cold chain shipping mechanisms. An increased risk of wildfire and other physical climate impacts may affect energy and electricity grid stability, causing implications for cold storage and manufacturing, impacting Illumina facilities and offices, as well as the supply chain. Other physical impacts of climate change have the potential to increase the costs of different modes of transport and shipping routes, while cold chain may become more difficult to maintain either due to energy constraints or increased competition from other sectors. Business plans are in place and are updated routinely as part of business continuity planning to respond to interruptions of supply or production due to exceptional weather events. Our sites that use management systems apply the elements of global environmental aspects and impacts, risks, and opportunities. Additional mitigation factors include new site planning, supply chain redundancy, water conservation projects, and diverse use of energy sources.
Chronic physical	Relevant, always included	Two chronic physical risks were identified for Illumina but had a long-term horizon and rated as low to moderate impact: changes in patterns for precipitation and extreme variability in weather, and rising temperatures and sea levels. Changes in patterns for precipitation and extreme variability in weather is more likely than not to occur and has a potential of low impact on Illumina's operations. Rising temperatures and sea levels is not likely to occur and has a potential of moderate impact on Illumina's operations. Talent and human capital may also be impacted in all scenarios including migration of workers from areas of high risk as well as increased health challenges due to climate change impacts. Chronic physical risks e.g. sustained higher temperatures could present risks to the company. An increase in the number and length of periods of increased temperature could affect the cost to cool water for production. Labs with specific temperature control issues for product integrity may face a higher cost of production in order to maintain temperatures. Our 2030 environmental targets include water reduction targets and emission reduction targets. Energy or material use may depend on long term availability of certain resources. We have implemented Tesla onsite battery storage at our San Diego Headquarters to capture energy during the day to use at night. Onsite power generation includes installation of a fuel cell in 2019 and solar has been added across our portfolio to support site growth. Fires and floods are part of our emergency response and business continuity risk assessments and planning.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

No

C2.3b

(C2.3b) Why do you not consider your organization to be exposed to climate-related risks with the potential to have a substantive financial or strategic impact on your business?

	Primary reason	Please explain
Row 1	Risks exist, but none with potential to have a substantive financial or strategic impact on business	Risks exist but based on our climate scenario modelling, these risks are not currently rated to have potential substantive or strategic impact on our business. The climate scenario analysis was completed using three plausible narrative future representations of our operating environment respectively aligned to a well below 2°C, a 3°C , and a 4°C level of warming. To map assumptions for each trajectory, we utilized standardized third-party climate modeling data, such as the Shared Socioeconomic Pathways (SSPs) and the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP). The following types of risk were identified in line with TCFD terminology: market, reputation, acute physical, and chronic physical. Each of the risks identified had a low or moderate impact. No risks had a high impact identified which would result in substantive financial, operational, strategic, or reputational impact. We have diversified our geographical locations and have initiatives in place to positively impact our scope 1, 2 and 3 emission footprint. Compared to other industries and other companies in our own industry, our footprint is relatively small. Our climate risk and opportunities are not currently expected to be financially material. We are working on a holistic approach to both the risk and opportunities associated with climate impact and are continuing to refine the data collection within each element. We will seek to continue to improve, innovate, give back to our communities, and work toward a more sustainable and equitable future.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
No

C2.4b

(C2.4b) Why do you not consider your organization to have climate-related opportunities?

	Primary reason	Please explain
Row 1	Opportunities exist, but none with potential to have a substantive financial or strategic impact on business	Opportunities exist but based on our climate scenario modeling these opportunities are not currently rated to have potential substantive or strategic impact on our business. A climate scenario analysis was completed using three plausible narrative future representations of our operating environment respectively aligned to a well below 2°C, a 3°C , and a 4°C level of warming. To map assumptions for each trajectory, we utilized standardized third-party climate modeling data, such as the Shared Socioeconomic Pathways (SSPs) and the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP). The following types of opportunities were identified: energy source, products & services, resource efficiency, markets, resilience, and reputation. No opportunities identified had a high impact classification which would result in substantive financial, operational, strategic, or reputational impact. For energy source opportunities, a lower emission source of energy was identified with a moderate impact. For products & services opportunities, development of new products or services through R&D and innovation was identified with a low impact. For resource efficiency opportunities, more efficient buildings, processes, and modes of transport were identified with a low impact. For market opportunities, access to new markets was identified with a low impact. For resilience opportunities, participation in renewable energy programs and adoption of energy-efficiency measures was identified with a moderate impact. For reputation opportunities, consumer preferences was identified with a low impact. We recognize that climate-related opportunities span both physical risk (extreme weather) and transition risks (energy pricing, customer expectations, regulations, and technology). We have diversified our geographical locations and have initiatives in place to positively impact our scope 1, 2 and 3 emission footprint. Compared to other industries and other companies in our own industry, our footprint is relatively small. Our climate risk and opportunities are not currently expected to be financially material. We are working on a holistic approach to both the risk and opportunities associated with climate impact and are continuing to refine the data collection within each element. We will seek to continue to improve, innovate, give back to our communities, and work toward a more sustainable and equitable future.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?
Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, and we do not intend it to become a scheduled resolution item within the next two years	

