

Welcome to your CDP Climate Change Questionnaire 2023

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C0. Introduction

C0.1

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

VMware, Inc. (“VMware”) originally pioneered the development and application of virtualization technologies with x86 server-based computing, separating application software from the underlying hardware, and then evolved to become the private cloud and mobility management leader. Building upon that leadership, VMware is focused on becoming the multi-cloud leader. Information technology (“IT”) driven innovation continues to disrupt markets and industries. Technologies emerge faster than organizations can absorb, creating increasingly complex environments. Organizations’ IT departments and corporate divisions are working at an accelerated pace to harness new technologies, platforms and cloud models, ultimately guiding businesses and their product teams through a digital transformation. To take on these challenges, we are helping customers drive their multi-cloud strategy by providing the multi-cloud platform for all applications, enabling digital innovation and enterprise control. Our multi-cloud portfolio, spanning application modernization, cloud management, cloud infrastructure, networking, security and anywhere workspaces, forms a flexible, consistent digital foundation on which customers can build, run, manage, connect and protect their mission-critical workloads.

We incorporated in Delaware in 1998 and were acquired by EMC Corporation in 2004. In August 2007, we conducted an initial public offering of our Class A common stock but remained a controlled company that was majority-owned by EMC. In September 2016, Dell Technologies Inc. acquired EMC and we became a majority-owned subsidiary of Dell. In November 2021, we became a standalone company following our spin-off from Dell.

On May 26, 2022, VMware entered into an Agreement and Plan of Merger with Broadcom Inc. pursuant to which VMware will be acquired by Broadcom upon closing. The transaction, which is expected to be consummated in Broadcom’s fiscal year 2023, was approved by VMware stockholders at a special meeting held on November 4, 2022 but remains subject to the receipt of regulatory approvals and other customary closing conditions. VMware will continue to operate as an independent public company until completion of the merger. Forward-looking statements made in this report reflect the current views of VMware management regarding its operations as an independent public company and do not take into account

potential changes in VMware's business and operations following completion of the merger. Actual results may differ materially and are subject to further risks and uncertainties described in VMware's most recent reports on Form 10-K and Form 10-Q and current reports on Form 8-K that VMware may file with the U.S. Securities and Exchange Commission (SEC) from time to time.

Our fiscal year is the 52 or 53 weeks ending on the Friday nearest to January 31 of each year. We refer to our fiscal year ending February 2, 2024 and fiscal years ended February 3, 2023 and January 28, 2022 as "fiscal 2024," "fiscal 2023," and "fiscal 2022," respectively. Fiscal 2024 is, and fiscal 2022 was, a 52-week fiscal year, while fiscal 2023 was a 53-week fiscal year. For the purpose of our GHG emissions inventory, we follow the start of the month - February 1, 2022 to January 31, 2023.

Total revenue in fiscal 2023 (FY23) increased 4% to \$13.4 billion. Total revenue is comprised of license revenue of \$2.8 billion, subscription and software-as-a-service ("SaaS") revenue of \$4.0 billion and services revenue of \$6.5 billion. As customers shift from our on-premises offerings to our subscription and SaaS offerings, license revenue and software maintenance revenue has and may continue to be lower and subject to greater fluctuation in the future, resulting from a higher proportion of our sales occurring through our subscription and SaaS offerings.

Our corporate headquarters are located at 3401 Hillview Avenue, Palo Alto, California, and we have 114 offices worldwide.

For more details, please reference VMware's annual report on Form 10-K for the year ended February 3, 2023.

<https://ir.vmware.com/websites/vmware/English/5010/us-sec-filing.html?shortDesc=Annual%20Report&format=html&secFilingId=775c2ac6-173e-47fb-a0f4-c3449e781b84>

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

February 1, 2022

End date

January 31, 2023

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

4 years

Select the number of past reporting years you will be providing Scope 2 emissions data for

Not providing past emissions data for Scope 2

Select the number of past reporting years you will be providing Scope 3 emissions data for

4 years

C0.3

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

Argentina

Armenia

Australia

Austria

Belgium

Bermuda

Brazil

Bulgaria

Canada

Chile

China

Colombia

Costa Rica

Croatia

Denmark
Egypt
Finland
France
Germany
Greece
Hong Kong SAR, China
India
Indonesia
Ireland
Israel
Italy
Japan
Kenya
Lithuania
Luxembourg
Malaysia
Mexico
Netherlands
New Zealand
Nigeria
Norway
Pakistan
Peru
Philippines
Poland
Portugal
Qatar
Republic of Korea
Romania

Saudi Arabia
Singapore
South Africa
Spain
Sweden
Switzerland
Taiwan, China
Thailand
Turkey
United Arab Emirates
United Kingdom of Great Britain and Northern Ireland
United States of America
Viet Nam

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, an ISIN code

US9285634021

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	<p>Explanation of how responsibility is related to climate issues: Board level oversight of ESG (Environmental, Social & Governance), including climate related issues, includes full Board of Directors (Board or BOD) annual oversight of ESG topics as well as focused oversight responsibilities by Board committees, including the Nominating and Related Persons Transactions Committee (Governance Committee), the Audit Committee and the Compensation Committee. The Governance Committee is responsible for overall oversight of VMware's ESG programs including environmental sustainability, and ESG disclosure. The Audit Committee oversees enterprise risk, cybersecurity and data privacy. The Compensation Committee oversees annual executive officer performance objectives incorporating ESG goals.</p> <p>The Governance, Audit and Compensation Committees report to the Board on the matters reviewed by the Committees. Senior management annually presents ESG Strategy to the full Board. The Board reviews the ESG annual operating plan and budgets as part of the company's overall annual corporate operating plan (AOP) review and approval. Our Governance, Compensation and Audit Committees are comprised solely of independent directors within the meaning of the applicable SEC and New York Stock Exchange</p>

	<p>rules and regulations. In 2020, the full Board reviewed VMware's ESG Strategy, also called the 2030 Agenda, presented by ESG Executive Sponsors and included it as part of its approval of VMware's annual operating plan. The 2030 Agenda was launched to demonstrate our commitment to corporate responsibility for over a decade, setting out a commitment to reach 30 goals by 2030 for building a more sustainable, equitable and secure world. This ESG strategy is focused on driving three outcomes: Sustainability, Equity and Trust. Sustainability is core to our values and future success. As a global corporate citizen, we have an opportunity to innovate for a more resilient world by decarbonizing digital infrastructure across our customer ecosystem, supply chain and operations. Through our collective efforts to drive net zero emissions, workload carbon efficiency and sustainable innovation, VMware aims to help accelerate a future where multi-clouds (public clouds, data centers and edge) are zero-carbon and powered by renewable energy.</p>
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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	Please explain
Scheduled – some meetings	<p>Reviewing innovation/R&D priorities</p> <p>Overseeing and guiding employee incentives</p> <p>Overseeing and guiding the development of a transition plan</p> <p>Monitoring the implementation of a transition plan</p> <p>Monitoring progress towards corporate targets</p>	<p>VMware's ESG-related corporate governance practices provide a framework for operating in our stakeholders' best interests and in compliance with applicable legal requirements. We have implemented a strong governance structure to ensure oversight and effective management of ESG issues, including climate, that impact our business.</p> <p>This starts at the top with annual oversight of ESG topics by the full Board of Directors (Board). The Nominating, Governance and Related Persons Transactions Committee of the Board (Governance Committee) is responsible for formal oversight of our ESG progress, the Audit Committee of the Board is responsible for oversight of cybersecurity and data privacy matters, and the Compensation Committee of the Board is responsible for oversight of executive compensation incorporating ESG goals. Our ESG Executive Sponsors—comprised of C-suite leaders—meet quarterly to provide ESG strategy direction. Our ESG Leadership Council—made up of senior functional and business unit leaders—meets quarterly to monitor progress</p>

		<p>against ESG-related goals.</p> <p>Operationally, our ESG Office drives cross-company alignment and integration of our 2030 Agenda, implements ESG initiatives, and measures the progress made toward enterprise-wide ESG targets. We report our progress annually for transparency by using widely recognized guidelines for ESG reporting.</p> <p>In FY23, the Compensation Committee of the Board maintained the general structure of the FY22 Bonus Program for the CEO and other Named Executive Officers, with bonuses paid based on achievement against performance metrics and individual goals for a performance period that spanned the full fiscal year, while continuing to retain negative discretion to reduce actual payouts below the amounts calculated under the plan formulas as deemed appropriate.</p> <p>In FY23, the Compensation Committee established a specific accountability for the Company's DEI and ESG objectives, including climate, reflecting 10% of total payout opportunity.</p>
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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
Row 1	Yes	Annual oversight of ESG topics, including climate, is held by the full Board of Directors and the Nominating, Governance and Related Persons Transactions Committee of the Board is responsible for formal oversight of our ESG progress. Our Board is composed of highly experienced directors with extensive leadership expertise as well as financial, operational and technological acumen. This includes the current Chairman of the Board who is a member of the World Economic Forum (WEF) Alliance of CEO Climate Leaders, which focuses on accelerating the pace of climate action within a companies' value chains and in the markets in which they operate. The Chairman is also CEO of a

		company that set emissions reductions approved by the Science Based Targets initiative in 2015 and is a member of the Digital Climate Alliance, focused on activating data to meet the climate challenge and CDP's RE100 initiative.
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C1.2

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

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Developing a climate transition plan
 Implementing a climate transition plan
 Setting climate-related corporate targets
 Monitoring progress against climate-related corporate targets
 Assessing climate-related risks and opportunities
 Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Other, please specify
 Chief Technology Officer (CTO)

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

Quarterly

Please explain

i) Description of responsibilities: The VP of ESG (appointed CSO in FY23) oversees the development and operationalization of our sustainability strategy to support long-term value creation by building a more sustainable, equitable & resilient digital future for our stakeholders. We have selected quarterly as the frequency of reporting to the board on climate-related issues as once per year, the CSO contributes ESG materials as part of a CFO presentation to the full Board, and three times per year, the CSO reports on ESG and sustainability strategy and goal progress to the Nominating, Governance and Related Persons Transactions Committee of the Board (Governance Committee), which is responsible for formal oversight of our ESG progress,

The CSO reports directly to and meets regularly with our CTO. Placing the CSO in the Office of the CTO was a strategic move made in 2016 to align sustainability and ESG objectives with our technical roadmap and business strategy.

ii) Role descriptions: CSO and the ESG Office are trusted advisors to business functions for driving environmental sustainability, social impact and ESG governance - including long-term strategy goals such as net zero for global operations and supply chain, intrinsic sustainability goals through zero-carbon clouds and workload carbon efficiency.

Position or committee

Other C-Suite Officer, please specify

Chief Technology Officer, Chief People Officer, Chief Financial Officer, President, and General Counsel

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities

Developing a climate transition plan

Implementing a climate transition plan

Monitoring progress against climate-related corporate targets

Assessing climate-related risks and opportunities

Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

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

Annually

Please explain

i) Responsibility description: Established in 2020 to embed ESG goals into our business, Executive Sponsors aim to integrate ESG goals: accelerating a low carbon future by decarbonizing digital infrastructure across our customer ecosystem, supply chain and operations. They provide leadership and executive management authority on ESG issues by connecting strategic planning to operations. More specifically, connecting ESG to business strategies and risk responses; evaluating emerging ESG-related risks/opportunities; and ensuring a program is in place to identify, assess, manage and monitor ESG risks. The Exec Sponsors - specifically CPO, CFO & GC - report to the Governance Committee of the Board with CEO support. The Chair of the Governance Committee presents on Governance Committee matters to the full Board at regular Board meetings which includes ESG topics to the full Board annually. VP of Internal Audit is responsible for implementing a process for independent review and assessment of ESG processes and results, and also reports to the Audit Committee of the Board.

ii) Role descriptions:

- CFO considers potential sustainability impacts on financial risk & long-term financial performance
- CPO for potential sustainability impacts on employee experience, culture, talent acquisition, retention & development
- GC provides guidance to understand/navigate legal and compliance issues that may arise, as well as external reporting on ESG performance
- President considers potential sustainability impacts on customer demand and opportunity.
- CTO for potential sustainability impacts on long-term technical agenda

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

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

C1.3a

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

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI

Progress towards a climate-related target

Increased investment in low-carbon R&D

Increased engagement with suppliers on climate-related issues

Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Implementation of employee awareness campaign or training program on climate-related issues

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

To incentivize ESG progress, including climate-related goals, our executive compensation planning incorporated ESG goals as part of the Compensation Committee's holistic evaluation of performance under our Annual Executive Bonus Program in FY23.

Our 2030 Agenda ESG goals (climate included) are embedded in our Core Team (Corporate Executive Team) scorecard, for the Executive Officer Bonus calculation for FY23. The executive officers include ESG Executive Sponsors - Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief People Officer (CPO), and General Counsel (GC). The Chief Technology Officer (CTO) bonus calculation also took into account ESG objective and key results (OKR) progress, including climate-related targets. The progress against goals is regularly reported internally through leadership meeting.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to VMware's implementation of the organization's climate commitments by ensuring our progress toward our 2030 Net Zero goal and our annual emission reductions are embedded into the company Objective and Key Results. and into the Core Team's scorecard.

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Achievement of climate transition plan KPI
 Progress towards a climate-related target
 Increased investment in low-carbon R&D
 Increased engagement with suppliers on climate-related issues
 Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)
 Implementation of employee awareness campaign or training program on climate-related issues

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

In FY23, the Compensation Committee of the Board established for the CEO and other Named Executive Officers, a specific accountability for the Company's DEI and ESG objectives, within strategic and operational goals, reflecting 10% of total payout opportunity.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

This incentive contributes to VMware's implementation of the organization's climate commitments by ensuring our progress toward our 2030 Net Zero goal and our annual emission reductions are embedded into the company Objective and Key Results. and into the CEO's goals.

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	1	Time horizons are aligned to internal audit and enterprise risk management processes for climate-related risks
Medium-term	1	3	Time horizons are aligned to internal audit and enterprise risk management processes for climate-related risks
Long-term	3	6	Time horizons are aligned to internal audit and enterprise risk management processes for climate-related risks

C2.1b

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

i) When assessing climate-related risks or opportunities, VMware weighs the estimated financial and strategic impacts against our baseline business using criteria that take a returns-based view for financing considerations and a full stakeholder view for future strategy. With respect to financial impact, VMware initially considers whether the climate-related risk or opportunity would be material, in terms of revenue or free cash flow, and then ultimately considers the bearing the climate-related risk or opportunity may have on enterprise value. To the extent that climate-related topics shape and drive our internal financial planning and audit and risk management processes, we treat it on equal footing with other business risks and opportunities by assigning business values to climate impacts to reach investment allocation decisions. From a strategic lens, we seek to identify early on climate-related risks that are potential sources of disruption to our business operations and that would increase costs spanning sales, support and product development. Simultaneously, we are equally focused on identifying climate-related business opportunities that can deliver positive impacts to our customers' climate posture, such as reducing energy needs and facilitating a better remote work experience. Risks and opportunities are prioritized based on agreed potential substantive financial or strategic impacts and then evaluated further.

ii) For CDP reporting purposes only, VMware defines "substantive financial or strategic impact" as an impact that has the potential to affect total revenue by >1% or free cash flow by >3% while also considering the context of a given issue. For VMware's FY23, revenue was \$13.35 billion and free cash flow was \$3.85 billion; therefore, a substantive financial impact for the purposes of CDP would translate to an affect to total revenue of >\$133.5 million and to free cash flow of >\$115.5 million. This definition of substantive impact is not necessarily a conclusive definition for any other purpose.

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

More than once a year

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

VMware has a robust governance structure around our processes for assessing and managing climate-related transition and physical risks/opportunities that could have a substantive financial or strategic impact across short-, medium-, and long-term horizons. Our CSO develops and communicates our sustainability strategy and collaborates with our VP of Internal Audit (IA) to integrate climate risk/opportunities from direct operations into our risk assessment process.

The Board's role in the Company's risk oversight process includes receiving regular reports from members of senior management on areas of material risk to VMware, including financial, operational, cybersecurity, legal, regulatory, strategic, ESG (including climate-related issues) and reputation. Our Audit Committee oversees management of financial risk exposures, including the integrity of our accounting and financial reporting processes and controls. As part of this responsibility, the Audit Committee meets periodically with the independent auditor, our internal auditors and our financial and accounting personnel to discuss significant financial risk exposures and steps management has taken and plans to take to monitor, control and report any such exposures. IA reviews the adequacy and effectiveness of the Company's risk management and controls framework and processes, provides that risk management activities are integrated, consistent and managed at a level consistent with the risk, makes recommendations for, and tracks and reports on progress of, changes in the risk management framework, and assists the Company's executive staff in assuring that significant risks to the Company are identified and risk benefit trade-offs are managed appropriately to protect the Company's assets and stockholder value. The VP of IA meets with and regularly reports to the Audit Committee. Our Governance Committee oversees the management of governance risks, the composition and structure of the Board and its committees and succession planning, and it also monitors the effectiveness of our corporate governance policies. Our Governance Committee also oversees our policies, procedures and risks and assesses ESG risks in connection with its oversight of our ESG programs, which includes climate-related issues.

