C0. Introduction

C0.1

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

Rambus provides industry-leading chips and silicon IP that make data faster and safer. With more than 30 years of advanced semiconductor experience, Rambus is a pioneer in high-performance memory subsystems that solve the bottleneck between memory and processing for data-intensive systems. Whether in the cloud, at the edge or in your hand, real-time and immersive applications depend on data throughput and integrity. Our products and innovations deliver increased bandwidth, capacity and security required to meet the world's data needs and drive ever-greater end-user experience.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
January 1 2022

End date
December 31 2022

Indicate if you are providing emissions data for past reporting years
No

Select the number of past reporting years you will be providing Scope 1 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 2 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 3 emissions data for
<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.
Bulgaria
Canada
Finland
France
India
Netherlands
Republic of Korea
Taiwan, China
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

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 or committee	Responsibilities for climate-related issues
Board-level committee	The Corporate Governance / Nominating Committee (CGNC) reviews Rambus's CSR and ESG policies, programs, initiatives, and reports.

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 – all meetings	Reviewing and guiding annual budgets Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing the setting of corporate targets Monitoring progress towards corporate targets Reviewing and guiding the risk management process	<Not Applicable>	Climate-related issues are a regularly scheduled agenda item at the CGNC meeting at least annually. Rambus's Board of Directors is responsible for overseeing our ESG practices, including climate-related issues. The Board's CGNC reviews our ESG policies, programs, initiatives and progress at least annually and makes recommendations to the full Board of Directors regarding Rambus's ESG policies and practices.

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	The Board of Directors were asked to complete a self-assessment on a variety of specialized expertise including ESG/climate risks. The Directors can rate themselves at three levels, no skill/experience, moderately skilled/experienced or significantly skilled. Additional details are requested to further substantiate the Directors' qualifications if significantly skilled is selected for any specialized expertise. The Board skills matrix will be reviewed annually by the CGNC.	<Not Applicable>	<Not Applicable>

C1.2

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

Position or committee
Chief Executive Officer (CEO)

Climate-related responsibilities of this position
Integrating climate-related issues into the strategy
Monitoring progress against climate-related corporate targets
Assessing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
Annually

Please explain
The CEO and CEO's Direct Staff, along with the Corporate Governance / Nominating Committee, have overall responsibility for Rambus's ESG and CSR programs which include assessing climate-related risks and opportunities and monitoring progress against targets once set. These personnel are responsible for receiving information from the ESG council, integrating relevant information into the strategy and relaying ESG-related information to the Board.

Position or committee
Other, please specify (ESG Council)

Climate-related responsibilities of this position
Managing annual budgets for climate mitigation activities
Providing climate-related employee incentives
Setting climate-related corporate targets
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Annually

Please explain
The ESG Council consists of the SVP and General Counsel, SVP of Human Resources (HR), SVP of Global Operations, VP Chief of Staff, and a cross-departmental Advisory Council which includes leadership members from Legal, Facilities/Global Operations and Marketing. Members of the ESG Council meet at least twice annually and their responsibilities include reviewing and approving policies, strategies, climate-related targets and funding activities associated with implementing aspects of our ESG and CSR program. The ESG Council is also responsible for monitoring internal and external trends to identify potential risks that could have a material impact on our ESG program.

Position or committee
Other, please specify (CSR/ESG Operational Working Group)

Referred to within Rambus as CSR/ESG Committee

Climate-related responsibilities of this position
Monitoring progress against climate-related corporate targets
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities
Other, please specify (Establishing, managing, and implementing programs based on the Rambus ESG Management System Framework)

Coverage of responsibilities
<Not Applicable>

Reporting line
Other, please specify (ESG Council)

Frequency of reporting to the board on climate-related issues via this reporting line
Annually

Please explain
The CSR/ESG Committee consists of members from the Legal, Facilities/Global Operations, Marketing, HR and Supply Chain departments. This committee manages and implements the ESG/CSR programs, policies and initiatives, including those related to climate change. This group meets at least twice annually to provide accurate, cogent and concise reporting on our activities. This committee reports to the ESG Council.

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	No, not currently but we plan to introduce them in the next two years	We are in the process of determining a climate target and plan to introduce the target this year. After our target is established, we will evaluate options to introduce incentives for the management of climate-related issues including the attainment of targets.

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	3	
Medium-term	3	10	
Long-term	10	30	

C2.1b

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

Rambus utilizes an Enterprise Risk Management protocol for the identification of material risks that may have a substantive financial or strategic impact on our business. We define material risks as risks that have a high likelihood of impacting Rambus's operations and financial performance. All material risk factors are reported in our 10-K annual filings.