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?
Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
2DS RCP 2.6 RCP 6 RCP 8.5	In 2020, Illumina engaged with BSR (Business for Social Responsibility) to develop three 2030 climate scenarios linked to global warming by 2100. Our goal was to better understand the implications of climate change for our business and identify opportunities to build resilience. A climate scenario analysis was completed using three plausible narrative future representations of our operating environment respectively aligned to a well below 2°C, a 3°C , and a 4°C level of warming. To map assumptions for each trajectory, we utilized standardized third-party climate modeling data, such as the Shared Socioeconomic Pathways (SSPs) and the Intergovernmental Panel on Climate Change (IPCC) Representative Concentration Pathways (RCP). The 4°C scenario utilized SSP 3- baseline and RCP 8.5. The 3°C scenario utilized SSP 4-45 and RCP 6.0. The well below 2°C scenario utilized SSP 1-26 and RCP 2.6. Each scenario assessed the following variables: greenhouse gas emissions, energy consumption, carbon price, and physical impacts (temperature change, drought likelihood, heat wave probability, and maximum rainfall.) Physical climate impact models used The World Bank Climate Change Knowledge Portal. The scenarios were reviewed in a cross-functional workshop that included key stakeholders across various business units. The implications for each scenario were discussed and participants identified risk and opportunity hot spots to help direct further integration of resilience planning and embed climate into our developing enterprise risk management program. We will be utilizing the climate scenario insights to expand influence on our climate planning evolution and business continuity plans. We utilized the following time horizons for each of the risks and opportunities identified: Short (0–5 years), Medium (5–8 years), and Long (8–10 years) which align to the Paris Agreement and a scenario of well below 2°C. These horizons also align with our 2030 sustainability targets. The largest risks identified for Illumina were: acute physical, chronic physical, reputation, and market. The climate change elements that have most influenced our strategy are physical risk to operations, supply chain impact, and reputation. These risks have been incorporated into business continuity planning, future product development, redundancy in supply chain where possible, and site selection for future growth. We are actively reviewing opportunities to further integrate climate into our processes and path to further expand resilience. Examples of incorporation include: targets to align with the UN Sustainable Development Goals and utilizing the Science Based Targets initiative (SBTi) methodology for a well below 2°C scenario (2DS); holistic goals of reducing the environmental footprint of our products throughout the life cycle; incorporation of Design for Environment into our new product design; and addition of a new logistics location to our network on the east coast resulting in cost savings, improved supply chain planning, and a reduction of air emissions. We have implemented redundant planning and maintained safety stock to provide resilience during severe weather events. For financial planning, we include risk and opportunities evaluated through our standard budget planning. Investment in energy-reduction projects that require capital expenditures are evaluated through the Capital Committee planning process. Potential indirect costs associated with supply chain, future tax, or increased operating costs from extreme weather would connect with these internal workstreams. A more in depth analysis of Illumina's TCFD Scenarios is available on pages 106-109 of our 2021 CSR Report: https://www.illumina.com/content/dam/illumina-marketing/documents/company/illumina-csr-report-2021.pdf.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	We are committed to respecting and protecting the environment as we develop new products, technologies, and solutions. We apply the principles of environmental stewardship throughout the product life cycle to address impact. Design for Environment is an approach to incorporate sustainability and lower the environmental impact of products through design. Through Design for Environment, we apply environmental criteria to resource selection, design, packaging, energy use, data processing efficiency, and end-of-life management. To help us evaluate differences in environmental impacts between packaging options, we have implemented a simplified life-cycle assessment (LCA) tool which enables us to make informed and evidence based decisions about packaging materials and designs. Many of our products are temperature sensitive, which creates unique requirements for packaging, shipping, and storage. We have implemented redundant planning and maintained safety stock to provide resilience during severe weather events. Through Design for Environment, Illumina is addressing climate-related opportunities associated with lowering energy use of products, creating more efficient modes of transport of products, and addressing consumer preferences for more sustainable products. We have created 2030 environmental targets to address these opportunities and reduce Ilumina's risks related to climate change. Product targets include overall reduction of packaging by 75%, requirement of at least 50% of our primary packaging to be recyclable, and 90% of our secondary and tertiary packaging to be recyclable or reusable. In addition, we have set a target to reduce dry ice by 90%. Additional environmental targets for products include optimizing sequencer power consumption and processing efficiency, reducing plastics used in products, and replacing use of chemicals of concern wherever possible with greener alternatives. In 2020, we increased processing efficiency of our sequencing instruments, translating to decreased power consumption per gigabase. We introduced dynamic power management and a more efficient HVAC design for new high throughput sequencers. Learn more about our product and services environmental commitments on pages 45-47 of our 2021 CSR Report: https://www.illumina.com/content/dam/illumina-marketing/documents/company/illumina-csr-report-2021.pdf.
Supply chain and/or value chain	Yes	Illumina has identified potential risks associated with increased severity and frequency of extreme weather and wildfires, changes in patterns for precipitation and extreme variability in weather, and rising temperatures and sea levels. These risks have been incorporated into redundancy in supply chain where possible. We added a new logistics location to our network on the east coast resulting in cost savings, improved supply chain planning, and a reduction of air emissions. Prior to this facility being opened, product had to be shipped via air and cold chain from California to customers all over the US and to the Europe hub. With the opening of the warehouse, we have been able to use refrigerated trucks to transport from the west coast to east coast. We have implemented redundant planning and maintained safety stock to provide resilience during severe weather events. Our Design for Environment approach to products and packaging is allowing Illumina to address risks associated with severe weather shifts. In 2020, Illumina increased the shelf life of NovaSeq 6000 v1.5 RUO kits from three to twelve months. Our NextSeq product utilizes ambient shipping of sequencing flowcells reducing the reliance on cold chain. Illumina has created a 2030 target for 100% of strategic suppliers to have a commitment to reduce their environmental footprint. We will use our Scope 3 emissions footprint assessment to develop climate indicators to embed in our procurement process and vendor selection. We have updated our Supplier Code of Conduct to include guidance for suppliers to provide options that support environmentally preferable products that meet performance requirements when submitting proposals to Illumina for commodities and services, wherever possible. Learn more about our supply chain environmental commitments on pages 44 and 77-79 of our 2021 CSR Report: https://www.illumina.com/content/dam/illumina-marketing/documents/company/illumina-csr-report-2021.pdf.
Investment in R&D	Yes	Our technology is used in various settings ranging from clinical health to research and is being used to directly support sustainability, climate change, conservation, and environmental DNA research. As the leader in global genomics, innovation is key for future stability and continued evolution of the field. Our advances in technology continue to drive down the cost of sequencing and make it more accessible to a wider variety of end users. In 2020, Illumina acquired Enancio. The Enancio compression technology provides power-consumption savings per sequencing run, with power savings directly scaling with output capacity. For the NovaSeq 6000, this resulted in a 20.4 kWh power savings per run. Illumina's Greater Good Initiative grant program spurs critically needed research that will increase the sustainability, productivity, and nutritional density of agriculturally important crop and livestock species. Grant recipients receive donations of Illumina products to support their projects. Illumina is participating in the Earth BioGenome Project, a network of partner organizations and affiliated projects with the shared goal of sequencing and annotating the genomes of all known species over a 10-year period. This project aims to create a digital backbone of sequences that will serve as critical infrastructure for biology, conservation, agriculture, medicine, and the growing global bioeconomy. The first SARS-CoV-2 genome was sequenced on an Illumina sequencer in January 2020 and 42 days later, Moderna shipped the first batch of its messenger RNA vaccine, developed from that viral genome data. Genomic technology has been on the front lines of diagnostics, research, vaccines, therapy development, and surveillance. Genomic research has given valuable insights into COVID-19 susceptibility and precision treatments. Genomic surveillance has detected SARS-CoV-2 variants developing around the world. Through these R&D investments, Illumina is addressing climate-related opportunities for innovative new uses of genetic sequencing products which support human health and wellbeing. This includes improving agricultural efficiency, supporting interventions for infectious diseases, and conducting climate change adaptation research.
Operations	Yes	We are responding to climate change risk such as increased severe weather events, potential policy changes, and reputational harm by investing in more renewable energy, integrating green design principles into our facilities and products, and continuing to drive innovation. We continuously seek initiatives to reduce our environmental footprint at existing facilities, while integrating green design principles into new construction projects. Illumina has established 2030 targets which include: 30% reduction in Scope 1 & 2 emissions, a 50% increase in renewable energy use, 10% reduction in water use, and 90% waste diversion from landfill at all main sites. In 2020, we implemented various energy efficiency projects at our San Diego Headquarters to reduce our energy load. These included: optimizing the central plant, conducting a chilled water retro-commissioning project, and utilizing LED lighting and room occupancy controls for lighting and HVAC. We use a Tesla battery storage system to capture and store energy when demand is low, and discharge during peak times to reduce strain on the electrical grid. The labs use a Aircuity lab management system to continuously monitor air quality throughout the day, providing demand-based ventilation to meet safety protocols. Illumina participated in a two-year Strategic Energy Management program with the California Public Utility Commission and our local utility provider. Activities included treasure hunts with our energy champion volunteers and audits with the Facilities and EHS teams, resulting in more than 100 low- (or no-)cost energy saving projects identified. The projects were mostly focused on operational and maintenance opportunities. 50% of water used in our San Diego facilities is from recycled sources. We are also actively working with our US sites on projects to increase their waste diversion rate. Our EMEA and Singapore sites have already achieved greater than 90% landfill diversion. Illumina will continue to address climate-related risks and opportunities across its operations by identifying additional initiatives to make our facilities more efficient. We will focus on participation in more renewable energy programs and continue to adopt energy-efficiency measures to make our facilities more resilient to acute and chronic physical risks.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures	As part of our climate risk management process, we review opportunities to reduce our climate change impact. Our capital allocation planning includes ROI assessment and connection to our CSR initiatives. Examples include the addition of onsite solar projects, Tesla battery storage, fuel cells, and an Aircuity lab HVAC system. Planning typically occurs 1 to 2 years before initiation. An example project includes the installation of 50 new EV chargers to offer free charging to employees on campus. The project scoping started in 2018 and was implemented in 2019. Planning for the conversion of our shuttles started in 2018 and implementation occurred in 2021. Project planning for the fuel cell started in 2017 and was implemented in 2019. Energy reduction projects and capital expenditures are factored into financial planning. A favorable ROI provides opportunities for savings. Operating costs can be reduced with investment in energy intensive parts of the operations.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Year target was set
2018