Under Frequency of Assessment, we have selected more than once per year as our collective risk assessment processes involve continual and/or multiple reviews during the year. Our global Business Impact Analysis (BIA) is completed at least annually, our operational risk assessment is continually evaluated throughout the year, and our value chain partner engagements on climate-related risks occur multiple times

per year.

Risks, including climate risks, are examined from a holistic perspective to assess their impact not only on VMware's direct operations, but also extending to their upstream suppliers and downstream customers. Given the scale of our global supply chain, climate-related risks could impair the production capabilities of our suppliers or disrupt transportation networks, potentially limiting our ability to fulfill customer obligations. We collaborate with these other businesses throughout the year to help them ensure their own business continuity plans have robust strategies to mitigate acute/chronic climate-related risks.

VMware's global business continuity management conducts BIAs at a minimum annually, in collaboration with leaders across VMware's business lines document key risks to operations and continuity strategies. Risks are prioritized by potential substantive financial or strategic impact. Our risk evaluation process considers among other things, potential strategic, customer, legal, stakeholder and regulatory impacts, as well as our potential vulnerabilities, such as rate of change, scale, experience and concern.

To supplement the enterprise risk processes, in FY22 we conducted an extensive company-wide assessment of climate-related risks to better understand VMware's risk exposure. Six functional groups across VMware's value chain identified relevant climate-related risks and evaluated their potential impact on VMware. The likelihood of physical risks impacting VMware was assessed via scenario analysis due to the temporal uncertainty of physical climate risks in the face of climate change. Specifically for climate-related risks, VMware's climate screening and scenario analyses provided data which helps VMware understand and prioritize a) how climate risks interconnect with other enterprise risks and b) the proportional impact of climate risk in the context of other risks, across different future climate scenarios.

The operational risk assessment process is ongoing and continually assessed, and pertinent risks are flagged by Risk Management, Physical Security & Resiliency (PSR), Emergency Response, and Crisis Management (CM). Potential operational risks associated with climate change are mitigated by the Workplace, CM, PSR teams, through disaster recovery/business continuity planning.

To respond to climate-related risks and opportunities, VMware IA meets with PSR at a minimum annually. PSR regularly assesses existing/emerging operational risks and improves our response/preparedness/resiliency by focusing on mitigation strategies for key business interruption risks identified by IA, including natural or man-made disasters. PSR develops CM Plans for top risks, drives organizational awareness, and unites Business Continuity, Disaster Recovery, Safety, and Security programs under a collaborative governance framework to effectively manage risks to our people and business. CM Teams across key locations are prepared to quickly respond to incidents/threats, with timely decision-making communications to help keep employees safe, protect our reputation and products, and comply with legal requirements.

The highest level of management responsible for the PSR program is the Chief Security Officer, who meets with the Audit Committee regularly and with the Board as needed.

Examples of our climate-related physical and transitional risk assessment processes:

- CM and PSR assess and identify climate-related extreme weather events that can impact short-term business operations/productivity. In FY23, physical risk incidents identified globally included cyclones, earthquakes, extreme rainfall, and wildfires. Our resiliency plans help manage these events that may disrupt business operations or put teams in harm's way and includes strategies like transferring time-sensitive tasks to unimpacted employees or advising remote work
- Sourcing electricity through Renewable Energy to avoid potential market risks of price increases of fossil fuel-based electricity
- Renewable energy transition of upstream suppliers, including colocation service providers. When selecting a new data center location, the Data Center Operations and Sustainability teams co-evaluate the vendor's sustainability and renewable energy goals

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	<p>As VMware operates in many regions and has expanded our global presence, we endeavor to be aware of climate-related local, state or national governmental regulations in these various geographies. Current regulations and the related compliance risks, which may be influenced by climate issues, are considered relevant and included in our enterprise risk management identification and assessment processes conducted by our Internal Audit team.</p> <p>As one example, the offices that VMware operates in the European Union are subject to strict environmental regulations, such as Streamlined Energy and Carbon Reporting (SECR) and Energy Savings Opportunity Scheme (ESOS). In the UK, large companies have had reporting obligations under SECR starting in 2020. As a large company, VMware UK Ltd reports under a number of UK or international frameworks, including the SECR scheme. VMware's 2021 financial statements, filed in October 2022, included the second of our SECR disclosures. Similar regulations in different geographies could also impact our operations by potentially requiring us to make capital investments or other operational modifications in order to comply.</p>

Emerging regulation	Relevant, always included	<p>Emerging regulation and related compliance risks, which may be influenced by climate issues, are relevant and included in our enterprise risk management identification and assessment processes conducted by our Internal Audit team. Our engagement on policy-related activities were coordinated through our VP of Global Government Relations and Public Policy in FY23. This individual was on the board of directors and served as the Vice-Chair of the Finance Committee of the Information Technology Industry Council (ITI), enabling VMware to better assess emerging regulation risks and to weigh in on ITI's policy positions.</p> <p>With proposed climate-related SEC rules in the United States, as well as the Corporate Sustainability Reporting Directive (CSRD) in the European Union, emerging regulations and new disclosure requirements heighten the risk of timely compliance for companies.</p>
Technology	Relevant, always included	<p>Technological risks, which may be influenced by climate issues, are relevant and included in our enterprise risk management identification and assessment processes conducted by our Internal Audit team. We consider the risks presented by technology and the rapid developments within the field from a business strategy perspective, as well as a competitive one.</p> <p>For example, the energy efficiency benefits VMware offers customers through our virtualization technologies and cloud services are a competitive advantage. Our multi-cloud infrastructure services and solutions enable customers to reduce their energy expenditures and minimize their carbon footprints. If a competitor develops technology or sustainability solutions to surpass our current energy efficiency benefit offerings, we risk falling behind in this fast-moving field.</p>
Legal	Relevant, always included	<p>Legal risks, which may be influenced by climate issues, are relevant and included in our enterprise risk management identification and assessment processes conducted by our Internal Audit team.</p> <p>We believe that our climate-related legal risk is ultimately mitigated by the nature of our business as a software company and our internal governance processes, including those relating to climate issues. Further, we believe our exposure to litigation related to our climate-related performance and disclosure and potential allegations of breach of fiduciary duty with respect to our management of climate-related risks is similarly effectively mitigated. We have assessed the legal risk due to noncompliance with current climate regulation as low, and we are evaluating the potential impacts of proposed new disclosure requirements.</p> <p>From financial years beginning on or after 1st April 2019, qualifying large UK companies will need to include the following</p>

		<p>information within (or alongside) their Directors' Report annually – GHG emissions, Total kWh energy use, energy efficiency actions taken during the reporting period. VMware filed 2021 financial statements in October 2022 which included our second of such SECR disclosures.</p> <p>In the U.S., the SEC rules to enhance and standardize climate-related disclosures for investors have not yet been made final and, accordingly, present a potential climate-related reporting legal risk. As part of VMware's internal processes to understand and mitigate climate-related legal risks, an ESG Disclosure Working Group has been formed to monitor the regulatory developments and ensure our preparedness to meet upcoming changes in the legal landscape.</p> <p>For FY23, we disclosed certain of our ESG performance results in our Annual Report on Form 10-K, including with respect to ESG, Environmental Sustainability, and Diversity Equity and Inclusion (DEI) (https://ir.vmware.com/websites/vmware/English/5100/us-sec-filing.html?year_filter=0&category_filter=1). We also incorporated sections on ESG, DEI, our 2030 Agenda (our ESG strategy), and corporate governance reporting in our Annual Proxy Statement (https://ir.vmware.com/websites/vmware/English/5100/us-sec-filing.html?year_filter=0&category_filter=2) for the third consecutive year.</p>
Market	Relevant, always included	<p>Market risks, which may be influenced by climate issues, are relevant and included in our enterprise risk management identification and assessment processes facilitated by our Internal Audit team.</p> <p>We face intense competition across industries and geographies for our products and services. We believe that the key factors in our ability to successfully compete include the quality, price, and adaptability of our product and service offerings, along with energy efficiency (decarbonization) benefits.</p> <p>While we are a technology leader in virtualization and cloud infrastructure solutions and have a favourable reputation with our customers, many of our current or potential competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, technical, sales, marketing and other resources. An example of a climate-related market risk that we consider is the need to develop and implement energy efficiency features in our offerings that equal or exceed those in competing products. If we fail, we would risk losing a part of our competitive share that values our products' environmental benefits.</p>

Reputation	Relevant, always included	<p>Reputational risks, which may be influenced by climate issues, are relevant and included in our enterprise risk management identification and assessment processes conducted by our Internal Audit team. For VMware, given that we have led the virtualization of IT with our virtualization products, including, for example vSphere, vCloud NFV, and Horizon, and that our products are known for energy efficiency, it would negatively impact our business if our reputation was damaged due to a lack of performance around the environment and climate change.</p> <p>There is now greater public and shareholder scrutiny on how companies are assessing climate change risks and opportunities. Third-party ESG rating and ranking agencies such as Morgan Stanley Capital International (MSCI) ESG rating (https://www.msci.com/our-solutions/esg-investing/esg-ratings-climate-search-tool/issuer/vmware-inc/IID000000002129033) scan businesses' environmental performance and practices to rate companies. VMware received a AA rating from MSCI in FY23. We were also named to the Dow Jones Sustainability Index (DJSI) for the third year in a row. The DJSI is one of the most respected independent sustainability performance evaluation systems, and we outranked many of our peers in the software category for our leadership in corporate sustainability. VMware must continue to demonstrate commitment to climate-change-related action and progress on public goals to continue to score high in ESG ranking and ratings.</p>
Acute physical	Relevant, always included	<p>Acute physical risks, which may be influenced by climate issues, are relevant and included in our enterprise risk management identification and assessment processes conducted by our Internal Audit team. We evaluate the impacts of potential event-driven weather incidents that are severe or frequent such as drought, wildfires, acute air pollution, floods, water crisis, or increase in temperature. Our current process is now more robust and standardized within the organization, where risks (including climate-related risks) are tracked centrally and reported to the Chief Security Officer every month.</p> <p>We closely monitor the potential impacts from potential natural disasters to our major office locations. Tropical storms and hurricane Ida did not have a major impact in FY23 for our AMER operations. Given that two of our largest populations of employees live in drought-prone areas - California in the U.S. and Bangalore and Chennai in India – we monitor this risk closely. Wildfires and public safety power shutoffs in FY23 for our California operations, including with respect to the Palo Alto campus, Santa Clara data center, as well as large segments of our VMware employees living within zones that were under wildfire threats, were monitored and did not have a major impact on our operations. Also in FY23, unanticipated extreme cold weather resulted in electrical grid outages in Texas, where many of our U.S. employees are located.</p> <p>Such events can impact our major locations, where R&D product development, operations and support are conducted. While</p>

		this danger currently has a low-assessed risk of disrupting normal business operations in the near term, it has the potential to impact employees' abilities to commute to work or to work from home and stay connected effectively. Under our Future of Work distributed workforce model, we are also monitoring climate-related weather risks in our major locations for impacts to employees' home power and network infrastructure.
Chronic physical	Relevant, always included	<p>Chronic physical risks, which may be influenced by climate issues, are relevant and included in our enterprise risk management identification and assessment processes conducted by our Internal Audit team. We evaluate the impacts of chronic physical risks and longer-term shifts in climate patterns, such as sustained higher temperatures, that may cause sea level rise or frequent cyclones; chronic heat waves causing droughts; changes in precipitation patterns; and changing weather patterns.</p> <p>For example, climate-driven changes in precipitation extremes have the potential to disrupt VMware's internal operations. Our California headquarters is projected to be vulnerable to future water scarcity due to climate change. Also, our India office locations like Bengaluru experienced heavy rainfall in September 2022. In addition, we had potential incident advisories for flooding events in China and Malaysia in FY23.</p>

C2.3

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

No

C2.3b

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

Primary reason	Please explain
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Row 1	Risks exist, but none with potential to have a substantive financial or strategic impact on business	<p>To prioritize relevant climate risks for VMware, a qualitative climate screening and a quantitative scenario analysis aligned to TCFD recommendations were conducted in 2021 to identify, assess, and quantify VMware's climate-related transition and physical risks, as well as corresponding opportunities. Risks were prioritized based on the scope of their impact and which risks VMware has direct management control over (first-order risks). Scenario analysis modeling was conducted to capture the likelihood/onset of the severity of climate risks for physical risks. The impact of long-term changes in climate and weather patterns leading to increased heat and drought conditions at colocation data centers as well as the risks to employees' "work from home" productivity was analyzed. This quantitative analysis estimated financial and business impact of physical risks affecting VMware's ability to continue operations.</p> <p>As an example, financial analyses related to increased cooling demand at data centers and decreased employee productivity due to rising temperatures were completed. These analyses showed that while VMware does face some potential risk, it is below the revenue and free cash flow thresholds for substantive financial impact related to climate as defined in question C2.1b for CDP reporting purposes. Transition risks like reputational impact with respect to customers and employees were also analyzed. Based on our definition of substantive financial risk as outlined in C2.1b (for FY23, substantive financial impact for the purposes of CDP would translate to an affect of >\$133.5M million for revenue and of >\$115.5 million for free cash flow), none of the identified risks were found to be reasonably likely to have a substantive financial or strategic impact on the business in the short to medium term. Although these risks did not meet our definition in 2022, we are working on mitigation and adaptation plans to best prepare VMware for a changing climate. In addition, we recognize that climate risk management and analysis is an ongoing and dynamic process. We plan to continue maturing our approach and completing financial analysis of additional climate-related risks as they arise or as we have new information.</p>
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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 and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

In FY23, the Green Score feature in VMware Aria Operations was developed and released to help customers track their decarbonization goals using a relative scoring and identify where they are in the sustainability journey. In the transition to a low-carbon economy, a goal can only be achieved if it is tracked and validated against tangible target values. Total carbon emissions footprint and carbon avoidance have become two important data center key performance indicators for organizations of all sizes. The Green Score builds upon the first sustainability dashboards released in FY22 in VMware Aria Operations, which focused on showcasing and quantifying carbon emissions saved by compute virtualization and ways to further reduce carbon footprint in vSphere-powered Data Centers by identifying idle workloads (vSphere is VMware's compute virtualization product).

In October 2022, the next Aria Operations Cloud release introduced the Green Score which was developed around three themes: (1) Identify the current Carbon Footprint, (2) Evaluate level of Carbon Emissions against best practices with a Green Score, and (3) Recommend actions for improving the Green Score. The Aria Operations Suite first helps identify the current power consumption and carbon footprint within the data center. Then the product optimizes current power consumption by identifying wastage in the data center and provides the capability to identify where to provision the next workload to be on the greenest or least power-consuming vSphere clusters (IT infrastructure) in the data center.

Next, the Green Score is generated to help optimize power consumption and carbon footprint within the data center over a period of time. Under the sustainability dimensions of clean demand, lean operations and green supply, the Green Score consists of five weighted components – workload efficiency, utilization of physical resources, level of virtualization of workloads, carbon intensity of the power source and hardware efficiency – to compute a Green Score for the organization within their data center. To make the score easily understandable for comparing or tracking, a score between 0% and 100% is generated. Lastly, the dashboard provides actionable and automated recommendations on improving the Green Score within the data center.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

200,250,000

Explanation of financial impact figure

We see increasing interest from customers who want to reduce their energy use and carbon emissions in their multi-cloud. Through the Green Score feature in VMware Aria Operations, customers can improve carbon transparency, increase workload carbon efficiency and progress towards a zero-carbon cloud. Customers have several business drivers in mind when selecting a multi-cloud solution, and we currently do not have reliable means for predicting potential growth and what percentage is attributable to energy efficiency and carbon emissions versus other business drivers. As such, the potential financial impact represents a range from \$0 to \$200.25 million, 1.5% of our total FY23 revenue of \$13.35 billion, representing a potential 1.5% growth of demand for this sustainability solution..

Cost to realize opportunity

900,000

Strategy to realize opportunity and explanation of cost calculation

Situation: Customers desire a transition to a low-carbon economy.

Task: Develop and expand VMware's offering of low-carbon services.

Action: Our primary strategy to realize this opportunity is to integrate sustainability into research and development (R&D) across our solutions and services. In FY23 our R&D spend was \$3.3 billion. A part of R&D spend is invested into the development of tools to report and analyze customers' carbon footprints, and to improve resource utilization and energy efficiency of customers' multi-cloud environments, which can help reduce customers' total cost of ownership and carbon emissions. In addition to server consolidation, VMware's multi-cloud management solution enables customers to run their workloads in the best region with lowest cost and carbon emission. The costs of these improvements and new developments are embedded into the VMware's product roadmaps and thus are not considered additional, rather provided here for context.