C2.2

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

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

Annually

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Rambus currently evaluates climate-related risks as a key component of our broader risk management frameworks which include ISO 9001 and Business Continuity Management System (BCMS). The Board of Directors meets regularly to receive reports from its committees, as well as from management with respect to areas of material risk to the company, including legal, operational, financial and strategic risks. Currently the Rambus ERM program does not explicitly include climate-related risks. Rather, climate risks are considered as an input when relevant and are integrated into the respective management systems.

Rambus follows the standard set forth in the ISO 9001 management system. Under the ISO 9001 system, business units identify risks that could impact their operations and climate-related issues are considered in this process when relevant. Risks are incorporated into the business unit's risk register, managed by the assigned risk owners, and evaluated periodically.

Through the BCMS framework, climate-related issues are considered as integral risk factors that could impact business continuity. Leaders in Operations, HR and Technology Partnerships and Corporate Development ensure business continuity is integrated into Rambus's business strategy and operations while also promoting continual improvement of the BCMS. A cross-functional working groups supports these leaders by reviewing internal and external issues on a regular basis, supporting the implementation of business continuity initiatives, and ensuring the effectiveness of the management systems.

In the coming years, Rambus plans to enhance the ERM program by incorporating climate-related risks into main pillars such as financial, market, brand, operational and compliance risks. We believe that the updated ERM program will allow us to further integrate climate-related risks in the organization and streamline the process of identifying, assessing and managing these risks.

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	Compliance with current regulation is always included in our risk assessment. Our business is headquartered in the state of California where environmental regulations are among the strictest in the US. We regularly review regulatory compliance requirements such as hazardous waste disposal and air quality, among others and ensure our facilities are compliant with federal, state and local regulations.
Emerging regulation	Relevant, always included	Compliance with changing regulation of corporate governance and public disclosure may result in additional expenses that could impact our bottom line. For example, our compliance cost may increase under the proposed SEC disclosure rule in the US and we are closely following these emerging regulations to ensure we will be compliant.
Technology	Relevant, always included	Technology risk is relevant and is always considered in our risk management process. For example, through our business continuity management system, we regularly review technologies such as renewable energy and battery systems that could potentially improve our resiliency against natural disasters and operation disruptions.
Legal	Relevant, always included	Legal risks have always been considered in our risk management processes. We may be subject to legal claims or regulatory matters involving consumer, stockholder, employment, competition, IP and other issues on a global basis. However, we consider our legal risks related to climate change are low as current and emerging regulations are more relevant at this time.
Market	Relevant, always included	We rely on third parties for a variety of services, including manufacturing, and these third parties' failure to perform these services adequately or change the allocation of their services/capacity due to industry or other pressures could materially and adversely affect our business.
Reputation	Relevant, always included	Rambus has a relatively concentrated customer base and this risk is always included in our risk assessment. Customers and stakeholders are increasingly requesting information on our ESG practices and initiatives, which include climate-related issues. Rambus makes great effort to maintain our reputation by meeting stakeholder expectations and delivering excellence. Reputation risk is always included in our risk management processes. For example, through our risk management processes, we became aware that our customers are increasingly asking about our efforts to reduce energy consumption of our products and we have integrated the management of this risk into our product design processes.
Acute physical	Relevant, always included	Our operations are subject to risk of natural disasters that may intensify due to climate change at our domestic and international locations. Any one of which could result in a business stoppage and negatively affect our operating results. For example, our San Jose headquarters and the local employees are at risk of experiencing wildfires and flooding events, and our location in Bangalore, India has a high risk of heat wave. These physical risks are integrated in our risk management processes through the BCMS and the Environmental, Health, Safety and Energy management system.
Chronic physical	Relevant, always included	Our operations are subject to risks of chronic physical risks such as chronic water stress and sea level rise. Our San Jose headquarters may be at risk of sea level rise, and our location in Bangalore, India has a high risk of drought. These physical risks are integrated in our risk management processes through the BCMS and the Environmental, Health, Safety and Energy management system.

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?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Wildfire

Primary potential financial impact
Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Our headquarters building in San Jose and data centers located near our headquarters are at high risk of wildfire and this risk may be exacerbated by increasing temperatures. This may lead to disruptions in our operations and potential asset damages.

Time horizon
Short-term

Likelihood
Very likely

Magnitude of impact
High

Are you able to provide a potential financial impact figure?
Yes, an estimated range

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
0

Potential financial impact figure – maximum (currency)
10000000

Explanation of financial impact figure
The financial impact estimate of this risk includes impacts that would occur from loss of our corporate headquarters and associated business interruptions from a wildfire event and the subsequent restoration to normal operation.

