

C0. Introduction

C0.1

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

Applied Materials, Inc. (Nasdaq: AMAT) provides manufacturing equipment, services and software to the semiconductor, display and related industries. Founded in 1967, Applied Materials is the leader in materials engineering solutions used to produce virtually every new chip and advanced display in the world. Our expertise in modifying materials at atomic levels and on an industrial scale enables customers to transform possibilities into reality. From our commitment to the well-being of our employees and their communities, to our sustainable and ethical business practices, we are focused on our goal to Make Possible® a Better Future.

Applied Materials is committed to growing profitably and sustaining our business in an environmentally and socially responsible manner. We use our resources and technology leadership to enable the creation of products that improve the way people live. As of the end of 2021, Applied employed approximately 27,000 regular employees. Around the world, as of the end of 2021, we owned a total of approximately 7,327,000 square feet of space and leased another 3,712,000 square feet of space for offices, plants and warehouses.

In 2021 we continued to make progress across our various climate-related goals, which include:

- 100% renewable electricity in the U.S. by 2022
- 100% renewable electricity globally by 2030
- 50% reduction in our Scope 1 and Scope 2 emissions by 2030
- Science Based Targets announced by 2022, including a Scope 3 emissions goal
- Disclosure in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) by 2022

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 2021	December 31 2021	Yes	2 years

C0.3

(C0.3) Select the countries/areas in which you operate.

- Canada
- China
- France
- Germany
- Greece
- India
- Ireland
- Israel
- Italy
- Japan
- Malaysia
- Netherlands
- Philippines
- Republic of Korea
- Singapore
- Taiwan, China
- 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

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	AMAT

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
Board-level committee	Responsibilities: Applied's Corporate Governance and Nominating Committee (CGNC) oversees sustainability and climate-related strategy to foster accountability. On a quarterly basis the CGNC is briefed by the Director of ESG and Managing Director of Environmental, Health and Safety (EHS) on the status of Applied's company-wide environmental, social and governance (ESG) strategy, which is focused on integrating sustainability into our operations and company culture through initiatives aligned to business strategy that address a broad set of stakeholders, including customers, employees, suppliers, governments and our local communities. The CGNC reviews progress on Applied's various climate-related goals, which address the company's emissions, renewable electricity procurement, and product efficiency, as well as climate-related reporting and disclosures (namely our annual sustainability report). A more in-depth evaluation of the overall ESG strategy, including the performance and evolution of Applied's climate and energy goals and initiatives, is conducted on an annual basis. Example of climate-related actions: The CGNC recently reviewed and provided input on Applied's climate-related disclosures, including GHG data, progress on goals, and our first TCFD report. The CGNC also discussed with management SEC proposed rules on climate-related disclosures.

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 Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<Not Applicable>	Applied's Director of ESG and Managing Director of Environmental, Health and Safety (EHS) present progress on Applied's overall ESG strategy and climate-related goals and initiatives to the CGNC (Board committee) on a quarterly basis. This includes the review of performance across all climate-related goals, including our absolute emission reduction goals, 100% renewable electricity goals, and our product efficiency goals, as well as a discussion of actions being taken to continue progress towards these goals. A more in-depth review of Applied's ESG strategy is conducted on an annual basis to ensure the company is continuing to prioritize the most significant climate-related issues within its strategy and is prepared for any new trends or expectations.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Criteria include: - Previous tangible professional experience related to climate-related issues (i.e., renewable energy) - Understanding of key climate-related concepts, including GHG reporting principles and considerations - Awareness and understanding of emerging climate-related reporting and disclosure expectations or regulations	<Not Applicable>	<Not Applicable>

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 Executive Officer (CEO)	<Not Applicable>	Both assessing and managing climate-related risks and opportunities	<Not Applicable>	Quarterly

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).

Applied Materials' CEO holds overall responsibility for climate-related issues. The CEO and his executive team, which represent different functions of the business, review, assess, and provide input on the company's ESG strategy through the annual strategic review process. Tracking of our corporate 2030 climate goals, which cover Applied's emissions reductions, 100% renewable electricity, and product efficiency goals, are tracked and reviewed by this team via our Corporate Scorecard. Progress on these goals and discussion of emerging climate and energy issues and opportunities are presented for monitoring and review to the CEO and Board of Directors on a quarterly basis by the Director of ESG and Managing Director of EHS.

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	Objectives to incentivize progress against towards Applied's stated climate goals, including scope 1 and 2 emissions reductions, 100% renewable electricity, and product efficiency goals, are included in our Corporate Scorecard, which is used to inform the annual incentive bonus for executives, including the CEO.

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 incentivized	Comment
Corporate executive team	Monetary reward	Emissions reduction target Efficiency target Other (please specify) (100% renewable electricity)	Objectives to incentivize progress on towards Applied's climate goals is are tracked and incorporated into the Corporate Scorecard, which is used to inform the annual incentive bonus. Objectives to measure progress towards the following goals are included in the scorecard: - 50% reduction of scope 1 and 2 emissions by 2030 -100% renewable electricity in the U.S. by 2022, and globally by 2030 - 30% reduction in energy and chemical consumption per wafer for semiconductor products by 2030 - Commitment to set an SBT by end of 2022

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	
Medium-term	5	10	
Long-term	10	30	

C2.1b

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

Applied Materials defines substantive financial or strategic impacts as those that could materially and adversely affect Applied's business, financial performance, continuity of operations, and/or cause reputational harm. Our risk assessment processes allow us to evaluate and prioritize the impact of emerging and ongoing risks, which would be considered substantive based on factors like probability, magnitude, and duration, depending on the scenario. The thresholds used to determine whether an impact is substantive are specific to the risk, scenarios, and time horizons evaluated; thus, generalizations on specific thresholds are difficult to provide. Some quantitative indicators we use to assess whether an impact is substantive include:

- % Change to Applied's OPEX
- % Change to Applied's profit margins
- % Revenue/sales gains/losses
- % Change in market share
- Number of days of interrupted R&D or manufacturing
- Number of days/weeks of accelerated/delayed time to market
- Potential for swings in stock price due to shareholder behavior
- Presence or absence of mitigating factors

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

A specific climate-related risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Identifying risks and opportunities: During 2020-2022 Applied completed its first comprehensive physical and transition risk assessments with the support of Trucost (S&P Global). To identify climate-related risks and opportunities across our value chain, the assessments relied on a blend of internal leadership stakeholder interviews and surveys, and industry benchmarking and research to determine the most relevant physical and transition climate-related risks for Applied Materials and its value chain. In addition, starting in 2021 Applied is using the Datamaran platform to systematically identify and prioritize ESG-related risks (including climate, energy, and renewable energy) most important to its stakeholders. The results were informed through Applied internal stakeholder input along with Datamaran's aggregated research and benchmarking of external stakeholder sources (reports, regulations, media, etc.) Evaluating risks and opportunities: Physical climate risks were modelled for our top 32 global facilities using RCP 2.6, 4.5, and 8.5 climate scenarios and CMIP5 models to determine the statistical likelihood and identify risk factors such as wildfires, water stress, and flooding that could impact these locations from 2020-2050. Similar risks were evaluated by interviewing Applied stakeholders considering both our own business operations and the company's supply chain, which is spread out across the globe. Transition risks associated with Applied's own business and value chain related to potential shifts in future carbon pricing between 2020-2050 were compiled by Trucost using a blend of publicly available carbon pricing data across 100 geographies, low/medium/high price increase scenarios based on existing climate commitments and 2°C pathways, and Applied-specific business growth modelling. Interviewed stakeholders also considered policy, market, reputational, and technology-related risks and opportunities and evaluated the likelihood, timeframes in which the risks could occur, and relevance of impacts for our operations and upstream and downstream across our value chain. External research and peer benchmarking was also conducted to evaluate reputational risks and technology-related risks within the semiconductor manufacturing sector. Responding to climate-related risks: Applied Materials has continued to monitor and prepare for potential acute physical climate-related risks on an annual basis, with responsibility for identifying company-wide and site-specific risks resting with a core team of global emergency response, crisis management, and business continuity personnel, as well as local facilities teams. Our risk identification, mitigation, and management plans help ensure our ability to recover quickly from climate-related events and effectively support our customers' and suppliers' operations. Applied Materials has been monitoring certain transitional risks, including potential regulations changes covering climate change and their potential impact on our business operations. These include changes in sources of energy and mandatory disclosure of detailed carbon emissions from our operations. California, the U.S., Europe, UK, and China, are all at the forefront of seeking to mandate climate disclosures. These are all considered in the Applied Materials environmental management system (EMS). At the asset level, we use the site facilities and business continuity teams to identify local physical risks and concerns to business units and operations. Oftentimes, the ISO 14001 EMS, PSI Behavior Change Framework or Private Sector Preparation, or variations of these frameworks are used with tool development to identify site specific concerns.