We have established a Sustainability Innovation group, of subject-matter experts and partners to product groups, to accelerate the development and adoption of sustainability-related features and tools into our product portfolio. The team focuses on tools to report and reduce carbon emissions and to improve resource utilization and energy efficiency. We have a three-year product roadmap with incremental deliverables. We are setting yearly Objective and Key Results (OKRs) to further achievement against our long-term commitment of VMware's ESG 2030 agenda. Estimated annual cost to realize the opportunity is \$900K, which reflects related labor costs of approximately five full-time equivalents and spend on third-party data and research.

Result: In FY23, the Green Score feature in VMware Aria Operations was developed and released to help customers track their decarbonization goals using a relative scoring and identify where they are in their sustainability journey.

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

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

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

We have a different feedback mechanism in place

Description of feedback mechanism

The details of our net zero commitment and our science-based emissions reduction targets (SBTs) are shared publicly on our company website (www.vmware.com/company/esg) and in our annual ESG Report. VMware invites stakeholders to provide feedback on the topics covered in our report and on our website by submitting the questions or comments to our ESG office via email (ESG@vmware.com).

In FY23, there was limited shareholder engagement due to the pending acquisition of VMware by Broadcom, which was announced on May 26, 2022. Prior to that announcement, proactively engaging with investors on ESG topics remained a key priority for the organization. In FY22, we

strengthened our stockholder engagement program by proactively reaching out to our ten largest unaffiliated stockholders who collectively held approximately 38% of our total unaffiliated shares outstanding, as well as two major proxy advisory firms in the U.S., to solicit feedback on ESG. We engaged with these investors through a series of select investor calls that included the CSO and highlighted ESG topics. The investor feedback was analyzed and insights reviewed with ESG leadership.

VMware is committed to achieving net zero carbon emissions for our operations and supply chain by 2030 as part of our ESG strategy. Among other things, we purchase renewable energy, work with our suppliers to reduce their emissions, and support distributed workforces through our Future of Work initiative to reduce what we can. By purchasing carbon offsets, we participate in low carbon sustainable development projects that enable carbon avoidance to offset our remaining emissions. In line with the leading net zero guidance, we are developing our strategy to include carbon removal projects to address residual emissions.

Our net zero goal builds on approved SBTs and expands the scope of our climate commitments to enable employees, customers and partners to act even as the definition of a net zero future evolves. Our validated SBTs are ambitious, 1.5°C-aligned targets focused on halving our absolute Scope 1 & 2 emissions, our employee commute and fuel and energy-related emissions by FY31 from a FY19 baseline. VMware further commits that 75% of its suppliers by spend covering purchased goods and services, capital goods, upstream leased assets and upstream transportation and distribution will have committed to set science-based targets by end of FY25.

Frequency of feedback collection

More frequently than annually

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

www.vmware.com/company/net-zero | www.vmware.com/company/esg

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
Row 1	Yes, qualitative and quantitative

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 8.5	Company-wide		The parameters of our scenario analysis were to understand the potential impacts of climate change for our colocation data center operations and our employees. Assumptions around possible impacts on operating expenses and employee productivity were used. Analytical choices included evaluating colocation data centers and major employee metro areas at the median (50th percentile) of 30 downscaled LOCA models (from the 1/16th degree LOCA climate data set http://loca.ucsd.edu/) across the three different future world scenarios on the 2030 and 2050 time horizon. The climate metrics evaluated to understand impacts on operating expenses and employee productivity were extreme heat, extreme precipitation events, and drought.
Physical climate scenarios RCP 4.5	Company-wide		The parameters of our scenario analysis were to understand the potential impacts of climate change for our colocation data center operations and our employees. Assumptions around possible impacts on operating expenses and employee productivity were used. Analytical choices included evaluating colocation data centers and major employee metro areas at the median (50th percentile) of 30 downscaled LOCA models (from the 1/16th degree LOCA climate data set http://loca.ucsd.edu/) across the three different future world scenarios on the 2030 and 2050 time horizon. The climate metrics evaluated to understand impacts on operating expenses and employee productivity were extreme heat, extreme precipitation events, and drought.
Physical climate scenarios RCP 2.6	Company-wide		The parameters of our scenario analysis were to understand the potential impacts of climate change for our colocation data center operations and our employees. Assumptions around possible impacts on operating expenses and employee productivity were used. Analytical choices included evaluating colocation data centers and major employee metro areas at the median (50th percentile) of 30 downscaled LOCA models (from the 1/16th degree LOCA climate data set http://loca.ucsd.edu/) across the three different future world scenarios on the 2030 and 2050 time horizon. The climate metrics

			evaluated to understand impacts on operating expenses and employee productivity were extreme heat, extreme precipitation events, and drought.
Transition scenarios IEA 2DS	Company-wide		<p>i) Scenario Assumptions: We completed a quantitative & qualitative climate-related scenario analysis to understand and evaluate the implications of our SBT. Assumptions around future growth rates, sales, employee headcount and real estate square footage were used.</p> <p>ii) Analytical Choice on time horizon: Analysis included medium- and long-term time horizons as prescribed by SBTi & CDP (5-15 years, 15+ years, respectively), as we used this analysis to meet or exceed the SBTi criteria. For the SBTi analysis and SBT tracking, we perform a yearly Scope 3 inventory.</p> <p>iii) Parameters considered: SBT assessment applies to the entire company, including the operating boundary for Scope 1 and 2 emissions, and Scope 3 emissions. Scope 1: vehicles, refrigerants, natural gas use, and diesel use from generators Scope 2: facilities, data centers, purchased cooling in leased locations, and labs Scope 3: purchased goods & services, capital goods, Fuel-and-energy-related activities (FERA), upstream transportation and distribution, waste, business travel, employee commuting, and upstream leased assets. The assessment relies on assumptions and inputs from specific business/stakeholder groups: facilities, data center labs, real estate, finance, and supplier network.</p> <p>iv) Results: We would need to achieve reductions ranging from 25% to 55% for medium- and long-term timeframes, respectively. Consequentially, our SBT is to reduce Scope 1 and 2 emissions by 50% by FY31 from a FY19 base-year. Results are used to directly inform objectives and corporate strategy by providing reference points to determine feasibility and actions to reduce emissions. FY19 base year analysis results showed 94% of our total emissions were Scope 3, and 54% of Scope 3 emissions were attributable to purchased goods and services. As a result, we developed an approved SBTi Scope 3 target to reduce Scope 3 GHG emissions from employee commuting and FERA 50% by FY31 from a FY19 base year. We further committed that 75% of suppliers by spend covering purchased goods and services, capital goods, upstream leased assets and upstream transportation and distribution will have</p>

			SBTs by FY25. v) Case study: We analyze our emissions yearly for our growth trajectory and consider reduction levels needed to align with SBTi criteria and to meet our SBT. We use the analysis to understand reduction goals progress and future energy procurement needs.
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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

What is VMware's direct operational exposure to climate-related risks across plausible "future climate worlds" on a 2030 and 2050 time horizon?

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

The results of this analysis found that our colocation data centers will experience chronic higher temperatures, including higher temperature extremes for longer amounts of time across all scenarios. The severity of this change differed across the scenarios, but it is likely that there will be higher cooling demand required at our colocation data centers, and thus investments into operational efficiencies is of strategic advantage. We recognize that VMware isn't alone in taking into consideration the physical impacts of climate change on data centers and that our customers are impacted too. In FY23, we further invested in the R&D of VMware Deep Cooling, a solution to optimize cooling in data centers. Deep Cooling uses AI and big data to accurately predict and match the optimal parameter combination of cooling in the data center by modeling with machine learning. Using operation metrics of critical equipment in the cooling chain, monitoring data of the dynamic environment, and energy usage, Deep Cooling reduces energy, emissions, and costs by dynamically adjusting parameters in each link of the cooling system. We will continue to assess new data center cooling technologies to support both VMware's and our customers' sustainability needs. Furthermore, when VMware identifies potential new data center locations, our Data Center Engineering Operations and sustainability teams meet to review climate-related criterion specific to the data center vendor and location.

We also found that the metro areas in which VMware employees live and work will likely experience different future climate stressors and may

increasingly factor into our future office locations. The majority of metro areas are expected to experience increased extreme heat conditions and more frequent extreme precipitation events. As we now rely on the ability to maintain a remote workforce, these changes in the climate may impact our employee's future work-from-home productivity. Based on these findings, we have decided to focus our efforts within the next two years on better understanding what our employees' resilience will be to these climate risks. With these results, across all scenarios it is expected there will be some degree of impacts on our direct operations that may have a financial impact via increased operating expenses and/or losses in employee productivity. The severity of VMware's exposure to those risks is dependent on the scenario and the impacts of VMware's future resilience building initiatives.

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	<p>Customers increasingly evaluate IT energy use/carbon impacts to support their sustainability/decarbonization goals in response to climate risks and opportunities. As we continually update product features to lower carbon footprints and measure carbon reduction initiatives to remain competitive, our climate-related strategy will continue to influence our products/services strategy (short-term of 0-1 year, medium-term of 1-3 years, and long-term of 3-6 years).</p> <p>In our 2030 Agenda, we commit to accelerating and transforming the carbon efficiency of customer digital operations. We help move toward a low carbon future through efforts to drive net-zero emissions, workload carbon efficiency, carbon-free clouds, and sustainable innovation. VMware led the development of virtualization technologies which help customers reduce energy consumption, and we continue to transform low-carbon IT resources across private clouds and complex multi-cloud/multi-device environments.</p> <p>The primary aspect of climate change that drives our strategy is enabling energy efficiency via software. Cloud computing enables shifting to a lower carbon business model while increasing operational</p>

		<p>efficiency. We support customers by helping them avoid emissions by using our compute virtualization platform, vSphere, and reduce their hardware footprints with our vSAN and NSX products. Along with gains in hardware and data center efficiencies, VMware's virtualization technologies have helped reduce power consumption resulting in avoided emissions, even as IT workloads have grown. We continually invest in our products and services, and have annual releases that provide more robust low-carbon features to support our client's requirements.</p> <p>In FY23, VMware developed a three-year product roadmap with incremental deliverables and an investment plan in an engineering team to focus on sustainable offerings in our core products and services, aligned with our private, public, telecommunications (telco), and edge cloud platforms. This sustainability roadmap focuses on developing tools for our customers centered around energy savings, carbon transparency, and emissions reductions in a multi-cloud environment. In addition, VMware uses our own products and tools to reduce our Scope 2 electricity consumption and Scope 3 data center and public cloud emissions.</p>
Supply chain and/or value chain	Yes	<p>Climate change may have a long-term negative impact on our business. Risks related to rapid climate change may have an increasingly adverse impact on our business and those of our customers, partners and vendors in the longer term. Given the inherent risks faced by all businesses in today's climate along with the scale of our global supply chain, VMware aims to create an awareness of climate-related risks among our suppliers that will better enable them to identify and prepare for future events through CDP disclosures. A number of climate-related risks, including extreme weather events, could impair the production capabilities of our suppliers or disrupt transportation networks, potentially limiting our ability to fulfill obligations to our customers. Further by engaging with our suppliers, we can seize the opportunity to further reduce emissions beyond our direct operations. Climate-related strategy will continue to influence our supply chain business strategy now and into the future (short-term of 0-1 year, medium-term of 1-3 years, and long-term of 3-6 years).</p> <p>VMware's supply chain strategy is influenced by climate-related risks and opportunities now and in the future (short, medium, and long term). VMware joined CDP's Supply Chain initiative in 2018 to engage suppliers. Through this platform, we learned that our suppliers are highly capable and understand the</p>

		<p>need for emissions reductions. Since 2018, VMware's supplier engagement and enablement program has evolved. In FY23, we tested a new supplier engagement strategy to work with suppliers at a deeper level in support of our SBT goal of having 75% of our suppliers by spend commit to their own SBTs by the end of FY25.</p> <p>The FY23 pilot supplier enablement program deeply engaged 15 suppliers that collectively represented 16% of VMware's supplier spend, a cross-section of supplier industries, and business sizes. 80% (12 suppliers) of these engaged suppliers took action to begin a climate program that would support annual measurement of their emissions and set carbon reduction targets. 40% (6 suppliers) formally committed to setting science-based targets through the SBTi. More broadly, in FY23, as part of VMware's supplier engagement program we engaged suppliers with addressable spend over \$1 million, as this number typically constitutes between 85-90% of our supplier spend coverage.</p>
Investment in R&D	Yes	<p>We have made investments in R&D and continually update product features to improve our cloud offerings in response to climate-related risks and opportunities. Customers increasingly evaluate IT energy use/carbon impacts as a competitive differentiator. Climate-related strategy will continue to influence our R&D business strategy now and in the future (short-term of 0-1 year, medium-term of 1-3 years, and long-term of 3-6 years).</p> <p>To significantly progress our R&D strategy, we continually invest in opportunities with climate-related benefits that improve our cloud product offerings now and in the future (short, medium, and long term). We have assembled an experienced group of developers with expertise within application modernization, cloud management, cloud infrastructure, networking, security, anywhere workspaces, software-as-a-service (SaaS), open source and edge solutions. We prioritize product development efforts through a combination of engineering-driven innovation and customer- and market-driven feedback. Our R&D culture values innovation, quality and open collaboration with partners. We continue to invest in and focus on expanding our subscription and SaaS offerings. We continue to invest in key growth areas and areas we expect to be significant growth drivers in future periods.</p> <p>In FY23, VMware developed a three-year product roadmap with incremental deliverables and investment</p>

		<p>plan for an engineering team to focus on sustainable product offerings. Currently, we invest in innovative solutions to drive carbon transparency and workload carbon efficiency. In the past, this team developed carbon calculation tools, enabling our customers to track and reduce their carbon footprint. This team also worked with our cloud partners to drive VMware's zero carbon committed initiative.</p> <p>We also have strong ties to leading academic institutions and invest in joint research opportunities. In FY23, VMware continued to partner with the US National Science Foundation on the research program: "The Next Generation of Sustainable Digital Infrastructure." . VMware and NSF lead this multi-year digital infrastructure research to foster novel, transformative research to lead to practical sustainability methodologies/tools across the full development and operations lifecycle. The joint NSF-VMware awards total US \$6 million in research funding grants over three years.</p>
Operations	Yes	<p>Climate change may have a long-term negative impact on our business. While we mitigate the business risks associated with climate change for our operations, there are inherent climate-related risks wherever business is conducted. Any primary locations may be vulnerable to the effects of climate change and the impacts of extreme weather events, which have caused regional, short-term systemic failures in the U.S. and elsewhere.</p> <p>Our operations are subject to a number of climate-related risks, such as potential disruptions to our drought/wildfire prone Palo Alto headquarters, all presenting opportunities to evolve, innovate, and include operational resiliency into our strategy. Climate-related strategy will continue to influence our operational strategy in the short (0-1 year), medium (1-3 years), and long-term (3-6 years).</p> <p>In the last five years, California has experienced extreme temperatures and low precipitation, resulting in wildfires that impact air quality and electric service at our Palo Alto campus, where 4,000+ employees are based. We have installed a microgrid on our 105-acre campus in Palo Alto illustrates the impact of which extends far beyond our campus, providing local renewable power, energy storage, and emergency back-up power to the local community in a climate-related event.</p> <p>Inspired by a vision to increase our community's resilience in the face of climate disasters, we assessed</p>

		<p>systemic risks and realized that our collective dependency on grid power made us vulnerable to outages. VMware collaborated with the City of Palo Alto on a first-of-its-kind community microgrid that can provide local renewable power and energy that is reliable, sustainable, and resilient.</p> <p>The microgrid prototype encompasses two buildings on VMware's campus, supported by two 1 MWh batteries which integrate with existing rooftop solar panels and 100% renewable grid power. Each microgrid has the capability to support the community's Mobile Emergency Operations Center (MEOC), providing connectivity and resilient power for its vehicles. These MEOC vehicles can then use the VMware microgrid in case of extended power outages or fuel shortages to provide critical communication services during emergencies for the surrounding community.</p>
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C3.4

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

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Assets	<p>We plan for climate-related risks and opportunities annually as part of our existing annual financial planning process in the ESG office. ESG investments are prioritized across three considerations (1) alignment to our 2030 strategy, (2) financial ROI and (3) impact. Prioritized investments are presented by the VP, ESG and reviewed with the ESG Executive Sponsors and by the VP, Corporate Finance. The proposed plan is presented by the CFO to the Board of Directors with ESG included as a specific component of VMware's annual operating plan. The approved plan is incorporated in the financial planning of relevant organizations across the enterprise and is intended to ensure that we meet current climate commitments, as well as make progress towards future climate commitments.</p> <p>i.) Case studies: We incorporate climate risk and opportunity into financial planning through improving the resource efficiency and resiliency of our buildings and data centers (assets). We incorporate energy efficiency, resiliency, sustainability, and green power into retrofitting existing office buildings and in new projects, and we believe this increases the intrinsic value of the assets and our reputation in the market to attract new generation talent. For example, we have</p>