Cost of response to risk
10000000

Description of response and explanation of cost calculation
We closely monitor and respond to potential fire events that may disrupt our operations and have business continuity plans in place to manage these risks. The cost of response includes auxiliary power investments to sustain critical operations in the event a wildfire occurs and creating redundancies for our data centers in areas at lower risk of wildfire.

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?
Direct operations

Opportunity type
Resource efficiency

Primary climate-related opportunity driver
Move to more efficient buildings

Primary potential financial impact
Reduced indirect (operating) costs

Company-specific description
Part of Rambus's lease renewal strategy is to leverage negotiations to address environmental, as well as health and wellness, aspects of its workplaces. This includes the prioritization of green certifications such as LEED, Fitwel, WELL, etc. which promote energy and water-efficient buildings that reduce costs associated with utility consumption. Additionally, we continue to explore and implement energy efficiency projects to reduce energy consumption used in our facilities, for example, replacing air handling units in our Bangalore, India office and relighting our office in France with more efficient lighting.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
37000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
This financial impact figure is calculated by the total monetary savings from the replacement of AHUs in the Bangalore office and the cost savings from relighting at France. cost savings expected from replacing the AHUs at Bangalore is estimated to be 33,000 USD and the cost savings achieved from relighting the France office is estimated to be around 4,000 USD. The figure provided is an annual cost savings and the actual cost savings achieved throughout the lifetime would be much higher.

Cost to realize opportunity
43200

Strategy to realize opportunity and explanation of cost calculation
Cost to realize opportunity is calculated by the investment required to replace the AHUs in our Bangalore, India office and the investment required for relighting at France. Investment required to replace the AHUs at Bangalore is estimated to be 39,000 USD and the investment for relighting the France office is estimated to be around 4,200 USD. We have other sustainability initiatives such as electronic recycling across our offices, however, those costs are not separately monitored and are expected to be minimal. Therefore, we use the AHU project and the relighting project as a proxy to estimate our cost to improve energy efficiency in our offices.

Comment

C3. Business Strategy

C3.1

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

Row 1

Climate transition plan

No, our strategy has been influenced by climate-related risks and opportunities, but we do not plan to develop a climate transition plan within two years

Publicly available climate transition plan

<Not Applicable>

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

<Not Applicable>

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

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

<Not Applicable>

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

Although our strategy is influenced by climate-related risks and opportunities, we do not currently have a transition plan that aligns with a 1.5°C world. Rambus is actively working to set goals and targets regarding our climate impact. Once we have set targets and goals, a transition plan will likely follow but we anticipate this timeline to be after two years.

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	No, but we anticipate using qualitative and/or quantitative analysis in the next two years	Important but not an immediate priority	At this moment, our immediate priority is to set goals and targets for our climate impact, which we look forward to sharing in the future. We are currently evaluating our climate risks and opportunities qualitatively, but we anticipate using scenario analysis to further strengthen our risk assessment.

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	Climate-related risks and opportunities influence our products and services strategy. We continue to invest in cutting-edge technology to decrease energy use and maximize performance of our products. In 2021, Rambus completed a detailed management systems framework related to product stewardship based on the principles of ISO 9001 for quality management systems and ISO 14001, 14006 and 14062 for environmental management systems. These frameworks outline the importance of implementing an eco-design policy in our product stewardship process thereby reducing adverse environmental impacts throughout the life cycle of our products. Our product design and development process helps us evaluate environmental targets and specifications at each stage. As we move forward with our product stewardship plans, we look forward to setting targets to achieve energy efficiency gains in our products. Considering the performance of our products in terms of performance per watt of energy, energy efficiency improvement, and ultimately total cost of ownership will meaningfully contribute to Rambus' goals in reducing GHG emissions in our supply chain and acting as strong stewards for the environment in our product development and production.
Supply chain and/or value chain	Yes	Climate-related risks and opportunities have influenced our strategy related to supply chain. Rambus actively worked to formalize our sustainable procurement policies and model of excellence for the future at Rambus. In September 2020, we adopted our first Vendor Code of Conduct, based on the Responsible Business Alliance (RBA) Code of Conduct, which is in turn informed by the Universal Declaration of Human Rights. This Code of Conduct establishes standards to ensure that working conditions in the electronics industry and its supply chains are safe, that workers are treated with respect and dignity, and that business operations are environmentally responsible and conducted ethically. Rambus expects our vendors to comply with the RBA code and with the Rambus Code of Business Conduct and Ethics, as well as all national and local laws and regulations. In 2022, we also implemented a performance measurement system for suppliers that enables a baseline measurement associated with key sustainability goals and performance indicators. We onboarded our top direct suppliers to the CDP supplier platform and will begin to collect more detailed, granular data from these suppliers. On an annual basis, we will monitor, assess and provide continuous improvement mechanisms and take corrective actions with suppliers. This process will also assist in the selection of new suppliers and actively communicate the results of annual assessments to decision makers and internal stakeholders. We will benchmark our work in this area against leaders in our field using RBA's standards for excellence.
Investment in R&D	Evaluation in progress	We know climate change is a serious environmental, social, and economic threat. All sectors of society must take immediate and collaborative action to protect the future of our planet. At Rambus, we are addressing climate change directly, minimizing our environmental footprint to contribute to a healthier world. Our commitment to innovation and invention in our business extends directly to the way we view environmental excellence at Rambus. We are actively seeking out technology innovation opportunities to ensure our manufacturing processes, materials sourcing and technological advances are environmentally friendly.
Operations	Yes	Climate-related risks and opportunities have been influenced our operations and how we are approaching mitigating our impact on the climate. We have developed a four-pillar strategy to reduce the environmental footprint of our operations - Prevention of Pollution, Sustainable Resource Use, Climate Change Mitigation and Adaption and Protection of the Environment, Biodiversity and Restoration of Natural Habitats. Through these four pillars, we rolled out programs and management systems to measure, record and report data related to water consumption, waste emissions, packaging materials and energy consumption and GHG emissions in our operations, and implemented strategies and initiatives such as the LEED certification in our headquarter building in San Jose. We have also moved to 100% renewable energy for our headquarters in San Jose, our office in India in 2021 and our office in France in 2022. These three locations represent 72% of our scope 2 emissions.

