Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

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

As of December 31, 2022, the Company owned or had an ownership interest in 44 regional shopping centers and 5 community/power shopping centers. These regional and community/power shopping centers (which include related office space) consist of approximately 47 million square feet of gross leasable area (‘‘GLA’’).

C0.2

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

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

Yes

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

1 year

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

1 year

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

1 year

C0.3

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

United States of America

C0.4

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

USD

C0.5

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

Operational control

C-CN0.7/C-RE0.7

(C-CN0.7/C-RE0.7) Which real estate and/or construction activities does your organization engage in?

New construction or major renovation of buildings
Buildings management
Other real estate or construction activities, please specify
Minor renovations

C0.8

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

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

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 Chair	The Chairman of the Board of Directors has responsibility for climate-related issues and actively manages our Board by: working with the CEO, management team, and other directors to set the agenda for our Board meetings; presiding over all Board meetings and executive sessions of the independent di- rectors; serving as the principal liaison on all Board issues, including climate-related issues; and other customary duties. The Chairman serves as an information resource for the independent directors and acts as a liaison between directors, committee chairs, and management. The Chairman, along with the rest of the Board, oversees and supports our overall strategy which includes climate-related issues. Results of Macerich's progress against sustainability are reported to the Board of Directors on a quarterly basis and the Board approves activities and/or makes directional recommendations based on these reports.
Chief Executive Officer (CEO)	Macerich's CEO has the highest level of responsibility for climate-related issues as he guides Macerich's expansive national portfolio of high-performing retail properties, with a focus on adding value to assets and land holdings. He has the highest level of authority on climate-related issues as he reports to stakeholders on Macerich's progress towards goals and the future trajectory of Macerich's overall operations. The CEO also provides guidance and trajectory relative to setting performance objectives, monitoring the implementation and performance of objectives, overseeing major capital expenditures, acquisitions and divestitures, and monitoring and overseeing progress against goals and targets for addressing climate-related issues. Results are reported to the Board on a quarterly basis and the Board approves activities and/or makes directional recommendations based on these reports.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets	The Nominating and Corporate Governance Committee provides strategic oversight of social responsibility, environmental and sustainability matters; makes recommendations to the Board concerning such matters; evaluates ESG-related risks and the

	Overseeing and guiding employee incentives Reviewing and guiding strategy Monitoring the implementation of a transition plan Monitoring progress towards corporate targets	Company's social and environmental goals; and reviews the full scope of Macerich's corporate social responsibility efforts at least annually, including diversity and inclusion and sustainability. On a quarterly basis, the EVP, Portfolio Operations and People and CEO provide a report to the Board including progress to date of annual and long-term goals, which include energy, waste, water, and carbon. Specifically, in 2022, the Board was provided metrics on energy consumption, waste diversion, and renewable energy production which coincide with Macerich's progress towards climate-related targets. The Board reviews the effectiveness of the organization's risk management processes for economic, environmental and social topics. Finally, the Board assesses company progress towards targets through quarterly reporting and its compensation committee sets annual performance targets and incentives across the company. Climate-related and sustainability discussions at Board meetings focus on Macerich's overall climate strategy, how our strategy and efforts support the attraction and retention of retailers, how our reputation may be impacted, how we are viewed in the industry, and how our company and our practices are viewed by investors.

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	We assess competence of board members on climate-related issues based on the diversity of experience that they bring in from other companies that make major climate-related investment decisions and/or are involved with green technology and climate impacts. For instance, one of our board members serves on the board for a renewable energy services firm, as well as a sustainability technology investment firm focused on investing in agro & food technology and sustainable building innovations within the agriculture, food, and real estate sectors.

C1.2

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

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Monitoring progress against climate-related corporate targets

Coverage of responsibilities

Reporting line

Reports to the board directly

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

Quarterly

Please explain

On an ongoing basis, the CFO provides reporting to and meets with the CEO, as appropriate, to review progress against sustainability goals. The CEO is the overall strategic lead of Macerich and provides guidance and trajectory relative to setting performance objectives, monitoring implementation and performance of objectives, overseeing major capital expenditures, acquisitions and divestitures, and monitoring and overseeing progress against goals and targets for addressing climate-related issues. Results of Macerich's progress against sustainability are reported to the Board of Directors on a quarterly basis and the Board approves activities and/or makes directional recommendations based on these reports.

Position or committee

Chief Financial Officer (CFO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Providing climate-related employee incentives
Implementing a climate transition plan
Assessing 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

Quarterly

Please explain

The Executive VP, Chief Financial Officer (CFO) has overall responsibility for reviewing, reporting, and approving funds for the allocation of capital and reviewing operational savings with respect to renewable energy, energy management, and sustainability measures.

Position or committee

Other, please specify

Executive VP, Portfolio Operations and People

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Providing climate-related employee incentives
Implementing a climate transition plan
Integrating climate-related issues into the strategy
Monitoring progress against climate-related corporate targets

Coverage of responsibilities

Reporting line

Reports to the board directly

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

Quarterly

Please explain

The EVP, Portfolio Operations and People holds executive-level responsibility for environmental and social topics and provides quarterly reports to the Board on strategy, major plans of action, and implementation and performance related to these topics. This includes any stakeholder concerns pertaining to the environment, corporate responsibility, health and safety and sustainability.

Position or committee

Other, please specify

Vice President, Sustainability

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Implementing a climate transition plan
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets

Coverage of responsibilities

Reporting line

Operations - COO reporting line

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

Quarterly

Please explain

The Vice President, Sustainability manages day-to-day sustainability activities and reports to the Executive Vice President, Portfolio Operations and People on a bi-weekly basis. The Executive Vice President, Portfolio Operations and People reviews operational results with the CFO, including progress in key areas, like the use of energy (which accounts for the vast majority of the Company's GHG emissions) against Macerich's budgets and goals. The VP, Sustainability is directly responsible for managing information on climate change within Macerich.

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 a climate-related target

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

The Executive ESG Scorecard is comprised of four short-term objectives:
1) Add 1,000 kilowatts of clean power,
2) Enter into commitments to invest $10 million across the portfolio in innovation projects supporting carbon neutrality,
3) Achieve portfolio-wide average of 40% waste diversion,
4) Increase purchased renewable energy power by at least 8,000 megawatts per hour.

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

Each objective directly contributes to progressing on our climate transition plan and enables our climate commitments. The development of new renewable electricity generation, procurement of electricity from renewable sources, and investment in reducing our electricity use are all pillars of meeting our climate commitments.

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	2	0-2 years is considered as Short-term for Macerich.
Medium-term	2	7	2-7 years is considered as Medium-term for Macerich.
Long-term	7	20	7-20 years is considered as Long-term for Macerich.

C2.1b

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

Macerich identifies and assesses business risks and opportunities that can substantively impact value, reputation, and business continuity on an on-going basis as a normal course of business. With respect to climate change, regulatory risks/opportunities – particularly related to energy legislation - are deemed most material at the company level and are typically identified on a quarterly basis through direct interaction with regulatory agencies and participation in trade groups such as the Real Estate Round Table, the National Association of Real Estate

Investment Trusts, and the International Council of Shopping Centers. This analysis is primarily conducted by the VP, Sustainability, in concert with Legal, Operations, Property Management, Marketing, and other departments that may be affected by the regulatory changes. Macerich identifies and assesses business risks and opportunities that can substantively impact value, reputation, and business continuity on an on-going basis as a normal course of business. Macerich defines a substantive financial impact when identifying or assessing climate-related risks or opportunities as a climate change material risk or opportunity that will affect the portfolio growth performance by 25 basis points or more, which based on 2022 data, would equate to approximately $1.77 million in operational costs impacts across the entire portfolio.

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

Macerich identifies and assesses business risks and opportunities that can substantively impact value, reputation, and business continuity on an on-going, more frequently than annual, basis as a normal course of business. With respect to climate change, regulatory risks/opportunities – particularly related to energy legislation - are deemed most material at the company level and are typically identified on a quarterly basis through direct interaction with regulatory agencies and participation in trade groups such as the Real Estate Round Table, the National Association of Real Estate Investment Trusts, and the International Council of Shopping Centers. This analysis is primarily conducted by the VP, Sustainability, in concert with Legal, Operations, Property Management, Marketing, and other departments (collectively, the Senior Management Team) that may be affected by the regulatory changes. As necessary, the VP, Sustainability also submits a formal written report to the Executive VP, CFO, who then provides a quarterly update to the Board of Directors.

Additionally, exposed risks are communicated upwards through the corporate

governance structure. The VP, Sustainability meets with the Executive Vice President of Portfolio Operations and People twice a month to present updates on sustainability initiatives and resilience-related topics across the portfolio. The VP, Sustainability also submits a formal written report to the executive team including CEO who then provides a quarterly update to the Board of Directors. At both the company and asset level, Macerich assesses risks across all time horizons (short-, medium-, and long-term). With respect to climate change, physical risks and opportunities caused by weather-related events are deemed most material at the asset level. They are typically identified and managed by the property teams on a monthly basis, under the direction of the executives responsible for operations. Property/business interruption insurance and disaster recovery plans address physical risks at the asset level, including those resulting from climate change.

Annually, Macerich hires a third-party engineering firm to perform a comprehensive analysis of a variety of risks at a minimum of 12 properties. Every property is evaluated every 3 to 4 years. These reviews include recommendations that improve loss liability exposure. Sample elements that are reviewed and identified as part of this process include (but are not limited to) the following: Automatic Seismic Shutdown Values, Wind Studies, Control Valve Locking, Cooking Protection Improvements, Fire Suppression, Infrared Thermography, Vertical Penetrations, and Structural Supports, all of which are used to assess risks and opportunities more than 6 years into the future. Risks and opportunities are prioritized based on materiality, which is typically measured in terms of potential financial, operational, or reputational impact. Financial analyses and the ongoing monitoring of weather events and stakeholder requests are used to assess the scale and materiality of risks and opportunities.

Physical risks and opportunities case study -- As part of our risk process and through regular communications amongst the Senior Management team, Macerich identified a risk of extreme weather events, such as hurricanes, snowstorms and superstorms. These were assessed to have a potential substantive impact on our facilities or affect our portfolio growth performance by 25 basis points or more. To respond to these risks, Macerich has preparedness and recovery plans in place to manage risks associated with these extreme weather events. These include pre-storm planning requirements and post-storm recovery processes, such as snow removal protocols. Macerich also keeps comprehensive liability, fire, extended coverage, and rental loss insurance with insured limits customarily carried for similar properties. Macerich's Risk Management department continually evaluates diverse financial instruments in order to hedge exposure to catastrophic losses due to exceptional events by modeling values based on predetermined insurance-related statistics. For example, in 2021, we looked into captive insurance as a tool to protect Macerich against extreme volatility in the insurance market, which may be caused by increased frequency of storms. The NOAA estimates for the 2020 storm cycle were used as a basis for auditing and reevaluating flood coverage across the portfolio, with a focus on the eastern seaboard. With these measures in place, Macerich potentially has the opportunity to drive interest in space for our properties, as we have already calculated for extreme weather events during the risk and opportunity assessment phase. In the Northeast, where worsening severe winter weather has been a continuing concern, Macerich has chosen to precontract for

services where available. In the case of Danbury Mall, we have decided to maintain our own fleet of snow removal equipment on site to allow for immediate action and support for the safety of our employees, retailers and shoppers and ensure that severe winter storms are far less likely to cause business interruption.

Transitional risks and opportunities case study -- As part of the risk process, Macerich hired a third-party engineering firm to perform a comprehensive analysis of a variety of risks at a minimum of 12 properties. Working in conjunction with the Senior Management Team, the firm identified that Macerich could face negative reputation risk from customers, stemming from a lack of sustainable property amenities. It was assessed that this risk could potentially decrease revenues due to reduced demand for our services. As a response, in 2022, Macerich invested $6.8 Million in critical operational projects for energy efficiency, including building controls, LED, HVAC and major equipment upgrades at a large central plant to modernize HVAC services to the mall and its tenants. These projects have an efficiency reduction estimated at over 5.5 million kWh annually and can be treated as both a risk and opportunity, as Macerich is proactively reducing any potential negative risk associated with poor sustainability, while still understanding that we need to maintain vigilant attention to our sustainability reputation.

Additionally, Kasirer, one of our political consultants, has advised us on state and local climate change policies, and ballot initiatives at the city level that influence what we do. Kasirer connected us with the NYC Sustainability Office to stay ahead of local laws and brokered one-on-one meetings with influential decision makers, such as staff from NYC Department of Buildings, Mayor’s Office of Sustainability, and New York Borough City Officials. Our EVP, Portfolio Operations and People also regularly attends these types of meetings with government officials to stay abreast of climate-related risks and opportunities related to regulations.