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	Applied Materials analyzes existing regulations and their impact on the business to guide the development of compliance strategies. For example, to comply with current European Union regulations regarding the importation of hazardous substances, Applied Materials re-designed certain product lines to ensure the products would meet EU importation standards.
Emerging regulation	Relevant, always included	The emergence of and potential for regulation are actively being monitored by our legal, government affairs and other teams to determine potential business impacts, where relevant to Applied's business. For example, we've been monitoring potential future regulatory restrictions on emission-intensive process chemicals that are used in some of our semiconductor tools. This may require process modifications to meet future emissions constraints. Other examples include EPA's proposed regulation on reducing HFCs, as well as active monitoring of the evolving regulatory space around climate risk disclosures in the EU and by the SEC. Applied Materials utilizes a third-party regulatory monitoring agency to assess emerging regulations that may impact our operations.
Technology	Relevant, always included	The energy efficiency and carbon intensity of semiconductor equipment is a key concern for value chain partners. Applied actively monitors customers' evolving climate-related commitments and is directly engaged with customers on these topics to build awareness of Applied's capabilities to enhance efficiency. The company evaluates and invests in R&D to develop technologies that are competitive and help customers meet their resource efficiency goals. For example, Applied Materials invested in a new technology solution, our iSystem intelligent controller, which we've worked with one of our key customers to implement at their fabrication plant, enabling them to track resource consumption, GHG emissions, and other environmental factors.
Legal	Relevant, always included	Legal requirements applicable to Applied Materials operations and value chain are proactively identified, assessed and implemented, as appropriate. Each manufacturing and R&D site maintains a comprehensive environmental requirements register. In addition, Applied's Product Safety organization tracks product-related requirements, including those related to climate change. For example, Applied is anticipating additional reporting requirements regarding the use of refrigerants for chillers and certain semiconductor processes.
Market	Relevant, always included	Market risks associated with shifts in customer preferences toward purchasing less resource-intensive products are also considered in the risk assessment. For example, as customers are exposed to increasing energy and water constraints in their manufacturing operations, or to meet their climate commitments, they are likely to shift their purchasing preferences towards more energy and water-efficient equipment.
Reputation	Relevant, always included	Applied Materials' reputation within the industry, and among all stakeholders, is essential to preserving the integrity of our brand. In particular, as investor interest in environmental, social and governance (ESG) and climate-related topics increases, comprehensive public reporting of our performance and initiatives has become increasingly critical. Applied monitors evolving expectations using a prioritized set of ESG rating/ratings reports and actively benchmarks its own climate performance, goals, and initiatives against key industry peers.
Acute physical	Relevant, always included	Applied Materials' climate risk assessment considers acute physical risks across our top global assets that may be susceptible to extreme weather events based on their geographical location. Our top 32 facilities are rated and ranked based on their risk exposure to acute events such as wildfires, hurricanes, and floods, while the overall portfolio is scored based on the composite physical risk scores.
Chronic physical	Relevant, always included	Applied Materials' climate risk assessments considers chronic physical risks across top global assets based on their geographical location. Our top 32 facilities were rated and ranked based on their risk exposure to chronic trends such as water stress and sea level rise.

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?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Market	Changing customer behavior
--------	----------------------------

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Applied's customers' chip manufacturing operations are typically both energy and water intensive, and customers are increasingly focusing on improving the efficiency and overall resource consumption of their manufacturing processes and setting ambitious goals to lower their impacts. Over time customers may also be subject to both cost and regulatory pressures that incentivize them to shift their purchasing preferences towards increasingly more energy and water-efficient equipment. There is a risk of impacts to revenues and market share if Applied is unable to outpace its competitors in offering more efficient equipment that enables customers to meet their business and environmental goals. This is why Applied has established its 3x30 goals aimed at achieving a 30% reduction in energy and chemical consumption for its semiconductor products on a per-wafer basis by 2030 and is developing solutions such as the iSystem™ controller, which enables automated measurement of power usage and optimization of our tools.

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Determining the potential impact to revenues associated with Applied not keeping pace with competitors in offering more efficient equipment is extremely difficult due to the number of variables in play (how many and which customers will shift their purchasing behaviors, to what extent environmental performance of products would be weighed against other product criteria, how many competitive products are on the market, etc.) and can produce a wide range of results.

Cost of response to risk

0

Description of response and explanation of cost calculation

Applied's existing R&D and 3x30 team budgets already encompass the funds to continuously assess and implement efficiency measures to our equipment, thus no added costs are required to manage this risk at this time. Applied has established its 3x30 goals and a team of experts including a Design for Sustainability Center of Excellence who are supporting this initiative to ensure the company continues to enhance its offering of products that reduce energy and emissions impacts. We are actively engaging with key customers to bring awareness to existing sustainability solutions that we offer as well as to identify collaborative opportunities to reduce our collective footprints.

Comment

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?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Applied Materials has already started to offer equipment and service features that enable our customers to save energy and reduce emissions, such as the iSystem™ controller, which provides automated tracking of power usage from our tools and associated sub-fab systems. As our key customers set and begin driving towards their ambitious emission-reduction goals (such as scope 1 and 2 emissions reductions or Net Zero goals), demand and preference for energy and emission-reducing solutions will continue to grow. Applied is positioned to expand our offering of such solutions, whether through more efficient components, processes, or tool monitoring systems and services.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Determining the potential impact to enhanced revenues associated with Applied offering more efficient equipment is extremely difficult due to the number of variables in play (how many and which customers will shift their purchasing behaviors, to what extent environmental performance of products would be weighed against other product criteria, how many competitive products are on the market, etc.). Regardless Applied understands that producing equipment that is efficient and enables customers to meet their environmental goals can help us maintain our strong position in the market.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Applied's existing R&D and 3x30 team budgets already encompass the funds to continuously assess and implement efficiency measures to our equipment, thus no added costs are required to manage this opportunity at this time. Applied has established its 3x30 goals and a team of experts including a Design for Sustainability Center of Excellence who are supporting this initiative to ensure the company continues to enhance its offering of products that reduce energy and emissions impacts. We are actively engaging with our key customers to bring awareness to existing sustainability solutions that we offer as well as to identify collaborative opportunities to reduce our collective footprints.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a transition plan that aligns with a 1.5°C world?