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	Indirect costs Capital expenditures	Our financial planning processes account for initiatives and strategies related to managing climate risks and mitigating climate impacts and depending on the specific initiative or strategy, the element of financial planning influence would be indirect costs or capital capital, or both. For example, our indirect operating cost, specifically our spend on energy have been influenced because we have negotiated contracts with our landlords in San Jose, India and France to move to 100% renewable energy. Additionally, our capital expenditures have also been influenced. We have a dedicated capital budget to implement energy efficiency and other sustainability initiatives in our facilities in an effort to mitigate our emissions.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	No, but we plan to in the next two years	<Not Applicable>

C4. Targets and performance

C4.1

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

No target

C4.1c

(C4.1c) Explain why you did not have an emissions target, and forecast how your emissions will change over the next five years.

	Primary reason	Five-year forecast	Please explain
Row 1	We are planning to introduce a target in the next two years		Rambus intends to establish emissions targets in the next two years.

C4.2

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

No other climate-related targets

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*	0	0
Implemented*	2	2.55
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

Energy efficiency in buildings	Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
0.53

Scope(s) or Scope 3 category(ies) where emissions savings occur
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
4015

Investment required (unit currency – as specified in C0.4)
4356

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment

Initiative category & Initiative type

Low-carbon energy consumption	Low-carbon electricity mix

Estimated annual CO2e savings (metric tonnes CO2e)
2.02

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
<1 year

Comment

C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	We have dedicated budget to implement energy efficiency projects in our facilities.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?
No

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 2020

Base year end

December 31 2020

Base year emissions (metric tons CO2e)

1.059

Comment

Scope 2 (location-based)

Base year start

January 1 2020

Base year end

December 31 2020

Base year emissions (metric tons CO2e)

1455.185

Comment

This include the electricity used in our offices. In our previous year's report, these emissions were inaccurately included in scope 3 - upstream leased asset.

Scope 2 (market-based)

Base year start

January 1 2020

Base year end

December 31 2020

Base year emissions (metric tons CO2e)

1455.185

Comment

This include the electricity used in our offices. In our previous year's report, these emissions were inaccurately included in scope 3 - upstream leased asset.

Scope 3 category 1: Purchased goods and services

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
3435.982

Comment
This only includes contract manufacturing; other purchased goods and services are not currently included.

Scope 3 category 2: Capital goods

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
We did not evaluate emissions from this category in 2020.

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

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
We did not evaluate emissions from this category in 2020.

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
We did not evaluate emissions from this category in 2020.

Scope 3 category 5: Waste generated in operations

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
78.275

Comment

Scope 3 category 6: Business travel

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
210.184

Comment

Scope 3 category 7: Employee commuting

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
333.037

Comment

Scope 3 category 8: Upstream leased assets

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment
The emissions from our leased offices were inaccurately included in this category in last year's report. We have since included the emissions from leased offices in scope 1 and scope 2, therefore emissions in this category is 0.

Scope 3 category 9: Downstream transportation and distribution

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)
0

Comment
We did not evaluate emissions from this category in 2020.

Scope 3 category 10: Processing of sold products

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
We did not evaluate emissions from this category in 2020.

Scope 3 category 11: Use of sold products

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
We did not evaluate emissions from this category in 2020.