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	While Macerich strives to keep pace with emerging trends and technologies to facilitate its adaptation to a lower-carbon economy, regulations continue to evolve in response to climate change. Potential risks from not being current with regulation is always considered in our risk assessment, as we could face potential fines if we are not compliant with the local laws and regulations governing our centers. During the risk assessment, we identified that 9 of Macerich’s Core 30 top performing properties are located in California and subject to AB802, which mandates energy benchmarking and disclosure. Not complying with regulations could negatively impact Macerich’s financial operations. Macerich has budgeted expenses as well as substantial

		reserves as appropriate. These reserves are based on property-specific risk and are up to as much as $250k per property for the purpose of addressing environmental compliance and regulatory changes that may affect or pose a risk to operations of our properties or portfolio. As such, Macerich continues to develop our self-reliant sustainable energy projects to show that we are open to this legislation and able to comply. For example, Macerich has spent over two years now developing a regional strategy in New York and the Northeast in anticipation of loosening of grid restrictions, wheeling rights, and distributed generation assets. We are continuing to broaden this approach and make further investment decisions based not just on property-level impact, but also regional impact that will allow Macerich to support local grid relief efforts, renewable power needs, load management with the local distribution company (LDC) and efficiency in meeting our total regional demands. This includes new renewable resources at three regional properties, a new LDC interconnect to serve the community with up to 7MW when needed, and integrated software and monitoring to support future dispatch of assets and power across regional assets owned by Macerich. Our risk assessment team and consultants continue to monitor and assess this specific risk type. They meet every quarter to discuss development and address concerns.
Emerging regulation	Relevant, always included	While Macerich strives to keep pace with emerging trends and technologies to facilitate its adaptation to a lower-carbon economy, regulations continue to evolve in response to climate change. Potential risks from not being current with emerging regulation is always considered in our risk assessment, as centers are subject to specific local laws and regulations. As an example, New York City enacted Local Law 97 in 2019 which will go into effect January 1, 2024. As part of our risk assessment, we identified that this law will impact 3 of our properties and require us to ensure our buildings do not exceed specific annual building GHG emission limits or else we will be subject to noncompliance penalties. We must also comply with new energy conservation requirements. As such, Macerich has spent over two years now developing a regional strategy in New York and the Northeast in anticipation of loosening of grid restrictions, wheeling rights, and distributed generation assets. We are continuing to broaden this approach and make further investment decisions based not just on a property-level impact, but also a regional impact that will allow Macerich to support local grid relief efforts, renewable power needs, load management with the LDC and efficiency in meeting our total regional demands. This includes new renewable resources at three regional properties, a new LDC interconnect to serve the community with up to 7MW when needed, and integrated software and monitoring to support future dispatch of assets and power across regional assets owned by Macerich. Macerich has contracted with external firms to prepare for these regulations, as regulation terms develop over time.

		Our risk assessment team and consultants continue to monitor and assess this specific risk type. They meet every quarter to discuss development and address concerns.
Technology	Relevant, always included	Risks from abrupt and unexpected shifts in energy costs, relative to technology, are always considered in our risk assessment. Macerich leverages technology to mitigate potential negative risk impacts, such as loss of approximately $25 M in gross operating margins from losses in revenue for properties that do not have reliable sources of energy. Additionally, financial impacts from failed installations or stigmatization of current technologies may result in early retirements of existing fixed assets, reduced investments in or demand for our assets, and a drop in capital availability. For instance, at our Kings Plaza facility, which provides power not only to our shopping center, but also to the surrounding New York community, we may face increased risk of using obsolescent technology if we are unable to adapt or replace the technology at this facility to be more energy efficient or climate resilient. To respond to and mitigate this risk, Macerich has invested heavily in renewable energy and resource efficiencies across our portfolio to manage demand charges, promote asset resilience, and earn revenue. In addition, Macerich has spent the past several years developing a regional strategy in New York and the Northeast in anticipation of loosening of grid restrictions, wheeling rights, and distributed generation assets. We are continuing to broaden this approach and make further technology investment decisions based not just on a property-level impact but a regional impact that will allow Macerich to support local grid relief efforts, renewable power needs, load management with the LDC, and efficiency in meeting our total regional demands. This includes new renewable resources at three regional properties, a new LDC interconnect to serve the community with up to 7MW when needed, and integrated software and monitoring to support future dispatch of assets and power across regional assets owned by Macerich. Our risk assessment team and consultants continue to monitor and assess this specific risk type. They meet every quarter to discuss development and address concerns.
Legal	Relevant, always included	Potential legal climate-related risks are always considered in our risk assessment. A rising appetite for climate-related litigation against entities over failures to adequately hedge against climate change impacts or disclose material financial risks associated with adapting to climate change is a relatively new risk to mitigate. These legal risks require expanding knowledge and capabilities of internal and external resources and threaten to intensify operating costs, trigger asset impairments or write-offs and ultimately shrink revenue and profits. During the risk assessment, we identified that 9 of Macerich's Core 30 top performing properties are located in California and subject to AB802, which mandates energy benchmarking and disclosure. Not complying with regulations could negatively impact Macerich's financial

		operations as risks can arise from not reporting to the public and potential litigations, which can negatively impact our net revenue, estimated to be at $25 million in gross operating margin over the lifetime of a lease, as well as potential litigation risks for Macerich. Macerich contracted with external firms to prepare for these regulations, and benchmarking, as regulation terms have developed over time. Our risk assessment team along with our consultants, continue to monitor and assess this specific risk type. They meet every quarter to discuss development and address concerns.
Market	Relevant, always included	The investors' market is always considered during our risk assessments. We identified that increased stakeholder concern/awareness and negative stakeholder feedback could lead to reduced revenue from decreased demand for goods/services, if Macerich did not provide sustainable properties. We address this risk by publicly reporting our annual progress towards sustainability goals and implementing innovative energy efficiency projects. For example, 9 of Macerich's Core 30 top performing properties are located in California where there is a growing environmental consciousness from investors and customers. Macerich consistently report on market risk in our CSR reports as a core value that can significantly influence the selection process of sustainability-conscious potential investors. The investor market is critical to Macerich's long-term success, as shifts in market sentiment on climate-related issues can impact our investors' perceptions of our business. Because the needs of this market are changing and investors are becoming much more cognizant of companies' sustainability performance and vision, we are continuing to adapt our internal and external policies and have been actively working to reframe our ESG policies. We have made them publicly available for our stakeholders and have addressed the key issues of sustainability. Additionally, we participate in sustainability benchmarks and rankings, such as GRESB and ISS. For instance, Macerich has demonstrated consistent reporting when we earned GRESB's #1 ranking in the North American Retail Sector for 2022 for the eighth straight year and landed on EPA's Green Power Partnership list of Top 30 On-Site Generation companies for the eighth consecutive year. Our risk assessment team and consultants continue to monitor and assess this specific market risk type and ensure our actions are exceeding or keeping pace with the rate of change. They meet every quarter to discuss development and address concerns.
Reputation	Relevant, always included	Risks from stakeholder concern or negative reputation from stakeholder feedback regarding our sustainability efforts are always considered in our risk assessment and could lead to reduced revenue from decreased demand for tenant space. To manage potential negative reputational risks, Macerich reports to climate-related disclosures, such as GRESB, to ensure continued transparency to our stakeholders on our sustainability progress. Macerich consistently reports environmental

		initiatives through our CSR reports as a core value that can significantly influence sustainably conscious potential investors. In addition, Macerich has demonstrated consistent reporting efforts and earned GRESB's #1 ranking in the North American Retail Sector for 2022 for the eighth straight year, and the EPA's Green Power Partnership list of Top 30 On-Site Generation companies for the eighth consecutive year. Our risk assessment team and consultants continue to monitor and assess this specific risk type. They meet every quarter to discuss development and address concerns.
Acute physical	Relevant, always included	Acute physical risks, such as increased severity of extreme weather events like cyclones and floods, are always considered as part of Macerich's risk assessment process. Macerich recognizes that some of our centers in the Northeast and Midwest (where 10 of our Core 30 top performing properties are located) are in areas subject to acute natural disasters, such as hail, ice, hurricanes, and superstorms. As an example, Macerich analyzed the Kings Plaza facility to determine if it had resiliency to operate independently. The center has its own power plant, providing 12.8MW of combined heat/power through a CHP system. This facility can operate either as a stand-alone onsite cogeneration plant that supplies 100% of the electrical requirements to the 1.2 million square-foot shopping mall and marina or provide power back to Con Edison's grid, providing both electric and thermal energy to the center, as well as maintaining power through extreme events. Without this system in place, Macerich would most certainly be subject to negative effects from sudden storms and flooding, where access to Macerich properties could be inhibited, or even result in the loss of power, where tenant space cannot be utilized properly. Macerich also looks at grid connections and wielding all our capabilities throughout our portfolio, including redundant utilities to ensure that all operations can operate and provide battery backup power. Our risk assessment team and consultants continue to monitor and assess this specific risk type. They meet every quarter to discuss development and address concerns.
Chronic physical	Relevant, always included	Chronic physical risks, such as changes in precipitation patterns and extreme variability in weather patterns, are always considered in our risk assessments. We identified that Macerich's portfolio includes limited locations that could be affected by such risks. For example, some locations are potentially susceptible to heavy snowfall (including those in the Northeast, like Queens Center and Danbury Fair Mall) or drought, and our risk assessment also accounts for these. There is a risk that tenants may not choose to lease space from Macerich in areas that are subject to increasing frequency of heavy snowfall, which can impact our operating margins by approximately $3,800,000. Macerich mitigates this risk by annually budgeting around $3,765,000 a year for the removal and management of snow. In addition, Macerich also has risk management policies and insurance programs in place to mitigate

		and manage these risks. For example, we reviewed the Kings Plaza facility to determine if it had resiliency to operate independently from the connected grid, as the center itself has its own power plant, providing 12.8MW of combined heat/power through a CHP system. This facility can operate as a stand-alone onsite cogeneration plant that supplies 100% of the electrical requirements to the 1.2 million square-foot shopping mall and marina or provide power back to Con Edison's grid, providing both electric and thermal energy to the center, as well as maintaining power through extreme events. Our risk assessment team and consultants continue to monitor and assess this specific risk type. They meet every quarter to discuss development and address concerns.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market

Uncertainty in market signals

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Macerich has 30 Major Markets, 44 Regional Town Centers, and 5 community/power shopping centers. Hence, increases in fuel/energy taxes impact Macerich directly, as energy costs represent approximately 6.6% of the Company's operating expenses, prior to recoveries from tenants. If utility prices suddenly increased by 5%, our annual cost for utilities could increase by $3,020,000 across our entire portfolio. Macerich's climate change strategy is closely related to its energy management strategy because the majority of the Company's GHG emissions result from the use of purchased electricity. Further, rising fuel costs pose a potential substantive market risk, as this would mean higher costs from heating from the properties that Macerich has.

An example occurred in 2020 when several of our major properties in the Northeast, including Queens Center, Danbury Fair Mall, Atlas Park, Freehold Raceway Mall, Deptford Mall, and Wilton Mall were affected by a severe winter, including a Nor'easter in December. The severe winter of 2018 caused these same properties to have a 13% rise in heating degree days from 2017, resulting in a 27% increase in market cost for energy and a significant cost impact to our operations across these properties.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,020,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Using our own internal methods, we have assessed that the risk of market volatility could potentially increase our energy costs by 5%. In 2021, our total energy costs were $60.4 million, meaning a 5% increase equates to $3,020,000, prior to recoveries from tenants, if left unmitigated.

$60,400,000 * 0.05 = $3,020,000

Cost of response to risk

5,562,613

Description of response and explanation of cost calculation

To achieve our long-term energy and carbon reduction goals, Macerich has put processes in place to keep the Board informed of sustainability efforts. The VP, Sustainability meets on a bi-weekly basis with the EVP, Portfolio Operations and People to review energy use against budgets and goals, and the EVP, Portfolio Operations and People meets with the executive team and CEO on a regular basis; results are reported to the Board on a quarterly basis. Example: In deregulated markets (applicable to 150+ accounts at 18 of our properties in 6 states), internal management staff with third-party consultants regularly analyze factors such as: electricity prices, capacity prices, gas demand, gas storage, weather forecast, and market fundamentals and implications. As

a result, Macerich strategically manages contracts to minimize impacts from exposure to market rate volatility and utilizes data during scheduled utility budgeting/forecasting processes annually/as necessary. This ongoing process supports a proactive response to market changes including those that are attributed to climate change.

In 2021, following the results of the third-party analysis of the energy market, Macerich implemented a number of energy efficiency projects to mitigate against exposure from market rate volatility. For example, Macerich invested $5,562,613 in energy management ($265,124), HVAC upgrades ($2,380,055), energy-efficient roofs/skylights/other projects ($2,917,424). Management of energy investment activities are part of normal business for Macerich and do not create material incremental costs, so the total cost to implement these projects are noted in the cost of response to risk.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changing precipitation patterns and types (rain, hail, snow/ice)

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Macerich's operations are at risk from the impact of extreme snow and ice weather events. Such events usually result in property loss but can also lead to business interruption. The main regions in which our properties experience these impacts are the Northeast and Midwest regions.