	<p>achieved LEED certification for 20 of our sites globally, including LEED Platinum certification for two new buildings in Pune and in Bangalore, India. Our former data center located in Wenatchee, Washington (under VMware control for a portion of 2022) was also LEED Platinum certified with a PUE of 1.29. Additionally, most new offices in Palo Alto and India have been LEED Gold or higher certified since 2016, and we are working toward LEED GOLD certification for one of our upcoming new facilities in India. In FY23, 45% of our portfolio square footage is in green building certified space including VMware leased office space within buildings that have been LEED/BREEAM certified by another party. Additionally, we are using VMware's Sustainable Design Guidelines to support our teams in achieving LEED certification for both existing retrofits/remodels and new construction. New construction and retrofit projects with LEED certification have implications for our capital planning, in turn they enable future cost and carbon savings. LEED certification of new facilities is one of the strategies for our S2 SBT. First costs increase for LEED certification range from 1% to 10% and yield energy and carbon savings over the lifetime of the facility.</p> <p>We also incorporate climate risk into our operational costs through making short-term expenditures, such as carbon credits and RECs, towards meeting our current RE100 and Climate Neutral commitments, and longer-term investments and capital expenditures, such as R&D for climate-related opportunities per C2.4a, responsible sourcing and renewable energy investments, towards future commitments such as SBTs, Net Zero, Supplier targets, and Zero Carbon Committed Clouds.</p> <p>In early FY22, we established our new ESG Office to ensure cross-company alignment, a strategic focus, as well as to measure and track the progress against our 30 goals that make up our 2030 Agenda (ESG strategy). The ESG Office is responsible for updating our Climate Transition Plan and tracking progress on our Net Zero goal and SBT. We have increased our internal resourcing and cross-functional collaboration by partnering with our finance and audit teams to strengthen our governance structure around our commitments.</p>
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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
Row 1	No, but we plan to in the next two years

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

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

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)

Base year

2019

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

5,238

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

20,054

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

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

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

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

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

25,292

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, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO₂e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO₂e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO₂e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO₂e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2031

Targeted reduction from base year (%)

50

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

12,646

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

3,650

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

844

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO₂e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

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

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

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

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

4,493

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

164.4709789657

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Our SBT-approved goal is to reduce our company-wide Scope 1 and 2 emissions by 50% by FY31 from a FY19 base-year. Our Scope 1 and 2 target covers 100% of sites and activities under VMWare's operational control and colocation data centers, with no exclusions. All years listed are our fiscal years as defined in C0.2. In 2016, we declared a renewable energy target and set a company-wide target to achieve RE100 status and 100% renewable electricity consumption. VMware committed to increase annual sourcing of renewable electricity from 94% in FY19 to 100% by FY21 and commits to continue annually sourcing 100% renewable electricity through to FY31. We have maintained our global consumption of 100% renewable electricity in FY22 and FY23.

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

The percentage achieved is a result of the reduction in our Scope 1 and 2 emissions since FY19. 100% of all VMware offices and colocation data centers are covered under our RE100 commitment. We are committed to maintaining 100% renewable electricity for our global facilities through 2030 and moving forward, we are actively reviewing the availability of new virtual power purchase agreements that add renewable energy generating assets to the grid in locations where we have significant demand. Over time, we plan to increase the proportion of high impact renewable electricity purchasing contracts to our portfolio and where possible, shift away from relying on Energy Attribute Certificates (EACs) to maintain our RE100 status.

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

Target reference number

Abs 2

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

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

Base year

2019

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

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

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

13,008

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

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

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

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

13,008

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

13,008

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

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

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

100

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

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

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2031

Targeted reduction from base year (%)
50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]
6,504

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

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

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

7,346

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

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

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

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

7,346

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

7,346

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

87.0541205412

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Our SBT approved Scope 3 goal is to reduce absolute Scope 3 GHG emissions from fuel-and-energy-related activities 50% by FY31 from a FY19 base year. All years listed are our fiscal years as defined in C0.2. This category includes emissions related to the production of fuels and electricity purchased and consumed by VMware. The target coverage is for 100% of all VMware offices and colocation data centers, with no exclusions.

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

100% of all VMware offices and colocation data centers are covered under our RE100 commitment. In 2016, we declared a renewable energy target and set a company-wide target to achieve RE100 status and 100% renewable electricity consumption. VMware committed to increase annual sourcing of renewable electricity from 94% in FY19 to 100% by FY21 and commits to continue annually sourcing 100% renewable electricity through to FY31. We have maintained 100% global consumption of renewable energy in FY22 and FY23. Our commitment to procure 100% renewable electricity helps reduce the upstream emissions of purchased electricity included under the Fuel- and energy-related emissions Scope 3 category.

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

Target reference number

Abs 3

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Category 7: Employee commuting

Base year

2019

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

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

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO₂e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

51,464

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

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

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

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

51,464

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

51,464

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

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

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

100

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
13

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2031

Targeted reduction from base year (%)
50

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

25,732

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

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

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

25,815

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

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

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

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

25,815

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

25,815

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

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

99.6774444272

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

Our SBT-approved Scope 3 goal is to reduce absolute Scope 3 GHG emissions from employee commuting 50% by FY31 from a FY19 base year. Our employee commute estimation includes emissions from teleworking (i.e., employees working remotely), but excludes commute and teleworking emissions for contingent workers. All years listed are our fiscal years as defined in C0.2.

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

Under our Future of Work (FoW) initiative—a hybrid workforce model that offers all employees the flexibility and freedom to work from a VMware office, a home office, or other places that enable them to meet their professional and personal goals. We also offer a range of region-specific low-carbon employee commute programs through a combination of strategies, including public transport subsidies, vanpooling, dedicated parking spots for electric vehicles, bike racks, and so on.

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

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

Net-zero target(s)

Other climate-related target(s)

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

2016

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2015

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

139,798

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

71

Target year

2021

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

100

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

100

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

100

Target status in reporting year

Achieved

Is this target part of an emissions target?

This target is a part of our Abs1 .

Is this target part of an overarching initiative?

RE100

Please explain target coverage and identify any exclusions

This goal is a part of our Scope 2 SBT which is as follows: VMware commits to increase annual sourcing of renewable electricity from 94% in FY19 to 100% by FY21 and commits to continue annually sourcing 100% renewable electricity through to FY31. We increased our global consumption of renewable energy from 94% in FY19 to 100% in FY21 and have maintained 100% in FY22 and FY23 as well. We joined RE100 and declared a renewable energy target in 2016 and defined company-wide offices, and company-managed data centers as the goal boundary. In 2018, we folded in colocation services related IT equipment Scope 2 emissions for the first time into overall Scope 2 calculations. This was done in accordance with the Future of Internet Power best practices paper (https://www.bsr.org/reports/BSR_Future_of_Internet_Power_GHG_Emissions_Report.pdf). The colocation IT equipment power consumption are also included in the RE% target calculations.

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

List the actions which contributed most to achieving this target

To achieve this, we focused on prioritizing energy efficiency within our operations, followed by direct contracts to procure renewables and purchase of Environmental Attribute Certificates (EACs). We are also developing a region-specific renewable electricity program that includes virtual power purchase agreements (VPPA) and aggregated VPPAs in mature markets where VMware has a significant presence, such as the United States and Europe.

C4.2b

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

Target reference number

Oth 1

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

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

Engagement with suppliers

Percentage of suppliers (by emissions) with a science-based target

Target denominator (intensity targets only)

Base year

2019

Figure or percentage in base year

28

Target year

2025

Figure or percentage in target year

75

Figure or percentage in reporting year

52

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

51.0638297872

Target status in reporting year

Underway

Is this target part of an emissions target?

Yes, it is the supplier engagement portion of our Scope 3 SBT.

Is this target part of an overarching initiative?

Science Based Targets initiative – approved supplier engagement target

Please explain target coverage and identify any exclusions

VMware commits that 75% of its suppliers by spend covering purchased goods and services, capital goods, upstream leased assets and upstream transportation and distribution will have science-based targets by the end of FY25. All years listed are our fiscal years as defined in C0.2

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

To achieve our supply chain carbon reduction goals, we increased efforts in FY23 to work with suppliers at a deeper level to support them and help ensure their progress towards our SBT goal. 52% of our suppliers by spend have committed to set a science-based target with the SBTi. We continually work with our top suppliers on enhancing their ESG efforts and checking in on their progress, so we expect to see these numbers increase.

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Abs2

Abs3

Target year for achieving net zero

2031

Is this a science-based target?

No, but we are reporting another target that is science-based

Please explain target coverage and identify any exclusions

As part of our 2030 Agenda, VMware is committed to achieving net zero carbon emissions for our operations and supply chain.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

Our SBTs, our commitments to RE100 and our carbon neutrality are foundational as we drive towards net zero. We plan investments for our emissions elimination projects as part of our annual operating cycle and are in the process of developing a long-term net zero plan which will also include our carbon removal strategy to neutralize residual emissions by 2030.

Planned actions to mitigate emissions beyond your value chain (optional)

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*	4	220
Implementation commenced*	0	0
Implemented*	5	312
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)

237

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

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

128,703

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

1,292,732

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

Installation of Human Centric tunable and LED light fixtures, motion sensors and controls to manage interior lights, and control panel upgrades .

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify

High-efficiency equipment

Estimated annual CO2e savings (metric tonnes CO2e)

75

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

Scope 2 (location-based)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

6,616

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

132,324

Payback period

16-20 years

Estimated lifetime of the initiative

16-20 years

Comment

Energy valves and electronically commutated fan installation in AHUs

C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	To accelerate our Sustainable Product development, VMware has used the ring-fence method of budgeting (dedicated funds), which enables increased focus on and visibility to our investment in delivering sustainable product solutions. For the majority of our other investments, VMware uses our integrated annual capital budgeting process to identify and fund energy saving projects globally. To determine which projects to invest in, as part of the ESG Office annual financial planning process, investments for Scope 1, 2 and 3 reduction activities are prioritized across 3 considerations, (1) alignment to 2030 strategy, (2) financial ROI and (3) impact. Along with typical Scope 2 emissions reduction activities, such as LED lighting, upgrading HVAC systems, or designing to LEED certification, VMware also invests in Scope 2 initiatives through renewable energy, such as the Palo Alto campus microgrid, and Scope 3 initiatives such as employee commute and the responsible supplier program.
Compliance with regulatory requirements/standards	Certain projects may be necessary to meet or exceed regulatory or customer compliance requirements. In such cases, compliance would be the driver and objective.
Partnering with governments on technology development	<p>VMware has worked closely with the City of Palo Alto, California to develop the prototype of an innovative community microgrid, a local energy grid that can disconnect from the traditional grid and operate autonomously. The microgrid prototype encompasses two buildings on VMware's Palo Alto campus, supported by two 1 MWh batteries which integrate with existing rooftop solar panels and 100% renewable grid power. Each microgrid has the capability to also support the community's Mobile Emergency Operations Center (MEOC), providing connectivity and resilient power for its vehicles. These MEOC vehicles can use the VMware microgrid in case of extended power outages or fuel shortages to provide critical communication services.</p> <p>In FY23, VMware continued to fund a new research program in partnership with the US National Science Foundation (NSF): "The Next Generation of Sustainable Digital Infrastructure," which is part of a continuing collaboration between NSF and VMware. The program was developed by VMware Academic Program (VMAP) in collaboration with VMware Office of the CTO's Sustainability group and NSF's Division of Computer and Network Systems. The goal of this program is to foster transformative research in fundamental and systematic approaches, resulting in dramatic increases in the environmental</p>

	<p>sustainability of digital infrastructure and leading to practical methodologies and tools.</p> <p>In FY22, Aurora Energy Research, in collaboration with VMware, published a policy paper titled, 'Digital Transformation and a Net Zero Emissions Europe' commissioned by VMware to raise awareness about the role of virtualization and renewable energy powered data centers in reducing the carbon footprint of digital transformation. https://auroraer.com/insight/digital-transformation-and-a-net-zero-emissions-europe-march-2021/</p>
Internal incentives/recognition programs	<p>VMware's Sustainability at Home is a program led by our Sustainability Ambassadors (volunteer teams) in each region, who engage with their communities by partnering with sustainable product companies and non-profit organizations to enable VMware employees to lead more sustainable lifestyles. Some of the organizations offer discounts to our employees and all of them offer continued education on sustainability topics. Currently, these offerings include discounts on renewable energy and residential solar, composting, and alternatives to plastic products.</p> <p>Some examples of companies are:</p> <p>SunShares, for the sixth consecutive year, enabling our employees to reduce their carbon emissions at home and go solar. SunShares (https://www.bayareasunshares.org/) is a solar bulk purchase program that is available for all of our California employees.</p> <p>In a similar manner we partner with Common Energy (https://www.commonenergy.us/partners/vmware). Through this program, employees can sign up to support a new, local, clean energy project for free. Energy from the project replaces fossil fuel generation, lowering emissions in the community. In addition, everyone who signs up receives guaranteed savings on their electricity. It is available to employees in nine different states in the U.S. Two additional companies offer discounts to our employees: in Costa Rica (plastic alternatives) and Massachusetts, U.S. (composting) - helping employees reduce their emissions from waste.</p> <p>VMware encourages innovation in everything we do. In FY23, our team of Sustainability Ambassadors in Costa Rica, obtained the Bandera Azul Ecologica for our Costa Rica site for the sixth consecutive year. This prestigious award granted by the Costa Rican government on a yearly basis recognizes the effort and volunteer work of different local committees (within Costa Rica-based companies) that strive to improve environmental practices and use the program to adapt and mitigate climate change.</p>

Employee engagement	<p>We have a unique professional development opportunity for our employees called “Take 3.” This program enables an employee to work in a different group for three months as a respite from their normal work and as a way to broaden their understanding of how the organization works. Our sustainability team actively recruits employees for Take 3 opportunities and we have had great success in leveraging these relationships to support us in more effectively communicating with various business units and increasing engagement in our sustainability strategy overall.</p> <p>We have developed new employee training content on sustainability for all employees that is now delivered online during virtual orientations. We also engage our employees on a regular basis through various communication channels, including our enterprise collaboration platform, Social and our Slack channel. It is here where employees can have active dialogues about the issues they care about, including sustainability.</p> <p>Earth Month is VMware’s flagship sustainability employee engagement campaign. In FY23, the intent was to promote personal climate action by providing tools and education while measuring our individual and collective climate impact. VMware developed three interactive webinars for employees on topics including regenerative agriculture, electric vehicle adoption and climate advocacy. More than 2,750 employees worldwide joined the VMware Earth Month events and together we avoided nearly 700 MT of CO2 emissions through collective individual actions, exceeding our Earth Month Challenge target by more than 200%.</p>
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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

Group of products or services

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

No taxonomy used to classify product(s) or service(s) as low carbon

Type of product(s) or service(s)

Other

Other, please specify

Virtualization Software

Description of product(s) or service(s)

Since 2003, VMware's virtualization technologies have helped reduce power consumption resulting in avoided carbon emissions, even as IT workloads have grown. VMware's virtualization products/services reduce data center and cloud operations energy consumption relative to non-virtualized IT environments. VMware's compute virtualization management platforms enable customers to run a high density of workloads on their IT infrastructure. This means less IT infrastructure, smaller data center footprints, less energy consumption and associated carbon emissions. Specific features to achieve this level of productivity and efficiency are:

-VMware's vSphere Host Power Management that dynamically controls energy efficiency and supports High Performance, Balanced or Low Power configurations depending on customer needs. This ensures the least amount of host energy is used to power customers' virtualized workloads.

-VMware's Distributed Resource Scheduler balances virtual machines across hosts for optimal performance. Along with Power Management, it can consolidate workloads during periods of reduced activity, power off excess capacity to conserve energy and bring capacity back online when demand increases. High workload consolidation means less IT infrastructure.

-vSphere provides CPU scheduling and memory management, allowing resource reclamation, making high virtual machine density possible and leading to less IT infrastructure.

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

Yes

Methodology used to calculate avoided emissions

Evaluating the carbon-reducing impacts of ICT

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

Use stage

Functional unit used

The number of physical servers, storage appliances, and switches that were not deployed because of the implementations of VMware's virtualization technologies serve as the basis for calculating the amount of energy and CO2e emissions avoided. The energy avoided is directly proportional to the avoidance of physical servers being deployed and is augmented to reflect the energy that would have been used to operate the data center for that avoided IT infrastructure.

Reference product/service or baseline scenario used

IDC's Worldwide Server Tracker data provided the basis for total worldwide number of physical servers deployed, including the portions both with and without virtualization capabilities.