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Scope 1+2 (location-based)

Base year
2019

Covered emissions in base year (metric tons CO2e)
34404

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2030

Targeted reduction from base year (%)
30

Covered emissions in target year (metric tons CO2e) [auto-calculated]
24082.8

Covered emissions in reporting year (metric tons CO2e)
36573

% of target achieved [auto-calculated]
-21.0149982560167

Target status in reporting year
Underway

Is this a science-based target?
Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition
Well-below 2°C aligned

Please explain (including target coverage)
Our emission reduction target was based using the Science Based Target initiatives absolute contraction tool. The methodology applies a well below 2°C scenario developed by International Energy Agency (IEA) as part of its publication, Energy Technology Perspectives (ETP). It was developed by CDP, WRI and WWF with the technical support of Ecofys, a consultancy partner. The methodology was created with input from a group of technical advisors, two public stakeholder workshops and one online workshop, and aims to provide businesses with a research-backed method to set their emissions goals. The accompanying tool allows companies to enter their data and determine their science-based targets according to the method and is regularly updated with recent ETP data. Our carbon target provides us with a long-term perspective to 2030 based on input with our 2019 Scope 1 and 2 emissions baseline.

Target reference number
Abs 2

Year target was set
2021

Target coverage
Company-wide

Scope(s) (or Scope 3 category)
Other, please specify

Scope 3 Categories 1, 2, 4, 6, 7 and 15 contributed to 93% of Illumina's total Scope 3 emissions in FY2019. These categories were used for Illumina's 2030 SBTI target for Scope 3 emissions.

Base year
2019

Covered emissions in base year (metric tons CO2e)
254141

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)
100

Target year
2030

Targeted reduction from base year (%)
46.2

Covered emissions in target year (metric tons CO2e) [auto-calculated]
136727.858

Covered emissions in reporting year (metric tons CO2e)
272662

% of target achieved [auto-calculated]
-15.7742137587971

Target status in reporting year
Underway

Is this a science-based target?
Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition
1.5°C aligned

Please explain (including target coverage)
Our emission reduction target was created using the Science Based Target initiatives methodology of 1.5°C which equated to reducing our Scope 3 emissions by 4.2% annually. Scope 3 emissions associated with employee commuting and business travel decreased due to changes in operations resulting from COVID-19 including a large portion of our workforce working remotely and a decrease in business travel in respondence to the global pandemic. These reductions in emissions were offset by an increase in production and an increase in emissions resulting from purchased goods and services, as well as capital goods.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2018

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Renewable fuel production	Other, please specify (GJ of renewable energy)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2019

Figure or percentage in base year
1566

Target year
2030

Figure or percentage in target year
2349

Figure or percentage in reporting year
3333

% of target achieved [auto-calculated]
225.670498084291

Target status in reporting year
Achieved

Is this target part of an emissions target?
Established a goal of increasing our use of renewable energy by 50% from 2019 baseline. In 2019, we produced1,566 gigajoules of renewable energy from on-site solar. In 2020, we added additional on-site solar to our facilities and increased our renewable energy use to 2,349 gigajoules.

Is this target part of an overarching initiative?
Other, please specify (Increasing use of renewables will support our 2030 emission targets, climate change action plans, and support a shift to a low carbon economy.)

Please explain (including target coverage)
We set an initial 2030 target to increase the amount of renewable energy used at our sites by 50%. We have achieved this target and are assessing our renewable energy goals in line with net zero and science-based target methodology. In the meantime, we are continuing to explore renewable energy options for all sites.