An example occurred in 2020 when several of our major properties in the Northeast, including Queens Center, Danbury Fair Mall, Atlas Park, Freehold Raceway Mall, Deptford Mall and Wilton Mall were affected by a severe winter, in December. The severe winter of 2018 caused these properties to have a 13% rise in heating degree days from 2017, resulting in a 27% increase in market cost for energy and a significant cost impact to our operations across these properties. The impacts were likely similar for these properties in 2021.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,800,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Extreme snow and ice related weather events can have a financial impact that range from increased operating costs to temporary business interruptions. In 2021, snow removal costs amounted to $3,800,000 across 22 properties. Approximately $35,000 was accounted for based on vehicle fuel usage alone, with the remaining $3,765,000 accounted from removal and management of snow. Macerich anticipates that similar or more extreme weather events resulting from climate change could pose similar or greater magnitude of financial risk, which is already accounted for in our annual budgets.

Average cost for removal and snow per property $171,136 x 22 properties = $3,765,000

Snow removal costs for 22 properties $3,765,000 + Fuel costs $35,000 = $3,800,000

Cost of response to risk

4,590,000

Description of response and explanation of cost calculation

Macerich has preparedness and recovery plans in place to manage risks associated with snow and ice weather events. These include pre-storm planning requirements and post-storm recovery processes, such as snow removal protocols. The Company also keeps comprehensive liability, fire, extended coverage, and rental loss insurance with insured limits customarily carried for similar properties. Macerich's Risk Management department continually evaluates diverse financial instruments to hedge exposure to catastrophic losses due to exceptional events by modelling values based on predetermined insurance-related statics. As an example, in 2021 Macerich proactively developed on-demand and pre-paid contracts with ice and snow removal companies to provide immediate and efficient responses to severe winter-related events. Specifically, at our Danbury Mall property, we maintain and have our own large caterpillar snow removal equipment on-site to ensure our ability to respond to these risks and events now and in the future. This preparation helps to ensure that access to our facilities is always provided, thereby minimizing reduced revenue from decreased traffic to and from our facilities.

The cost of Property and Business Interruption coverage insurance premiums ran more than $4 Million in 2021. At this time the actual purchase price for our caterpillar at Danbury Mall is no longer available, but the onsite equipment at the Mall for snow removal is estimated to have a value well over $500,000 and Macerich has continued to invest over $90,000 annually in property management, repairs, and services to maintain this equipment and provide for on-site response safety and hedge against severe weather impacts.

Cost of insurance premiums ($4,000,000) + Onsite snow removal equipment ($500,000) + maintenance costs ($90,000) = $4,590,000

Comment

The preparation of preparedness and recovery plans is part of normal business practice and do not give rise to material incremental costs.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Reputation

Increased stakeholder concern or negative stakeholder feedback

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

9 of Macerich's Core 30 top performing properties are located in California where there is a growing environmental consciousness from investors and customers. Among Macerich’s tenants, we are seeing a growing demand for sustainable spaces, which help mitigate climate change impacts. For instance, we have seen a clamor from tenants for Macerich to become a US EPA Green Power Partner to support the development of renewable energy. We are experiencing these concerns primarily from the following types of tenants: 1) luxury tenants, especially those whose headquarters are in Europe where there is progressive climate legislation, 2) office space tenants who are seeking more energy efficient spaces, such as in our Fashion District Philadelphia, and 3) tenants who have sustainability and climate action integrated into their core values. There are also a growing number of investors who factor climate change information in their investment and asset allocation decisions. A lack of response to market demand could create a competitive disadvantage for Macerich. Failing to address our customer demand for sustainable practices would cause a decrease in reputation and reduced demand for goods/services. As such, in 2020, we joined the EPA's Green Power Partnership’s On-Site Renewables Challenge. In 2022, Macerich was ranked 23 out of 30 companies for U.S. on-site renewable generation. In addition, Macerich had a total of 44.3 million of on-site green power usage (kWh).

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Low

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)

419,020

Potential financial impact figure – maximum (currency)

31,426,500

Explanation of financial impact figure

The financial impact of tenants deciding not to lease space at Macerich's facilities due to a lack of sustainable space will vary based on how many tenants would make such a decision and the scope of their relationship with the company. The financial implication of a decision can be estimated as follows: The value of a 7-year lease for a 1,000 sq. ft. space at a single property with a leasing rate of $59.86/sq. ft. per year, would be roughly equal to $419,020 in gross operating margin over the lifetime of the lease. The value of a 7-year lease for a 2,500 sq. ft. space at 30 properties with an average leasing rate of $59.86/sq. ft. per year, would be roughly equal to $31,305,750 in gross operating margin over the lifetime of the leases.

($59.86/sq. ft per year x 1,000 sq.ft) x 7 x 1 property= $419,020

($59.86/sq. ft per year x 2,500 sq. ft) x 7 x 30 properties = $31,426,500

Cost of response to risk

11,439,100

Description of response and explanation of cost calculation

Macerich manages its public reputation by communicating its response to climate change and GHG emissions performance through mainstream financial reports and voluntary communications. In 2022, Macerich communicated its efforts by responding to GRESB and CDP. We also became a U.S. EPA Green Power Partner to support the development of new, renewable energy in the United States. Macerich continues to develop a more rigorous and robust environmental policy framework to meet the requirements of GRESB and CDP and ensure a proactive approach to meeting potential reputational risks. Additionally, our robust ESG marketing campaign broadens educational sustainability messaging throughout our malls. We shared our energy savings and promoted our projects in customer-facing LED and digital signage, while

regularly updating and rotating our messaging to encourage customers to take on energy, water, and waste reduction practices at home. At over 75% of Macerich properties, we message through a combination of the following multi-media platforms: large digital displays, digital directories, barricade graphics, and Macerich's Happenings newsletter for retailers. As we continue to elevate our one-of-a-kind portfolio of A-level malls and trophy properties, sustainability is one crucial measure of quality.
Our environmental investments in renewable energy, such as at our Queens Center and Danbury Fair Mall, make our business more efficient, cost-effective and attractive to retailers and shoppers, while reducing our environmental footprint. Unique investments such as this and participation in climate-related disclosures allow tenants to reassess the value of doing business at or encourage customers to visit our various properties.
The cost of preparing the Company's reports to the CDP and GRESB, which includes developing a GHG Inventory, are estimated to be in the order of $139,100 annually. [$65,800 (cost of CDP/GHG consultants) + $30,800 (cost of third-party data verification services) + $42,500 (cost of GRESB consultants) = $139,100] In addition, the cost of investing in the Danbury and Queens renewable energy projects was $11,300,000 .
Macerich's marketing and communication of its response to climate change and GHG emissions performance does not give rise to incremental internal costs, as it is integrated into day-to-day business practice (cost of $0).
The total cost of response is $139,100 + $11,300,000 = $11,439,100.

Comment

Macerich's communication of its response to climate change and GHG emissions performance does not give rise to incremental internal costs, as it is integrated into day-to-day business practice.

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

Macerich's climate change strategy is closely related to our energy management strategy because the majority of the Company's GHG emissions result from the use of purchased electricity. Macerich has 30 Major Markets, 44 Regional Town Centers, and 5 Community/Power Shopping Centers. Hence, minimizing energy expenses directly impacts net operating income and is a key component of Macerich's business strategy. As a result, while energy taxes and regulations could result in an increase in operating costs for Macerich, the Company's strategic focus on energy efficiency could create a cost advantage relative to competitors and reduced operating costs. In 2022 Macerich invested approximately $6.8 million in energy-efficient projects, including 4 LED lighting projects ($342,000), HVAC upgrades ($1,784,000), 5 energy management/building automation system projects ($1,280,000), and central plant upgrades ($3,210,000) in addition to further investment in energy resource projects such as solar and fuel cell installations. As a result, Macerich properties have produced 44.3 million kWh of clean energy from 14 on-site solar projects and 19 fuel cells across 6 properties and were less reliant on the connected grid in 2022.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,020,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Using our own internal methods, we have assessed that this opportunity of adopting renewable energy could lead to a 5% decrease in energy costs. In 2021, our total energy costs were $60,400,000, meaning a 5% decrease would decrease our total energy costs by $3,020,000 to $57,380,000

Total energy costs for 2021 $60,400,000 x 0.05 = $3,020,000 in energy cost savings.

Cost to realize opportunity

845,000

Strategy to realize opportunity and explanation of cost calculation

Macerich prioritizes energy efficiency opportunities by investments in sustainability projects. To ensure long term success in achieving energy use reduction, we implemented 5 battery systems at some of our properties. The batteries supplement the existing solar panels on site by storing solar energy to be used at off-peak times. The energy storage system complements and enhances the existing energy efficiency and renewable energy projects, thereby increasing Macerich's opportunity to minimize operating costs. As a result, Macerich properties have produced 44.3 million kWh of clean energy from 14 on-site solar projects and 19 fuel cells across 6 properties and were less reliant on the connected grid in 2022.

We also engage two third-party contractors annually, Yardi and RPAC, to support our energy management products. Yardi supports load curtailment, utility rebate for efficiency projects, and local and state energy benchmarking requirements, which not only keep Macerich in compliance but also help support local grid resilience and ongoing project implementation to lower energy requirements at our properties. RPAC is focused on supply side solutions with finding and evaluating large renewable supply contracts, solar and wind off-take projects as well as supporting evaluation of further battery storage and renewable projects. In 2021 Yardi helped support over 12MW of load control efforts across the Macerich portfolio while RPAC initiated a new renewable contract that represented almost 10% of total Macerich electrical usage.

The use of third-party contractors, Yardi and RPAC, to help manage energy usage and expenditures amounts to approximately $789,000 annually. Annual Spend on Battery projects is approximately $56,000 annually on 5 battery projects (projects have annual fees, no upfront capex). $789,000 + $56,000 = $845,000.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

The use of lower-emission sources of energy will reduce our exposure to future fossil fuel price increases. Macerich has 30 Major Markets, 44 Regional Town Centers, and 5 Community/Power Shopping Centers. Moreover, in 2021 Macerich invested over $7.1 million in energy efficiency retrofit projects in the areas of lighting, HVAC, building control systems, and energy efficient roofs/skylights, in addition to further investment in energy resource projects such as solar and fuel cell installations. By relying less on the grid and continuing to introduce lower energy emission energy technology into our portfolio, Macerich produced nearly 44.3 million kWh of clean energy from 14 on-site solar power projects and 19 fuel cells across 6 properties in 2022. This not only allowed Macerich to reduce CO2e emissions in 2022 from just our clean energy projects, but it also helps us mitigate risk from future fossil fuel price increases.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

7,174,400

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

With an average market rate of $0.152/kWh for electricity from the grid, and a total of 44.3 million kWh of clean energy produced from Macerich owned low emission energy sources in 2022, Macerich saves approximately $6,733,600 from being used on energy costs from the grid and being less reliant on fossil fuels (44,300,000 * $0.152 = $6,733,600) .

Cost to realize opportunity

11,300,000

Strategy to realize opportunity and explanation of cost calculation

To help reduce exposure to future fossil fuel price increases and in line with our goal of carbon neutrality by 2030, Macerich has been investing in renewable and clean generation sources and renewable energy credits, while setting GHG reduction targets in line with climate science. For example, in 2022, to support our carbon neutral goal, we invested in clean energy projects that produced 15.1 million kWh from solar and 29.2

million kWh from fuel cells. These additions bring Macerich's total clean and renewable energy generation to 44.3 million kWh across 16 properties, with the benefit of being less reliant on fossil fuels.

In 2020 and 2021, $11.3 million was invested in completing the renewable energy projects at our Queens and Danbury sites The average cost per site was $5.65 million. Total cost was $5.65 million x 2 = $11.3 million. Our Danbury site came online in early 2020 and our Queens site came online in 2022.

Comment

The analysis and prioritization of opportunities, and project management activities have been integrated into normal business practices and do not give rise to material incremental costs.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Downstream

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

In 2022, Macerich continued to invest in on-site energy generation and storage, where total energy produced on-site for solar and fuel cell was 15.1 and 29.2 million kWh, respectively, bringing Macerich’s total clean and renewable energy generation to 44.3 million kWh across our properties. The recognition of Macerich’s ability to operate its properties efficiently may help the Company attract tenants seeking to align themselves with energy-efficient and sustainably-focused shopping centers at attractive rents. In addition, the recognition of the Company’s commitment to sustainability practices may provide a competitive advantage in recruiting and retaining employees.