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

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
We did not evaluate emissions from this category in 2020.

Scope 3 category 13: Downstream leased assets

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
Not applicable.

Scope 3 category 14: Franchises

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
Not applicable.

Scope 3 category 15: Investments

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
Not applicable.

Scope 3: Other (upstream)

Base year start
January 1 2020

Base year end
December 31 2020

Base year emissions (metric tons CO2e)

Comment
Not applicable.

Scope 3: Other (downstream)

Base year start
January 1 2020

Base year end
December 31 2020

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)
US EPA Center for Corporate Climate Leadership: Indirect Emissions From Purchased Electricity
US EPA Center for Corporate Climate Leadership: Direct Emissions from Stationary Combustion Sources
US EPA Center for Corporate Climate Leadership: Direct Emissions from Mobile Combustion Sources
US EPA Emissions & Generation Resource Integrated Database (eGRID)

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
1853.392

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.2

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

Row 1

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

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

Comment

C6.3

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

Reporting year

Scope 2, location-based
1031.5

Scope 2, market-based (if applicable)
275.2

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?
No

C6.5

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

Purchased goods and services

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
62020

Emissions calculation methodology
Spend-based method

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

Please explain
Our emissions in this category were calculated using spend-based methodology for the reporting year. We are in the process of collecting emissions data from our contract manufacturers and will improve our methodology in the coming years to calculate emissions using data obtained from suppliers.

Capital goods

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
4383.068

Emissions calculation methodology
Spend-based method

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

Please explain
Emissions from capital goods are calculated by spend-based methodology. Sources of emissions include machinery, equipment, etc. purchased during the reporting year.

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

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
136.253

Emissions calculation methodology
Average data method

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

Please explain
Emissions in this category is calculated by using the average grid losses in the regions where we purchased energy.

Upstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
46.95

Emissions calculation methodology
Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Emissions are calculated based on the emissions figures provided by logistics suppliers. It is assumed that downstream transportation is negligible and all emissions are associated with upstream transportation.

Waste generated in operations

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
8.9

Emissions calculation methodology
Average data method
Waste-type-specific method

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

Please explain
Emissions are calculated for each waste stream in our locations and specific emission factors for each waste and respective disposal method.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
521.438

Emissions calculation methodology
Spend-based method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
95

Please explain
Air travel is calculated by the distance between the origin and destination city pairs. Distance-data is obtained from our travel booking agency. Air travel represents 95% of our business travel emissions. For business travel for other modes (rail, hotel, etc.), we used spend-based methodology and these emissions represent 5% of total business travel emissions.

Employee commuting

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
76.133

Emissions calculation methodology
Distance-based method

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

Please explain
Commuting data is collected through employee survey in each of our locations, including mode of travel, distance travelled each day, and number of days travelled during the reporting year. Average emission factors for each mode of travel are multiplied with total distance travelled during the reporting year to calculate total employee commuting emissions.

Upstream leased assets

Evaluation status
Not relevant, calculated

Emissions in reporting year (metric tons CO2e)
0

Emissions calculation methodology
Spend-based method

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

Please explain
Because we use the operational control boundary and we have operational control over all our leased offices, we do not have any facilities that fall under this category. All emissions from our leased spaces are included in scope 1 and scope 2. Therefore the emissions from this category is 0.

Downstream transportation and distribution

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
0

Emissions calculation methodology
Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Emissions are calculated by total emissions provided by logistic providers. We currently do not have a method to separate upstream transportation with downstream. However, we assume that downstream transportation is negligible compared with upstream transportation, since almost all of our shipments are shipped from the contract manufacturers. Therefore, downstream transportation emissions ar assumed to be 0.

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
Our sold products (IP chips, etc.) do not go through further processing that may emit GHG.

Use of sold products

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
200386.743

Emissions calculation methodology
Average data method

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

Please explain
The emissions from this category is calculated by the total number of chips that we sold during the reporting year, the average power demand per chip (0.75W) and the average emission factors in the US. We assume that the data centers and systems where our products are used operate 365 days and 24 hours.

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
We do not currently have a method to track how our products are disposed of at end of life.

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
We do not have any downstream leased assets; therefore the emissions is 0 for this category.

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
We do not have any franchises; therefore the emissions associated with this category is 0

Investments

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
We do not have any investments; therefore the emissions associated with this category is 0.

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
We do not have other upstream activities that are not already included in the above sections.

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
We do not have other downstream activities that are not already included in the above sections.