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

Use stage

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

1.4

Explain your calculation of avoided emissions, including any assumptions

A conservative and defensible approach to calculate the server host infrastructure avoided and the associated power consumption and carbon dioxide emissions that were avoided because of enterprise use of VMware's virtualization infrastructure was used. The estimates include incremental virtualizations implemented as well as contributions from the installed base of virtualized infrastructure still in operations providing ongoing avoided energy and carbon savings. For storage and networking, the savings are twofold — savings associated with displacement of storage appliances and switches and using high-efficiency storage devices. The annual avoided infrastructure estimate was combined with avoided installed base estimates to determine the total avoided infrastructure counts for each year.

Data on IT equipment avoidance was used from new deployments and existing installations, as well as weighted-average power data and annual runtimes to determine megawatt-hours (MWh) avoided. The cumulative savings from storage virtualization were combined with compute virtualization savings. In addition to energy savings from avoided infrastructure, we also calculated power consumption avoided because of

cooling and other non-IT equipment energy savings using a power usage effectiveness (PUE) of 1.6. This included assumptions regarding the total energy consumed by the data center for operations such as cooling.

Equivalent power consumption avoidance data was then converted into metric tons of carbon dioxide (MT CO₂) emissions avoided using an average annual global electricity carbon emissions factor from International Energy Agency.

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

70

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

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	Yes, a change in methodology	<p>In FY23, the Scope 3, Category 6 – Business travel emissions were calculated to include commercial air, rail, car rental, personal mileage, hotel, and taxi/cab/ride share data. In previous years, the business travel calculation only considered commercial air travel data as the other forms of travel data were not available.</p> <p>In FY23, the Scope 1 emissions were calculated to include corporate jet emissions. VMware's use of a corporate jet is by way of a fractional lease and the associated emissions from the jet fuel consumed are included under Scope 1. In previous years, this data was not available.</p>

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1 Scope 3	<p>In FY23, the Scope 3, Category 6 – Business travel emissions were recalculated for FY19 (base year) through FY22 to include commercial air, rail, car rental, personal mileage, hotel, and taxi/cab/ride share data. Previously, the base year and past years' business travel calculation only considered commercial air travel data as the other forms of travel data were not available.</p> <p>In FY23, the Scope 1 base year emissions were recalculated for FY19 (base year) through FY22 to include corporate jet emissions. VMware's use of a corporate jet is by way of a fractional lease and the associated emissions from the jet fuel consumed are included under Scope 1. In the base year and past years, data on the corporate jet was not available.</p>	Yes

			The base year inventory is adjusted in response to any structural or methodology changes if the resulting adjustment is equal to or more than 7% of base year emissions.	
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C5.2

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

Scope 1

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

5,238

Comment

The FY19 base-year Scope 1 emissions include emissions from natural gas used for space heating, diesel used for emergency generators, refrigerant emissions from owned/managed equipment, gasoline used in the company owned fleet for Shipping & Receiving in Palo Alto, and jet fuel from the leased corporate jet.

Scope 2 (location-based)

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

73,257

Comment

The FY19 base-year Scope 2 emissions include purchased electricity (for all VMware offices and colocation data centers) and refrigerant emissions from all leased sites.

Scope 2 (market-based)

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

20,054

Comment

The FY19 base-year Scope 2 emissions include purchased electricity (for all VMware offices and colocation data centers) and refrigerant emissions from all leased sites.

Scope 3 category 1: Purchased goods and services

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

210,222

Comment

Scope 3 category 2: Capital goods

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

50,440

Comment

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

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

13,008

Comment

The FY19 base-year FERA emissions includes Fuel-and-Energy Related Activities from purchased electricity, natural gas used for space heating, diesel used for emergency generators, gasoline used in the company owned fleet for Shipping & Receiving in Palo Alto, and jet fuel from a leased corporate jet.

Scope 3 category 4: Upstream transportation and distribution

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

3,505

Comment

Scope 3 category 5: Waste generated in operations

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

351

Comment

Scope 3 category 6: Business travel

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

76,249

Comment

The FY19 base-year Business Travel emissions includes air travel, car rental, rail, hotel, taxi/cab/ride services, and personal mileage.

Scope 3 category 7: Employee commuting

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

51,464

Comment

Scope 3 category 8: Upstream leased assets

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

1,394

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

Comment

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

Scope 3 category 10: Processing of sold products

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

Comment

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

Scope 3 category 11: Use of sold products

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

Comment

Given the nature of our business as a software and technology services company in FY19, we have determined this category to be not relevant for our base year Scope 3 reporting as VMware did not sell physical products in FY19.

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

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO2e)

Comment

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

Scope 3 category 13: Downstream leased assets

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

Comment

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

Scope 3 category 14: Franchises

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

Comment

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

Scope 3 category 15: Investments

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

Comment

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

Scope 3: Other (upstream)

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

Comment

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

Scope 3: Other (downstream)

Base year start

February 1, 2018

Base year end

January 31, 2019

Base year emissions (metric tons CO₂e)

Comment

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

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)

3,650

Start date

February 1, 2022

End date

January 31, 2023

Comment

Our gross global Scope 1 emissions are 3,650 MT CO₂e. While the City of Palo Alto has provided carbon neutral natural gas since July 1, 2017, we have not considered this offset into our calculation. We buy green gas tariffs for Staines, UK as well but do not claim any offset.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

3,291

Start date

February 1, 2021

End date

January 31, 2022

Comment

Restated to include jet fuel emissions from leased corporate jet

Past year 2

Gross global Scope 1 emissions (metric tons CO2e)

3,049

Start date

February 1, 2020

End date

January 31, 2021

Comment

Restated to include jet fuel emissions from leased corporate jet

Past year 3

Gross global Scope 1 emissions (metric tons CO2e)

5,915

Start date

February 1, 2019

End date

January 31, 2020

Comment

Restated to include jet fuel emissions from leased corporate jet

Past year 4

Gross global Scope 1 emissions (metric tons CO2e)

5,238

Start date

February 1, 2018

End date

January 31, 2019

Comment

Restated to include jet fuel emissions from leased corporate jet

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

61,224

Scope 2, market-based (if applicable)

844

Start date

February 1, 2022

End date

January 31, 2023

Comment

Our Scope 2 emissions account for the purchased electricity and purchased cooling for our VMware sites and our colocation data centers.

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)

190,576

Emissions calculation methodology

Hybrid method

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

11

Please explain

VMware uses Environmentally Extended Economic Input Output (EIO) lifecycle analysis (LCA) emissions factors to quantify the emissions associated with its annual supplier and procurement purchasing activity. Annualized spend data is mapped to corresponding Scope 3 categories, supplier categories, and industry sectors and is then multiplied by cradle-to-gate LCA emission factors for the sector to provide estimated carbon emissions associated with the extraction, production and transport of purchased goods and services acquired or purchased by VMware in the reported year. For our key spend categories, like Infrastructure as a Service and Colocation services, emissions are calculated using a mix of actual supplier-specific data, estimated data, and spend data. Supplier spend activity that was already included in Scope 1 or 2 (such as electricity purchases from leased buildings) and other Scope 3 categories (such as upstream leased assets) that could be further defined to a GHG Protocol Scope 3 category were removed from the Purchased Goods and Services category to prevent double counting. This may result in under- or over- reporting of emissions representation in certain supplier categories and specific suppliers based on available spend data due to the nature of cost and accrual accounting. We anticipate improving the methodology and availability data in the future, which will impact our year-over-year reporting and trends over time.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

62,933

Emissions calculation methodology

Average spend-based method

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

0

Please explain

VMware uses Environmentally Extended Economic Input Output (EEIO) lifecycle analysis (LCA) emissions factors to quantify the emissions associated with its annual supplier and procurement purchasing activity. Annualized spend data is mapped to corresponding Scope 3 categories, supplier categories, and industry sectors and is then multiplied by cradle-to-gate LCA emission factors for the sector to provide an estimated carbon emissions associated with the extraction, production and transport of capital goods acquired or purchased by VMware in the reported year. We have elected to use this methodology, over using a single generic emissions factor (EF), for 'all' capital goods as reported to enable better visibility into specific capital good categories by spend and carbon impact. Supplier spend activity that was already included in Scope 1 or 2 (such as electricity consumption from owned IT hardware) and other Scope 3 categories (such as upstream leased assets) that could be further defined to a GHG Protocol scope 3 category were removed from the Capital Goods category to prevent double counting. This may result in an under- or over- reporting of emissions representation in certain supplier categories and specific suppliers based on available spend data due to the nature of cost and accrual accounting. We anticipate improving the methodology and availability data in the future, which will impact our year-over-year reporting and trends over time.

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

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

7,346

Emissions calculation methodology

Fuel-based method

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

100

Please explain

FERA emissions reported are based on the market-based approach for Scope 2 reporting. Emissions were calculated for fuel-and-energy-related activities (not included in Scope 1 or 2) by totaling activity data for each Scope 1 fuel type and electricity consumption by country. These totals were multiplied by their relevant specific emission factors from UK Defra / DECC 20212 Conversion Factors for Company Reporting, AIB Residual Mix, and EPA eGRID. VMware's purchased renewable energy certificates were applied at a 0 emissions factor at the country level.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

21,891

Emissions calculation methodology

Average spend-based method

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

0

Please explain

VMware uses Environmentally Extended Economic Input Output (EEIO) lifecycle analysis (LCA) emissions factors to quantify the emissions associated with its annual supplier & procurement purchasing activity. Annualized spend data is mapped to corresponding scope 3 categories, supplier categories, and industry sectors and is then multiplied by cradle-to-gate LCA emission factors for the sector to provide an estimated carbon emissions associated with the extraction, production and transport of capital goods acquired or purchased by VMware in the reported year. This may result in an under- or over- reporting of emissions representation in certain supplier categories and specific suppliers based on available spend data due to the nature of cost and accrual accounting. We anticipate improving the methodology and availability data in the future, which will impact our year-over-year reporting and trends over time.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

216

Emissions calculation methodology

Waste-type-specific method

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

59

Please explain

VMware uses the EPA's WARM methodology which assigns values to each material that gets landfilled, recycled and composted, along with GHG Protocol's guidance on waste generated in operations to calculate the emissions associated with waste generated in our global operations. Waste collection and disposal data for our Palo Alto (US), Australia, China, India, Singapore, Taiwan, United Arab Emirates, South Africa, Armenia, Bulgaria, France, Ireland, Italy, Spain, and Sweden, UK, and Brazil sites and global e-waste data is provided by our waste management vendors.

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

44,210

Emissions calculation methodology

Average spend-based method

Distance-based method

Other, please specify

Hotel night-based method

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

100

Please explain

VMware calculates business travel emissions based on commercial flight, rail, and hotel data provided by the travel agent, American Express Global Business Travel.

Based on the flight mileage, each flight is categorized by haul to align with the EPA and DEFRA business travel emissions factors for air travel (2022). The DEFRA EFs are then multiplied by the total miles by haul to determine the total GHG emissions. A 60% uplift aviation impact factor was considered this year to account for Radiative Forcing - a measure of the additional indirect effects of aviation at high altitude including non-carbon engine emissions of nitrous oxides, water vapor, and other secondary impacts.

Based on the rail mileage, each train trip is categorized into intercity, national, and international to align with the EPA and DEFRA business travel emission factors for rail travel (2022). Based on the hotel stays by country and region, the quantity of hotel nights is multiplied by emission factors from the Cornell Hotel Sustainability Benchmarking Index (CHSB).

In addition, business travel emissions for car rental, personal mileage and taxi/cab/ride share trips are based annualized spend data. VMware uses Environmentally Extended Economic Input Output (EEIO) lifecycle analysis (LCA) emissions factors to quantify the emissions associated with these categories of travel purchasing activity.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

25,815

Emissions calculation methodology

Average data method

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

0

Please explain

Our employee commute emissions, including teleworking, are estimated based on broad-based assumptions. We estimated employee commute emissions using internal HR data, modes of transportation split, commuting days per year and EPA emissions factors. For home-office emissions, we adopted a bottom-up approach to account for region-specific, energy-end uses, such as IT plug load, lighting, space heating and cooling for the representative size of a typical home office, taking into consideration region-specific electricity and fuel emissions factors.

Upstream leased assets

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

85

Emissions calculation methodology

Average data method

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

0

Please explain

VMware uses Environmentally Extended Economic Input Output (EeIO) lifecycle analysis (LCA) emissions factors to quantify the emissions associated with its annual supplier and procurement purchasing activity. Annualized spend data is mapped to corresponding Scope 3 categories, supplier categories, and industry sectors and is then multiplied by cradle-to-gate LCA emission factors for the sector to provide an estimated carbon emissions associated with the extraction, production and transport of upstream leased assets acquired or purchased by VMware in the reported year. Supplier spend activity that was already included in Scope 1 or 2 (such as electricity consumption from colocation data centers) that could be further defined to a GHG Protocol Scope 3 category were removed from the Upstream Leased Assets category to

prevent double counting. This may result in under- or over-reporting of emissions representation in certain supplier categories and specific suppliers based on available spend data due to the nature of cost and accrual accounting. We anticipate improving the methodology and availability data in the future, which will impact our year-over-year reporting and trends over time.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

VMware is part of the IT Services industry and primarily delivers software products and services. VMware does not directly operate manufacturing facilities; however, we use Original Equipment Manufacturers (OEMs) to produce a limited number of off-the-shelf hardware-based appliances in support of our Software-Defined Wide Area Network (SD-WAN) technology that supports the virtualization of WAN connections. Shipping of VMware's SD-WAN Edge products from the manufacturer to VMware's warehouses and the majority of customers is paid for by VMware and is covered under Upstream transportation and distribution.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

VMware is part of the IT Service industry and primarily delivers software products and services. VMware manufactures through Original Equipment Manufacturers (OEMs) an off-the-shelf hardware-based appliance in support of its Software-Defined Wide Area Network (SD-WAN) technology that supports the virtualization of WAN connections. Following manufacture by the OEM, further processing to the end product is not carried out before use by the end customer.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

39,443

Emissions calculation methodology

Hybrid method

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

100

Please explain

VMware manufactures through Original Equipment Manufacturers (OEMs) an off-the-shelf hardware-based appliance in support of its Software-Defined Wide Area Network (SD-WAN) technology that supports the virtualization of WAN connections. VMware's SD-WAN Edge device comes in several different physical models. VMware calculates Use of Sold product emissions for its SD-WAN Edge model line using sales data by country, model-specific power specifications, and product lifespan data.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

VMware primarily delivers software products and services that have no physical end of life and therefore have no end-of-life emissions impacts. A Product Carbon Footprint (PCF) provided by the manufacturer of VMware's SD-WAN hardware appliance estimated that the end-of-life emissions associated with the Edge devices is approximately 0.19% of the total product footprint and result in an insignificant quantity of emissions.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

VMware does not have significant operations or assets that are owned by VMware and then leased, which are not already included in our Scope 1 and 2 emissions based on operational control.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

VMware does not have any product, process or system franchises and as such has determined this category as not relevant.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

As per GHG protocol Scope 3 definition, Investments category is designed primarily for private financial institutions, and public financial institutions (e.g., multilateral development banks, export credit agencies). VMware is not in the financial services business and hence this category is not relevant.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

Given the nature of our business as a software and technology services company, we have determined this category to be not relevant for our Scope 3 reporting.

C6.5a

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

Past year 1

Start date

February 1, 2021

End date

January 31, 2022

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)

8,709

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

Past year 2

Start date

February 1, 2020

End date

January 31, 2021

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)

17,503

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

Past year 3

Start date

February 1, 2019

End date

January 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)

94,073

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

Past year 4

Start date

February 1, 2018

End date

January 31, 2019

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)

76,249

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

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

0.0000049

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

64,874

Metric denominator

unit total revenue

Metric denominator: Unit total

13,350,000,000

Scope 2 figure used

Location-based

% change from previous year

11

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities

Please explain

As in previous years, our teams have undertaken emissions reduction activities through building energy efficiency projects, such as lighting retrofits and high efficiency equipment (as outlined in C4.3b). For example, human centric tunable light fixtures were installed in our Pune and one of our Bangalore, India offices, and we installed SMART lighting controls to manage all interior lights at our Burlington, MA, USA office. Motion sensors and photocell lights will only illuminate at our Burlington office where there is not enough natural light coming into the space. Also, energy valve and electronically commutated fans in AHUs were installed in one of our Bangalore offices.

There was an 8% decrease year-over-year in our FY23 Scope 2 location-based emissions due to the redistribution of our real-estate portfolio resulting from the consolidation of offices in some regions and the transfer of the Wenatchee data center from VMware-operation to COLO in April 2022. The data center transfer to COLO allows for greater operational efficiencies, increased rack utilization, and resulted in an approximate 30% reduction in VMware's electricity consumption per month at that data center location. The Scope 1 emissions increased slightly in FY23 (11%) as compared to the prior year due to increased natural gas consumption and use of the leased corporate jet; however, diesel and refrigerant emissions (both Scope 1 and 2) were less in FY23 than in FY22. The decrease in our combined location-based Scope 1 and 2 emissions along with a 4% increase in our revenue (denominator); resulted in a 11% year-over-year decrease in our FY23 emissions intensity from FY22.