Target reference number
Oth 2

Year target was set
2018

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Waste management	Other, please specify (90% landfill diversion at all main sites)

Target denominator (intensity targets only)
<Not Applicable>

Base year
2019

Figure or percentage in base year
51

Target year
2030

Figure or percentage in target year
90

Figure or percentage in reporting year
49

% of target achieved [auto-calculated]
-5.12820512820513

Target status in reporting year
Underway

Is this target part of an emissions target?
We have established a 2030 target to divert 90% of waste from landfill at our main sites. Three main sites have already achieved this target: Illumina Centre Cambridge, UK; Woodlands, Singapore; and Eindhoven. Each of these sites had 100% landfill diversion in 2020.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

This target includes all Illumina main sites: San Diego (i3, Headquarters and Distribution Center), Hayward, Madison, UK Illumina Centre, Netherlands, and Singapore Woodlands.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	41	
To be implemented*	9	
Implementation commenced*	2	
Implemented*	8	1173
Not to be implemented	11	

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Low-carbon energy generation	Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

106

Scope(s)

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

117000

Investment required (unit currency – as specified in C0.4)

400000

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

Installed on-site solar photovoltaic system in January 2020 at Foster City site. In 2020, this system produced 467,800 kWh of renewable energy used on-site.

Initiative category & Initiative type

Energy efficiency in buildings	Other, please specify (Shutting off equipment in facility when workforce was working remotely and facility was unoccupied)

Estimated annual CO2e savings (metric tonnes CO2e)

136

Scope(s)

Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

150816

Investment required (unit currency – as specified in C0.4)

0

Payback period
<1 year

Estimated lifetime of the initiative
1-2 years

Comment
Equipment was adjusted at Illumina's i3 San Diego commercial site while the workforce operating in this facility was working remotely in response to the pandemic. Equipment was adjusted to only operate when necessary, resulting in a 60% energy reduction in 2020 at this location.

Initiative category & Initiative type

Transportation	Company fleet vehicle efficiency

Estimated annual CO2e savings (metric tonnes CO2e)
289

Scope(s)
Scope 3

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
24720

Investment required (unit currency – as specified in C0.4)
22374

Payback period
<1 year

Estimated lifetime of the initiative
6-10 years

Comment
We provide shuttles to employees in San Diego between campuses and to and from the train station. In 2020, we partnered with San Diego Gas & Electric and Ace Shuttle Company to convert the six company shuttles from propane to electric power to reduce our Scope 3 emissions.

Initiative category & Initiative type

Energy efficiency in buildings	Building Energy Management Systems (BEMS)

Estimated annual CO2e savings (metric tonnes CO2e)
1173

Scope(s)
Scope 1
Scope 2 (location-based)
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
933000

Investment required (unit currency – as specified in C0.4)
446000

Payback period
<1 year

Estimated lifetime of the initiative
1-2 years

Comment
Utilized Building Energy Management Systems and sub-metering at San Diego sites to optimize energy efficiency of equipment.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Illumina prioritizes projects that ensure compliance with regulatory requirements and standards. For each project, Illumina analyzes regulatory compliance, alignment with company goals, and reduction of cost impact.
Dedicated budget for energy efficiency	Each project is assessed for return on investment and carbon emission reductions.
Employee engagement	Our Sustainability Green Teams operate at all our major sites and represent an important and effective means to both engage with employees and enhance the sustainability of our business. For example, our Madison Green Team led the implementation of a project to recycle non-hazardous glove and garment lab waste through the Kimberly-Clark RightCycle Program. In San Diego, the Green Team removed plastic liners from the office recycle container bins to reduce plastic bag usage. In EMEA, the Green Team led virtual climate change "lunch n' learn" sessions, and the Singapore Green Team hosted an Earth Day Fair.
Internal incentives/recognition programs	Financial awards and other forms of recognition are also presented to employees who have developed a noteworthy project during the year which could be related to environmental or energy efficiency enhancements. This could include Spot Bonus Awards, Innovation Awards, and Values Awards.
Internal finance mechanisms	Utilize capital committee planning process, individual cost centers, and relevant compliance schemes.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?
No

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
12489

Comment
In 2020, Illumina adjusted its Scope 1 and 2 emissions baseline year from 2018 to 2019 after identifying that 2019 is the earliest reliable and representative data set for our portfolio. We also updated our boundary for the annual energy and greenhouse gas emission inventory to: sites >30,000 square feet or sites that 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 estimated footprint. 2019 baseline data was adjusted to also reflect more reliable data. The data in this section is restated and represents Illumina's updated baseline. We had a third party conduct a limited assurance in accordance with ISAE 3000 and ISAE 3410.

Scope 2 (location-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
21915

Comment
In 2020, Illumina adjusted its Scope 1 and 2 emissions baseline year from 2018 to 2019 after identifying that 2019 is the earliest reliable and representative data set for our portfolio. We also updated our boundary for the annual energy and greenhouse gas emission inventory to: sites >30,000 square feet or sites that 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 estimated footprint. 2019 baseline data was adjusted to also reflect more reliable data. The data in this section is restated and represents Illumina's updated baseline. We had a third party conduct a limited assurance in accordance with ISAE 3000 and ISAE 3410.

Scope 2 (market-based)

Base year start
January 1 2019

Base year end
December 31 2019

Base year emissions (metric tons CO2e)
21915

Comment
In 2020, Illumina adjusted its Scope 1 and 2 emissions baseline year from 2018 to 2019 after identifying that 2019 is the earliest reliable and representative data set for our portfolio. We also updated our boundary for the annual energy and greenhouse gas emission inventory to: sites >30,000 square feet or sites that 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 estimated footprint. 2019 baseline data was adjusted to also reflect more reliable data. The data in this section is restated and represents Illumina's updated baseline. We had a third party conduct a limited assurance in accordance with ISAE 3000 and ISAE 3410.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.
IEA CO2 Emissions from Fuel Combustion
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Emissions & Generation Resource Integrated Database (eGRID)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
19701

Start date
January 1 2020

End date
December 31 2020

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
12489

Start date
January 1 2019

End date
December 31 2019

Comment
In 2020, Illumina adjusted its Scope 1 and 2 emissions baseline year from 2018 to 2019 after identifying that 2019 is the earliest reliable and representative data set for our portfolio. We also updated our boundary for the annual energy and greenhouse gas emission inventory to: sites >30,000 square feet or sites that 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 estimated footprint. 2019 baseline data was adjusted to also reflect more reliable data. The data in this section is restated and represents Illumina's updated baseline. We had a third party conduct a limited assurance in accordance with ISAE 3000 and ISAE 3410.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
16872