Row 1

Transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a transition plan within two years

Publicly available transition plan

<Not Applicable>

Mechanism by which feedback is collected from shareholders on your transition plan

<Not Applicable>

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

Attach any relevant documents which detail your transition plan (optional)

<Not Applicable>

Explain why your organization does not have a transition plan that aligns with a 1.5°C world and any plans to develop one in the future

Climate-related risks and opportunities have already influenced our business strategy to reduce the impact of our operations and products, whether it's investing in 100% renewable electricity to power our operations or developing a team and framework to implement our 3x30 goals, which aim to reduce energy and chemical consumption of our tools by 30% per wafer. Building on this, Applied Materials is now in the process of evaluating and setting 1.5C-aligned goals by 2022, including a 2030 science-based target across its scope 1, 2, and 3 emissions. As a part of this process, we are modeling the various measures and initiatives that will be needed to meet these goals and the projected impact these could have. This process lays the foundation for the development of our 1.5C-aligned transition plan, which will define our strategy to implement these measures across our business in a way that prioritizes the most impactful actions that will make the greatest progress to meeting our goals.

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

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

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 2.6	Company-wide	<Not Applicable>	Top 32 facility locations were analyzed against the model from 2020-2050 for the following risks: - Coldwave - Flood - Heatwave - Hurricane - Sea level rise - Water stress - Wildfire
Physical climate scenarios RCP 4.5	Company-wide	<Not Applicable>	Top 32 facility locations were analyzed against the model from 2020-2050 for the following risks: - Coldwave - Flood - Heatwave - Hurricane - Sea level rise - Water stress - Wildfire
Physical climate scenarios RCP 8.5	Company-wide	<Not Applicable>	Top 32 facility locations were analyzed against the model from 2020-2050 for the following risks: - Coldwave - Flood - Heatwave - Hurricane - Sea level rise - Water stress - Wildfire
Transition scenarios IEA 2DS	Company-wide	<Not Applicable>	Carbon price scenario if policies are implemented in line with the 2-degree Celsius scenario
Transition scenarios IEA NZE 2050	Company-wide	<Not Applicable>	Carbon price scenario if full implementation of country Nationally Determined Contributions are met per the Paris Climate Agreement

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

- Which physical climate risks pose the greatest risk to our operations? - Which facilities and locations are subject to relatively higher acute or chronic physical climate risks? - How do the relative risk trends fluctuate between 2020-2050? - What impact would higher carbon prices have on Applied's business and its supply chain? - What level of reputational risk is Applied exposed to and how are we poised to perform against our industry peers?

Results of the climate-related scenario analysis with respect to the focal questions

- Water stress, wildfire, and flooding pose relatively higher climate risks to Applied's facilities as compared to other physical risks such coldwaves, heatwaves, and sea level rise. - Applied Materials has facilities located in India, Israel and certain regions of the US, areas that are exposed to relatively higher risks associated with water stress, wildfire, and/or flooding. - The risk trends between 2030-2050 are generally stable - Applied has low risk exposure with regards to increases in carbon pricing when accounting for our emission reduction goals and potential impact as a percentage of our OPEX and profit margins between 2030-2050 - Overall market-related risks related to our top suppliers is low considering their sectors, profit margins, and geographic exposure - According to Trucost's assessment, Applied has a moderate level of reputation risk based on our industry classification, carbon intensity, and GHG reduction goals and strategy

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	As customer preferences shift toward more energy-efficient products, Applied has and continues to develop technologies that allow customers to meet current and future environmental obligations to their own customers, regulators, and other stakeholders. For example, Applied is actively producing technologies to reduce the power consumption of semi-conductor chips and improving the energy density of batteries. We also produce systems and services to improve the overall energy efficiency of semiconductor fabrication facilities. These strategies are being implemented and monitored in the immediate-to-short-term (1-5 years), but also being evaluated longer term over the next 10 years.
Supply chain and/or value chain	Yes	Applied Materials' tier 1 supply chain, consisting of over 3,000 suppliers, is spread across the globe. However, as Applied's supply chain is geographically diverse, well-coordinated and proficient at managing continuity risks, recent impacts of severe weather events, such as typhoons and hurricanes, have been relatively modest. Applied is currently assessing its top 80% by spend direct suppliers on environmental performance via the Responsible Business Association (RBA) self-assessment questionnaire, which has suppliers report on their GHG tracking, goals, and initiatives, as well as a targeted GHG survey. Suppliers considered high risk (evaluated each year) are audited against the framework. This strategy is being implemented and monitored in the immediate-to-short-term (1-5 years), but also being evaluated longer term over the next 10 years.
Investment in R&D	Yes	As environmental regulations emerge and evolve in different regions where Applied Materials operates, the company must design products that comply with varying standards to continue serving customers. For example, when the European Union restricted the types of refrigerants that can be imported, Applied invested in R&D to redesign certain products so they would no longer be reliant on the restricted chemicals. These strategies are being implemented and monitored in the immediate-to-short-term (1-5 years), but also being evaluated longer term over the next 10 years.
Operations	Yes	Increases in carbon pricing have the potential to impact Applied's operating costs in the mid to long-term. As such, Applied has invested in multiple renewable energy projects, both on-site and offsite through a VPPA, that are collectively enabling the company to be on track to meeting its 100% renewable goals in the US by 2022, and globally by 2030. These strategies are being implemented and monitored in the immediate-to-short-term (1-5 years), but also being evaluated longer term over the next 10 years.

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 Indirect costs Capital expenditures	Revenues: As customer purchasing behaviors shift and regulations emerge and evolve in the short-term, Applied Materials has the opportunity to develop technologies that meet more stringent efficiency requirements. For example, technology that can reduce the power consumption of semi-conductor chips has the potential to generate hundreds of millions of dollars in revenue annually for Applied. The company has invested R&D funds to deploy a global "Design for Sustainability" team within our Semiconductor business with the expectation that our more efficient semiconductor product offerings will lead to meaningful product differentiation for the market. Indirect costs: To increase resiliency, reduce operating costs, and meet our 100% renewable electricity goals, Applied has been and continues to evaluate and procure renewable sources of electricity, through means such as on-site solar arrays, utility green energy programs, and a virtual power purchase agreement (VPPA). Capital expenditures: Applied has invested and continues to evaluate investments in renewable energy projects, such as on-site solar. Projects are evaluated following Applied's standard capital project evaluation process based on their projected financial performance and strategic value.

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

2020

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Market-based

Scope 3 category(ies)

<Not Applicable>

Base year

2019

Base year Scope 1 emissions covered by target (metric tons CO2e)

53494

Base year Scope 2 emissions covered by target (metric tons CO2e)

82521

Base year Scope 3 emissions covered by target (metric tons CO2e)

<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

136016

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

68008

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

43982

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

49290

Scope 3 emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

93272

% of target achieved relative to base year [auto-calculated]

62.8514292436184

Target status in reporting year

Underway

Is this a science-based target?

Yes, we consider this a science-based target, and the target is currently being reviewed by the Science Based Targets initiative

Target ambition

1.5°C aligned

Please explain target coverage and identify any exclusions

The absolute target covers 100% of our company-wide Scope 1 and Scope 2 market-based emissions in the base year, and is being submitted as Applied Materials' scope 1 and 2 science-based target to SBTi for validation in 2022.