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
0.00000634

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
2884.9

Metric denominator
unit total revenue

Metric denominator: Unit total
454800000

Scope 2 figure used
Location-based

% change from previous year
16

Direction of change
Decreased

Reason(s) for change
Change in renewable energy consumption
Other emissions reduction activities
Change in revenue

Please explain
We have invested in emissions reduction activities throughout our offices such as relighting our office in France, which contributed to reducing our emissions intensity, Additionally, we executed a renewable energy procurement contract in France to procure 100% renewable energy for our office. Our revenue increased significantly from 2021 levels, which is the main contributor to the reduction in emissions intensity.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
No

C7.2

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

Country/area/region	Scope 1 emissions (metric tons CO2e)
United States of America	1771.81
India	26.43
Netherlands	55.155

C7.3

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

C7.3b

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

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
San Jose	1770.581	35.931308	-79.03251
Chapel Hills	1.225	35.9132	-79.0558
Bangalore, India	26.43	12.9716	77.5946
Vught, Netherlands	55.155	51.6533	5.2943

C7.5

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

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
United States of America	340.136	183.152
Canada	34.2	28
India	591.139	0
Finland	4.164	4.164
Netherlands	47.899	47.899
Bulgaria	6.446	6.446
Republic of Korea	0.225	0.225
France	2.022	0
Taiwan, China	5.255	5.255

C7.6

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

C7.6b

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

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
San Jose	156.98	0
Hillsboro	70.03	70.03
Bangalore, India	591.14	0
Chapel Hills	69.23	69.23
Agoura Hills	43.9	43.9
Toronto	24.88	24.88
Finland	4.16	4.16
Vught	47.9	47.9
Korea	0.23	0.23
Bulgaria-Sofia	5.99	5.99
Bulgaria-Plodiv	0.46	0.46
France	2.02	0
Taiwan	5.26	5.26
Toronto - Analog x	3.2	3.2
Montreal	6.19	0

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?
No

C7.9

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

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	8.21	Decreased	0.46	In 2022, we executed on a renewable energy procurement contract in our France office to purchase 100% renewable energy, which accounted for 2.02 metric ton of emissions. Our new Montreal office is also operating on renewable electricity from hydro which accounted for 6.19 metric tons of emissions. Collectively these two sites reduced 8.21 metric tons of emissions. Our previous year's scope 1+2 (market-based) emissions was 1773 metric tons and the 8.21 metric tons of reduction represented 0.46%.
Other emissions reduction activities	0.533	Decreased	0.03	In 2022, we completed a relighting project in our France office, which accounted for 0.53 metric ton of emissions. Our previous year's scope 1+2 (market-based) emissions was 1773 metric tons and the 0.53 metric tons of reduction represented 0.03%.
Divestment	0	No change	0	no change from divestment
Acquisitions	0	No change	0	no change from acquisitions
Mergers	0	No change	0	no change from mergers
Change in output	365.073	Increased	20.6	In 2022, our natural gas consumption at San Jose office and our overall electricity consumption compared with last year. This increase is aligned with the increase of more than 50% in revenue in 2022 from 2021. We estimate this increase in emissions to be 365 metric tons. Our previous year's scope 1+2 (market-based) emissions was 1773 metric tons and the 365 metric tons of reduction represented 20.6%.
Change in methodology	0	No change	0	no change in methodology
Change in boundary	0	No change	0	no change in boundary
Change in physical operating conditions	0	No change	0	no change in physical operating conditions
Unidentified	0	No change	0	no change
Other	0	No change	0	no change

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

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)	Unable to confirm heating value	0	9480	9480
Consumption of purchased or acquired electricity	<Not Applicable>	1548	1075	2623
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>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	1548	10555	12104

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	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

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

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
<Not Applicable>

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

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

Comment

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
<Not Applicable>

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

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

Comment

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
<Not Applicable>

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

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

Comment

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
<Not Applicable>

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

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

Comment

Oil

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
<Not Applicable>

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

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

Comment

Gas

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
<Not Applicable>

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

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

Comment

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

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
9480

MWh fuel consumed for self-generation of electricity
9480

MWh fuel consumed for self-generation of heat
0

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

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

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

Comment
This include natural gas consumption at the San Jose headquarters to generate electricity, as well as the backup diesel generator.

Total fuel

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
9480

MWh fuel consumed for self-generation of electricity
9480

MWh fuel consumed for self-generation of heat
0

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

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

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

Comment
This include natural gas consumption at the San Jose headquarters to generate electricity, as well as the backup diesel generator.

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	5185.45	5185.45	0	0
Heat				
Steam				
Cooling				

C8.2e

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

Country/area of low-carbon energy consumption
United States of America

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Renewable energy is procured through the TotalGreen program offered through San Jose Clean Energy.)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
648.6

Tracking instrument used
Contract

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
Yes

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
2019

Comment
San Jose Clean Energy was launched in 2019.