As Macerich takes advantage of these shifts in consumer preferences, our leadership and commitment to sustainability practices have resulted in global and national recognition in 2022, including #1 ranking in GRESB’s North American Retail sector. In line with our goal of carbon neutrality by 2030, Macerich continues to invest in renewable and clean generation sources and renewable energy credits, while setting GHG reduction targets in line with climate science.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

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)

419,020

Potential financial impact figure – maximum (currency)

31,426,500

Explanation of financial impact figure

The financial impact of tenants deciding to lease space at Macerich's facilities because of the company's reputation will vary based on how many tenants would make such a decision and the scope of their relationship with the company. The financial implication of a decision can be estimated as follows: The value of a 7-year lease for a 1,000 sq. ft. space at a single property with a leasing rate of $59.86/sq. ft. per year, would be roughly equal to $419,020 in gross operating margin over the lifetime of the lease. The value of a 7-year lease for a 2,500 sq. ft. space at 30 properties with an average leasing rate of $59.86/sq. ft. per year, would be roughly equal to $31,426,500 in gross operating margin over the lifetime of the leases.
($59.86/sq. ft per year x 1,000 sq.ft) x 7 years x 1 property = $419,020

($59.86/sq. ft per year x 2,500 sq. Ft) x 7 years x 30 properties = $31,426,500

Cost to realize opportunity

11,439,100

Strategy to realize opportunity and explanation of cost calculation

Increasing client/customer demand for sustainable practices has a direct correlation with an increase in reputation and product demand. In response, Macerich manages this opportunity by communicating our response to climate change and GHG emissions performance through mainstream financial reports and a variety of voluntary communications. Since the 2014 reporting year, Macerich has been managing this opportunity for recognition by responding to the annual requests for information from GRESB and CDP. In 2022 (reflecting 2021 reporting year), Macerich achieved a Leadership A in CDP, which was made public to investors, clients, customers, and tenants. Additionally, we had a robust ESG marketing campaign to broaden educational sustainability messaging throughout our malls. We shared our energy savings and promoted our projects in customer facing LED and digital signage while integrating messaging to encourage customers to take on energy, water, and waste reduction practices at home. This marketing effort is across multiple media platforms including on

mall large digital displays, digital directories, barricade graphics as well as direct to retailer as part of Macerich's Happenings newsletter. We have some level of these mediums available at over 75% of Macerich properties and we regularly update and rotate our messaging across the portfolio. We regularly receive inquiries about these and other ESG programs from potential tenants as well as positive feedback through twitter and other social media from the public. This commitment to sustainability disclosures and publicizing the results is a key opportunity for Macerich to communicate and increase its reputation and brand value. These actions will lead to additional interest for Macerich's services and products from investors, clients, customers, and tenants.

The cost of preparing the Company's reports to the CDP and GRESB, including GHG inventory development, are estimated to be in the order of $139,100 annually.

$139,100= $65,800 (cost of CDP/GHG consultants) + $30,800 (cost of third-party data verification services) + $42,500 (cost of GRESB consultants). In addition cost of investing in the Danbury and Queens renewable energy projects was $11,300,000 for a total of $11,439,100.

Comment

Macerich's communication of its response to climate change and GHG emissions performance does not give rise to incremental internal costs, as it is integrated into day-to-day business practice.

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

Joint venture partners, investors and other internal and external stakeholders are given Macerich's ESG plans for assets and portfolio on an annual basis, including our transition plan, which not only aligns with a 1.5C world but includes strategies that are in advance of the Paris Agreement. These partners are then given the opportunity to ask questions or provide feedback.

Frequency of feedback collection

Annually

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

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
Transition scenarios Customized publicly available transition scenario	Company-wide	1.5ºC	Since 2020, Macerich has embarked on its first climate-related scenario analysis pursuant to the TCFD requirements. We began this process through conducting a climate-related risk and opportunity assessment, and since built on this to understand the potential impact of these identified risks and opportunities on our operations under varying degree scenarios to a 2050 and 2100 timeline. As part of this scenario analysis, we used both qualitative and quantitative analytical methods, with the end goal of this process to develop quantitative risks, opportunities, and business impacts that can be incorporated into our current Environmental Risk Management (ERM) program for use throughout our portfolio. We used a customized publicly available transition scenario using the Shared Socioeconomic Pathways (SSPs), to understand the transition risks that have the potential to impact Macerich in alignment with the RCPs we also used. For our 'Middle of the Road' scenario, which utilized SSP3 we assumed that all our facilities in 2022 still exist and are owned by Macerich in 2050. Regarding policy, the scenario assumed low

			international priority for addressing environmental concerns, which has the potential to lead to more frequent and intensive climate risks, and there is still reliance on fossil fuels as existing present-day policies for energy access fail to succeed. As a result, developing countries continue to use biomass and traditional sources of energy as part of development and countries remain focused on achieving goals at the country level, rather than taking a broader-based development approach. To support our analysis, we also utilized SSP2 and SSP5 to align with RCP2.6 and RCP8.5 which represent out 'best-case' and 'worst-case' scenario.
Physical climate scenarios RCP 2.6	Company-wide		We utilized RCP2.6 to understand how climate risks and opportunities may impact Macerich under a lower-degree scenario (2-degrees Celsius and under), This scenario, focused on the physical impacts of climate change assumes few barriers to the transition to a low-carbon economy that is aligned with the goals of the Paris Agreement, offering a declining emissions trajectory. The scenario assumes GDP and population growth remain steady throughout the century and assumes socioeconomic policies are aggressive–aligned with SSP 2. Furthermore, collaboration between nations and business support global decarbonization efforts, allowing emissions to be halved by 2050 and the majority of energy capacity to come from renewables by the same timeline. All of Macerich facilities and operations were considered as part of this scenario, looking at impacts up to a 2050 and 2100 timeline. This scenario uses multiple external models and tools to support the analysis and projections of certain risks such as flooding and wildfire.
Physical climate scenarios RCP 4.5	Company-wide		We utilized RCP4.5 to understand how climate risks and opportunities may impact Macerich under a medium-degree scenario (2-3 degree Celsius). Known as 'Middle of the Road,' this scenario aligns with the transition policies of SSP3. This is considered to be the most likely scenario, with projections of a 'stabilizing' emissions trajectory,

			seen as the most likely to be attained. Assumptions of this scenario include population peaking in 2065 and then declining to 2100, with GDP stable throughout the century. It is a 'cost-minimizing' pathway that assumes all nations of the world undertake emissions mitigation simultaneously and effectively. Declines in overall energy use are seen, along with an increased reliance on wind, solar and other renewables as well as carbon-capture and storage to support international emissions-related goals. All of Macerich facilities and operations were considered as part of this scenario, looking at impacts up to a 2050 and 2100 timeline. This scenario uses multiple external models and tools to support the analysis and projections of certain risks such as flooding and wildfire.
Physical climate scenarios RCP 8.5	Company-wide		We utilized RCP8.5 to understand how climate risks and opportunities may impact Macerich under a higher-degree scenario (4-degree Celsius and above). This scenario, aligned with SSp5, is considered to be 'business as usual,' assuming rising emissions and population. Under this scenario, there is little convergence between high- and low-income countries and results in greater disparity between nations, resulting in slow economic development and little progress in efficiency. As population rises, energy demand increases but slow development of low-carbon technologies. All of Macerich facilities and operations were considered as part of this scenario, looking at impacts up to a 2050 and 2100 timeline. This scenario uses multiple external models and tools to support the analysis and projections of certain risks such as flooding and wildfire.
Transition scenarios Customized publicly available transition scenario	Company-wide	1.5ºC	Macerich utilizes our climate risk scenario analysis in making investments for hard-asset improvements which help us mitigate our highest-risk properties across the portfolio. Together with large and small redevelopments our annual capital expenditure pipeline remains our primary lever for risk mitigation. These investments are determined, in-part, by the regional magnitude of the climate risk. We assess the properties and regions by physical chronic and

			acute risk types such as wildfires, extreme storms, sea-level rise, heat waves, and flooding. In 2022, Macerich spent $19M in climate-related capital investments which included $9M for extreme storms, $7M for heat waves, $860K for drought and over $1M in other climate risks. Macerich expects to continue to align our investment and facility improvements with climate-related risks over the next 5-10 years with a reassessment of risk every 3 years.

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

Through the scenario analysis, Macerich aimed to understand the following:
1. What are the potential climate-related physical and transitional risks that could impact Macerich's business across the various regions in which we operate?
2. How would the RCP 2.6, 4.5, and 8.5 scenarios impact the identified material climate-related risks across Macerich's direct operations and overall business model?
3. How would climate-risk scenario analysis impact investment decisions for mitigating highest-risk properties across the portfolio?

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

1. We identified the physical risk with the largest potential impact to our facilities and operations is heat waves. This is largely due to the high potential increase in the cost of energy and rising price on carbon, coupled with rising temperatures will increase demand for energy at a high price. We are vulnerable to this risk in California and Arizona. Other physical risks such as wildfires also have a high likelihood of impact as increased severity and frequency, could block routes to access our facilities and damage assets. Analysis identified low-lying coastal facilities such as Kings Plaza in New York and The Village at Corte Madera in San Francisco are at risks from coastal flooding and sea level rise. Regarding transition risks, market risks such as increased price on carbon have been identified as having a potentially substantive impact to our business. Under lower degree scenarios which sees carbon prices exceeding $100/tCO2e, failing to transition to greater renewable energy could result in higher operational costs to run our facilities.

2. Under a lower-degree scenario, we expect to be impacted more by transition risks as the world adopts low-carbon technologies. This is likely to be achieved through strict policy implemented at the international, national, and state level. Under a middle of the

road scenario (RCP4.5), which is seen as the most likely, we expect to see an increase in impacts from physical risks such as wildfires, flooding, and extreme storms, as changes in temperature cause more volatile weather conditions. Under a higher degree scenario, although transition risks such as regulation are less likely to impact Macerich, physical risks are a high threat to operations and assets as high temperatures increase frequency and severity of physical risks. This could result in the loss of assets entirely, such as Kings Plaza or the Village at Corte Madera being inundated by coastal flooding waters at least annually if no mitigation or adaptation strategies are implemented.

3. We utilize our transition risk scenario analysis in making investments for improvements which help us mitigate our highest-risk properties across the portfolio. With large and small redevelopments, our annual capital expenditure pipeline is a primary lever for risk mitigation. One such decision, to minimize water waste, we have invested $500,000 in leak detection technology at our Southwestern properties. To understand physical and transitional risk we garner information from governments, independent organizations and academic resources and determine transitional risks such as market changes, technology, policy and regulation. Macerich expects the long-term transition risk of policy and regulation to impact investments in on-site energy, HVAC, Lighting and Water Reduction. Macerich expects to continue to align our investment and facility improvements with transition risks over the next 5-10 years with a reassessment of risk every 3 years.

C3.3

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

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	As Macerich's main product line is retail rental space on our properties, risks such as extreme weather events can be impactful by limiting the availability of power to both our properties and the communities in which we operate and access to our centers. Macerich identified the climate-related opportunity to make our retail spaces more resilient and operationally available across our portfolio, and in 2022, Macerich received 2.5 million kWh of clean energy monthly from SRP in a renewable power procurement deal, helping power eight Arizona properties. The solar allotment reduces each property's carbon emissions and is traceable by asset. Notably, the agreement doubled Macerich's purchased renewable utility power across our portfolio and played a crucial role in achieving our 2022 purchased renewable energy goal. Macerich will continue to pursue

		and prioritize on-site generation projects and additional battery projects over medium- (2-7years) and long-term (7-20 years) time horizons because we believe providing resiliency for our portfolio will make our spaces more attractive for current and future tenants.
Supply chain and/or value chain	Yes	Opportunities such as shifting consumer preferences towards sustainable companies have impacted our supply chain/value chain as rental tenants are able to note that their stores are in sustainable space. They are also able to benefit from leasing a space that has high energy efficiency, which lowers their energy costs and their own climate impacts. Last year, Macerich achieved a Leadership A in CDP, which was made public to investors, clients, customers, and tenants. Along with this, we earned GRESB's #1 ranking in the North America Retail Sector for 2022 and was ranked #23 on EPA's Green Power Partnership list of Top 30 On-Site Generation companies. This commitment to sustainability disclosures and publication of results is a key opportunity and substantial strategic decision for Macerich to communicate and increase its reputation and brand value. As our average lease is 7 years, this area of business is covered within a medium-term time horizon.
Investment in R&D	Yes	Investment in R&D has been impacted through investments in completion of renewable energy projects at existing sites as Macerich is taking advantage of the opportunity to use lower emission sources of energy and reduce exposure to future fossil fuel price increases. In line with our goal of carbon neutrality by 2030, Macerich continues to invest in renewable and clean generation sources, and renewable energy credits, while setting GHG reduction targets in line with climate science. As examples of our most strategic decisions in 2021, Macerich piloted projects by investing in new technologies as well as by continuing larger scale projects outside of energy efficiency projects. In 2022, Macerich continued to install Turntide Smart Motors on properties, which resulted in measured HVAC energy reductions as high as 40%. This technology is a new "ultra-high efficiency motor" which allows Macerich to maintain the same comfort levels for our guests and tenants with less energy. In 2022 we rolled out this technology to 15 centers.
Operations	Yes	As Macerich's main product line is through retail rental space on our properties, risks such as extreme weather events can be impactful by limiting the availability of power to both our properties and the communities in which we

		operate. Macerich identified the opportunity to make our retail spaces more resilient and operationally available across our portfolio. Macerich's most substantive strategic decision to date, was the decision to pursue the Kings Plaza Interconnection Project in 2019. The center itself has its own power plant, providing 12.8MW of combined heat/power through a CHP system. This facility can operate either as a stand-alone onsite cogeneration plant that supplies 100% of the electrical requirements to the 1.2 million square-foot shopping mall and marina or provide power back to Con Edison's grid, providing both electric and thermal energy to the center as well as maintaining power through extreme events. This unique connection was designed to relieve stress during peak energy demand and has already been put into use during extreme temperatures. Off peak, the power plant produces the energy needed to operate the center. Additionally in 2022, Macerich completed LED retrofits at various properties that alleviate in carrying additional energy loads. Macerich will continue to pursue and prioritize on-site generation projects and additional battery projects over medium- (2-7years) and long-term (7-20 years) time horizons because we believe providing resiliency for our portfolio will make our spaces more attractive for current and future tenants.