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 CO ₂ e)	GWP Reference
CO ₂	2,622.1	IPCC Fifth Assessment Report (AR5 – 100 year)

CH4	4.28	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	7.34	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	1,015.93	IPCC Fifth Assessment Report (AR5 – 100 year)

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)
Armenia	33.04
Bulgaria	14.91
China	144.16
France	3.04
Germany	25.59
India	837.21
Ireland	0.33
Spain	5.89
Portugal	10
United Kingdom of Great Britain and Northern Ireland	123.83
United States of America	2,427.42
Bermuda	14.23
Belgium	10

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 CO ₂ e)
Natural Gas	1,694.99
Diesel	220.2
Fleet	9.59
Refrigerants	1,015.93
Jet Fuel	708.94

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 CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Argentina	6.67	0.55
Armenia	188.17	3.63
Australia	540.45	9.09
Austria	5.17	0.24
Belgium	3.21	0.26
Brazil	17.21	0.87
Bulgaria	1,824.73	29.28
Canada	16.73	3.31
Chile	4.94	0.1

China	2,659.46	36.9
Colombia	5.32	0.13
Costa Rica	22.62	18.79
Croatia	1.36	0.06
Denmark	4.2	0.24
Egypt	34.37	0.51
France	19.4	2.65
Germany	117.86	2.12
Greece	2.2	0.04
India	12,383.49	258.46
Indonesia	5.44	0.07
Ireland	888	13.34
Israel	220.43	5.69
Italy	41.83	1.51
Japan	589.3	20.65
Malaysia	65.51	1.31
Mexico	18.94	0.27
Netherlands	375.45	0.88
New Zealand	5.02	0.43
Norway	0.32	0.15
Pakistan	8.39	0.23
Peru	2.99	0.12

Philippines	37.45	0.53
Poland	14.46	0.41
Saudi Arabia	53.29	0.49
Singapore	331.37	9.04
South Africa	89.89	0.05
Republic of Korea	2.3	1.6
Spain	151.98	3.92
Sweden	2.25	0.73
Switzerland	0.43	0.25
Taiwan, China	129.95	1.37
Thailand	31.13	0.9
Turkey	55.55	0.45
United Arab Emirates	4.76	1.04
United Kingdom of Great Britain and Northern Ireland	292.92	10.07
United States of America	39,925.68	400.52
Viet Nam	1.16	0.07
Finland	0.5	0.08
Kenya	0.3	0.03
Lithuania	0.55	0.03
Luxembourg	0.45	0.03
Qatar	16.14	0.19
Romania	1.62	0.04

Nigeria	0.74	0.02
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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 CO ₂ e)	Scope 2, market-based (metric tons CO ₂ e)
Purchased Electricity	60,380	0
Purchased Cooling	844	844

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

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 in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	<p>Because renewable energy purchases are not counted in our location-based accounting, we did not see a change in location-based Scope 2 emissions due to renewable energy purchases in the reporting year. In FY23, VMware continued to source 100% renewable electricity, with all VMware offices and colocation data centers covered under our RE100 commitment. 0 MT CO2e of Scope 2 MB emissions were reduced from last year as VMware also sourced 100% renewable electricity in FY22. Our renewable energy consumption is reflected in our market-based calculations.</p> <p>In FY23, we also saw an increase of renewable electricity consumed at our Tokyo Tamachi location through our green tariff agreement, and increase of on-site solar generation at our Sofia, Bulgaria location. This renewable energy consumption is reflected in our market-based calculations.</p> <p>Our total Scope 1 and 2 emissions in the previous year FY22 was 70,175 MT. Therefore, we calculated the percentage change for FY23 as $(0/70,175) * 100 = 0\%$ (i.e., a 0% reduction in emissions)</p>
Other emissions reduction activities	6,010	Decreased	9	<p>5,698 MT CO2e of Scope 2 LB emissions in FY23 were reduced from FY22 due to the transfer of the Wenatchee data center from VMware-operation to COLO in April 2022. The data center transfer to COLO allows for greater operational efficiencies, increased rack utilization, and resulted in approximately a 30% reduction in VMware's electricity consumption per month at that location.</p> <p>Further, the emissions reductions activities VMware implemented at owned and leased facilities worldwide in FY23 resulted in energy savings and corresponding</p>

				<p>emissions avoidance of around 312 MT CO₂e.</p> <p>Our total Scope 1 and 2 emissions in the previous year FY22 was 70,175 MT. Therefore, we calculated the percentage change in FY23 as $(6,010/70,175) * 100 = 9\%$ (i.e., a 9% reduction in emissions).</p>
Divestment	0	No change		There were no divestments in FY23
Acquisitions	0	No change		There were no significant acquisitions that impacted our emissions in FY23
Mergers	0	No change		There were no mergers in FY23
Change in output	0	No change		There was no change in output in FY23
Change in methodology	709	Increased	1	Jet fuel consumption for the leased corporate jet was included for the first time in FY23 and calculations for previous years were recalculated. Our total Scope 1 and 2 emissions in the FY22 was 70,175 MT location-based. Therefore, we calculated the percentage change for FY23 as $(709/70,175) * 100 = 1\%$ increase in emissions.
Change in boundary	0	No change		There was no change in boundary in FY23
Change in physical operating conditions	0	No change		There was no change in physical operating conditions in FY23
Unidentified	0	No change		N/A
Other	0	No change		N/A

C7.9b

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

Location-based

C8. Energy

C8.1

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

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

C8.2

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

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

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	11,830	11,830

Consumption of purchased or acquired electricity		179,144	0	179,144
Consumption of self-generated non-fuel renewable energy		393		393
Total energy consumption		179,537	11,830	191,366

C8.2b

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

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

C8.2c

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

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

Comment

VMware did not consume sustainable biomass in FY23.

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

Comment

VMware did not consume other biomass in FY23.

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

Comment

VMware did not consume Other renewable fuels in FY23.

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

Comment

VMware did not consume coal in FY23.

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

Comment

VMware did not consume oil in FY23.

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

9,354

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

9,354

Comment

Natural gas is used in our Palo Alto, California, Denver, Colorado, and Staines, United Kingdom sites for space heating

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

Heating value

HHV

Total fuel MWh consumed by the organization

2,476

MWh fuel consumed for self-generation of electricity

870

MWh fuel consumed for self-generation of heat

1,606

Comment

Diesel is used in emergency generators at our Palo Alto, Wenatchee, Dallas, Austin, Broomfield, Cork, Yerevan, Sofia, Bangalore, Chennai and Pune sites. Gasoline is used for our vehicle fleet at our Palo Alto campus, and jet fuel is used for our corporate jet.

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

11,830

MWh fuel consumed for self-generation of electricity

870

MWh fuel consumed for self-generation of heat

10,960

Comment

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	393	393	393	393
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2g

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

Country/area

Argentina

Consumption of purchased electricity (MWh)

22.36

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

22.36

Country/area

Armenia

Consumption of purchased electricity (MWh)

1,016.76

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

1,016.76

Country/area

Australia

Consumption of purchased electricity (MWh)

780.04

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

780.04

Country/area

Austria

Consumption of purchased electricity (MWh)

41.16

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

41.16

Country/area

Belgium

Consumption of purchased electricity (MWh)

17.88

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

17.88

Country/area

Brazil

Consumption of purchased electricity (MWh)

174.95

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

174.95

Country/area

Bulgaria

Consumption of purchased electricity (MWh)

4,787.87

Consumption of self-generated electricity (MWh)

24.32

Is this electricity consumption excluded from your RE100 commitment?

No

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]

4,812.19

Country/area

Canada

Consumption of purchased electricity (MWh)

479.46

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

479.46

Country/area

Chile

Consumption of purchased electricity (MWh)

11.53

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

11.53

Country/area

China

Consumption of purchased electricity (MWh)

4,246.36

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

4,246.36

Country/area

Colombia

Consumption of purchased electricity (MWh)

22.49

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

22.49

Country/area

Costa Rica

Consumption of purchased electricity (MWh)

2,130.54

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

2,130.54

Country/area

Croatia

Consumption of purchased electricity (MWh)

7.79

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

7.79

Country/area

Denmark

Consumption of purchased electricity (MWh)

41.88

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

41.88

Country/area

Egypt

Consumption of purchased electricity (MWh)

88.4

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

88.4

Country/area

Finland

Consumption of purchased electricity (MWh)

5.77

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

5.77

Country/area

France

Consumption of purchased electricity (MWh)

325.87

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

325.87

Country/area

Germany

Consumption of purchased electricity (MWh)

370.15

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

370.15

Country/area

Greece

Consumption of purchased electricity (MWh)

5.77

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

5.77

Country/area

India

Consumption of purchased electricity (MWh)

17,498.96

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

17,498.96

Country/area

Indonesia

Consumption of purchased electricity (MWh)

6.92

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

6.92

Country/area

Ireland

Consumption of purchased electricity (MWh)

3,277.1

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

3,277.1

Country/area

Israel

Consumption of purchased electricity (MWh)

465

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

465

Country/area

Italy

Consumption of purchased electricity (MWh)

151.77

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

151.77

Country/area

Japan

Consumption of purchased electricity (MWh)

1,189.14

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

1,189.14

Country/area

Kenya

Consumption of purchased electricity (MWh)

4.33

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

4.33

Country/area

Lithuania

Consumption of purchased electricity (MWh)

3.46

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

3.46

Country/area

Luxembourg

Consumption of purchased electricity (MWh)

3.89

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

3.89

Country/area

Malaysia

Consumption of purchased electricity (MWh)

98.21

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

98.21

Country/area

Mexico

Consumption of purchased electricity (MWh)

46.71

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

46.71

Country/area

Netherlands

Consumption of purchased electricity (MWh)

1,237

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

1,237

Country/area

New Zealand

Consumption of purchased electricity (MWh)

35.47

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

35.47

Country/area

Nigeria

Consumption of purchased electricity (MWh)

1.73

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

1.73

Country/area

Norway

Consumption of purchased electricity (MWh)

25.95

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

25.95

Country/area

Pakistan

Consumption of purchased electricity (MWh)

20.62

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

20.62

Country/area

Peru

Consumption of purchased electricity (MWh)

16.15

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

16.15

Country/area

Philippines

Consumption of purchased electricity (MWh)

51.85

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

51.85

Country/area

Poland

Consumption of purchased electricity (MWh)

22.46

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

22.46

Country/area

Qatar

Consumption of purchased electricity (MWh)

32.87

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

32.87

Country/area

Romania

Consumption of purchased electricity (MWh)

5.77

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

5.77

Country/area

Saudi Arabia

Consumption of purchased electricity (MWh)

86.29

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

86.29

Country/area

Singapore

Consumption of purchased electricity (MWh)

836.15

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

836.15

Country/area

South Africa

Consumption of purchased electricity (MWh)

96.75

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

96.75

Country/area

Republic of Korea

Consumption of purchased electricity (MWh)

1.5

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

1.5

Country/area

Spain

Consumption of purchased electricity (MWh)

960.79

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

960.79

Country/area

Sweden

Consumption of purchased electricity (MWh)

146.03

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

146.03

Country/area

Switzerland

Consumption of purchased electricity (MWh)

7.21

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

7.21

Country/area

Taiwan, China

Consumption of purchased electricity (MWh)

234.59

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

234.59

Country/area

Thailand

Consumption of purchased electricity (MWh)

63.41

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

63.41

Country/area

Turkey

Consumption of purchased electricity (MWh)

78.77

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

78.77

Country/area

United Arab Emirates

Consumption of purchased electricity (MWh)

286.14

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

286.14

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)

1,332.13

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

1,332.13

Country/area

United States of America

Consumption of purchased electricity (MWh)

136,239.76

Consumption of self-generated electricity (MWh)

368.68

Is this electricity consumption excluded from your RE100 commitment?

No

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]

136,608.44

Country/area

Viet Nam

Consumption of purchased electricity (MWh)

1.73

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

No

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]

1.73

C8.2h

(C8.2h) Provide details of your organization's renewable electricity purchases in the reporting year by country/area.

Country/area of consumption of purchased renewable electricity

India

Sourcing method

Financial (virtual) power purchase agreement (VPPA)

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

9,556.76

Tracking instrument used

Contract

Country/area of origin (generation) of purchased renewable electricity

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2017

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

VMware has a contractual agreement for supply of wind power to our South Bangalore, India sites

Country/area of consumption of purchased renewable electricity

India

Sourcing method

Physical power purchase agreement (physical PPA) with a grid-connected generator

Renewable electricity technology type

Renewable electricity mix, please specify

RE mix

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

665.89

Tracking instrument used

No instrument used

Country/area of origin (generation) of purchased renewable electricity

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2020

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

United Kingdom of Great Britain and Northern Ireland

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify

RE Mix

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1,332.13

Tracking instrument used

Contract

Country/area of origin (generation) of purchased renewable electricity

United Kingdom of Great Britain and Northern Ireland

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2018

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Our utility provider, Engie, provides 100% renewable power for our UK facilities.

Country/area of consumption of purchased renewable electricity

Ireland

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify

RE Mix

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

3,112.68

Tracking instrument used

Contract

Country/area of origin (generation) of purchased renewable electricity

Ireland

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

SSE Airtricity, our utility provider in Ireland provides 100% renewable power for our Cork site.

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

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

Renewable electricity technology type

Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1,146.64

Tracking instrument used

Contract

Country/area of origin (generation) of purchased renewable electricity

Japan

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2021

Additional, voluntary label associated with purchased renewable electricity

Comment

VMware has a contractual agreement with the landlord & the utility provider for RE

Country/area of consumption of purchased renewable electricity

Netherlands

Sourcing method

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

Renewable electricity technology type

Renewable electricity mix, please specify

RE Mix

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1,083.04

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Netherlands

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2020

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Argentina

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify
Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

22.36

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Argentina

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Armenia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1,016.76

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Turkey

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Australia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

769

Tracking instrument used

Australian LGC

Country/area of origin (generation) of purchased renewable electricity

Australia

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)

2022

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Australia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

11.04

Tracking instrument used

Australian LGC

Country/area of origin (generation) of purchased renewable electricity

Australia

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Austria

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

41.16

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Belgium

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

17.88

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Brazil

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

121

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Brazil

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)

2014

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Brazil

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

53.95

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Brazil

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Bulgaria

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Unspecified

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2,746.63

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2020

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Canada

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

479.46

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

Green-e

Comment

Country/area of consumption of purchased renewable electricity

Chile

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

11.53

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Chile

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

China

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

4,104

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

China

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

China

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

142.36

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

China

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Colombia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

22.49

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Colombia

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)

1977

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Costa Rica

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1,733

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Costa Rica

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)

2015

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Costa Rica

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

397.54

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Costa Rica

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Croatia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

7.79

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Denmark

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

41.88

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Egypt

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

88.4

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Israel

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Finland

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

5.77

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

France

Sourcing method

Default delivered renewable electricity from the grid, supported by energy attribute certificates

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

325.87

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Germany

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

370.15

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Greece

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

5.77

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

India

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

5,844

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

India

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)

2012

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

India

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1,432.31

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Indonesia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

6.92

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Indonesia

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Ireland

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

164.42

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Israel

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

465

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Israel

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)

2013

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Italy

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

151.77

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Japan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

42.5

Tracking instrument used

J-Credit (Renewable)

Country/area of origin (generation) of purchased renewable electricity

Japan

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)

2010

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Kenya

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

4.33

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

South Africa

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)

2010

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Lithuania

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify
Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

3.46

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Luxembourg

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

3.89

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Malaysia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

34.85

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Malaysia

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)

2012

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Malaysia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

59

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Malaysia

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)

2012

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Malaysia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

4.36

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Malaysia

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Mexico

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

46.71

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Mexico

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Netherlands

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

153.96

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

New Zealand

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

35.47

Tracking instrument used

Australian LGC

Country/area of origin (generation) of purchased renewable electricity

Australia

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Nigeria

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1.73

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Egypt

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Norway

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

25.95

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Pakistan

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

20.62

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Peru

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

16.15

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Peru

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Philippines

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

51.85

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Philippines

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Poland

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

22.46

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Qatar

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

32.87

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

United Arab Emirates

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)

2018

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Romania

Sourcing method

Default delivered renewable electricity from the grid, supported by energy attribute certificates

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

5.77

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Saudi Arabia

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

86.29

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

United Arab Emirates

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)

2018

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Singapore

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

836.15

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Malaysia

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)

2012

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

South Africa

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

96.75

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

South Africa

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)

2014

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Republic of Korea

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1.5

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

China

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Spain

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

960.79

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

EKOenergy label

Comment

Country/area of consumption of purchased renewable electricity

Sweden

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

146.03

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Switzerland

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Onshore

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

7.21

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Norway

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Taiwan, China

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

234.59

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

China

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Thailand

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

59

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Thailand

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Thailand

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

4.41

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Thailand

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Turkey

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Hydropower (capacity unknown)

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

78.77

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Turkey

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)

2013

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

United Arab Emirates

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

286.14

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

United Arab Emirates

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)

2018

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

United States of America

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

18,528

Tracking instrument used

US-REC

Country/area of origin (generation) of purchased renewable electricity

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)

2016

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

Green-e

Comment

Country/area of consumption of purchased renewable electricity

United States of America

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Solar

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

27,493

Tracking instrument used

US-REC

Country/area of origin (generation) of purchased renewable electricity

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)

2018

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

Green-e

Comment

Country/area of consumption of purchased renewable electricity

United States of America

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Wind

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

816

Tracking instrument used

US-REC

Country/area of origin (generation) of purchased renewable electricity

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)

2011

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

Green-e

Comment

Country/area of consumption of purchased renewable electricity

United States of America

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

22,468.11

Tracking instrument used

US-REC

Country/area of origin (generation) of purchased renewable electricity

United States of America

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

Green-e

Comment

Country/area of consumption of purchased renewable electricity

Viet Nam

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Any, excluding biomass

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

1.73

Tracking instrument used

I-REC

Country/area of origin (generation) of purchased renewable electricity

Viet Nam

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

Bulgaria

Sourcing method

Unbundled procurement of Energy Attribute Certificates (EACs)

Renewable electricity technology type

Renewable electricity mix, please specify

Unknkown

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

2,041.25

Tracking instrument used

GO

Country/area of origin (generation) of purchased renewable electricity

Bulgaria

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Country/area of consumption of purchased renewable electricity

United States of America

Sourcing method

Default delivered renewable electricity from the grid, supported by energy attribute certificates

Renewable electricity technology type

Renewable electricity mix, please specify

RE Mix

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

28,155.31

Tracking instrument used

No instrument used

Country/area of origin (generation) of purchased renewable electricity

United States of America

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2022

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

Our local utility provider in Palo Alto, California -- the City of Palo Alto Utilities provides 100% clean electric power to our facilities in that location.