Scope 2, market-based (if applicable)
16872

Start date
January 1 2020

End date
December 31 2020

Comment

Past year 1

Scope 2, location-based
21915

Scope 2, market-based (if applicable)
21915

Start date
January 1 2019

End date
December 31 2019

Comment
In 2020, Illumina adjusted its Scope 1 and 2 emissions baseline year from 2018 to 2019 after identifying that 2019 is the earliest reliable and representative data set for our portfolio. We also updated our boundary for the annual energy and greenhouse gas emission inventory to: sites >30,000 square feet or sites that 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 estimated footprint. 2019 baseline data was adjusted to also reflect more reliable data. The data in this section is restated and represents Illumina's updated baseline. We had a third party conduct a limited assurance in accordance with ISAE 3000 and ISAE 3410.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?
No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
100351

Emissions calculation methodology
S&P Global Trucost (Trucost) used Illumina's FY2020 supplier spend data, combined with supplier disclosed emissions data from the Trucost Environmental Register and the Trucost EEI-O model, to calculate the supply chain GHG emissions of suppliers through all tiers up to and including raw materials extraction. Emission Factors used: Trucost EEI-O model and sector estimation factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
6

Please explain
This category includes internal spend data for all suppliers used to calculate emissions from purchased goods and services.

Capital goods

Evaluation status
Relevant, calculated

Metric tonnes CO2e
44057

Emissions calculation methodology
S&P Global Trucost (Trucost) used Illumina's FY2020 supplier spend data, combined with supplier disclosed emissions data from the Trucost Environmental Register and the Trucost EEI-O model, to calculate the supply chain GHG emissions of suppliers through all tiers up to and including raw materials extraction.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
13

Please explain
This category includes internal spend data for all suppliers used to calculate emissions from purchased goods and services.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, calculated

Metric tonnes CO2e
5785

Emissions calculation methodology
S&P Global Trucost calculated emissions based on actual electricity/fuel usage data and using T&D and WTT DEFRA emission factors (2020).

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes actual and estimated electricity from facilities.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Metric tonnes CO2e
92736

Emissions calculation methodology
S&P Global Trucost used Illumina's region and country specific distance, transportation mode and weight of goods supplied FY2019 and FY2020 data by countries, and calculated emissions based on average distance travelled using emission factors from Defra (2020).

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes emissions from the transportation and distribution of raw materials and products. Illumina is responsible for the majority of transportation of products to customers, therefore these are also considered in our upstream transportation and distribution emissions.

Waste generated in operations

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
617

Emissions calculation methodology
S&P Global Trucost calculated emissions using Illumina's waste data and emission factors from Defra (2020) – UK Government GHG Conversion Factors for Company Reporting.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes all solid waste generated from Illumina's main sites: San Diego (HQ, i3 and Warehouse), Hayward, Foster City, Madison, Eindhoven, UK Cambridge Illumina Centre, and Singapore Woodlands. The emissions calculated were less than 1% of total Scope 3 emissions resulting in this category being not relevant.

Business travel

Evaluation status
Relevant, calculated

Metric tonnes CO2e
8913

Emissions calculation methodology
S&P Global Trucost used Illumina's spend data by mode of transport and distance travelled combined with Trucost EEI-O model, to calculate GHG emissions related to business travel.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes all business travel associated with Illumina's operations.

Employee commuting

Evaluation status
Relevant, calculated

Metric tonnes CO2e
7567

Emissions calculation methodology
S&P Global Trucost used Illumina's global employee head count by country, combined with OECD's published country averages for commuting time, transportation mode and distance, to calculate GHG emissions from employee commuting.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes the number of employees working at each site and the % of employees working on-site vs. working remotely. In 2020, many employees were working remotely for a portion of the year in response to the global pandemic.

Upstream leased assets

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
1275

Emissions calculation methodology
Using Illumina's data on facilities outside of their Scope 1 & 2 emissions inventory, S&P Global Trucost applied average intensities for energy consumption (US Energy Information Administration data) to obtain total consumption by energy source for each office. Emissions calculated using country-specific electricity grid factor from IEA and fuel emission factors from Defra (2020) UK Government GHG Conversion Factors for Company Reporting.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes actual and estimated electricity from facilities outside the Scope 1 & 2 emissions boundary and fuel usage from third party owned vehicles. The emissions calculated were less than 1% of total Scope 3 emissions resulting in this category being not relevant.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Illumina does not own or control vehicles or facilities from which sold products are transported or distributed. Illumina's outbound transportation and distribution services that are purchased by us are excluded from category 9 and included in category 4 (Upstream transportation).

Processing of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
No further processing of sold products takes place for any of Illumina's products, therefore this category is not relevant.

Use of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
4850

Emissions calculation methodology
S&P Global Trucost used energy consumption data during use phase of the products and IEA country specific electricity grid factors to estimate emissions.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes Illumina products which consume energy to operate.

End of life treatment of sold products

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
2245

Emissions calculation methodology
Total weight of instruments and reagents are used along with region specific waste disposal route and DEFRA 2020 factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes Illumina's instrument and reagent products. The emissions calculated were less than 1% of total Scope 3 emissions resulting in this category being not relevant.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Scope 3 emissions resulting from downstream leased assets are not reported because this category is not applicable to Illumina.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Scope 3 emissions resulting from franchises are not reported because this category is not applicable to Illumina.

Investments

Evaluation status
Relevant, calculated

Metric tonnes CO2e
19038

Emissions calculation methodology
S&P Global Trucost (Trucost) used investment data provided by Illumina, combined with company disclosed emissions data from Trucost Environmental Register and the Trucost EEI-O model, to calculate the scope 1 and 2 of Illumina's investments.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Please explain
This category includes all corporate investments made by Illumina.

Other (upstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

Other (downstream)

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
11.4

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
36573

Metric denominator
unit total revenue

Metric denominator: Unit total
3200000000

Scope 2 figure used
Location-based

% change from previous year
16

Direction of change
Increased

Reason for change
We saw decreased revenue in 2020 due to business operation disruptions that occurred from the global pandemic. Some of our customers were shut down for a period of time, but we did see a faster recovery than expected in both clinical and research customers, leading to a strong rebound in our business by the second half of the year.