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 Liabilities	Revenues: Shifts in tenant preferences towards energy-efficient and sustainably-focused shopping centers can result in increases in our revenue, as tenants continue to recognize Macerich's commitment to sustainability practices and ability to operate properties efficiently. As a result, Macerich has invested heavily in renewable energy and various resource efficiencies across our portfolio to manage demand charges, promote asset resilience, and earn revenue. For example, in 2022, Macerich continued to invest in on-site energy generation and storage, where total energy produced on-site for solar and fuel cell was 15.2 and 29.2 million kWh, respectively. Direct/Indirect costs: Renewable energy portfolio standards and other regulatory requirements imposed on power producers, to the extent they cause an increase in energy costs, have a direct impact on operating

		costs for the Company. This is because energy costs represent approximately 5 to 10% of the Company's operating expenses, prior to recoveries from tenants. A case study of how this financial planning element has been influenced is in 2022, Macerich invested approximately $3.4 million for energy efficiency retrofit projects in lighting, HVAC, building control systems, and energy efficient roofs/skylights. In addition to further investment in energy resource projects such as solar and fuel cell installations to mitigate against energy cost increases. Management of energy investment activities are part of normal business operations for Macerich and do not create material incremental costs. In line with our goal and vision of achieving carbon neutrality by 2030, Macerich has budgeted out for future and long-term impacts through the implementation of energy reduction technologies that would reduce operating costs. For example, in 2022, we invested in clean energy projects that produced 15.2 million kWh from solar, and 29.2 million kWh from fuel cells, effectively reducing operating costs in perpetuity. The magnitude of this risk impact on operating costs was low and the time horizon covered is short-term. Extreme snow and ice related weather events can also have a financial impact that range from increased operating costs to temporary business interruptions. A case study of how this financial planning element has been influenced is how in 2021, snow removal costs amounted to approximately $3.8 million across 22 properties. Approximately $35,000 was accounted for based on vehicle fuel usage alone, with the remaining $3,765,000 accounted from removal and management of snow. Macerich anticipates that similar or more extreme weather events resulting from climate change could pose similar (i.e., approximately $3-4 million) or greater magnitude of financial risk, which is already accounted for in our annual budgets. The magnitude of this risk impact on revenue was low and the time horizon covered is short-term. Capital expenditures: A case study of how this financial planning element has been influenced was in 2022, Macerich invested approximately $3.4 million in energy efficiency retrofit projects in the areas of lighting, HVAC, building control systems, and energy efficient roofs/skylights, in addition to further investment in energy resource projects such as solar and fuel cell installations. The internal analysis and prioritization of opportunities, the on-going reporting of results, and project management activities have been integrated into normal business practices and do not give rise to material incremental costs. The use of third-party contractors to help manage energy usage and expenditures amount to more than $789,000 annually. The magnitude of this opportunity had a low impact on capital expenditures and the time horizon covered is short-term. Liabilities: Liabilities have been impacted by risks from extreme snow

		and ice weather events. A case study of how this financial planning element has been influenced is in 2021 when Macerich saw approximately $3.8 million in costs to remove and manage snow. The cost of property and business interruption coverage insurance premiums were approximately $4 million. The magnitude of this risk impact was low and the time horizon covered is short-term.

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	Yes, we identify alignment with our climate transition plan

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with our climate transition plan

Taxonomy under which information is being reported

Objective under which alignment is being reported

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

19,091,524

Percentage share of selected financial metric aligned in the reporting year (%)

39

Percentage share of selected financial metric planned to align in 2025 (%)

25

Percentage share of selected financial metric planned to align in 2030 (%)

30

Describe the methodology used to identify spending/revenue that is aligned

Macerich's Sustainability team partners with Operations, Asset and Property Management teams to continuously assess its level of exposure to physical environmental risks on our business. Macerich's multi-pronged approach to sustainability assesses risks to properties and business continuity, property values, tenants, employees, and communities through environmental, social and governance lenses, and we partner with internal and external stakeholders to review properties for biological, climatological and geophysical vulnerability. We assess physical risk with metrics including property loss and damage, increases in capital costs, increases in insurance premiums, business interruption, reduced shopper traffic, reduced revenue, and increases in operating costs. Facility-level absolute sales per square foot (calculated using income per square foot and gross leasable area) is used to attribute a magnitude of financial impact to all assessed climate related risks.
Our process for identifying and managing physical and transition risks is integrated into Macerich's overall risk management process with guidance from our ESG Working Group and execution at the department level. Stakeholder engagement surveys and discussion have informed our approach, as will climate scenario analysis, which is underway. With ultimate oversight and responsibility for climate-related issues residing at the Board level, engagement by the Board and executive leadership drives the overall risk management effort.

Macerich manages climate-related risk consistent with our overall approach to the responsible use of financial and material resources. To that end, we continue to make thoughtful investments for hard-asset improvements that help us mitigate risk at our highest-risk properties across our portfolio. Together with large and small redevelopment projects, these capital expenditures remain a focus of our long-term business strategy.

Macerich has engaged ADEC Innovations, a third-party provider that provides analysis and modeling of Macerich's transition risk. The process for prioritizing transition risks includes, but is not limited to, location, asset value, and likelihood of transition risk events occurring during the life cycle horizon of the asset. All assets identified in a high-likelihood location are monitored and evaluated on an annual basis. Other assets are evaluated on a recurring schedule that aligns with the site audits performed by Paragon Risk Engineering.

In 2022, Macerich invested $19 million in climate-related capital investments. This includes $9 million to address the climate risk of extreme storms in the East Coast region and $7.8 million under the climate risk of heat waves in the Southern California and Arizona region. Climate transition investments in 2022 include leak detection technology, HVAC replacement and upgrades, and drought-tolerant landscaping.

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)

18,131

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

44,235

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)

62,366

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

2030

Targeted reduction from base year (%)

46.2

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

33,552.908

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

20,123

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

23,574

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)

43,697

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]

64.7934626384

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In 2021, Macerich received validation of our Science Based Targets. Macerich commits to reduce absolute Scopes 1, 2, and 3 emissions 46.2% by 2030 from a 2019 base year. Macerich utilized the Absolute Emissions Contraction method (version April 2020) to set these targets. This target includes all scope 1 and 2 market-based emissions that fall within our operational control boundary.

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

As Macerich works to achieve carbon neutrality by 2030, as well as meet our science-based targets, key steps include:

1) Develop and implement operational efficiency programs, technology and practices to re- duce consumption,

2) Implement on-site renewable generation where technically and economically viable and explore off-site investment for renewable power opportunities,

3) Directly procure renewables via third-party-owned generators and direct or virtual power purchase agreements (PPAs) and indirectly procure renewables via utility retail options, Community Choice Aggregation and other indirect power providers,

4) Develop carbon accounting practices and pricing to appropriately include carbon cost in development cost assessments,

5) Establish a program and strategy for procurement of renewable energy credits (RECs) and opportunities to support research and programs for offsetting emissions.

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 13: Downstream leased assets

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)

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)

135,535

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)

135,535

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

135,535

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)

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)

100

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)

91

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

100

Target year

2030

Targeted reduction from base year (%)

46.2

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

72,917.83

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)

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)

79,605

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)

79,605

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

79,605

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]

89.3205489804

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

In 2021, Macerich received validation of our Science Based Targets. Macerich commits to reduce absolute Scopes 1, 2, and 3 emissions 46.2% by 2030 from a 2019 base year. Macerich utilized the Absolute Emissions Contraction method (version April 2020) to set these targets. This target includes all scope 1 and 2 market-based emissions that fall within our operational control boundary.

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

As Macerich works to achieve carbon neutrality by 2030, as well as meet our science-based targets, key steps include:

1) Develop and implement operational efficiency programs, technology and practices to re- duce consumption,

2) Implement on-site renewable generation where technically and economically viable and explore off-site investment for renewable power opportunities,

3) Directly procure renewables via third-party-owned generators and direct or virtual power purchase agreements (PPAs) and indirectly procure renewables via utility retail options, Community Choice Aggregation and other indirect power providers,

4) Develop carbon accounting practices and pricing to appropriately include carbon cost in development cost assessments,

5) Establish a program and strategy for procurement of renewable energy credits (RECs) and opportunities to support research and programs for offsetting emissions.

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?

Net-zero target(s)
Other climate-related target(s)

C4.2b

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

Target reference number
Oth 1

Year target was set
2018

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)
Resource consumption or efficiency
Other, please specify
Gallons of water withdrawn

Target denominator (intensity targets only)

Base year
2015

Figure or percentage in base year
955,839,607

Target year
2030

Figure or percentage in target year
477,919,803.5

Figure or percentage in reporting year
813,575,670

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

29.7673241322

Target status in reporting year

Underway

Is this target part of an emissions target?

No

Is this target part of an overarching initiative?

Other, please specify

Sustainable Development Goal #13: Clean Water

Please explain target coverage and identify any exclusions

As an owner and operator with significant properties and offices in the West, we are acutely aware of the scarcity of water. Macerich aims to reduce our net water consumption by 50% from 2015 levels by 2030. Along the way, we are adding building design elements to help us reach net-zero water use.

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

Our water reduction practices and tools include:

• WaterCompass to allow local property teams to detect and address water leaks quickly

• WeatherTRAK smart irrigation systems at 50% of our properties for real-time visibility and control

• Water-wise landscaping to minimize water consumption, such as replacing water-intensive grass with high-performance turf and integrating native plants and low-irrigation landscaping

• Water-saving fixtures, including low-flow fixtures, aerators and automatic shutoffs

• Active tenant engagement to help us monitor, address and repair leaks promptly

We continue to explore these additional water-saving efforts:

• Working with development and construction partners to find opportunities for water capture and reuse projects to offset purchased freshwater

• Reducing demand through innovative technologies that consume less water

• Harnessing alternative water sources

• Treating wastewater on-site for reuse or return to the water supply

• Returning stormwater to the original water supply as part of our green infrastructure

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

Target year for achieving net zero

2030

Is this a science-based target?

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

Please explain target coverage and identify any exclusions

Macerich has signed the Business Ambition for 1.5°C pledge — a commitment to set science-based emissions reduction targets that are consistent with keeping global warming to 1.5°C above pre-industrial levels. By signing the pledge, we join more than 1,000 companies worldwide in committing to a long-term target to reach net-zero emissions by no later than 2050. In fact, our own more ambitious target to reach this goal is 2030 across our entire portfolio.

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

As step 5 of our Net Zero pathway, we will further develop our program and strategy for procurement of RECs for offsetting emissions in 2030, building on initial steps taken over the past five years, while exploring opportunities to support research and programs to develop other offsetting projects.

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	9	0
To be implemented*	68	5,795
Implementation commenced*	23	588
Implemented*	31	2,618
Not to be implemented	12	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)

229

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

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

70,330

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

342,000

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

4 LED lighting projects were completed in 2022 which led to a 562,640 kWh savings

Initiative category & Initiative type

Energy efficiency in buildings
Heating, Ventilation and Air Conditioning (HVAC)

Estimated annual CO2e savings (metric tonnes CO2e)

769

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

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
377,480

Investment required (unit currency – as specified in C0.4)
1,784,000

Payback period
11-15 years

Estimated lifetime of the initiative
16-20 years

Comment
Implemented HVAC upgrades projects for multiple facilities were completed in 2022 which led to a 3,019,840 kWh savings.

Initiative category & Initiative type
Energy efficiency in buildings
Other, please specify
EMS/BAS Projects

Estimated annual CO2e savings (metric tonnes CO2e)
378

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

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
859,580

Investment required (unit currency – as specified in C0.4)
1,280,000

Payback period
4-10 years

Estimated lifetime of the initiative
6-10 years

Comment

5 EMS/BAS Project were completed in 2022. Controls and utilities management is a continu-ally improving and changing technology and Macerich has always supported a high level of monitoring and control for our assets, and has achieved relatively high operational efficiency as a result.