Country/area of low-carbon energy consumption
India

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Renewable electricity is purchased from Green Power Provider through our landlord in Banglore)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
814.1

Tracking instrument used
Contract

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
France

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify (Renewable electricity is purchased from EDF, the utility provider in France)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
37.6

Tracking instrument used
Contract

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

Country/area of low-carbon energy consumption
Canada

Sourcing method
Default delivered electricity from the grid (e.g. standard product offering by an energy supplier) from a grid that is 95% or more low-carbon and where there is no mechanism for specifically allocating low-carbon electricity

Energy carrier
Electricity

Low-carbon technology type
Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
47.7

Tracking instrument used
No instrument used

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

Are you able to report the commissioning or re-powering year of the energy generation facility?
No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)
<Not Applicable>

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
United States of America

Consumption of purchased electricity (MWh)
1309.17

Consumption of self-generated electricity (MWh)
5185.45

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
6494.62

Country/area
Canada

Consumption of purchased electricity (MWh)
263.78

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
263.78

Country/area
India

Consumption of purchased electricity (MWh)
814.13

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
814.13

Country/area
Finland

Consumption of purchased electricity (MWh)
44.83

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
44.83

Country/area
Netherlands

Consumption of purchased electricity (MWh)
129.67

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
129.67

Country/area
Republic of Korea

Consumption of purchased electricity (MWh)
0.44

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
0.44

Country/area
Bulgaria

Consumption of purchased electricity (MWh)
14.74

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
14.74

Country/area
France

Consumption of purchased electricity (MWh)
37.58

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
37.58

Country/area
Taiwan, China

Consumption of purchased electricity (MWh)
8.4

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]
8.4

C9. Additional metrics

C9.1

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

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
2023 GHG verification Rambus Letter.pdf

Page/ section reference
1-2

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.1b

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

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
2023 GHG verification Rambus Letter.pdf

Page/ section reference
1-2

Relevant standard
ISO14064-3

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: Business travel

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
2023 GHG verification Rambus Letter.pdf

Page/section reference
1-2

Relevant standard
ISO14064-3

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	ISO14064-3	The purchased electricity, natural gas, and distillate fuel oil data provided in C8 are verified as part of the GHG verification process.

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 canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

No, but we 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 GHG emissions data at least annually from suppliers

% of suppliers by number
100

% total procurement spend (direct and indirect)
100

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

Rationale for the coverage of your engagement
On an annual basis, we identify and engage with key, direct suppliers to manufacture, assemble or package our products to collect their GHG emissions data. These suppliers represent the majority of our annual spend and that are under contract. Additionally, this year we onboarded our top direct suppliers to the CDP supplier engagement platform, which will enable us to track more detailed data and performance on an annual basis.

Impact of engagement, including measures of success
We anticipate that the impact of this engagement will include the following: increased transparency into our supply chain and the associated climate impact; better understanding of our supply chain risks and mitigation strategies; establishing a formal due diligence framework to ensure our suppliers are held to high standards in sustainability.
Success is measured by the percentage of suppliers that shared their GHG data with Rambus and we aim for at least the top 80% suppliers to share their data with us.

Comment

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

% of customers by number
100

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

Please explain the rationale for selecting this group of customers and scope of engagement
We publicly share our climate change performance and strategy on the Rambus website and our ESG report. Because climate change is key topic that are increasingly integrated into the decision making processes of our customer and other stakeholders, we aim to communicate our strategy and performance on climate change as widely as possible to reach all customers. Therefore, we consider that this engagement effort covers 100% of our customers.

Impact of engagement, including measures of success
The most important impacts of this engagement effort are enhanced brand perception and potentially increase in revenue.
Success of these engagements is measured through customer feedback on our climate strategy and performance. We aim to address all customer feedback in a timely manner, and share our data and strategy with 100% of our customers when they request these information.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?
Yes, suppliers have to meet climate-related requirements, but they are not 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
We adopted the RBA Code of Conduct for our worldwide operations and published a Vendor Code of Conduct ("Rambus Vendor Code") based upon the RBA Code of Conduct that applies to all key suppliers. We communicate that requirement along with other requirements such as their CDP/GHG data, conflict minerals reporting template, information to aid our business continuity planning. We have established a continuous due diligence process which will make use of industry due diligence tools and programs the shareability of the output from those programs, such as risk assessments, corrective action plan management and 3rd party audits.

% suppliers by procurement spend that have to comply with this climate-related requirement
100

% suppliers by procurement spend in compliance with this climate-related requirement
100

Mechanisms for monitoring compliance with this climate-related requirement
Supplier self-assessment
Off-site third-party verification
On-site third-party verification

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

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
No, we have assessed our activities, and none could either directly or indirectly influence policy, law, or regulation that may impact the climate

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, but we 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 external engagement activities are consistent with your climate commitments and/or climate transition plan
We do not directly engage on policy issues related to climate change. We engage with several trade associations and have regular conversations with our industry group to ensure our positions are aligned.