Intensity figure
4.7

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
36573

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
7828

Scope 2 figure used
Location-based

% change from previous year
2

Direction of change
Increased

Reason for change
Illumina's combined Scope 1 & 2 emissions increased by 2,169 metric tons of CO2e in 2020 compared to 2019, while the number of employees only increased by 20.

Intensity figure
15.1

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
36573

Metric denominator
square foot

Metric denominator: Unit total
2430000

Scope 2 figure used
Location-based

% change from previous year
9

Direction of change
Increased

Reason for change
Illumina's real estate portfolio slightly decreased in 2020 as smaller facilities closed and larger facilities became fully operational.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	19681	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	10	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	10	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
Netherlands	73
Singapore	0
United States of America	18827
China	0
United Kingdom of Great Britain and Northern Ireland	801

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.
By facility
By activity

C7.3b

(C7.3b) Break down your total gross global Scope 1 emissions by business facility.

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Foster City, California	1398.33	37.569426	-122.269908
Watson, United Kingdom	18.9	52.100822	0.222121
Madison, Wisconsin	937.38	43.05581	-89.486624
San Diego-I3, California	903.03	32.875848	-117.20206
San Diego-HQ, California	14890.09	32.870872	-117.199031
Hayward, California	698.07	37.634032	-122.113123
Woodlands, Singapore	0	1.45535	103.799804
San Diego-Warehouse, California	0	32.814339	117.125
Illumina Centre, United Kingdom	782.27	52.117232	0.218928
Eindhoven, Netherlands	72.67	51.458377	5.395762
Shanghai, China	0	31.166936	121.387862

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Natural Gas	19701

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Netherlands	368	368	838.93	0
Singapore	8595	8595	21672.13	0
United States of America	6380	6380	19985.98	0
China	518	518	826.99	0
United Kingdom of Great Britain and Northern Ireland	1011	1011	4091.3	0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.
By facility
By activity

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Shanghai, China	517.7	517.7
Eindhoven, Netherlands	368.12	368.12
Foster City, California	1483.64	1483.64
Watson, United Kingdom	26.68	26.68
Illumina Centre, Cambridge, United Kingdom	983.88	983.88
Woodlands, Singapore	8595.17	8595.17
Madison, Wisconsin	2638.14	2638.14
San Diego-I3, California	196.33	196.33
San Diego-HQ, California	1265.11	1265.11
Hayward, California	719.64	719.64
San Diego- Warehouse, California	77.62	77.62

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Electricity	16872	16872

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?
Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	106	Decreased	0.31	We added an on-site photovoltaic system to Foster City site which was activated in January 2020. This additional renewable energy was accounted for in our Scope 2 emissions.
Other emissions reduction activities		<Not Applicable>		
Divestment	0	Please select		There were no divestment in 2020.
Acquisitions	0	Please select		We had business acquisitions in 2020 and they were captured in our Scope 3 emissions data.
Mergers	0	Please select		There were no mergers in 2020.
Change in output	8	Decreased	0.02	Based on the CDP definition of change in output, there was an increase in production related to increase in demand. In 2020, we opened a new warehouse in San Diego. There were closures associated with certain facilities. These activities balanced each other out, resulting in almost no change in emissions due to a change in output.
Change in methodology		<Not Applicable>		There was no change in methodology in 2020.
Change in boundary		<Not Applicable>		There was no change in scope boundary in 2020.
Change in physical operating conditions		<Not Applicable>		There was no change in physical operating conditions in 2020.
Unidentified		<Not Applicable>		
Other	4184	Increased	11	A 3.5-megawatt fuel cell system was installed at the San Diego Headquarters site in late 2019 to reduce energy operating costs. In 2020, this technology enabled us to reduce our electricity by 80% but increased our natural gas by 111%. The emission factors associated with an increasingly cleaner California grid resulted in a net increase of our emissions at this site. While our Scope 2 emissions at our San Diego Headquarters site decreased by 80%, our Scope 1 emissions increased by 110%. We hope to convert the fuel cell to a renewable biofuel as innovation in the field evolves and the price of this commodity reduces to support a reasonable ROI.

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)		108490	108490
Consumption of purchased or acquired electricity	<Not Applicable>		47415	47415
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	926	<Not Applicable>	926
Total energy consumption	<Not Applicable>	926	155905	156831

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)
Natural Gas

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
108490

MWh fuel consumed for self-generation of electricity
63022

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration
<Not Applicable>

Emission factor
0.18159

Unit
metric tons CO2e per MWh

Emissions factor source
2018 Climate Registry Default Emission Factors

Comment
Illumina has two fuel cells that convert natural gas into electricity. One is located at the San Diego Headquarters site (installed in October 2019) and the other one is located at the San Diego i3 site (installed in 2018). In 2020, this technology enabled us to reduce our electricity by 80% but increased our natural gas by 111%. The emission factors associated with an increasingly cleaner California grid resulted in a net increase of our emissions at the site. We hope to convert the fuel cell to a renewable biofuel as innovation in the field evolves and the price of this commodity reduces to support a reasonable ROI.

C8.2d

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	32097	32097	926	926
Heat				
Steam				
Cooling				

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method
None (no purchases of low-carbon electricity, heat, steam or cooling)

Low-carbon technology type
<Not Applicable>

Country/area of consumption of low-carbon electricity, heat, steam or cooling
<Not Applicable>

MWh consumed accounted for at a zero emission factor
<Not Applicable>

Comment

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description
Waste

Metric value
3703

Metric numerator
Metric Tons

Metric denominator (intensity metric only)
NA

% change from previous year
3

Direction of change
Increased

Please explain
Illumina produced 3,703 metric tons of non-hazardous waste in 2020. 49% of this waste was diverted from the landfill via recycling, composting and energy recovery. Illumina has established a 2030 target to divert 90% of waste from landfill from main site locations: San Diego (Headquarters, i3 and Distribution Center), Hayward, Foster City, Madison, Eindhoven, UK Cambridge Illumina Centre, and Singapore Woodlands. Our EMEA and Singapore sites have already achieved greater than 90% landfill diversion. We are actively working with other US sites on projects to increase their diversion rate. Our Sustainability Green Teams operate at all our major sites, and represent an important and effective means to both engage with employees and enhance the sustainability of our business. In 2020, our Madison team led the implementation of a project to recycle non-hazardous glove and garment lab waste by participating in Kimberly-Clark RightCycleTM Program. In San Diego, the team removed plastic liners from the office recycle container bin to reduce plastic bag usage.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Illumina CDP Assurance Statement_7-2021.pdf
Illumina CSR Report 2021.pdf