Initiative category & Initiative type

Energy efficiency in buildings

Other, please specify

Central Plant Upgrade

Estimated annual CO2e savings (metric tonnes CO2e)

1,096

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

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

416,300

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

3,210,000

Payback period

16-20 years

Estimated lifetime of the initiative

16-20 years

Comment

Central plant upgrades were made at 3 facilities in 2022, resulting in 3,330,400 kWh savings

Initiative category & Initiative type

Low-carbon energy generation

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

147

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

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

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

34,950

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

150,000

Payback period

4-10 years

Estimated lifetime of the initiative

11-15 years

Comment

Maintenance and improvements on existing solar installation to improve efficiency.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	Macerich typically exceeds local code requirements in new construction and major developments. For instance, the Company's internal efficiency targets are 20% higher than California's rigorous Title 24 requirements. When appropriate, the Company seeks to meet the certification requirements under the USGBC LEED programs.
Dedicated budget for energy efficiency	An annual energy efficiency budget is dedicated each year to meet Macerich's environmental and sustainability goals, which includes investments in emissions reduction activities and projects.
Internal incentives/recognition programs	All employees, individually or as part of a group, are eligible to receive company-wide recognition through the Company's global email recognition or our monthly all-hands email publication, called MacChat. Recognition is bestowed on employees who drive results in various areas, including the reduction of electricity consumption and GHG emissions. All employees are also incentivized to maximize operational efficiency through the overall sustainability performance of the company. This can impact performance reviews and compensation.

C4.5

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

Yes

C4.5a

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

Level of aggregation

Product or service

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

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Power

Solar PV

Description of product(s) or service(s)

EU Taxonomy: Electricity generation using solar photovoltaic technology. Macerich generates renewable electricity and sells to third parties.

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

No

Methodology used to calculate avoided emissions

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

Functional unit used

Reference product/service or baseline scenario used

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

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

Explain your calculation of avoided emissions, including any assumptions

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

0.09

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?
Row 1	No, but we have discovered significant errors in our previous response(s)

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	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the impact does not meet our significance threshold	Macerich follows best practice in setting its significance threshold for recalculation. Any material updates to emission factors, publication of improved methodologies or identification of material errors will result in an update of base year emissions to enable like-for-like comparison of data, in accordance with the GHG Protocol.	Yes

C5.2

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

Scope 1

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

18,131

Comment

Base year has been updated from 2014, which was disclosed in last year's response to align with our validated science-based target.

Scope 2 (location-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

44,235

Comment

Base year has been updated from 2014, which was disclosed in last year's response to align with our validated science-based target.

Scope 2 (market-based)

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

13,077

Comment

Base year has been updated from 2014, which was disclosed in last year's response to align with our validated science-based target.

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 5: Waste generated in operations

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

10,693

Comment

Scope 3 category 6: Business travel

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

287

Comment

Scope 3 category 7: Employee commuting

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

2,101

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

135,535

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

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)
The Greenhouse Gas Protocol: Scope 2 Guidance
Other, please specify
WRI and the WBCSD Corp Value Chain 3

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)

20,123

Start date

January 1, 2022

End date

December 31, 2022

Comment

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

27,503

Start date

January 1, 2021

End date

December 31, 2021

Comment

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

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

Reporting year

Scope 2, location-based

52,580

Scope 2, market-based (if applicable)

23,574

Start date

January 1, 2022

End date

December 31, 2022

Comment

Past year 1

Scope 2, location-based

58,009

Scope 2, market-based (if applicable)

29,508

Start date

January 1, 2021

End date

December 31, 2021

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

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

Purchased goods and services

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, it was estimated that emissions from purchased goods and services make up less than 5% of our total scope 3 and are con-sidered de minimis (i.e., does not pass our 5% significance threshold).

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

The lifecycle environmental impact of the operations of Macerich's vast portfolio of buildings greatly outweighs the impact of the annual new construction and major renovation activities. A review of Macerich's operations indicates that this Scope 3

category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, it was estimated that emissions from capital goods make up no more than 1% of our total scope 3 and are considered de min-imis (i.e., does not pass our 5% significance threshold).

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

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, a review of Macerich's operations indicates there are no other fuel- and energy-related emissions that are not already included in scope 1 or 2. Macerich does not participate in any of the activities that fall under Category 3, according to the GHG Protocol (e.g., up- stream emissions of purchased fuels, purchased electricity, T&D losses, nor generation of purchased electricity sold to end users). Therefore, this category is considered not relevant.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, due to the nature of our business, there are no purchased products requiring multi-modal transportation (shipping either between Macerich and its tier 1 suppliers, or third-party transportation between Macerich's facilities).

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

13,406

Emissions calculation methodology

Waste-type-specific method

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

100

Please explain

Tenants, and to a lesser extent shoppers, generate the vast majority of waste generated in operations at Macerich's properties. This waste is comingled with the minimal amount of waste generated by Macerich in compactors and other containers, which are picked by waste handling suppliers and trucked to landfills. Macerich collects cardboard separately from waste and sends it to recycling facilities. Waste collected in compactors is weighed, while the weight of waste collected in front end loaders (dumpsters) is estimated using industry- accepted volume to weight conversion factors. The emissions reflected in this category refer to waste generated from landfills only.

Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

301

Emissions calculation methodology

Distance-based method

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

100

Please explain

Macerich's business travel flight data is broken out by flight leg and categorized as short (<300 miles), medium (301-2,300 miles) and long-haul (>2,300 miles) flights. Emissions fac- tors from U.K.'s Department for Environment, Food and Rural Affairs (DEFRA) are applied to each flight leg to calculate emissions from employee business travel. Macerich's business travel rail data is calculated based on the distance between departure and arrival rail sta-tions.

While GHG emissions from business travel are relatively small and does not meet our 5% significance threshold, Macerich believes that tracking, disclosing, and managing them is good environmental stewardship and enhances its reputation with its various stakeholders.

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,781

Emissions calculation methodology

Distance-based method

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

100

Please explain

Using a Google API, Macerich calculates the distance from the center point of employees' home zip code to the center point of employees' workplace zip code. Annual mileage for all employees is calculated assuming 240 workdays per year per employee. Emissions are calculated by multiplying annual mileage by the US EPA's emissions factors for passenger cars.

Regional office employees are offered the opportunity for a hybrid schedule, with part of the week spent working in-office or on-mall and part working remotely. This provides our employ-ees with more flexibility during the workweek, but also allows us to work towards minimizing emissions from this source. While GHG emissions from employee commuting are relatively small, Macerich believes that tracking, disclosing, and minimizing employee commute emis-sions is important, demonstrates good environmental stewardship, and enhances its reputa-tion with its various stakeholders. Macerich calculates emissions from employee commuting using home and place of employment zip code information provided by the Human Resources Department.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting &Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, Macerich owns a majority of its assets and may rent only a few small offices and spaces which have been deemed negligible to overall emissions and immaterial (less than 5%). Therefore, this category is considered not relevant.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, this category includes emissions from the transport and distribution of any inter- mediate or final products sold between a company and the end consumer. However, Macerich does not deal in the selling of any intermediate or final products. Therefore, this category is considered not relevant.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, due to the nature of our business operating as a lessor, Macerich does not deal in the processing of sold goods. Therefore, this category is considered not relevant.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, due to the nature of our business operating as a lessor, Macerich does not sell products/services that result in direct use-phase emissions, or indirect use-phase emissions. Therefore, this category is considered not relevant.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, due to the nature of our business operating as a lessor, Macerich does not deal in the selling of products. Therefore, this category is considered not relevant.

Downstream leased assets

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

79,605

Emissions calculation methodology

Asset-specific method

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

100

Please explain

Macerich calculates emissions from tenants' use of electricity by multiplying the amount of kWhs provided to tenants by the US EPA's most recent eGrid factors. Emissions from ten-ants' use of natural gas is calculated by multiplying the MMBTU provided to the tenants by the natural gas emission factors per WRI Greenhouse Gas Protocol, Emission Factors from Cross-Sector Tools, April 2014. Tenant chilled water emissions are calculated by multiplying the ton-hours provided to the tenants by the chilled water emission factors were obtained from US DOE Voluntary Reporting of Greenhouse Gases Appendix N: Emission Factors for Steam and Chilled/Hot Water, Nov 2010.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, Macerich is not a franchisor and does not operate under a license to sell or dis- tribute another company's goods or services within a certain location. Therefore, this cate- gory is considered not relevant.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

A review of Macerich's operations indicates that this Scope 3 category does not meet any of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1.

In addition, according to the GHG Protocol, total projected lifetime emissions are reported in the initial year a project is financed, not in subsequent years. As our equity investments oc-curred prior to 2019, these are not included in our Scope 3 emissions and this category is considered not relevant.

Other (upstream)

Evaluation status

Please explain

Other (downstream)

Evaluation status

Please explain

C6.5a

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

Past year 1

Start date

January 1, 2021

End date

December 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)

14,011

Scope 3: Business travel (metric tons CO2e)

72

Scope 3: Employee commuting (metric tons CO2e)

1,546

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)

85,654

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

C-CN6.6/C-RE6.6

(C-CN6.6/C-RE6.6) Does your organization assess the life cycle emissions of new construction or major renovation projects?

	Assessment of life cycle emissions	Comment
Row 1	Yes, quantitative assessment	

C-CN6.6a/C-RE6.6a

(C-CN6.6a/C-RE6.6a) Provide details of how your organization assesses the life cycle emissions of new construction or major renovation projects.

	Projects assessed	Earliest project phase that most commonly includes an assessment	Life cycle stage(s) most commonly covered	Methodologies/standards/tools applied	Comment
Row 1	All new construction and major renovation projects	Operation	Cradle-to-grave	Embodied Carbon in Construction Calculator (EC3) Tool EN 15804 ISO 14040/44 ISO 14025 One Click LCA Other, please specify ISO 21930	

C-CN6.6b/C-RE6.6b

(C-CN6.6b/C-RE6.6b) Can you provide embodied carbon emissions data for any of your organization's new construction or major renovation projects completed in the last three years?

	Ability to disclose embodied carbon emissions	Comment
Row 1	Yes	

C-CN6.6c/C-RE6.6c

(C-CN6.6c/C-RE6.6c) Provide details of the embodied carbon emissions of new construction or major renovation projects completed in the last three years.

Year of completion
2022

Property sector
Retail

Type of project
New construction

Project name/ID (optional)
SFS-Pad "F" - LTF

Life cycle stage(s) covered

Other, please specify

A1 through C3

Normalization factor (denominator)

Other, please specify

Gross Floor Area provided by architects

Denominator unit

square meter

Embodied carbon (kg/CO2e per the denominator unit)

90.65

% of new construction/major renovation projects in the last three years covered by this metric (by floor area)

10

Methodologies/standards/tools applied

Embodied Carbon in Construction Calculator (EC3) Tool

ISO 14040/44

One Click LCA

Other, please specify

ISO 21930

Comment

Year of completion

2022

Property sector

Retail

Type of project

Major renovation

Project name/ID (optional)

VRC - DMV

Life cycle stage(s) covered

Cradle-to-grave

Normalization factor (denominator)

Other, please specify

Gross Floor Area provided by architects

Denominator unit

square meter

Embodied carbon (kg/CO2e per the denominator unit)
318.82

% of new construction/major renovation projects in the last three years covered by this metric (by floor area)
2

Methodologies/standards/tools applied
ISO 14040/44
ISO 14025
One Click LCA

Comment

Year of completion
2022

Property sector
Retail

Type of project
New construction

Project name/ID (optional)
GAM - Primark

Life cycle stage(s) covered
Cradle-to-grave

Normalization factor (denominator)
Other, please specify
Gross Floor Area provided by architects

Denominator unit
square meter

Embodied carbon (kg/CO2e per the denominator unit)
136.72

% of new construction/major renovation projects in the last three years covered by this metric (by floor area)
12

Methodologies/standards/tools applied
EN 15804
One Click LCA

Comment

Year of completion
2022

Property sector
Retail

Type of project
Major renovation

Project name/ID (optional)
GAM - Common Area Refresh

Life cycle stage(s) covered
Cradle-to-grave

Normalization factor (denominator)
Other, please specify
Gross Floor Area provided by architects

Denominator unit
square meter

Embodied carbon (kg/CO2e per the denominator unit)
2.49

% of new construction/major renovation projects in the last three years covered by this metric (by floor area)
24

Methodologies/standards/tools applied
EN 15804
One Click LCA

Comment

Year of completion
2022

Property sector
Retail

Type of project
Major renovation

Project name/ID (optional)

TCC - Apple

Life cycle stage(s) covered

Cradle-to-grave

Normalization factor (denominator)

Other, please specify

Gross Floor Area provided by architects

Denominator unit

square meter

Embodied carbon (kg/CO2e per the denominator unit)

47.54

% of new construction/major renovation projects in the last three years covered by this metric (by floor area)

11

Methodologies/standards/tools applied

Embodied Carbon in Construction Calculator (EC3) Tool

EN 15804

One Click LCA

Other, please specify

Manual Take-Offs, ISO 21930

Comment

Year of completion

2022

Property sector

Retail

Type of project

Major renovation

Project name/ID (optional)

Queens - Common Area Refresh & Entrances

Life cycle stage(s) covered

Cradle-to-grave

Normalization factor (denominator)

Other, please specify

Gross Floor Area provided by architects

Denominator unit

square meter

Embodied carbon (kg/CO2e per the denominator unit)

84.85

% of new construction/major renovation projects in the last three years covered by this metric (by floor area)

0.5

Methodologies/standards/tools applied

EN 15804
One Click LCA

Comment

Year of completion

2022

Property sector

Residential

Type of project

Major renovation

Project name/ID (optional)

Vita Plumbing

Life cycle stage(s) covered

Cradle-to-grave

Normalization factor (denominator)

Other, please specify

Gross Floor Area provided by architects

Denominator unit

square meter

Embodied carbon (kg/CO2e per the denominator unit)

5.25

% of new construction/major renovation projects in the last three years covered by this metric (by floor area)

3

Methodologies/standards/tools applied

EN 15804
One Click LCA

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

0.0005086

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

43,697

Metric denominator

unit total revenue

Metric denominator: Unit total

859,164,000

Scope 2 figure used

Market-based

% change from previous year

24.4

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities

Please explain

Macerich has refined our methodologies to reflect the newest available carbon accounting best practices from the GHG Protocol. These changes include updating 2021 GHG calculations to ensure a like-for-like comparison. The updated 2021 intensity figure is .00006727. The % change from previous year reflects a comparison to the updated intensity figure. However, in addition to a change in methodology, absolute emissions reductions were achieved through strategies in our carbon neutrality plan, including: Utility and Procured Renewable Energy, Reduced Utilization, Carbon Offsets and Renewable Energy Credits, and Additional Hard Energy Assets.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	19,577.71	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	5.83	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	6.9	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	533.09	IPCC Fourth Assessment Report (AR4 - 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)
United States of America	20,123

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Stationary Combustion - Natural Gas and Fuels	18,965
Mobile Combustion - Transport Fuels	625
Refrigerants	533

C7.5

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

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
United States of America	52,577	23,574

C7.6

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

By activity

C7.6c

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

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Malls	52,577	23,574

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	6,000	Decreased	10	Increased investment in REC purchases across the portfolio.