Plan for achieving target, and progress made to the end of the reporting year

Applied has already made substantial progress towards its scope 1 and 2 target in 2021, achieving a 31% reduction from our 2019 baseline year. The biggest factor contributing to this is our scaling of renewable electricity procurement, namely our White Mesa, TX wind VPPA coming online in 2021. Other utility-level procurement of renewables as well as some efficiencies at our facilities are also supporting progress towards our goal. Looking forward, Applied has developed a roadmap to reach its goal of 100% renewable electricity globally, which will be the key lever to achieving our scope 1 and 2 SBT. In addition, measures to enhance efficiency across our buildings, manufacturing sites, and labs are also in the process of being evaluated as well as methods for any new buildings to meet high standards for energy efficient equipment

and access to renewable electricity.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

C4.2

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

Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2020

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2019

Consumption or production of selected energy carrier in base year (MWh)

399468

% share of low-carbon or renewable energy in base year

36.5

Target year

2030

% share of low-carbon or renewable energy in target year

100

% share of low-carbon or renewable energy in reporting year

56.6

% of target achieved relative to base year [auto-calculated]

31.6535433070866

Target status in reporting year

Underway

Is this target part of an emissions target?

This target will ultimately be incorporated and submitted as a part of Applied Materials' science-based target, anticipated to be set through SBTi in 2022.

Is this target part of an overarching initiative?

Science Based Targets initiative

Please explain target coverage and identify any exclusions

The target aims for 100% of our total electricity globally to come from renewable sources by 2030, with an interim goal of 100% renewable electricity in the U.S. by 2022.

Plan for achieving target, and progress made to the end of the reporting year

Applied Materials has been working with a third-party renewable energy consultant to develop a roadmap to reaching 100% renewable electricity globally. We have identified the top available measures for renewables across all the countries in which we operate, and prioritized these measures to initiate implementation. Currently Applied's VPPA for a wind project in White Mesa, TX is the key contributor to our progress on this goal, however some localized utility-level renewables procurement is also included.

List the actions which contributed most to achieving this target

<Not Applicable>

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	0	0
To be implemented*	0	0
Implementation commenced*	1	0
Implemented*	4	101896
Not to be implemented	0	0

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 consumption	Wind
-------------------------------	------

Estimated annual CO2e savings (metric tonnes CO2e)

36624

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

500000

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

0

Payback period

<1 year

Estimated lifetime of the initiative

11-15 years

Comment

Applied Materials signed a 12-year VPPA contract with White Mesa Wind. The project went online in Q4 2021. Annual savings are calculated using current US REC prices.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix
-------------------------------	----------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

4749

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

456000

Payback period

No payback

Estimated lifetime of the initiative

1-2 years

Comment

Austin Energy GreenChoice allows Applied Materials to support renewable energy by ensuring Austin Energy purchases of Texas wind power match Applied's usage. Applied undergoes periodic renewals of this utility renewable energy program.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix
-------------------------------	----------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

22352

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

0

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

Silicon Valley Clean Energy is a Community Choice Energy program servicing Applied's Silicon Valley operations with clean energy. Applied undergoes periodic renewals of this utility renewable energy program.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix
-------------------------------	----------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

20815

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

0

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

Austin Energy retire their RECs on behalf of their customers as a part of their standard delivery of renewable electricity.

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix
-------------------------------	----------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

115

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

0

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

San Jose Clean Energy is a Community Choice Energy program servicing Applied's San Jose operations with clean energy. Applied undergoes periodic renewals of this utility renewable energy program.

Initiative category & Initiative type

Low-carbon energy consumption	Solar PV
-------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

1000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

16000000

Payback period

11-15 years

Estimated lifetime of the initiative

11-15 years

Comment

Applied Materials has installed solar photovoltaic arrays at our facilities located in Sunnyvale, California; Singapore; Xi'an, China; Bangalore, India, and Austin, Texas, with estimated CO2 savings of 1,000 tCO2e annually.

Initiative category & Initiative type

Low-carbon energy consumption	Other, please specify (Unbundled Renewable Energy Certificates (RECs))
-------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

10702

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

100000

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

Unbundled Renewable Energy Certificates (RECs) saved an estimated 10,702 tCO2e in 2021. Applied undergoes assessments of REC decisions on an annual basis.

Initiative category & Initiative type

Low-carbon energy consumption	Large hydropower (>25 MW)
-------------------------------	---------------------------

Estimated annual CO2e savings (metric tonnes CO2e)

2688

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

0

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

Our Alzenau Germany operations are powered by large hydropower.

Initiative category & Initiative type

Low-carbon energy consumption	Solar PV
-------------------------------	----------

Estimated annual CO2e savings (metric tonnes CO2e)

1966

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

0

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

0

Payback period

No payback

Estimated lifetime of the initiative

Ongoing

Comment

A portion of our electricity consumption in the International Tech Park in Bangalore, India is offset through rooftop solar PV, which is financed by the building owner.

C4.3c

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

Method	Comment
Internal finance mechanisms	Over time, we invest in our infrastructure to improve its energy efficiency and reduce associated GHG emissions. Enhancing building systems such as by replacing aging heating and cooling systems or retrofitting lighting systems improves operational efficiencies and supports sustainability initiatives. As we purchase (or design and build) new buildings, we look for ways to incorporate energy efficiency measures.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon

Other, please specify (SEMI S23 Guide for Conservation of Energy, Utilities and Materials Used by Semiconductor Manufacturing Equipment)

Type of product(s) or service(s)

Other	Other, please specify (More efficient semiconductor manufacturing systems)
-------	---

Description of product(s) or service(s)

Applied offers emissions measurement systems, pollution abatement equipment and consulting services to help our customers reduce their GHG emissions. Our company provides an industry standard calculation of the energy consumption of our products using the SEMI S23 standard allowing our customers to forecast energy use and emissions related to the operation of our equipment. This data allows our company and our customers to work together to improve the performance of our products. The Applied iSystem controller is one example of how our products can help minimize our customers' energy and resource consumption in their semiconductor manufacturing. In today's semiconductor fab, the focus on saving energy and resources has shifted from facility operations to the subfab, which contains support equipment (pumps, abatement systems, etc.) that can consume around half of the total energy use of the fabrication facility. To reduce energy consumption and conserve natural resources, we offer the Applied iSystem controller, which incorporates a hot standby idle mode in subfab control systems. While monitoring tool operation, the Applied iSystem controller collects valuable data that can be used to generate resource consumption and GHG emissions. More than 3,000 pieces of subfab equipment in customer fabs are connected to the Applied iSystem and predecessor control systems, thereby supporting customer sustainability initiatives.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

<Not Applicable>

Functional unit used

<Not Applicable>

Reference product/service or baseline scenario used

<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario

<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions

<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

1

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

Name of organization(s) acquired, divested from, or merged with

<Not Applicable>

Details of structural change(s), including completion dates

<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

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

Scope 1

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

53494

Comment

Scope 1 2019 data is being restated due to a corrected error in the emissions factor used in the calculations. Scope 1 data excludes emissions associated with on-site wastewater treatment and mobile combustion (which are estimate to represent less than 2% of total Scope 1 emissions).

Scope 2 (location-based)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

144616

Comment

Scope 2 (market-based)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

82521

Comment

Scope 3 category 1: Purchased goods and services

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

1862516

Comment

Spend-based analysis of total 2019 direct and indirect spend using 2019 U.S. EPA EEIO factors.

Scope 3 category 2: Capital goods

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

61953

Comment

Spend-based analysis of total 2019 capital spend using 2019 U.S. EPA EEIO factors.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

36012

Comment

Average-data method using total 2019 energy consumption by source and 2019 DEFRA fuels and T&D emission factors. Well-to-tank (WTT) emissions from Transmission & Distribution (T&D) losses are not included.