Country/area of consumption of purchased renewable electricity

United States of America

Sourcing method

Default delivered renewable electricity from the grid, supported by energy attribute certificates

Renewable electricity technology type

Renewable electricity mix, please specify

RE mix

Renewable electricity consumed via selected sourcing method in the reporting year (MWh)

38,779.01

Tracking instrument used

No instrument used

Country/area of origin (generation) of purchased renewable electricity

United States of America

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)

Vintage of the renewable energy/attribute (i.e. year of generation)

2022

Supply arrangement start year

2020

Additional, voluntary label associated with purchased renewable electricity

No additional, voluntary label

Comment

C8.2j

(C8.2j) Provide details of your organization's renewable electricity generation by country/area in the reporting year.

Country/area of generation

United States of America

Renewable electricity technology type

Solar

Facility capacity (MW)

Total renewable electricity generated by this facility in the reporting year (MWh)

369

Renewable electricity consumed by your organization from this facility in the reporting year (MWh)

369

Energy attribute certificates issued for this generation

No

Type of energy attribute certificate

Comment

On-site rooftop solar at Palo Alto , California office

Country/area of generation

Bulgaria

Renewable electricity technology type

Solar

Facility capacity (MW)

Total renewable electricity generated by this facility in the reporting year (MWh)

24

Renewable electricity consumed by your organization from this facility in the reporting year (MWh)

24

Energy attribute certificates issued for this generation

No

Type of energy attribute certificate

Comment

On-site rooftop solar at Sofia , Bulgaria office

C8.2k

(C8.2k) Describe how your organization's renewable electricity sourcing strategy directly or indirectly contributes to bringing new capacity into the grid in the countries/areas in which you operate.

We are committed to maintaining 100 percent renewable electricity for our global facilities through 2030 and moving forward we are actively reviewing the availability of new virtual power purchase agreements that add renewable energy generating assets to the grid in locations where we have significant demand. Over time, we plan to increase the proportion of high impact renewable electricity purchasing contracts to our portfolio and where possible, shift away from relying on Energy Attribute Certificates (EACs) to maintain our RE100 status.

C8.2I

(C8.2I) In the reporting year, has your organization faced any challenges to sourcing renewable electricity?

	Challenges to sourcing renewable electricity
Row 1	Yes, in specific countries/areas in which we operate

C8.2m

(C8.2m) Provide details of the country/area-specific challenges to sourcing renewable electricity faced by your organization in the reporting year.

Country/area	Reason(s) why it was challenging to source renewable electricity within selected country/area	Provide additional details of the barriers faced within this country/area
Egypt	Inability to buy Energy Attribute Certificates (EACs) in small quantities	
Nigeria	Inability to buy Energy Attribute Certificates (EACs) in small quantities	
Pakistan	Inability to buy Energy Attribute Certificates (EACs) in small quantities	
Singapore	Limited supply of renewable electricity in the market Prohibitively priced renewable electricity	
Saudi Arabia	Lack of credible renewable electricity procurement options (e.g. EACs, Green Tariffs)	
Armenia	Lack of credible renewable electricity procurement options (e.g. EACs, Green Tariffs)	
Kenya	Lack of credible renewable electricity procurement options (e.g. EACs, Green Tariffs)	
Qatar	Lack of credible renewable electricity procurement options (e.g. EACs, Green Tariffs)	

Republic of Korea	Lack of credible renewable electricity procurement options (e.g. EACs, Green Tariffs)	
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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

 VMware2023CDPGHGVerificationApex13July.pdf

Page/ section reference

Page 1/ GHG Emissions Statement (VMware 2023 CDP GHG Verification_Apex_13July.pdf)

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

 VMware2023CDPGHGVerificationApex13July.pdf

Page/ section reference

Page 1/ GHG Emissions Statement (VMware 2023 CDP GHG Verification_Apex_13July.pdf)

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

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

 VMware2023CDPGHGVerificationApex13July.pdf

Page/ section reference

Page 1/ GHG Emissions Statement (VMware 2023 CDP GHG Verification_Apex_13July.pdf)

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

Scope 3: Waste generated in operations

Scope 3: Business travel

Scope 3: Employee commuting

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

 VMware2023CDPGHGVerificationApex13July.pdf

Page/section reference

Page 1/ GHG Emissions Statement (VMware 2023 CDP GHG Verification_Apex_13July.pdf)

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?

 VMware2023CDPGHGVerificationApex13July.pdf

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	ISO 14064-3	In addition to having our carbon emissions assured by Apex, they assured VMware's total Scope 1 and 2 energy in MWh.

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?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits canceled by your organization in the reporting year.

Project type

Transport

Type of mitigation activity

Emissions reduction

Project description

According to the World Resources Institute, transport is responsible for 22% of global energy related greenhouse gas emissions and the sector's emissions are increasing at a greater rate than any other. Over the last two decades, Delhi has seen exponential growth in vehicle numbers (to 9.6 million in 2016), leading to poor air quality and CO2 emissions. Public transport is the primary mode of road transport for most people in India, and the public transport systems are among the most heavily used in the world, transporting billions of passengers per year. Under the Clean Development Mechanism (CDM) methodology for mass rapid transit projects, carbon finance supported Metro Delhi in

installing over 100 kilometers of state-of-the art electric rail systems with new trains. Its improved safety and reliability is attracting people away from private cars and other less efficient motorized vehicles. The metro system now carries 2.7 million people per day. This CDM project is reducing carbon emissions by almost 600,000 tonnes of CO₂ per year and helping improve local air quality by reducing NO_x and particulate matter. The Delhi Metro is the second Metro System in the world to achieve ISO14001 certification. Environmental impacts of construction were carefully managed with 10 trees planted for every one that had to be removed. In addition, the project invests annually in social programs including improved cycling infrastructure and environmental education programs in schools. Other initiatives have also been registered as separate projects under the CDM including provision of solar to power stations and use of breaking energy to power trains.

Credits canceled by your organization from this project in the reporting year (metric tons CO₂e)

40,000

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

Yes

Vintage of credits at cancellation

2016

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

CDM (Clean Development Mechanism)

Method(s) the program uses to assess additionality for this project

Consideration of legal requirements

Investment analysis

Other, please specify

common practice analysis

Approach(es) by which the selected program requires this project to address reversal risk

No risk of reversal

Potential sources of leakage the selected program requires this project to have assessed

Upstream/downstream emissions

Other, please specify

Emissions due to changes of the load factor of taxis and buses of the baseline transport system due to the project; and, emissions due to reduced congestion on affected roads, provoking higher average vehicle speed, plus a rebound effect

Provide details of other issues the selected program requires projects to address

The environmental section of the Delhi Metro Rail Corporation (DMRC) is responsible for CDM project monitoring. An environmental analysis of the project was conducted along with an EIA. DMRC is the 1st metro worldwide to receive ISO14001 certification. The DMRC Corporate Culture already specifies that the Metro construction should not lead to ecological or environmental degradation. One example of this policy is that for every tree cut during the construction ten trees have been planted in advance by DMRC as compensatory afforestation. Around 26,000 trees have been planted at Sultanpur Dabas, Isapur, Kakrola, Kharkhari and Revla Khanpur. In addition, regarding social and economic impacts, the DMRC will earmark 2% of annual CER revenue for sustainable development activities. DMRC will plan expenditure for this amount every year which will lead to sustainable development towards society or community. Activities include:

1. Include all DMRC construction and operation activities under a certified EMS system.
2. Improve landscaping / greening the surplus area.
3. Improving facilities for the cycle and cycle rickshaws near metro stations.
4. Work with NGOs and conduct free awareness programme on environment and climate change.
5. Tree plantation.
6. Work with schools to raise awareness on conservation of natural resources.
7. Capacity building/ workshops within DMRC on environment

Comment

Project type

Wind

Type of mitigation activity

Emissions reduction

Project description

This portfolio of wind projects supports the transition to renewable energy in India and China. Both countries are still highly dependent on fossil fuels for their energy, and rapid population growth has added to the increasing pressure on electricity generating capacity. Studies have shown that approximately 70% of India's energy is currently supplied by coal, and China is the world's largest producer and consumer of coal (as of 2022). The wind farms in this portfolio deliver clean, renewable energy to the regional grid, displacing electricity that would have otherwise been drawn primarily from fossil fuel power stations. The wind farms also contribute to the local economy and livelihood of residents through the creation of jobs, both temporary during construction and permanent for operation and maintenance (SDG 8). Carbon offsets purchased by VMware accelerate the global transition to low-carbon energy whilst support jobs and infrastructure resilience.

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

36,261

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

Yes

Vintage of credits at cancellation

2013

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

VCS (Verified Carbon Standard)

Method(s) the program uses to assess additionality for this project

Investment analysis
Barrier analysis
Market penetration assessment

Approach(es) by which the selected program requires this project to address reversal risk

No risk of reversal

Potential sources of leakage the selected program requires this project to have assessed

Other, please specify
No risk of leakage

Provide details of other issues the selected program requires projects to address

The standard requires the project to document the analysis of environmental impacts, including transboundary impacts. For this, an EIA was complete and approved. The EIA considered ecological, atmospheric, noise, and waste impact alongside the potential impacts of electromagnetic interference. According to the EIA report, the construction of this project has no significant negative impact on local environment. Environmental impacts are not considered significant by the project participants and the host party.

Comment

Project type

Other, please specify
Clean Water

Type of mitigation activity

Emissions reduction

Project description

Every one in four people worldwide do not have access to clean drinking water, and in Sub-Saharan Africa it is one in three. Each day, hundreds of children under the age of five die from preventable illness relating to unsafe water according to UNICEF. This Gold Standard project, based primarily in Uganda, Malawi, Rwanda and Eritrea provides clean drinking water to small rural communities by repairing and drilling new boreholes. Boreholes can be used as water wells by installing a vertical pipe casing and well screen with a hand pump which allows water to be extracted from the ground, even during dry seasons. By providing clean water, communities no longer need to purify water through boiling. This alleviates pressure on local forests – the predominant source of firewood – and reduces greenhouse gas (GHG) emissions. In addition to delivering emission reductions to help take urgent action to combat climate change (SDG 13), this project has a plethora of additional co-benefits. It improves health and wellbeing (SDG 3); In Uganda, 10 rehabilitated boreholes serve 5,700 people, preventing 100 cases of diarrhea and six fatalities each year. In 2016, while 29% of people globally did not use safely managed drinking water services, in Uganda the situation is significantly worse with 93% of people not using safely managed drinking water. The project also improves gender equality (SDG 5): Boreholes greatly reduce the time needed for collection of water and fuel, and the purification of water. This reduces exposure to indoor air pollution, and allows women to focus on other income-generating activities. Without a functioning borehole, women spent an average of 2 hours 50 minutes per day collecting water, which reduced to 47 minutes per day after the borehole in the region was rehabilitated.

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

2,500

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

Yes

Vintage of credits at cancellation

2016

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

Gold Standard

Method(s) the program uses to assess additionality for this project

Consideration of legal requirements
Investment analysis
Barrier analysis
Positive lists

Approach(es) by which the selected program requires this project to address reversal risk

No risk of reversal

Potential sources of leakage the selected program requires this project to have assessed

Other, please specify
No risk of leakage

Provide details of other issues the selected program requires projects to address

This project is not expected to have significant negative environmental impacts, including the new project technologies added at the time of design change. Voluntary Carbon projects in Kenya are not required to do EIAs. Transboundary impacts are not anticipated. Environmental risks were not rated negative in the LSC (local stakeholder consultation) sustainable development matrix and thus do not require mitigating measures. Nonetheless, the project mitigates such risk by:

- Offering a warranty system that enables technical support and/or follow-up
- Replacement of old technologies will require the user to relinquish the previously purchased product
- The project's technical team will be trained in repair and support
- Paradigm will recycle or dispose of relinquished units per Kenyan laws and regulations

Comment

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

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

Provide training, support, and best practices on how to set science-based targets

% of suppliers by number

1

% total procurement spend (direct and indirect)

8

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

5

Rationale for the coverage of your engagement

In FY23, to further our progress towards our SBT goal of having 75% of our suppliers (by spend) set their own SBTs by the end of FY25, we piloted a new supplier engagement strategy to work with suppliers at a deeper level. This pilot deeply engaged 15 suppliers that collectively represented 8% of our spend. For the pilot program, VMware reviewed previous sourcing team engagements and selected suppliers representing a cross-section of industries, business sizes (small/medium/large), and variation in climate program maturity.

Impact of engagement, including measures of success

Our measures of success for the pilot tracked the number of suppliers that launched their own climate programs and made formal commitments to set science-based targets. 100% of the pilot suppliers engaged in the process, resulting in 80% (12 suppliers) taking action to begin a climate program that would support annual measurement of their emissions and to set carbon reduction targets. As a result, 40% (6 suppliers) formally committed to setting science-based targets through the SBTi. Our threshold of success for the pilot was 100% participation of the selected suppliers in the pilot program. The impact of engagement is reduced carbon emissions from our upstream suppliers, which has a triple positive outcome on a.) the participating supplier's carbon footprint b.) VMware's footprint and c.) the footprint of other companies utilizing the same supplier. In addition, the responsible sourcing team was able to gather feedback, identify roadblocks and gauge receptiveness of the pilot program's resources to strengthen the larger-scale, supplier engagement program.

Comment

Our supplier engagement program is designed to support achievement of our goal of having 75% of our suppliers (by spend) set their own Science-Based Targets by the end of FY25. Our measures of success include a.) tracking the percentage of suppliers (by spend) that have formally set or committed to SBTs through the SBT Initiative and b.) meeting the 75% threshold of success by end of FY25. As of the end of FY23, 20% of our third-party spend was with suppliers who have science-based targets, and a further 32% of our third-party spend was with suppliers who have publicly committed to setting science-based targets (for a total SBT set and committed of 52%).

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect GHG emissions data at least annually from suppliers

Collect targets information at least annually from suppliers

% of suppliers by number

9

% total procurement spend (direct and indirect)

86

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

79

Rationale for the coverage of your engagement

Coverage of our FY23 engagement program includes all suppliers who have \$1M or more in annual spend in FY22. In FY23, this program included 343 suppliers, representing 86% of our total spend. We've found that at this spend level, VMware has enough leverage and established relationships with suppliers to request emissions data and/or help guide suppliers to create their own climate-related goals. Also, we view these large suppliers as important strategic partners with VMware, and thus look for their alignment with VMware's values, ESG strategy and climate goals.

Impact of engagement, including measures of success

Our supplier engagement program is designed to support achievement of our goal of having 75% of our suppliers (by spend) set their own Science-Based Targets by the end of FY25. Our measures of success include a.) tracking the percentage of suppliers (by spend) that have formally set or committed to SBTs through the SBT Initiative and b.) meeting the 75% threshold of success by end of FY25. As of the end of FY23, 20% of our third-party spend was with suppliers who have science-based targets, and a further 32% of our third-party spend was with suppliers who have publicly committed to setting science-based targets (for a total SBT set and committed of 52%).