Other emissions reduction activities				
Divestment				
Acquisitions				
Mergers				
Change in output				
Change in methodology				
Change in boundary				
Change in physical operating conditions	7,253	Decreased	13	Reduced consumption of natural gas due to climatic conditions.
Unidentified				
Other				

C7.9b

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

Market-based

C8. Energy

C8.1

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

More than 10% but less than or equal to 15%

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	103,498	103,498
Consumption of purchased or acquired electricity		45,556	97,398	142,955
Consumption of self-generated non-fuel renewable energy		14,810		14,810
Total energy consumption		60,366	200,896	261,262

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
HHV

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
n/a

Other biomass

Heating value
HHV

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
n/a

Other renewable fuels (e.g. renewable hydrogen)

Heating value
HHV

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

n/a

Coal

Heating value

HHV

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

n/a

Oil

Heating value

HHV

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

n/a

Gas

Heating value

HHV

Total fuel MWh consumed by the organization

100,213

MWh fuel consumed for self-generation of electricity

61,660

MWh fuel consumed for self-generation of heat

38,554

Comment

Natural gas to heat buildings and power fuel cells to generate electricity.

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

Heating value

HHV

Total fuel MWh consumed by the organization

3,285

MWh fuel consumed for self-generation of electricity

2,699

MWh fuel consumed for self-generation of heat

586

Comment

Includes fuel oil for boiler, diesel for power and gasoline for mobile combustion.

Total fuel

Heating value

HHV

Total fuel MWh consumed by the organization

103,498

MWh fuel consumed for self-generation of electricity

64,358

MWh fuel consumed for self-generation of heat

39,140

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	44,013	44,013	14,810	14,810
Heat	0	0	0	0
Steam	0	0	0	0

Cooling	0	0	0	0

C8.2e

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

Country/area of low-carbon energy consumption

United States of America

Sourcing method

Project-specific contract with an electricity supplier

Energy carrier

Electricity

Low-carbon technology type

Solar

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

58,665

Tracking instrument used

Contract

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

United States of America

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

Yes

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

2022

Comment

Country/area of low-carbon energy consumption

United States of America

Sourcing method

Unbundled procurement of energy attribute certificates (EACs)

Energy carrier
Electricity

Low-carbon technology type
Renewable energy mix, please specify
Solar & wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
75,000

Tracking instrument used
US-REC

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

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

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

Comment

C8.2g

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

Country/area
United States of America

Consumption of purchased electricity (MWh)
142,995

Consumption of self-generated electricity (MWh)
14,810

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]

157,805

C9. Additional metrics

C9.1

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

Description

Other, please specify

Total waste to landfill

Metric value

23,703

Metric numerator

Tonnes

Metric denominator (intensity metric only)

% change from previous year

5.26

Direction of change

Decreased

Please explain

In partnership with our property teams, our retailers, and our waste collection partners, we leverage several waste reduction practices. This includes working closely with waste collection partners and tenants to ensure proper waste stream sorting and reduce the number of hauling trips to lessen the environmental impacts and costs. Macerich focuses on education and outreach for tenants to help reduce business and packaging waste, including opportunities for polybag recycling through our partnership with Keter Environmental Services.

Description

Other, please specify

Total waste recycled

Metric value

16,302

Metric numerator

tonnes

Metric denominator (intensity metric only)

% change from previous year

0.02

Direction of change

Increased

Please explain

We utilize diverse recycling streams across our portfolio for cardboard, glass, aluminum, plastic and plastic film, paper, organics, used cooking oil and landscape debris. Additionally, we recycle significant levels of our construction waste.

Description

Other, please specify

Water withdrawal

Metric value

3,079,719

Metric numerator

cubic meters

Metric denominator (intensity metric only)

% change from previous year

2.94

Direction of change

Decreased

Please explain

Macerich regularly employs several water reduction practices and tools. This YoY is likely driven by our response to routinely occurring drought or near-drought conditions. In California, our 13 properties comply with or exceed the statewide Water Conservation Emergency Regulation requirements that took effect in June 2022. At our eight Arizona properties, we are taking voluntary water reduction actions to do our part in addressing the growing Tier 2a Colorado River shortage.

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

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

	Investment in low-carbon R&D	Comment
Row 1	Yes	

C-CN9.6a/C-RE9.6a

(C-CN9.6a/C-RE9.6a) Provide details of your organization's investments in low-carbon R&D for real estate and construction activities over the last three years.

Technology area

Other, please specify

HVAC systems

Stage of development in the reporting year

Pilot demonstration

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

15

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

2,659,000

Average % of total R&D investment planned over the next 5 years

5

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Macerich expects long-term transition risk of policy and regulation to impact investments in on-site energy, HVAC, Lighting and Water Reduction. Macerich expects to continue to align our investment and facility improvements with transition risks over the next 5-10 years with a reassessment of risk every 3 years.

Technology area

Demand response

Stage of development in the reporting year

Large scale commercial deployment

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

5

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

542,000

Average % of total R&D investment planned over the next 5 years

7.5

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Macerich expects long-term transition risk of pricing and power demand to impact investments in on-site energy and demand response. Macerich expects to continue to align our investment and facility improvements with transition risks over the next 5-10 years with a reassessment of risk every 3 years.

Technology area

Building integrated photovoltaic systems

Stage of development in the reporting year

Pilot demonstration

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

5

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

150,000

Average % of total R&D investment planned over the next 5 years

7.5

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Macerich expects long-term transition risk of pricing and power demand to impact investments in on-site energy and demand response. Macerich expects to continue to align our investment and facility improvements with transition risks over the next 5-10 years with a reassessment of risk every 3 years.

Technology area

Air-to-air heat pump

Stage of development in the reporting year

Basic academic/theoretical research

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

5

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

0

Average % of total R&D investment planned over the next 5 years

7.5

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

Macerich expects long-term transition risk of pricing and power demand to impact investments in efficient heating and cooling. Macerich expects to continue to align our investment and facility improvements with transition risks over the next 5-10 years with a reassessment of risk every 3 years.

C-RE9.9

(C-RE9.9) Does your organization manage net zero carbon buildings?

No, but we plan to in the future

C-CN9.10/C-RE9.10

(C-CN9.10/C-RE9.10) Did your organization complete new construction or major renovations projects designed as net zero carbon in the last three years?

No, but we plan to in the future

C-CN9.11/C-RE9.11

(C-CN9.11/C-RE9.11) Explain your organization's plan to manage, develop or construct net zero carbon buildings, or explain why you do not plan to do so.

Macerich does not currently manage any net zero carbon buildings. However, we have plans to do so in the future to align with our goal to be carbon neutral by 2030 and net zero strategy, along with continuing to implement sustainable investment, renewable and clean generation sources and renewable energy credits, while setting scientific greenhouse gas (GHG) reduction goals.

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

2022 Macerich.Brightworks Verification Letter Final CDP.pdf

Page/ section reference
Please see pages 1 - 3.

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 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

2022 Macerich.Brightworks Verification Letter Final CDP.pdf

Page/ section reference

Please see pages 1 - 3.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

2022 Macerich.Brightworks Verification Letter Final CDP.pdf

Page/ section reference

Please see pages 1 - 3.

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: Waste generated in operations

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

2022 Macerich.Brightworks Verification Letter Final CDP.pdf

Page/section reference

Please see pages 1 - 3.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Business travel

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

2022 Macerich.Brightworks Verification Letter Final CDP.pdf

Page/section reference

Please see pages 1 - 3.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

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

2022 Macerich.Brightworks Verification Letter Final CDP.pdf

Page/section reference

Please see pages 1 - 3.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope 3 category

Scope 3: Downstream leased assets

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

2022 Macerich.Brightworks Verification Letter Final CDP.pdf

Page/section reference

Please see pages 1 - 3.

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.2

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

Yes

C10.2a

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

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	ISO 14064-3: 2019	As part of our annual organization-wide verification process, Macerich pursues the verification of key environmental metrics including energy, emissions, water, and waste. 1
C9. Additional metrics	Other, please specify Total waste to landfill	ISO 14064-3: 2019	As part of our annual organization-wide verification process, Macerich pursues the verification of key environmental metrics including energy, emissions, water, and waste. 1
C9. Additional metrics	Other, please specify Total waste recycled	ISO 14064-3: 2019	As part of our annual organization-wide verification process, Macerich pursues the verification of key environmental metrics including energy, emissions, water, and waste. 1
C9. Additional metrics	Other, please specify Water withdrawal	ISO 14064-3: 2019	As part of our annual organization-wide verification process, Macerich pursues the verification of key environmental metrics including energy, emissions, water, and waste. 1

[1]2022 Macerich.Brightworks Verification Letter Final CDP.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

New York City enacted Local Law 97 in 2019 which will come into effect January 1, 2024. Under this law, most buildings over 25,000 square feet will be required to meet new energy efficiency and greenhouse gas emissions limits by 2024. As part of our risk assessment, we identified that this law will impact 3 of our properties and require us to ensure our buildings do not exceed specific annual building GHG emission limits or else be subject to noncompliance penalties. Since 2019, Macerich has been developing a regional strategy in New York and the Northeast in anticipation of this law. Macerich has engaged with policymakers over the past few years regarding Local Law 97 by providing feedback on the requirements of the policy and how the tax structure should be included, evaluated, and rated. Engagement in 2021 included proposing questions or concerns about the requirements. We are continuing to broaden this approach and make further investment decisions based not just on a property-level impact, but also a regional impact that will allow Macerich to support local grid relief efforts, renewable power needs, load management with the LDC and efficiency in meeting our total regional demands. From 2020 -2021, this included adding new renewable resources at three regional properties, a new LDC interconnect to serve the community with up to 7MW when needed at Kings Plaza, and integrated software and monitoring to support future dispatch of assets and power across regional assets owned by Macerich. In addition, in 2021, Macerich has contracted with external firms to prepare for LL97, as regulation terms develop over time. Our risk assessment team and consultants continue to monitor and assess this specific risk type. They meet every quarter to discuss development and address concerns.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

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

No, but we anticipate doing so in the next two years

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, our customers/clients

Yes, other partners in the value chain

C12.1a

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

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect GHG emissions data at least annually from suppliers
Collect other climate related information at least annually from suppliers

% of suppliers by number

50

% total procurement spend (direct and indirect)

21

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

8

Rationale for the coverage of your engagement

Macerich's supplier engagement strategy aligns with our SBTi approved emissions Scope 3 target committing to working with our suppliers in setting their own GHG reduction targets and report annually by 2025. We are committed to working across our value chain to reduce absolute emissions and limit temperature rise to 1.5C. Macerich understands the impact we can have with involving suppliers in our net zero goal; therefore, we will monitor supplier data annually to identify the highest impact for emission reduction opportunities.

Impact of engagement, including measures of success

The impact from our supplier engagement efforts provides the information we need for reduction targets. With consistent data tracking, we can monitor performance and evaluate any risks and opportunities that may impact our supply chain, operations and services to our tenants.
In 2022, 50% of the suppliers we engaged provided responses to our supplier survey. Our measure of success will be based on the increase of responses year over year.

Comment

C12.1b

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

Type of engagement & Details of engagement

Education/information sharing

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

100

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

84

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

In 2022, Macerich (MAC) engaged with 100% of our tenants (customers) because we believe it is important for all tenants to be provided with the tools to improve their waste management and, therefore, the sustainability of their own business practices. These tenants have the financial and scaling potential to work with MAC to deploy programs across our entire portfolio.