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

155478

Comment

Spend-based analysis of total 2019 transportation and distribution spend by mode (air, ocean, ground) using 2019 U.S. EPA EEIO factors .

Scope 3 category 5: Waste generated in operations

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

531

Comment

2019 waste tonnage by disposal method using relevant 2019 DEFRA waste emission factors. Represents data from over 80% of sites by square footage.

Scope 3 category 6: Business travel

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

97953

Comment

• Air travel calculated using total 2019 distances traveled by cabin type using relevant DEFRA business travel emission factors • Hotel stays based on total number of nights using the 2019 DEFRA hotel stay emission factor • Vehicle rentals based on total 2019 spend using a 2019 U.S. EPA EEIO factor

Scope 3 category 7: Employee commuting

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

76751

Comment

• Estimated using total 2019 employee headcount by region • Assumption on proportion of employees in each region commuting by various transportation modes and average distances travelled (based on country census or commuter survey data) • Calculated using the relevant 2019 DEFRA transportation mode factor

Scope 3 category 8: Upstream leased assets

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

2601

Comment

Includes leased vehicles and equipment with total 2019 fuel consumption or mileage using 2019 DEFRA fuel and vehicle factors. Where fuel consumption or distance is not available, estimates are used based on number and type of vehicles.

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

191577

Comment

• Estimated using total shipped units in 2019 with an average weight per unit and a breakdown of which global regions they were shipped to • The average distance per unit was estimated using the most common shipping locations. • The mode of transport breakdown was based on available outbound data • Calculated using the relevant 2019 U.S. EPA ton-mile factor

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not applicable - Applied's products are not processed by customers

Scope 3 category 11: Use of sold products

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

9610156

Comment

• Calculated based on 2019 sold units using the SEMI S23 standard to model Applied semiconductor tools' annual energy consumption across product categories, multiplied by an average 10-year product lifespan. • Emissions in this category include the energy, chemicals and gases used by Applied semiconductor tools as well as the ancillary equipment required to power the tools. • Also includes emissions from the combustion of natural gas in point-of-use abatement systems where applicable. • Does not yet include emissions from refurbished tools, nor from Applied's Display business (which represented 11% of total net sales in 2019) or other products. We will incorporate these emissions estimates in future reporting years.

Scope 3 category 12: End of life treatment of sold products

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

713

Comment

• Based on total weight of 2019 sold units • Uses an assumption on primary material composition of products • Calculated using relevant 2019 DEFRA waste factors

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not applicable – Applied does not lease out any assets

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Not applicable – Applied does not have franchises

Scope 3 category 15: Investments

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

5584

Comment

Based on investee business sector, total 2019 revenues, and % ownership stake mapped to US EPA EEIO sector spend-based emission factors. For 2 (out of 27) companies where company revenues were not available, averages were used based on the other companies' revenues.

Scope 3: Other (upstream)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

Comment

Not applicable

Scope 3: Other (downstream)

Base year start

January 1 2019

Base year end

December 31 2019

Base year emissions (metric tons CO2e)

Comment

Not applicable

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

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)
43982

Start date
January 1 2021

End date
December 31 2021

Comment
Scope 1 emissions include process gases, onsite fuel combustion and refrigerant leaks. This category excludes emissions associated with on-site wastewater treatment and mobile combustion as these are considered immaterial to our overall emissions (estimate to represent less than 2% of total Scope 1 emissions).

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)
49083

Start date
January 1 2020

End date
December 31 2020

Comment
Scope 1 emissions include process gases, onsite fuel combustion and refrigerant leaks. This category excludes emissions associated with on-site wastewater treatment and mobile combustion as these are considered immaterial to our overall emissions (estimate to represent less than 2% of total Scope 1 emissions).

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)
53494

Start date
January 1 2019

End date
December 31 2019

Comment
In 2020 we updated our emission monitoring program and tracking to new Intelix platform. Scope 1 2019 data is being restated due to a corrected error in the emissions factor used in the calculations. Scope 1 data excludes emissions associated with on-site wastewater treatment and mobile combustion (estimate to represent less than 2% of total Scope 1 emissions).

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
Many of our operations are located in regions that have substantial quantities of renewable electricity sources available. To capture these benefits, we are reporting both market-based and location-based figures.

C6.3

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

Reporting year

Scope 2, location-based

149301

Scope 2, market-based (if applicable)

49290

Start date

January 1 2021

End date

December 31 2021

Comment

Past year 1

Scope 2, location-based

137128

Scope 2, market-based (if applicable)

79939

Start date

January 1 2020

End date

December 31 2020

Comment

Past year 2

Scope 2, location-based

144616

Scope 2, market-based (if applicable)

82521

Start date

January 1 2019

End date

December 31 2019

Comment

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?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Wastewater

Relevance of Scope 1 emissions from this source

Emissions are relevant but not yet calculated

Relevance of location-based Scope 2 emissions from this source

No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions from this source

Explain why this source is excluded

Due to limited time and resources and the minimal estimated contribution to Scope 1 emissions from this source, we did not prioritize developing a methodology to incorporate emissions from wastewater in this reporting year.

Estimated percentage of total Scope 1+2 emissions this excluded source represents

1

Explain how you estimated the percentage of emissions this excluded source represents

1% of our Scope 1 total is approximately 440 MT CO₂e. Based on estimation calculations of wastewater treatment emissions and the amount of wastewater processing happening across facilities, emissions are less than 440 MT CO₂e.

Source

Mobile emissions

Relevance of Scope 1 emissions from this source

Emissions are relevant but not yet calculated

Relevance of location-based Scope 2 emissions from this source

No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions from this source

Explain why this source is excluded

Based on the minimal size of our mobile fleet and the magnitude of our Scope 1 emissions, we concluded that this source of emissions was immaterial and not prioritized to include in reporting and assurance this reporting year.

Estimated percentage of total Scope 1+2 emissions this excluded source represents

1

Explain how you estimated the percentage of emissions this excluded source represents

1% of our Scope 1 total is approximately 440 MT CO₂e. Based on the minimal size of our mobile fleet and the data that is available to us, our mobile emissions are estimated to be less than 440 MT CO₂e. (Note: emissions from leased vehicles are included in our Scope 3 Category 8 calculation.)

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, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Capital goods

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

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

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Business travel

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Employee commuting

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Upstream leased assets

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Downstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons 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

Applied Materials produces final products - there is no further processing of sold products.

Use of sold products

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

End of life treatment of sold products

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons 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

Not applicable – Applied does not lease out any assets

Franchises

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons 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

Not applicable – Applied does not have any franchises

Investments

Evaluation status

Relevant, not yet calculated

Emissions in reporting year (metric tons 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

Applied focused on completing its 2019 Scope 3 baseline in 2021. 2021 emissions will be calculated in early 2023 and included in next year's CDP response.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons 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 other upstream emissions sources exist

Other (downstream)

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons 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 other downstream emissions sources exist

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1 2020

End date

December 31 2020

Scope 3: Purchased goods and services (metric tons CO2e)

Scope 3: Capital goods (metric tons CO2e)

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Scope 3: Upstream transportation and distribution (metric tons CO2e)

Scope 3: Waste generated in operations (metric tons CO2e)

Scope 3: Business travel (metric tons CO2e)

Scope 3: Employee commuting (metric tons CO2e)

Scope 3: Upstream leased assets (metric tons CO2e)

Scope 3: Downstream transportation and distribution (metric tons CO2e)

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

Scope 3: End of life treatment of sold products (metric tons CO2e)

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Applied focused on completing its 2019 Scope 3 baseline in 2021.