Page/ section reference
CDP Assurance Statement: pages 1-3 2021 CSR Report ESG Appendix: pages 112-113

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Illumina CDP Assurance Statement_7-2021.pdf

Page/ section reference
CDP Assurance Statement: pages 1-3

Relevant standard
ISAE3000

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	International Standard on Assurance Engagements 3000 (ISAE 3000) and Engagements 3410 (ISAE 3410)	We engaged a third-party organization, ISOS Group, Inc., to provide limited assurance engagement in accordance with ISAE 3000 and ISAE 3410 on our energy usage and GHG emission data. The verification included the following data: Scope 1 Emissions, Scope 2 emissions, and energy consumption totals. Attached is the CDP assurance report.
C7. Emissions breakdown	Other, please specify (Scope 1 Emissions by Greenhouse Gas Type)	International Standard on Assurance Engagements 3000 (ISAE 3000) and Engagements 3410 (ISAE 3410)	We engaged a third-party organization, ISOS Group, Inc., to provide limited assurance engagement in accordance with ISAE 3000 and ISAE 3410 on our energy usage and GHG emission data. The verification included the following data: Scope 1 Emissions, Scope 2 emissions, and energy consumption totals. Attached is the CDP assurance report.
C7. Emissions breakdown	Other, please specify (Scope 1 Emissions by Country/Region)	International Standard on Assurance Engagements 3000 (ISAE 3000) and Engagements 3410 (ISAE 3410)	We engaged a third-party organization, ISOS Group, Inc., to provide limited assurance engagement in accordance with ISAE 3000 and ISAE 3410 on our energy usage and GHG emission data. The verification included the following data: Scope 1 Emissions, Scope 2 emissions, and energy consumption totals. Attached is the CDP assurance report.
C7. Emissions breakdown	Other, please specify (Scope 1 Emissions by Business Activity)	International Standard on Assurance Engagements 3000 (ISAE 3000) and Engagements 3410 (ISAE 3410)	We engaged a third-party organization, ISOS Group, Inc., to provide limited assurance engagement in accordance with ISAE 3000 and ISAE 3410 on our energy usage and GHG emission data. The verification included the following data: Scope 1 Emissions, Scope 2 emissions, and energy consumption totals. Attached is the CDP assurance report.
C7. Emissions breakdown	Other, please specify (Scope 2 Emissions by Country/Region)	International Standard on Assurance Engagements 3000 (ISAE 3000) and Engagements 3410 (ISAE 3410)	We engaged a third-party organization, ISOS Group, Inc., to provide limited assurance engagement in accordance with ISAE 3000 and ISAE 3410 on our energy usage and GHG emission data. The verification included the following data: Scope 1 Emissions, Scope 2 emissions, and energy consumption totals. Attached is the CDP assurance report.
C7. Emissions breakdown	Other, please specify (Scope 2 Emissions by Business Activity)	International Standard on Assurance Engagements 3000 (ISAE 3000) and Engagements 3410 (ISAE 3410)	We engaged a third-party organization, ISOS Group, Inc., to provide limited assurance engagement in accordance with ISAE 3000 and ISAE 3410 on our energy usage and GHG emission data. The verification included the following data: Scope 1 Emissions, Scope 2 emissions, and energy consumption totals. Attached is the CDP assurance report.

Illumina CDP
Assurance
Statement_7-
2021.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

C11.3

(C11.3) Does your organization use an internal price on carbon?
No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Compliance & onboarding

Details of engagement
Included climate change in supplier selection / management mechanism
Code of conduct featuring climate change KPIs
Climate change is integrated into supplier evaluation processes

% of suppliers by number
100

% total procurement spend (direct and indirect)
100

% of supplier-related Scope 3 emissions as reported in C6.5
100

Rationale for the coverage of your engagement
Our suppliers are critical to our mission and we recognize that together, we can magnify the positive impact to our customers and communities where we operate. We consider it business-critical to work with suppliers who share our commitment to integrity and the environment, and who support an ethical and compliant culture. Our suppliers are held to the same high 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 Illumina 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. In 2020, we updated our Supplier Code of Conduct to better reflect our growing CSR program and expectations of our supply partners. Our updated Supplier Code of Conduct now includes guidance for suppliers to provide options that support environmentally preferable products (EPP) that meet performance requirements when submitting proposals to Illumina for commodities and services, wherever possible. Our internal buying teams will prioritize purchasing EPPs when competing products have comparable function and value.

Impact of engagement, including measures of success
Illumina requires all suppliers to adhere to Illumina's Supplier Code of Conduct. All new suppliers are required to acknowledge the Supplier Code of Conduct in order to complete the onboarding process. The Supplier Code of Conduct states that suppliers will commit to reducing their environmental footprint, will upon request provide Illumina with information on sustainability performance, and are encouraged to voluntarily report sustainability and corporate citizenship related progress utilizing the United Nations Sustainable Development Goals, Dow Jones Sustainability Index, CDP, international frameworks such as GRI, SASB, TCFD, other equivalents, and regular company CSR Reports.

Comment

Type of engagement
Information collection (understanding supplier behavior)

Details of engagement
Other, please specify (Supplier scorecard program that assesses strategic suppliers for commitments to reduce their environmental footprint)

% of suppliers by number
1

% total procurement spend (direct and indirect)
22

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement
We have different types of suppliers that range from off-the-shelf packaging material to highly sophisticated reagents. We split our suppliers into the following categories: direct, indirect, strategic, differentiating, core, transactional, finished medical device, custom spec, off the shelf, internal, external, and services. We are expecting 100% of our strategic suppliers to commit to reducing their own environmental footprint.

Impact of engagement, including measures of success
Through our supplier scorecard program, we have assessed our strategic suppliers for commitments to reduce their environmental footprint. In 2020, 75% of our strategic suppliers committed to reduce their environmental footprint. By 2030, we aim to reach 100%.

Comment

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

To inform our CSR strategy, we engaged with a wide range of stakeholders. Our internal engagement encompassed all organizational levels, while our external engagement included representatives from global, national, and local interests. Our stakeholders included: customers, employees, healthcare providers, suppliers, community partners, channel partners, CSR peer groups, non-profits, industry leaders, government and regulators, investors, and distributors. We conducted a materiality assessment and assessed our material issues on the importance to our business and the ability to create impact across the categories of: Environment, Community, Product, Employee, and Governance.

Our global supply chain consists of suppliers, sub-contractors, channel partners, manufacturing sites, distribution centers, and customers. 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 Illumina's commitment to business integrity, ethical conduct in the marketplace, adherence to all applicable laws, and the fundamental elements of human rights. The Code of Conduct states that channel partners are committed to meeting or exceeding applicable environmental laws and regulations and to continuously improving environmental performance. This includes understanding and following all applicable environmental laws, regulations, Illumina company policies and procedures, and respecting and protecting the environment by conserving natural resources, reducing greenhouse gas emissions, reusing and recycling materials, and minimizing and eliminating waste.

We only build relationships with business partners that share our commitment to fulfilling all legal, ethical and environmental obligations. We perform due diligence on new business partners to verify that they meet our standards.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?
Trade associations

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?
No

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

At Illumina, CSR is governed at the executive level with the Board of Directors and is increasingly embedded into all areas of our business. Our CSR strategy focuses on our most significant and material issues, our stakeholders, and the areas where we can uniquely impact the global community. The Board of Directors provides guidance and direction on environmental, social, and governance issues and opportunities that have potential impact on reputation and long-term economic viability, including climate action.

Illumina's Executive CSR Steering Committee, chaired by the Chief Financial Officer (CFO) is comprised of a team of senior leaders drawn from across the organization that provide guidance on strategic plans, and review progress on a quarterly basis. This includes representatives from Medical Affairs, Legal, Product Development, Operations, and other key functions.

The CSR Functional Group reports directly to the CFO and is responsible for program management, recommendations for program evolution, and program reporting. The CSR programs are embedded into our business through several supporting working groups, including the Environment, Health & Safety Steering Committee; Quality Council; Public Policy Committee; Illumina Cares Champions; Sustainability Green Teams; and employee resource groups (ERGs),

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication
In voluntary sustainability report

Status
Complete

Attach the document
Illumina CSR Report 2021.pdf

Page/Section reference

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment
Illumina's 2021 Corporate Social Responsibility report outlines our commitments, progress, and activities related to environmental, social, and governance issues. New to the 2021 Report are frameworks from the Sustainable Accounting Standards Board (SASB) and Task Force on Climate-related Financial Disclosures (TCFD). We conducted our first climate scenario analysis and expanded our Global Reporting Initiative (GRI) level of disclosure.

Publication
In other regulatory filings

Status
Complete

Attach the document
Illumina 10-k 2020.pdf

Page/Section reference
11

Content elements
Governance
Strategy
Risks & opportunities

Comment
Illumina's 2020 10-k outlines potential risks associated with climate change.

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer and Board of Director	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

Illumina is an applied genomics technology company in DNA sequencing and array-based technologies. We aim to drive progress in the transformative power of genomics for all and our mission is to improve human health by unlocking the power of the genome. Genomics is at the intersection of biology and technology. In 2020, Illumina's revenue exceeded $3.2 billion, our employee base was over 7800, and we invested over $680 million in R&D.

We are dedicated to making a positive impact on humanity, not just through our technology, but through our actions. By doing so, we aim to help shape a more sustainable and equitable future for all. Our Corporate Social Responsibility (CSR) strategy focuses on our most material issues and the unique ways we can impact the global community. We prioritize the following focus areas: access to genomics, empowering our community, and environmental sustainability. We support these with the foundational elements of our people and our integrity. Our CSR strategy ensures that business decisions benefit all of our stakeholders including employees, patients, customers, suppliers, investors, the environment, and the communities in which we operate.

Our focus areas include:

- Providing access to genetic testing, supporting programs to remove barriers of access and addressing the diversity of genomic data.
- Offering the time and talent of our employees as well as our technology to communities around the world.
- Reducing our environmental footprint by investing in sustainable solutions across facilities, within our products and in our supply chain.

Human health and the health of our environment are intertwined, connecting our company mission to improve human health with our commitment to operate responsibly and sustainably. We are integrating the risk and opportunities associated with climate impact into our business strategy and believe addressing climate change is one of the key topics to achieving a sustainable, just, and resilient future for all. To understand the potential risks and opportunities of climate change, we conducted an assessment using the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

We are responding to climate change risk such as increased severe weather events, potential policy changes, and reputational harm by investing in more renewable energy, integrating green design principles into our facilities and products, and continuing to drive innovation. Opportunities to support climate action through genomics research can create additional positive impacts. We are proud to see our products being used around the world to study climate change impact, conservation biology, and influence more sustainable agriculture practices. We are at the forefront of addressing this critical global issue by enabling our customers around the world to understand these issues through the lens of genomics.

For more details, visit

- CSR page at www.illumina.com/csr.

- Our second annual CSR report at https://www.illumina.com/content/dam/illumina-marketing/documents/company/illumina-csr-report-2021.pdf.

- Our Climate Change position statement at https://www.illumina.com/content/dam/illumina-marketing/documents/company/final-climate-position-statement.pdf.

Climate Change position statement:

Illumina's CSR vision is to deepen our impact on human health by serving as a champion for patients, the community, and our planet. Illumina recognizes the risk posed by global climate change. Illumina supports the conclusions of international frameworks that address climate change and the conclusions from the Intergovernmental Panel on Climate Change (IPCC). We acknowledge the need to keep the global temperature rise to well below 2 degrees Celsius to avoid consequences to human health and wellbeing. We support implementation of the United Nations Sustainable Development Goal 13: Take urgent action to combat climate change and its impacts. We endorse the use of scientific consensus and science-based targets to address carbon emissions reduction efforts. We believe all governments and businesses have important roles and responsibilities to address the issue of Climate Change, and we will continue to seek opportunities to do our part to achieve this critical goal. Illumina has set targets associated with emission reduction, increased renewable energy use, water conservation, landfill waste diversion, green design in new construction, integrating sustainability into new product design, and influencing our supply chain. We are committed to measuring our progress and reporting to stakeholders in a timely and transparent way through our annual CSR Report. At Illumina, we are committed to safeguarding, sustaining, and improving the environment for the benefit of current and future generations.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	3200000000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?
Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	US	4523271090

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Please select	

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
Please select

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member
Please select

Group type of project
Please select

Type of project
Please select

Emissions targeted
Please select

Estimated timeframe for carbon reductions to be realized
Please select

Estimated lifetime CO2e savings

Estimated payback
Please select

Details of proposal

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?
No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain questions?
I am submitting my response	Investors Customers	Public	Yes, I will submit the Supply Chain questions now

Please confirm below

I have read and accept the applicable Terms