Comment

C12.1b

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

Type of engagement & Details of engagement

Collaboration & innovation

Run a campaign to encourage innovation to reduce climate change impacts

% of customers by number

100

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

0

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

VMware makes it easy for our customers that have zero carbon supply chain goals to find and connect with our Zero Carbon Committed (ZCC) providers (<https://cloud.vmware.com/providers/zero-carbon>). Recognizing the opportunity VMware has to influence our customers and collaborate with our public cloud partners, ZCC's vision is that by 2030, all VMware public cloud data centers will be zero carbon through energy-efficient and 100% renewable energy-powered operations. Our ZCC providers run VMware's full stack of virtualization technology (computer, storage, networking, and management) in their public cloud offerings and serve the dual roles of customer and partner-customers. As more end customers prioritize sustainable vendors, VMware's goal is to support the decarbonization efforts of both our customers and partner-customers. We have reported 100% of customers by number as we provide this information to all VMware customers.

Through this engagement to meet customer demand, ZCC's goal is to accelerate the transition to Zero Carbon clouds by connecting customers to verified cloud partners with aligned decarbonization goals. ZCC allows customers and partners together capture new sustainability opportunities and innovate, while meeting their business goals. A large number of our engaged customers have climate programs and set science-based targets through SBTi. According to Aberdeen Strategy and Research's 2021 paper "The Market for Sustainability in the Cloud is Here," there is increased customer demand for efficient data centers and 40% of businesses say sustainability goals drive their public cloud and virtualization initiatives.

To support our partner-customers and in turn our customers environmental goals for zero carbon emissions, we recognize and promote VMware's ZCC partners that have publicly committed to 100% renewable energy-powered data center operations. We develop Carbon Calculator and Optimizer tools to help those partners run their infrastructure more productively and reduce energy consumption. We provide educational opportunities for our partners in their zero-carbon journey, and recently developed a 3-hour on-demand workshop on data center carbon footprinting basics. We also offer partners a free 6-month membership with the Clean Energy Buyers Association (CEBA) to further accelerate their decarbonization efforts.

Impact of engagement, including measures of success

Zero Carbon Committed initiative launched in May 2021 with 5 partners. There are now 47 partners as of end of FY23. Our measures of success are the number of ZCC customers engaged and expanding our ZCC partners (who are also VMware customers) offerings. Our threshold of success is to incrementally increase our engaged partners year over year to allow our customers greater access to zero carbon cloud providers. In FY23, we added 20 new zero carbon committed partners, met our internally set goals on number of ZCC partners, and the ZCC initiative continues to double in size yearly. The impact of this engagement for customers is the positive outcome of reduced carbon footprints, and the opportunity for VMware, ZCC partners, and end-customers to innovate alongside like-minded businesses with aligned sustainability goals.

As an example of the impact of engagement: This past year, VMware initiated a groundbreaking engagement with Teraco, Africa's leading carrier-neutral colocation provider. Electricity in sub-Saharan Africa is currently primarily sourced from coal-fired plants. Teraco is accelerating their own shift to renewable energy sources, and now supplies renewable powered colocated data centers for five VMware Cloud Verified partners (Network Platforms, Strategix, Routed, Saicom and Silicon Sky) that previously did not have access to renewable energy infrastructure. This collaboration allowed these five VMware partner-customers to join the ZCC initiative, helping their customers in Sub-Saharan Africa transition to zero carbon clouds.

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

Setting a science-based emissions reduction target

Description of this climate related requirement

VMware has set a science-based target that includes a commitment to engage our suppliers so that 75% of supplier (by spend) will commit to set their own SBTs by the end of FY25. As part of this commitment, we requested disclosure of carbon emissions from suppliers representing 75% of spend through EcoVadis. Additionally, our supplier contracts and code of conduct require that suppliers will abide by all regulatory requirements applicable in their jurisdiction.

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

75

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

52

Mechanisms for monitoring compliance with this climate-related requirement

Other, please specify

VMware pulls data directly from the Science-Based Target Initiative quarterly to monitor progress.

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

Retain and engage

Climate-related requirement

Climate-related disclosure through a non-public platform

Description of this climate related requirement

VMware partnered with EcoVadis in FY23 to analyze the ESG performance of our top suppliers – those with \$1M+ in annual spend. The platform's assessment allows us to see where our risks are, but also encourages our suppliers to be more mindful of their own practices while giving them suggestions and training to improve. VMware also sets an example by completing the EcoVadis assessment ourselves each year and continuously working to improve our own score.

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

83

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

34

Mechanisms for monitoring compliance with this climate-related requirement

Supplier scorecard or rating

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

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could 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?

Yes

Attach commitment or position statement(s)

<https://www.vmware.com/company/esg.html>

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

VMware's ESG-related corporate governance practices provide a framework for operating in our stakeholders' best interests and in compliance with applicable legal requirements. We have implemented a strong governance structure to ensure oversight and effective management of ESG issues, including climate, that impact our business.

This starts at the top with annual oversight of ESG topics by the full Board of Directors (Board). The Nominating, Governance and Related Persons Transactions Committee of the Board (Governance Committee) is responsible for formal oversight of our ESG progress, the Audit Committee of the Board is responsible for oversight of cybersecurity and data privacy matters, and the Compensation Committee of the Board is responsible for oversight of executive compensation, including incorporating ESG goals. Our ESG Executive Sponsors—comprised of C-suite leaders—meet quarterly to provide ESG strategy direction. Our ESG Leadership Council—made up of senior functional and business unit leaders—meets quarterly to monitor progress against ESG-related goals.

Operationally, our ESG Office drives cross-company alignment and integration of our 2030 Agenda, implements ESG initiatives, and measures the progress made toward enterprise-wide ESG targets. We report our progress annually using widely recognized guidelines for ESG reporting and transparency.

The ESG Executive Sponsors includes the following stakeholders:

- Chief Executive Officer
- Chief Financial Officer
- Chief People Officer
- General Counsel
- President
- Chief Technology Officer

The ESG Leadership Council includes, but not limited to, the following stakeholders:

- Chief Accounting Officer
- GM and SVP, Cloud Infrastructure
- GM and SVP, Cloud Management
- VP, Deputy General Counsel
- VP, Global Strategic Sourcing
- VP, Internal Audit
- VP, Workplace

With regard to public policy, all of our policy engagement activities are coordinated through our Global Government Relations and Public Policy

group, which reports into the General Counsel, who is an ESG Executive Sponsor. Our regional heads of Government Relations in the Americas, Asia-Pacific, and EMEA collaborate with leaders of VMware's ESG team to consolidate and present a unified VMware perspective that is relevant where policy engagement and guidance is required at the provincial or local level. Given that our core business drives energy efficiency, these groups are aligned to support appropriate climate or energy-related legislation.

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

U.S. CHIPS and Science Act of 2022 (H.R.4346)

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Energy efficiency requirements

Technology requirements

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

VMware engaged with policy makers to support the bill, which was later enacted into law on August 9, 2022. Among its provisions is support for the inclusion of energy efficiency in advanced research carried out under the Act, including a provision requiring the establishment of a program on energy efficiency in advanced computing and data center technologies.

<https://www.congress.gov/bill/117th-congress/house-bill/4346>

<https://www.congress.gov/117/plaws/publ167/PLAW-117publ167.pdf>

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

This policy is not considered central to the achievement of our climate transition plan. We remain committed to our climate transition plan; however, the passage of these regulations may accelerate progress in the software sector and in the low-carbon product and services space.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

National Defense Authorization Act for Fiscal Year 2023 (H.R.7776)

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Energy efficiency requirements

Technology requirements

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

VMware engaged with policy makers to support the bill, which was later enacted into law on December 23, 2022. Among its provisions is the establishment of energy resilience demonstration projects on military bases. Many U.S. Federal Agencies are VMware customers and our resilient, scalable and secure cloud architecture digital solutions help reduce energy consumption and increase energy efficiency.

<https://www.congress.gov/bill/117th-congress/house-bill/7776/text>

<https://www.congress.gov/117/plaws/publ263/PLAW-117publ263.pdf>

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

This policy is not considered central to the achievement of our climate transition plan. We remain committed to our climate transition plan; however, the passage of these regulations may accelerate progress in the software sector and in the low-carbon product and services space.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Federal Consolidated Appropriations Act 2023 (H.R.2617)

Category of policy, law, or regulation that may impact the climate

Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate

Low-carbon innovation and R&D

Technology requirements

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

United States of America

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

VMware advocated in favor of sustainability legislation including the Federal 2023 Appropriations Act, which includes provisions on Multi-Cloud that can lead to reducing the energy consumption of IT Infrastructure.

<https://www.congress.gov/bill/117th-congress/house-bill/2617/text>

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

This policy is not considered central to the achievement of our climate transition plan. We remain committed to our climate transition plan; however, the passage of these regulations may accelerate progress in the software sector and in the low-carbon product and services space.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or 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

The Information Technology Industry Council (ITI)

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

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Information Technology Industry Council (ITI) and its members seek to continuously improve the energy efficiency landscape in the US and globally to leverage energy efficient technologies. ITI works on behalf of its member companies to advocate for policies that advance both intelligent efficiency and product efficiency.

In FY23, VMware's Senior Vice President of Global Government Relations sat on the Executive Committee of ITI and influences ITI's policy positions. ITI and its member companies understand that we have a major stake in the fight against climate change. VMware supports the three strategic commitments ITI has made in this regard. ITI also supports government policies that emphasize an innovation agenda for mitigating

and adapting our changing climate. On energy efficiency, ITI unites the tech sector and the NGO community to advance policies that drive sustainable economic growth through technology-enabled energy and product efficiency innovation. ITI works proactively with the Environmental Protection Agency as an active partner in and advisor to the ENERGY STAR program, their activities in Europe in coordination with Digital Europe, their work in China in coordination with USITO and their policy efforts elsewhere in Asia, Latin America, Africa, and the Middle East. It also participates actively in energy efficiency efforts within the G-20, the Asia Pacific Economic Cooperation (APEC) forum, the United Nations, and other international venues.

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

166,333

Describe the aim of your organization's funding

Partner with trade association with similar positions on public policy to achieve desired public policy outcomes.

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

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

Digital Europe

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

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Digital Europe is committed to contributing to a sustainable and energy efficient Europe. The organization aims to ensure that products are designed, produced, used, and where possible reused or recycled in a sustainable and safe manner, and to promote the benefits of digital solutions in achieving sustainable goals. Digital Europe help stakeholders in product design, including substance use, resource efficiency and waste management, reducing GHG emissions, and broader global supply chain responsibility, including responsible sourcing. Digital Europe addresses these specific areas of sustainability: chemicals, circular-economy, eco-design, waste, and supply-chain transparency.

In FY23, VMware's Senior Vice President of Global Government Relations was a voting member of Digital Europe; VMware's Head of EMEA Government Relations regularly partners with Digital Europe and its member organizations. Digital Europe, its board, and members are committed to contributing to a sustainable Europe that benefits society at large. VMware will raise awareness of our virtualization technology in support of Digital Europe's aim of leveraging innovative technology to encourage a sustainable future.

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

39,103

Describe the aim of your organization's funding

Partner with trade association with similar positions on public policy to achieve desired public policy outcomes.

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

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify

US-ASEAN Business Council

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

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

The US-ASEAN Business Council and our members are committed to supporting governments in ASEAN in their efforts to mitigate the risks of climate change. We support global action that drives reductions in greenhouse gas emissions while progressing economic development. USABC stands behind our members' efforts which include the use of innovative technology to improve energy efficiency, the development of scalable technologies to lower greenhouse gas emissions, and the creation and adoption of clean and renewable sources of energy.

In FY23, VMware's Senior Vice President of Global Government Relations sat on the board of the US-ASEAN Business Council. To support VMware's in-region policy efforts, VMware's Director and Head of ASEAN Government Relations and Public Policy is based in Singapore and reported to the Senior Vice President of Global Government Relations. VMware's technologies support USABC's mission to reduce greenhouse gas emissions, and where USABC can support ASEAN countries in this effort, VMware will also offer support and solutions.

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

32,500

Describe the aim of your organization's funding

Partner with trade association with similar positions on public policy to achieve desired public policy outcomes.

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

Yes, we have evaluated, and it is aligned

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

Status

Complete

Attach the document

 Proxy VMware FY2023 Statement Compressed.pdf

Page/Section reference

Page 7, 23, 24/ Governance

Page 19, 20, 21 / Strategy

Page 9-10 /Risks & Opportunities

Page 21 / Emissions Targets

Content elements

Governance

Strategy

Risks & opportunities

Emission targets

Comment

VMware's FY23 Proxy statement can be found at: <https://ir.vmware.com/websites/vmware/English/5100/us-sec-filing.html>


Publication

In mainstream reports

Status

Complete

Attach the document

 10-K_VMware_FY2023.pdf

Page/Section reference

Page 16, 18 / Environmental, Social and Governance (ESG) and Environmental Sustainability

Page 4, 5, 20 / Risk Factors

Content elements

Governance

Strategy

Risks & opportunities

Comment

VMware's 10-K can be found at: <https://ir.vmware.com/websites/vmware/English/5100/us-sec-filing.html>

Please note that the page/section references strictly match the sections listed in 10-K. Page 16/Environmental Social and Governance and Environmental Sustainability covers both Governance & Strategy content elements, and Page 18 / Oversight and Accountability of ESG covers Governance. Our 2030 Agenda represents our ESG Strategy focused on three business outcomes: Sustainability, Equity and Trust.


Publication

In voluntary communications

Status

Complete

Attach the document

 VMware Website.pdf

Page/Section reference

Page 2 / Governance

Page 1 / Strategy

Page 3, 5 / Emissions targets

Content elements

Governance

Strategy

Emission targets

Comment

Screenshot of <https://www.vmware.com/company/esg.html> [Last accessed on 24th July 2023] included in VMware Website.pdf

Publication

In voluntary sustainability report

Status

Complete

Attach the document

 ESG Report_VMware_FY2023.pdf

Page/Section reference

Page 37-46; 52 / Governance

Page 6-10; 12-24; 52-54 /Strategy

Page 16; 63/Emissions figures

Page 15; 54; 63/Emission targets

Page 10; 49-66 / Other metrics

Content elements

Governance
 Strategy
 Emissions figures
 Emission targets
 Other metrics

Comment

VMware's 2023 ESG Report can be found at: <https://www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/docs/vmware-esg-report-2023.pdf>

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	RE100 The Climate Pledge UN Global Compact Other, please specify Accounting for Sustainability (A4S)	<p>As a supporting member of The Climate Pledge, VMware's role is to help to address the climate crisis and solve the challenges of decarbonizing our economy.</p> <p>As an early signatory, VMware joined RE100 and declared a renewable energy target in 2016. 100% of VMware offices and colocation data centers are covered under our RE100 commitment, and we achieved 100% annual sourcing of renewable electricity in 2020. VMware's is committed to sourcing 100% renewable electricity through 2030.</p> <p>As a supporting member of the UN Global Compact, VMware's role is to support the adoption and implementation</p>

		<p>reporting of sustainable and socially responsible policies.</p> <p>In FY23, VMware's CFO was an active member of A4S, a collection of leading CFOs of large businesses that focus on embedding ESG into business processes and strategy. As an active member, VMware's role was to help inspire action alongside other finance leaders to drive a fundamental shift towards resilient business models and a sustainable economy.</p>
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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
Row 1	No, and we do not plan to have both within the next two years

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	Yes, we have made public commitments and publicly	<p>Other, please specify</p> <p>As an important component of our net zero strategy, we have set a commitment to conserve, restore, and plant one million</p>	<p>Other, please specify</p> <p>Last year, we joined 1t.org (alongside our one million tree commitment), part of the World Economic Forum's work to accelerate nature-</p>

endorsed initiatives related to biodiversity	trees by 2030. See our pledge at: https://www.1t.org/pledges/one-million-trees-for-a-thriving-planet	based solutions in support of the UN Decade on Ecosystem Restoration.
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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 and we don't plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No and we don't plan to within the next two years

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

Not assessed

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	Other, please specify

		As of FY23, we have funded the planting of over 400,000 trees since 2020 as part of our commitment to plant and protect one million trees by 2030. See our progress at: https://www.vmware.com/company/net-zero
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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	

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
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	<p>VMware 2023 ESG Report: Page 19 / Carbon Credits: Many of our forestry projects are Verified Carbon Standard and Climate, Community and Biodiversity certified.</p> <p>VMware Website: Page 5/Nature-Based Solutions and 1 million tree commitment</p> <p> ^{1, 2}</p>

 ¹VMware Website.pdf

 ²ESG Report_VMware_FY2023.pdf

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	CEO	Chief Executive Officer (CEO)