Past year 2

Start date

January 1 2019

End date

December 31 2019

Scope 3: Purchased goods and services (metric tons CO2e)

1862516

Scope 3: Capital goods (metric tons CO2e)

61953

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

36012

Scope 3: Upstream transportation and distribution (metric tons CO2e)

155478

Scope 3: Waste generated in operations (metric tons CO2e)

531

Scope 3: Business travel (metric tons CO2e)

97953

Scope 3: Employee commuting (metric tons CO2e)

76751

Scope 3: Upstream leased assets (metric tons CO2e)

2601

Scope 3: Downstream transportation and distribution (metric tons CO2e)

191577

Scope 3: Processing of sold products (metric tons CO2e)

Scope 3: Use of sold products (metric tons CO2e)

9610156

Scope 3: End of life treatment of sold products (metric tons CO2e)

713

Scope 3: Downstream leased assets (metric tons CO2e)

Scope 3: Franchises (metric tons CO2e)

Scope 3: Investments (metric tons CO2e)

5584

Scope 3: Other (upstream) (metric tons CO2e)

Scope 3: Other (downstream) (metric tons CO2e)

Comment

Categories 10, 13, and 14 are not applicable to Applied Materials.

C-CG6.6

(C-CG6.6) Does your organization assess the life cycle emissions of any of its products or services?

	Assessment of life cycle emissions	Comment
Row 1	Yes	Applied's Design for Sustainability Center of Excellence has developed energy and emission modelling solutions for representative groups of semiconductor products.

C-CG6.6a

(C-CG6.6a) Provide details of how your organization assesses the life cycle emissions of its products or services.

	Products/services assessed	Life cycle stage(s) most commonly covered	Methodologies/standards/tools applied	Comment
Row 1	Representative selection of products/services	Use stage	Other, please specify (SEMI S23)	Representative sets of semiconductor tools' product use-phase emissions are modelled following the SEMI S23 Guide for Conservation of Energy, Utilities and Materials Used by Semiconductor Manufacturing Equipment. Emissions include the energy, chemicals, and gases used by Applied semiconductor tools as well as the sub-fab equipment required to power the tools, and includes the combustion of natural gas in point-of-use abatement systems where applicable.

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

0.00000404

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

93272

Metric denominator

unit total revenue

Metric denominator: Unit total

2306300000

Scope 2 figure used

Market-based

% change from previous year

47

Direction of change

Decreased

Reason for change

The primary reasons for the decrease in CO2e intensity is due to the increase in our renewable electricity portfolio. Our White Mesa Wind VPPA became operational in 2021. We also experienced unprecedented demand in the semiconductor industry, causing our revenue to grow.

Intensity figure

3.4

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

93272

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

27223

Scope 2 figure used

Market-based

% change from previous year

37

Direction of change

Decreased

Reason for change

The primary reasons for our decrease in CO2e intensity is due to the increase in our renewable energy portfolio. Our White Mesa Wind VPPA became operational in 2021. We also experienced unprecedented growth in the semiconductor industry, causing our employee population to grow.

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	23814	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	2049	IPCC Fifth Assessment Report (AR5 – 100 year)
PFCs	1692	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	10154	IPCC Fifth Assessment Report (AR5 – 100 year)
SF6	3648	IPCC Fifth Assessment Report (AR5 – 100 year)
NF3	2625	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)
China	1541
France	0
Germany	902
India	4
Israel	129
Italy	143
Japan	0
Republic of Korea	71
Singapore	197
Taiwan, China	466
United States of America	40493
Canada	4
Ireland	5
Malaysia	7
Philippines	3
United Kingdom of Great Britain and Northern Ireland	2
Greece	0
Netherlands	15

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Stationary Combustion	23814
Process Emissions	18476
Refrigerants	1692

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)
Asia Pacific and Africa	48319	46352
Europe	22763	2938
North America	78219	0

C7.6

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

By activity

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 production to operate facilities	149301	49290

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?

Decreased

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	42823	Decreased	74.9	Change in emissions are due to the increase in renewable electricity projects that became operational in 2021, which resulted in a decrease of overall emissions. The difference in Scope 2 emissions is calculated based on the difference of (2020 Location-based Scope 2 minus 2020 Market-based Scope 2) subtracted from (2021 Location-based Scope 2 minus 2021 Market-based Scope 2)
Other emissions reduction activities		<Not Applicable >		
Divestment		<Not Applicable >		
Acquisitions		<Not Applicable >		
Mergers		<Not Applicable >		
Change in output	7072	Increased	3.8	Calculated from the difference between 2021 Scope 1 and 2020 Scope 1 plus the difference between 2021 Location-based Scope 2 and 2020 Location-based Scope 2
Change in methodology		<Not Applicable >		
Change in boundary		<Not Applicable >		
Change in physical operating conditions		<Not Applicable >		
Unidentified		<Not Applicable >		
Other		<Not Applicable >		

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?

Market-based

C-CG7.10

(C-CG7.10) How do your total Scope 3 emissions for the reporting year compare to those of the previous reporting year?

This is our first year of reporting

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)	0	131802	131802
Consumption of purchased or acquired electricity	<Not Applicable>	245563	188172	433735
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>	286	<Not Applicable>	286
Total energy consumption	<Not Applicable>	245849	319974	565823

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	Yes
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.

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

This fuel is not used

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

This fuel is not used

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

This fuel is not used

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

This fuel is not used

Oil

Heating value

HHV

Total fuel MWh consumed by the organization

1321

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Diesel

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

130481

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Natural gas

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

This fuel is not used

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

131802

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

0

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Natural gas and diesel

C8.2d

(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	6088	6088	6088	286
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

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

Sourcing method

Direct procurement from an off-site grid- connected generator e.g. Power purchase agreement (PPA)

Energy carrier

Electricity

Low-carbon technology type

Wind

Country/area of low-carbon energy consumption

United States of America

Tracking instrument used

US-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

92552

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

2021

Comment

White Mesa Wind VPPA

Sourcing method

Unbundled energy attribute certificates (EACs) purchase

Energy carrier

Electricity

Low-carbon technology type

Wind

Country/area of low-carbon energy consumption

United States of America

Tracking instrument used

US-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

63824

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Renewable Energy Certificates (RECs) purchases from Austin Energy and Silicon Valley Power

Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier

Electricity

Low-carbon technology type

Renewable energy mix, please specify (Wind, Solar)

Country/area of low-carbon energy consumption

United States of America

Tracking instrument used

US-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

46723

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Silicon Valley Clean Energy Community Choice Energy program

Sourcing method

Green electricity products from an energy supplier (e.g. green tariffs)

Energy carrier

Electricity

Low-carbon technology type

Solar

Country/area of low-carbon energy consumption

United States of America

Tracking instrument used

US-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

425

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

San Jose Clean Energy Community Choice Energy program

Sourcing method

Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

Energy carrier

Electricity

Low-carbon technology type

Wind

Country/area of low-carbon energy consumption

United States of America

Tracking instrument used

US-REC

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

31675

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Austin Energy standard delivery of renewable electricity from wind sources

Sourcing method

Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

Energy carrier

Electricity

Low-carbon technology type

Large hydropower (>25 MW)

Country/area of low-carbon energy consumption

Germany

Tracking instrument used

GO

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

7650

Country/area of origin (generation) of the low-carbon energy or energy attribute

Germany

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

Alzenau, Naturoption

Sourcing method

Purchase from an on-site installation owned by a third party

Energy carrier

Electricity

Low-carbon technology type

Solar

Country/area of low-carbon energy consumption

India

Tracking instrument used

Contract

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

2713

Country/area of origin (generation) of the low-carbon energy or energy attribute

India

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

International Tech Park campus in Bangalore solar PPA

C8.2g

(C8.2g) Provide a breakdown of your non-fuel energy consumption by country.