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

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate
At this moment, none of the trade associations that we engage with have activities that could directly or indirectly influence policy, law, or regulation that may impact the climate.

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-Rambus-ESG-Report.pdf

Page/Section reference
Page 33 for TCFD index

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Comment

Publication
In voluntary sustainability report

Status
Complete

Attach the document
2021-Rambus-ESG-Report.pdf

Page/Section reference
page 7-30

Content elements
Strategy
Risks & opportunities
Emissions figures

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	We are not a signatory/member of any collaborative framework, initiative and/or commitment related to environmental issues	<Not Applicable>

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, but we 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, but we plan to do so within the next 2 years	<Not Applicable>	<Not Applicable>

C15.3

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

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
No, but we plan to within the next two years

Value chain stage(s) covered
<Not Applicable>

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
No

C15.5

(C15.5) 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	Yes, we are taking actions to progress our biodiversity-related commitments	Education & awareness

C15.6

(C15.6) 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

C15.7

(C15.7) 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

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	Sr. Director, Global Workplace	Facilities manager

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	454800000

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.

Requesting member
Micron Technology, Inc.

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
185.3

Uncertainty (±%)
10

Major sources of emissions
Fuels consumed during the reporting year including natural gas, diesel, etc.

Verified
No

Allocation method
Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member
45480000

Unit for market value or quantity of goods/services supplied
Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
In 2022, revenue from Micron accounted for 10% or more of our total revenue. To allocate the emissions, we assumed that the requesting member represented 10% of our revenue. Therefore, market value of goods supplied to the requesting member is 10% of our total revenue. We allocated 10% of emissions to this requesting member.

Requesting member
Samsung Electronics

Scope of emissions
Scope 1

Scope 2 accounting method
<Not Applicable>

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
185.3

Uncertainty (±%)
10

Major sources of emissions
Fuels consumed during the reporting year including natural gas, diesel, etc.

Verified
No

Allocation method
Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member
45480000

Unit for market value or quantity of goods/services supplied
Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
In 2022, revenue from Samsung accounted for 10% or more of our total revenue. To allocate the emissions, we assumed that the requesting member represented 10% of our revenue. Therefore, market value of goods supplied to the requesting member is 10% of our total revenue. We allocated 10% of emissions to this requesting member.

Requesting member
Micron Technology, Inc.

Scope of emissions
Scope 2

Scope 2 accounting method
Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
103.1

Uncertainty (±%)
10

Major sources of emissions
Electricity consumption

Verified
No

Allocation method
Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member
45480000

Unit for market value or quantity of goods/services supplied
Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
In 2022, revenue from Micron accounted for 10% or more of our total revenue. To allocate the emissions, we assumed that the requesting member represented 10% of our revenue. Therefore, market value of goods supplied to the requesting member is 10% of our total revenue. We allocated 10% of emissions to this requesting member.

Requesting member
Samsung Electronics

Scope of emissions
Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)
<Not Applicable>

Allocation level
Company wide

Allocation level detail
<Not Applicable>

Emissions in metric tonnes of CO2e
103.1

Uncertainty (±%)
10

Major sources of emissions
Electricity consumption

Verified
No

Allocation method
Allocation based on the market value of products purchased

Market value or quantity of goods/services supplied to the requesting member
45480000

Unit for market value or quantity of goods/services supplied
Currency

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
In 2022, revenue from Samsung accounted for 10% or more of our total revenue. To allocate the emissions, we assumed that the requesting member represented 10% of our revenue. Therefore, market value of goods supplied to the requesting member is 10% of our total revenue. We allocated 10% of emissions to this requesting member.

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
Managing the different emission factors of diverse and numerous geographies makes calculating total footprint difficult	With a global supply chain, it can be difficult for Rambus to collect consistent environmental data in order to accurately allocate emissions. Further climate-related engagement with suppliers will help overcome these challenges as Rambus can then understand what issues they may also be experiencing in data collection and allocation. Rambus will also be investigating the utilization of CDP requests for our own suppliers to streamline the process and demonstrate the commitment to accurately reporting relevant Scope 3 emissions.

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.

Rambus will be investigating the potential use of CDP requests of our own customers to better understand the relevant Scope 3 emissions within the supply chain. By collecting more comprehensive data on supply chain emissions, Rambus will have further insight into how emissions can be allocated for our own customers. This is especially important as an organization that has a significant Scope 3 footprint compared to our Scope 1 and 2 totals.

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