In 2022, we continued to work with our waste service provider, Keter, to engage 100% of our tenants directly on waste issues. Keter engages tenants for program rollout, education, as-sessment, and billing functions and is continually looking at additional ways to improve and expand our programs to support both Macerich and the tenants. Education and outreach for tenants help reduce business and packaging waste, including opportunities for polybag recycling through our partnership with Keter. Keter provides most of our educational, and informational signage and information for tenants and on property tenant staff as well as interfaces with tenant corporate representation for billing and feedback on the programs.

We also continued a widespread marketing campaign to broaden educational sustainability messaging throughout our malls. We shared our energy savings and promoted our projects in customer facing LED and digital signage while integrating messaging to encourage cus-tomers to take on energy, water, and waste reduction practices at home. We also engaged with our tenants by having them complete a survey, which focused on evaluating their per-ceptions of MAC's sustainability initiatives. Questions included how important sustainability is to tenants, how they would rate MAC's sustainability initiatives across their portfolio, and their interest in receiving ongoing communications about MAC's sustainability initiatives and performance. For the 2022 survey, 6 of our tenants responded.

Impact of engagement, including measures of success

Corporately, MAC uses quantitative metrics to measure success with its customer outreach efforts such as recycling rates/ diversion rates. These metrics are contractually tracked and provided monthly by waste vendors to MAC's sustainability and operations teams. The threshold for success if year over year improvement in diversion rates. If a tenant's recycling/diversion rate does not improve year over year, follow-up meetings will oc-cur to ensure that tenants are aligned with our goals and thresholds are set. In 2022, the di-version rate was 53%, an increase from the prior year, which is an example

of a successful en-gagement. Utility recovery rates (utility income vs. expense) are another quantitative metric to measure success; these rates are tracked and reported monthly to measure usage and adoption of conservation programs at the site level. Measure of success of engagement in this regard, is determined when utility usage goes down year over year.

The impact of engagement was that these energy-saving, water-conserving, recycling-tuned properties reflect Macerich's (MAC) thorough commitment to sustainability, in which tenants can see the difference that they can make first-hand. Importantly, MAC has advanced tenant- driven recycling programs at more than half of our Core 30 centers. A growing number of these exceptional shopping environments generate energy as well. Additional impacts of our tenant engagement resulted in the following improvements: 100% of our janitorial paper pur-chases beginning in 2020 had advanced eco features, including 30%+ post-consumer recycled content, re-manufactured, or certified to leading standards, such as the Forest Stewardship Council, Green Seal, and EPA Design for the Environment; 100% of all paper supplied to our offices were either wheat straw paper or 30% recycled content paper; and janitorial supplies were bulk purchased to reduce harmful environmental impacts. We also believe the combination of Macerich and Keter being involved and engaged with our tenants is the best formula for long-term success. We will continue to improve our diversion and usage rates, which will sup-port Macerich and tenants in meeting our property and corporate goals.

C12.1d

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

Macerich works with other partners in the value chain, constituting our employees and nonprofit organizations, on climate-related issues. Our Company has a strong commitment to supporting a broad range of causes that have meaning to our employees and communities. Within our Regional Town Centers, we are developing customized programs supporting local interests, including volunteerism, financial support, in-kind donations and partnerships with local nonprofit organizations.

Created by our employees, the Macerich Volunteer Program (MVP) amplifies our support by actively encouraging employees to get involved in local non-profit organizations that are meaningful to them. Each Macerich employee receives a bank of 24 paid hours each year - an uncommon and popular benefit - to volunteer in the community. Local property and office teams choose the projects and non-profit organizations they are passionate about and can apply for grants to bolster their volunteerism with financial support. Our grant offering includes a donation match. Eligible employees can donate through payroll deduction and request a matching contribution through Macerich's donor-advised fund, compounding the impact of donations. Macerich employees volunteer with sustainability-related organizations including the Earth Day Network, Keep America Beautiful, and the National Parks Foundation. To date, Macerich has provided almost $4.1 million of assistance to non-profit organizations and charitable events in the communities where we work. In 2022, we donated over $1.1 million to community organizations.

Demonstrating our ongoing commitment to sustainability across our portfolio, 85 events were held during Earth Month (April), featuring electronic recycling, paper-shredding events, on-center displays featuring repurposed or recycled materials and electric vehicle showcases.

Through our MVP, employees from Regional Town Center offices as well as corporate offices — from coast to coast — spent more than 300 hours removing close to 6,300 pounds of trash from community parks, recreation centers, city streets and public spaces, as well as desert preserves and beaches.

Our Kids Club continued in 2022 in-person. We partnered with community and nonprofit organizations on sustainability-themed events. With crafts, activities, goody bags, and raffle prizes, Kids Club serves as an opportunity to teach children pre-Kindergarten to 8 years old about sustainability focused themes in a fun, interactive setting. The program aims to teach future generations how to build a stronger future for our world by focusing on "healthy people" and a "healthy planet".

C12.2

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

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

C12.2a

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

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

MAC's Supplier Code of Conduct (SCOC) encourages suppliers to minimize their environmental impact. MAC requires suppliers to obtain environmental permits and registrations and keep them current.

MAC's SCOC encourages suppliers to work on reducing their carbon emissions in areas within their control and strive for carbon neutral products and services in their purchasing process. Suppliers are also encouraged to work on maximizing the reuse and recycling of materials while minimizing waste volumes with an aim of minimizing waste to landfill. MAC encourages suppliers to work on utilizing resources optimally for maximum lifecycle and only to use what is needed. Where possible, MAC encourages suppliers to make a positive contribution to biodiversity, in relation to the products and services they provide. Suppliers are encouraged to ensure sustainable use and management of water resources in all areas that it has direct control and to support and encourage others where it can meaningfully do so.

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

100

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

100

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment

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

Other, please specify

All matters raised in good faith by suppliers, employees or third-party will be handled in a confidential and non-retaliatory basis.

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)

ClimateChangeEnergyPolicy.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

We see our engagement with trade associations and policy makers as the activities that have potential to influence policy, law, or regulation that may impact the climate. We conduct these engagements in line with our overall climate change strategy and commitment to envi-ronmental leadership, which includes our goal to achieve carbon neutrality by 2030, two decades ahead of the Paris Agreement. As Macerich's sustainability activities are in advance of the Paris Agreement, we believe all our engagement activities are so too.

To ensure our engagements remain aligned with our strategy, Macerich is well-represented on various trade groups such as NAREIT and ICSC. The VP, Sustainability provides up- dates from these engagements as he is an active participant in the Sustainability Committees for each of these organizations. He investigates opportunities related to climate change and is responsible for ensuring that Macerich's position within these organizations is always consistent with the overall climate change strategy of the Company. In particular, the VP, Sustainability directly contributes to advocating, driving, and shaping these trade groups' direct and indirect activities that influence policy.

In a similar vein, in late 2020, the Executive VP, Portfolio Operations and People, began serv-ing on NAREIT's ESG Steering Committee and helps to drive policy and requirements within the REIT industry to ensure alignment with Macerich's overall climate change strategy.

Furthermore, the VP, Sustainability meets bi-weekly with the Executive VP, Portfolio Operations and People, and the Executive VP, Portfolio Operations and People meets weekly with the Executive VP, CFO to review energy use from facility operations against budgets and goals.

Progress toward the implementation of sustainability projects is then reported to the CEO on a quarterly basis to review progress against overall sustainability goals; results of these meetings are reported to the Board on a quarterly basis as well. This process ensures that our mall and tenant activities are being operated consistently with our overall sustainability goals.

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

Macerich engaged with the New York Office of Sustainability on Local Law 97, an ambitious plan for reducing emissions for buildings over 25,000 square feet. The law requires new energy efficiency and greenhouse gas emissions limits by 2024 with more stringent limits taking effect in 2030. Local Law 97 was included in the Climate Mobilization Act that the City Council passed in April 2019 as part of the New York City Green New Deal.

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

Climate change adaptation

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

Other, please specify

Policy on use of Renewable Energy Credits

Policy, law, or regulation geographic coverage

Regional

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

Macerich engaged with Local Law 97 by providing feedback on the requirements of the policy and how the tax structure should be in-cluded, evaluated, and rated. Our EVP, Portfolio Operations and People meets regularly with the NYC Mayor's Office and City Council regarding this policy, while our VP, Sustainability and VP, Corporate Responsibility regularly interact with the Office of Sustainability within the or-ganization.

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?

Supporting Local Law 97 aligns with our strategy to mitigate Scope 2 whole building emissions by 56% which directly impacts our 2040 path to net-zero goal.

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 National Association of Real Estate Investment Trusts (NAREIT)

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

In 2022, NAREIT continued to have a broad ESG reporting and disclosure focus with educa-tion and lobbying across many standards and reporting guidelines including GRESB, CDP, SASB and TCFD. SASB remained a key topic and NAREIT continued to promote voluntary ESG reporting principles, intended for use in SEC Form 1 0-Ks forms and similar filings for a num-ber of industries with a stated mission to improve corporate disclosures of "material informa-tion" for investors regarding climate and ESG risks. NAREIT has continued to work with SASB to help ensure that the proposed disclosure topics constitute information that is material to the reasonable investor, particularly to companies in the Real Estate industry. NAREIT en-sured that metrics adopted by SASB are relevant, cost effective, comparable, and au-ditable. NAREIT has submitted comments on the proposed reporting standards and has con-tinued to assess how SASB integrates with what the industry sees now with TCFD guide- lines.

The overall REIT industry recognizes the increasingly dynamic and interdependent nature of environmental, social and governance issues and therefore prioritizes responsible and effec-tive management of these pillars to help drive return on investment for shareholders and long-term value for employees and communities .

Macerich is represented on NAREIT's Sustainability Committee to help ensure that NAREIT's position is consistent with that of Macerich's.

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

118,387

Describe the aim of your organization's funding

Macerich provides annual membership dues to NAREIT.

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

The International Council of Shopping Centers

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

In 2022, the IFRS Foundation, who provide the SASB standards, continued to pro-mote, for a number of industries, voluntary ESG reporting principles, intended for use in SEC Forms, 10-K forms and similar filings with a stated mission to improve corporate disclosures of "material information" for investors regarding climate and ESG risks. ICSC continues to work with SASB to help ensure that the proposed disclosure topics constitute information that is material to the reasonable investor, particularly to companies in the Real Estate indus-try. ICSC also ensures that metrics adopted by SASB are relevant, cost effective, compa-rable, and auditable. ICSC submitted comments on the proposed reporting standards on be- half of the industry.

Macerich is represented on ICSC's Energy and Sustainability Committee to help ensure that ICSC's position is consistent with that of Macerich.

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

131,825

Describe the aim of your organization's funding

Macerich provides annual membership dues to ICSC.

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

Macerich_Annual_Report_2022.pdf

Page/Section reference

Annual Report

Content elements

Governance
Strategy
Risks & opportunities

Comment

Publication
In mainstream reports

Status
Complete

Attach the document

Macerich 2022 Proxy Statement.pdf

Page/Section reference
Proxy Statement

Content elements
Governance
Strategy
Risks & opportunities

Comment

Publication
In voluntary sustainability report

Status
Complete

Attach the document

Macerich_CRR_2022_30MB.pdf

Page/Section reference
2022 Corporate Responsibility Report

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

Other metrics

Comment

C12.5

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

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Business Ambition for 1.5C Global Reporting Initiative (GRI) Community Member Science Based Targets Network (SBTN) Task Force on Climate-related Financial Disclosures (TCFD)	Macerich adheres to industry-leading reporting frameworks and guidelines to ensure we share the most accurate information about our ESG journey. Among the guidelines and entities we follow are those of TCFD, SASB, GRI and UNSDG. Macerich has signed the Business Ambition for 1.5C pledge - a commitment to set science-based reduction targets that are consistent with keeping global warming to 1.5C above pre-industrial levels. By signing this pledge, Macerich joins more than 1,000 companies worldwide in committing to a long-term target to reach net-zero emissions by no later than 2050. In fact, our own more ambitious target to reach this goal is 2030 across our entire portfolio.

C15. Biodiversity

C15.1

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

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity
Row 1	Yes, executive management-level responsibility	Macerich has Key Performance Indicators (KPI's) on: - the potential biodiversity impacts of proposed projects - the use of biodiverse materials in the development and maintenance of our sites, to minimize impacts on upstream and downstream ecosystems - measures in place that are associated with biodiversity, and - existing relationships with local community partners to support them in their goals relating to protecting and enhancing local biodiversity and draw on their expertise

		in managing our impacts. These KPIs are reviewed and updated during quarterly meetings by the Macerich Executive Team so the team can develop sustainability plans with regard the KPIs.

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
Row 1	No, but we plan to do so within the next 2 years

C15.3

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

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we 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?

No

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?
Row 1	No, we are not taking any actions to progress our biodiversity-related commitments, but we plan to within the next two years

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

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

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	[1]

[1] MAC - BiodiversityPolicy.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	Chief Executive Officer	Chief Executive Officer (CEO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

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

Please confirm below

I have read and accept the applicable Terms