Country/area

United States of America

Consumption of electricity (MWh)

293726

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

293726

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Taiwan, China

Consumption of electricity (MWh)

41477

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

41477

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Israel

Consumption of electricity (MWh)

38545

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

38545

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

China

Consumption of electricity (MWh)

18197

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

18197

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Singapore

Consumption of electricity (MWh)

17544

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

17544

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Germany

Consumption of electricity (MWh)

9254

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

9254

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

India

Consumption of electricity (MWh)

6472

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

6472

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Republic of Korea

Consumption of electricity (MWh)

6094

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

6094

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Japan

Consumption of electricity (MWh)

1060

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1060

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Italy

Consumption of electricity (MWh)

914

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

914

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

France

Consumption of electricity (MWh)

191

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

191

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Netherlands

Consumption of electricity (MWh)

188

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

188

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Malaysia

Consumption of electricity (MWh)

147

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

147

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Philippines

Consumption of electricity (MWh)

65

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

65

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Ireland

Consumption of electricity (MWh)

62

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

62

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Canada

Consumption of electricity (MWh)

35

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

35

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

Greece

Consumption of electricity (MWh)

32

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

32

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of electricity (MWh)

19

Consumption of heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

19

Is this consumption excluded from your RE100 commitment?

<Not Applicable>

C-CG8.5

(C-CG8.5) Does your organization measure the efficiency of any of its products or services?

	Measurement of product/service efficiency	Comment
Row 1	No, but we plan to start doing so within the next two years	Applied set the goal in 2020 to reduce equivalent energy consumption for semiconductor products by 30% by 2030; modelling of typical energy use across our tools is being modelled as a part of this initiative.

C9. Additional metrics

C9.1

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

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	Applied is actively engaging in R&D and developing lower-carbon hardware and software solutions, from identifying more efficient processes, reducing inputs, or providing monitoring to identify hotspots and optimize performance of semiconductor manufacturing. Further, our technologies enable end products that are helping with decarbonization, such as more efficient semiconductor technologies and better battery storage.

C-CG9.6a

(C-CG9.6a) Provide details of your organization's investments in low-carbon R&D for capital goods products and services over the last three years.

Technology area

Other, please specify (Semiconductor manufacturing)

Stage of development in the reporting year

Large scale commercial deployment

Average % of total R&D investment over the last 3 years

≤20%

R&D investment figure in the reporting year (optional)

Comment

Designed in-house, our web-based modeling and quantification tool analyzes design and end-user data to pinpoint sustainability improvements for legacy, in-production, and design-stage semiconductor manufacturing tools. Modeling efforts focus on our 3x30 goals of reducing energy use, chemical consumption, and the equipment's physical footprint to increase throughput density per square foot of cleanroom space. Analysis of tools in the design stage provides design engineers with data on the tool's projected resource consumption and other environmental impacts, allowing improvements before the tool goes into production. Analysis of existing tools supports identification of process efficiency improvements that we can communicate to our customers to boost sustainability performance.

Technology area

Other, please specify (Display technology)

Stage of development in the reporting year

Large scale commercial deployment

Average % of total R&D investment over the last 3 years

≤20%

R&D investment figure in the reporting year (optional)

Comment

In the 2000s, Applied Materials' advanced equipment ushered in the era of flat-panel LCD displays, a transformative technology that consumes less than half the energy of older CRT displays. Now Applied Materials' Display business is poised to drive the next evolution in screen technology through tools that simplify fabrication of OLED (organic light-emitting diode) displays, driving down production costs and consumer prices. Unlike LCDs, which use liquid crystals to modulate light from an always-on backlight unit, the pixels in OLED technology are self-illuminating. This simplified architecture makes possible thinner and more flexible panels with superior color range and contrast, cooler running temperatures, and lower energy consumption. Since OLED screens consume power in direct ratio to the brightness of the picture they're displaying, darker display color modes, and schemes consume between 30% and 60% less energy than LCDs in similar display modes.

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	Third-party verification or assurance process in place

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

ERM CVS-Assurance Statement for Applied Materials-2022 CDP Climate.pdf

Page/ section reference

Page 1

Relevant standard

ERM GHG Performance Data Assurance Methodology

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 market-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

ERM CVS-Assurance Statement for Applied Materials-2022 CDP Climate.pdf

Page/ section reference

Page 1

Relevant standard

ERM GHG Performance Data Assurance Methodology

Proportion of reported emissions verified (%)

100

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

ERM CVS-Assurance Statement for Applied Materials-2022 CDP Climate.pdf

Page/ section reference

Page 1

Relevant standard

ERM GHG Performance Data Assurance Methodology

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

- Scope 3: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations
- Scope 3: Business travel
- Scope 3: Employee commuting
- Scope 3: Upstream leased assets
- Scope 3: Investments
- Scope 3: Downstream transportation and distribution
- Scope 3: Use of sold products
- Scope 3: End-of-life treatment of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance

Limited assurance

Attach the statement

ERM CVS-Assurance Statement for Applied Materials-2022 CDP Climate.pdf

Page/section reference

Page 1- 2

Relevant standard

ERM GHG Performance Data Assurance Methodology

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 ISAE 3000 (Revised)	The following energy data was assured: - Total energy consumption [MWh] - Total electricity consumption [MWh] - Total renewable energy consumption [MWh] - Percentage renewable electricity consumption [%] ERM CVS-Assurance Statement for Applied Materials-2022 CDP Climate.pdf
C6. Emissions data	Other, please specify (All applicable)	International Standard on Assurance Engagements ISAE 3000 (Revised)	Gross global Scope 1 emissions Scope 2 GHG emissions (location and market-based) Intensity emissions ERM CVS-Assurance Statement for Applied Materials-2022 CDP Climate.pdf
C5. Emissions performance	Other, please specify (All applicable)	International Standard on Assurance Engagements ISAE 3000 (Revised)	Total Scope 3 GHG emissions for base year 2019 ERM CVS-Assurance Statement for Applied Materials-2022 CDP Climate.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, our customers/clients

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

4

% total procurement spend (direct and indirect)

80

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

71

Rationale for the coverage of your engagement

Applied recognizes there is substantial climate and energy impact across our value chain. ~15% of our scope 3 2019 baseline emissions lie in the Purchased Goods and Services category, demonstrating the importance of gathering information and engaging the suppliers associated with this key category of emissions. Applied Materials evaluates material ESG impacts within our supply chain, including climate and energy performance, by assessing 80% of its direct suppliers by spend for compliance with the RBA code of conduct and by assessing their GHG programs with an additional GHG focused survey. Data is collected and analyzed on an annual basis, and is augmented with further external research of climate-related goals and metrics using publicly available information.

Impact of engagement, including measures of success

We have escalated the issue of climate and energy management with suppliers through our enhanced effort to gather this level of performance data from our key direct suppliers covering ~80% of spend. The request for the data and communication of expectation to suppliers that these issues be effectively managed helps drive action in parts of the semiconductor supply chain that have not typically been reached. Key measures of success include increasing supplier response rates to the survey by ~10% per year as well as increasing the proportion of responding suppliers each year who are a) tracking and measuring their energy and emissions and b) establishing GHG reduction goals.

Comment

The % of supplier-related Scope 3 emission is estimated based on our 2019 Scope 3 baseline data.

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

1

% total procurement spend (direct and indirect)

15

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

15

Rationale for the coverage of your engagement

Applied's SuCESS2030 initiative includes a 10-year roadmap that extends our sustainability vision across our supply chain for semiconductor and display manufacturing. Through this program, Applied communicates its ESG priorities, including climate and energy-related issues, engages and educates suppliers on expectations, and identifies high risk suppliers who are then audited against the framework. In 2021 we conducted a specific environmental management training with 20 top-spend direct suppliers. The training engaged suppliers on how to measure their environmental footprint, including how to collect data on greenhouse gas emissions, energy use, water withdrawal, and waste generation, as well as qualitative data on their respective reduction targets and efforts. The training covered how to set organizational boundaries and best practices on accounting and reporting their environmental footprint.

Impact of engagement, including measures of success

Through the supplier assessment process, we have begun to educate and communicate to our suppliers the importance of the principles covered in the RBA code of conduct, including the expectation to track, set goals against, and reduce GHG emissions. Although our first year of training engagement was with a limited group, we are working to gradually increase direct engagement on this topic. This year we are expanding our engagement program through live webinars, online training, and e-learning through the RBA academy, which we expect to further build capacity and drive action across our key suppliers. A key measure of success includes increasing the number of suppliers engaged through such training, ideally doubling the number in 2022.

Comment

% of spend and emissions is estimated based on number of participants in this initiative and our 2019 Scope 3 baseline data

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to education customers about your climate change performance and strategy
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% of customers by number

14

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

70

Please explain the rationale for selecting this group of customers and scope of engagement

Scope 3 Category 11 covering the use of our semiconductor products in our customer's facilities is the largest contributor to our emission, representing nearly 80% of our total GHG footprint. Applied cannot achieve its own Scope 3 reduction goals without engaging our customers. Applied engages its largest customers by sales and emissions to share information on its low-carbon and more efficient product offerings and will collaborate with customers to model energy savings opportunities and implement solutions, such as our iSystem intelligent controller, which enables tracking of resource consumption, emissions, and other environmental factors. We prioritize our largest customers to amplify the impact these products can have in the market, and fortunately these largest customers are also generally the ones that have their own established climate and energy-related goals and initiatives in place, which we can support through hardware and software solutions. Much of our footprint depends on how our customers use our equipment, and so close collaboration is needed to support development of lower impact processes.

Impact of engagement, including measures of success

With this design support, our product groups' responsibilities extend beyond traditional performance attributes to encompass sustainability performance as well—adding new features to our existing portfolio of energy-saving product enhancements, passing on substantial energy saving opportunities to our customers, and modelling sustainability leadership industry-wide—for example, redesigning chillers and chilling processes to reduce energy and water consumption, locating sensors optimally to collect data and inform sustainability improvements, etc. Through such measures we have enabled annual energy use reductions in the tens of millions of kWh per year for our customers, and expect this trend to continue to increase in the coming years. Key measures of success include maintaining or increasing engagement with customers representing at least 70% of Scope 3 Category 11 emissions, increasing the total number of energy-saving projects implemented per customer per year, and increasing the total annual savings of such projects in terms of kWh and CO2e.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Climate-related disclosure through a non-public platform

Description of this climate related requirement

Applied expects its direct suppliers representing ~80% of procurement spend to disclose their available climate and energy data as a part of the annual RBA assessment process. Applied uses an environmental survey to capture information on total scope 1, 2, and 3 greenhouse gas emissions, energy and water consumption, waste generation, any goals/targets suppliers have set to improve their performance, and where more information regarding their climate, energy and water programs can be found. In addition, Applied reviews suppliers' publicly available sustainability reports and CDP disclosures to track and validate climate-related data.

% suppliers by procurement spend that have to comply with this climate-related requirement

80

% suppliers by procurement spend in compliance with this climate-related requirement

61

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

Direct or indirect engagement that could influence policy, law, or regulation that may impact the climate

Yes, we engage indirectly through trade associations

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

No, and we do not plan to have one in the next two years

Attach commitment or position statement(s)

<Not Applicable>

Describe the process(es) your organization has in place to ensure that your engagement activities are consistent with your overall climate change strategy

The ESG team works closely with Applied's Government Affairs team to ensure awareness of Applied's ESG-related priorities and objectives (including climate-related issues) and alignment in any engagement efforts. The Government Affairs team actively flags key updates, rulemaking and opportunities that may pertain to Applied's climate interests – for example the recent SEC proposed ruling on climate-related disclosures.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization engages with which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify (Semiconductor Industry Associate (SIA))

Is your organization's position on climate change consistent with theirs?

Mixed

Has your organization influenced, or is your organization attempting to influence their position?

We have already influenced them to change their position

State the trade association's position on climate change, explain where your organization's position differs, and how you are attempting to influence their position (if applicable)

SIA has generally been active in evaluating and engaging on climate-related issues on behalf of the semiconductor industry. Because it's a trade organization, it needs to engage and balance the views of many different sector members. Applied offers its input and engagement on relevant climate-related matters where appropriate.

Funding figure your organization provided to this trade association in the reporting year, if applicable (currency as selected in C0.4) (optional)

Describe the aim of your organization's funding

<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

No, we have not evaluated

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 mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

2021_Sustainability_Report.pdf

2021_Sustainability_Annex.pdf

Page/Section reference

2021 Sustainability Report: Planet and Progress sections - Link:

https://www.appliedmaterials.com/content/dam/site/company/csr/doc/2021_Sustainability_F.pdf.coredownload.inline.pdf 2021 Sustainability Annex: Environmental Metrics, SASB Index, TCFD Index - attached

Content elements

Governance

Strategy

Risks & opportunities

Emissions figures

Emission targets

Other metrics

Comment

Report file too large to attach - please access here: https://www.appliedmaterials.com/content/dam/site/company/csr/doc/2021_Sustainability_F.pdf.coredownload.inline.pdf

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	No, and we do not plan to have both within the next two years	<Not Applicable>	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	No, and we do not plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impact of its value chain on biodiversity?

	Does your organization assess the impact of its value chain on biodiversity?	Portfolio
Row 1	No, and we do not plan to assess biodiversity-related impacts within the next two years	<Not Applicable>

C15.4

(C15.4) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity-related commitments
Row 1	No, and we do not plan to undertake any biodiversity-related actions	<Not Applicable>

C15.5

(C15.5) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	Please select

C15.6

(C15.6) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
No publications	<Not Applicable>	<Not Applicable>

C16. 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.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	President and Chief Executive Officer	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.

SC0.1

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

	Annual Revenue
Row 1	23063000000

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
Customer base is too large and diverse to accurately track emissions to the customer level	Allocating emissions, even just Scope 1 and 2 emissions to a specific customer is inherently extremely complex considering the total number of customers Applied Materials works with, the large variety of products and services supplied to each customer, and ability to isolate manufacturing and R&D process to a particular customer in a given year. Simply taking a proportion of emissions by sales dollars or units would not be an accurate approach.
Doing so would require we disclose business sensitive/proprietary information	Some of the information being requested may be considered confidential or sensitive, and should not be disclosed to protect the scale and scope of our various business relationships.

SC1.4

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

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Applied has refined its GHG emission calculations substantially over the past few years. We understand the importance of helping allocate emissions to our key customers to enable collective action on emission reduction measures. Applied is evaluating methods to provide credible, accurate data that does not compromise sensitive information about our various business relationships and is simultaneously engaging through industry groups such as SEMI to evaluate effective approaches to doing so systematically across the industry.

SC2.1

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

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 understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms