

C0. Introduction

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C0.1

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

Las Vegas Sands Corp. (NYSE: LVS) is the pre-eminent developer and operator of world-class Integrated Resorts that feature luxury hotels, best-in-class gaming, retail, dining and entertainment, Meetings, Incentive, Convention and Exhibition (MICE) facilities, and many other business and leisure amenities. We pioneered the MICE-driven Integrated Resort, a unique, industry leading and extremely successful product that serves both the business and leisure tourism markets.

Starting with a single property in 1990, our footprint and impact extends worldwide, from Las Vegas to Macao and Singapore. We have a track record of successfully developing and operating some of the largest and most complex business and leisure properties. We are as passionate about where we build, as what we build and at the heart of our company are unshakable values. We're committed to listening to our guests and Team Members, to considering the environmental impact of our decisions and to contributing to the well-being of the communities in which we do business.

Our properties in the United States include The Venetian Resort Las Vegas, a luxury resort on the Las Vegas Strip, and the Sands Expo and Convention Center (the "Sands Expo Center," and together with The Venetian Resort Las Vegas, the "Las Vegas Operating Properties") in Las Vegas, Nevada. Through our 70.0% ownership of Sands China Ltd. ("SCL"), we own and operate a collection of Integrated Resorts in the Macao Special Administrative Region ("Macao") of the People's Republic of China ("China"). These properties include The Venetian Macao Resort Hotel ("The Venetian Macao"); Sands Cotai Central; The Parisian Macao; The Plaza Macao and Four Seasons Hotel Macao, Cotai Strip (the "Four Seasons Hotel Macao"); and the Sands Macao. In Singapore, we own and operate the iconic Marina Bay Sands, which has become one of Singapore's major tourist, business and retail destinations since its opening in 2010.

We are dedicated to being a good corporate citizen, anchored by the core values of serving people, planet and communities. We drive environmental performance through the award-winning Sands ECO360 global sustainability program. Through our Sands ECO360 global sustainability program, we develop and implement environmental practices to protect natural resources, offer our team members a safe and healthy work environment, and enhance the resort experiences of our guests. We are committed to creating and investing in industry-leading policies and procedures to safeguard our patrons, partners, employees and neighbors.

Please note that the sale of Sands Casino Resort Bethlehem was completed in May 2019. Our 2018 disclosure to CDP includes this property, as they were still part of our company in the reporting year.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2018	December 31 2018	No	<Not Applicable>

C0.3

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

- China, Macao Special Administrative Region
- Singapore
- United States of America

C0.4

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

USD

C0.5

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**(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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.**

Financial control

## C1. Governance

### C1.1

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

Yes

#### C1.1a

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

Position of individual(s)	Please explain
Chief Financial Officer (CFO)	LVS' Executive Vice President and Chief Financial Officer (CFO), who is also a board member, is the senior executive with direct oversight of Sands ECO360 Global Sustainability program with responsibility for environmental issues, including climate-related issues. He reviews the strategic direction and progress of global sustainability efforts with the Chief Procurement and Sustainability Officer and reports to the Board of Directors as needed. The CFO is positioned with the strongest ability to act on climate-related issues which can pose both financial risk (e.g. carbon tax, increasing energy tariffs/spend) and opportunities (e.g. energy efficiency). The CFO is also best positioned to ensure our sustainability program is executed properly by, overseeing strategic direction, major project execution, and progress against goals and targets. In addition, the CFO's background in engineering is incredibly valuable to our sustainability efforts given the nature of our initiatives.

#### C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	<ul style="list-style-type: none"> <li>Reviewing and guiding strategy</li> <li>Reviewing and guiding major plans of action</li> <li>Reviewing and guiding risk management policies</li> <li>Reviewing and guiding annual budgets</li> <li>Reviewing and guiding business plans</li> <li>Setting performance objectives</li> <li>Monitoring implementation and performance of objectives</li> <li>Overseeing major capital expenditures, acquisitions and divestitures</li> <li>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</li> </ul>	<p>The Board of Directors discuss climate-related issues as needed including overseeing major capital expenditures and reviewing and guiding business plans or major plans or action. For example, the board reviews any new development projects, which are a primary source of capital expenditure and part of the company's major business strategy. As part of these development projects, we leverage internal Sustainable Development Standards to ensure resorts are developed sustainably. These standards provide guidance on how to integrate energy, water, and natural resource efficiency and conservation into new development projects. Further, the board reviews and guides annual budgets including sustainability related expenditures. Typically, our company does not engage in acquisitions and divestiture strategies. However, should we do so in the future, these responsibilities would fall with the board. The CFO, who is also a board member, directly oversees all sustainability efforts, including monitoring implementation and performance, overseeing strategic direction and major project execution, and reviewing progress against climate goals and targets for addressing climate-related issues. The CFO also reviews employee incentives such as bonuses related to company executives' ability to meet environmental performance targets.</p>

### C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other C-Suite Officer, please specify (Chief Procurement/Sustainability Officer)	Both assessing and managing climate-related risks and opportunities	Quarterly

**C1.2a**

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

The Chief Procurement and Sustainability Officer (CPSO), oversees the Global Sustainability Department and reports directly to the Chief Financial Officer, who is a board member. The responsibilities of the CPSO include leading the LVS Enterprise Risk Management process related to environmental issues including climate change, reviewing and guiding sustainability strategy, developing major plans of actions, climate change related risk management policies, annual budget, business plans, approving environmental targets, and managing the execution of the Sands ECO360 sustainability program at all properties globally. Specifically, the Sands ECO360 sustainability program's focus areas include energy efficiency, water efficiency, recycling and waste management, air quality, supply chain, sustainable meetings and events, communication, employee education, and community outreach. Climate-related responsibilities lie with the CPSO as he holds dual responsibilities of both sustainability and procurement within the company. Many of the Sands ECO360 focus areas relate to procurement at different stages of execution including procuring energy, procuring water and energy efficiency technologies, negotiating waste recycling contracts, purchasing sustainable food and beverage products, and more. Further, the CPSO oversees and approves the Global Sustainability Department's engagement with subject matter experts on the issues related to climate change and sustainability. The CPSO's monitoring process for climate-related issues includes assessing the Global Sustainability Department's and property sustainability team's progress towards quantitative and qualitative environmental targets including emissions reduction, water conservation, and waste diversion on a weekly basis. The CPSO then meets with the CFO at least quarterly to review the Sands ECO360 program's strategic direction, budget and major capital expenditure, the progress of global sustainability efforts, and substantive climate-related risks and opportunities. The CPSO holds the most effective role to advance the Sands ECO360 program forward for LVS.

**C1.3**

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

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).**

**Who is entitled to benefit from these incentives?**

Environment/Sustainability manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction project

**Comment**

Sustainability managers and directors who manage or oversee climate change project related projects are also required to set their SMART Goals (accounting for 50% of their annual financial bonuses) in relation to our company's long-term emissions reduction, energy efficiency, water efficiency, recycling, or supply chain engagement goals.

**Who is entitled to benefit from these incentives?**

Facilities manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction project

**Comment**

Certain facility managers and engineers who are involved in climate change related projects are also required to set their SMART Goals (accounting for 50% of their annual financial bonuses) in relation to our company's long-term emissions reduction, energy efficiency, water efficiency, and recycling.

**Who is entitled to benefit from these incentives?**

All employees

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction project

**Comment**

Team Member "ECO360 Live Green Award" programs recognize our employees who contribute to our company's sustainability efforts. Winning Team Members are awarded various prizes, including monetary rewards at certain properties. As an example, in Macao, both the recipients and nominees for the 'ECO360 Live Green Award' award receives a cash prize.

**Who is entitled to benefit from these incentives?**

Other C-Suite Officer

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction project

**Comment**

One of the Chief Procurement and Sustainability Officer's four SMART Goals (accounting for 50% of his annual financial bonuses) is related to the company's sustainability performance.

**Who is entitled to benefit from these incentives?**

Business unit manager

**Types of incentives**

Monetary reward

**Activity incentivized**

Emissions reduction project

**Comment**

The Vice President of Sustainability's SMART Goals relate to ECOtracker emission and energy reduction projects and targets. The Vice President of Sustainability is also responsible for achievement of sustainability targets such as our science-based targets.

**C2. Risks and opportunities**

**C2.1**

**(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.**

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	5	
Long-term	5	15	

## C2.2

**(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.**

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

## C2.2a

**(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.**

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	

## C2.2b

**(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.**

Las Vegas Sands and its affiliates, including Sands China Ltd. have an Enterprise Risk Management ("ERM") program that identifies and assesses company risks. Climate-related risk assessment is part of the ERM program and is led by the Chief Procurement and Sustainability Officer (CPSO).

The objectives of the ERM program include:

- (1) Implement a process that effectively identifies, assesses, and monitors LVS' most significant risks to inform business and investment decisions.
- (2) Enable ERM disclosures in LVS' annual reports.

The ERM process is stated below. Risks are updated on a quarterly basis:

- (1) At the direction of LVS' Audit Committee, Executive Management creates a risk council to engage in the ERM assessment and to develop a sustainable ERM program. Audit Service Group (ASG) assists the risk council with engagement.
- (2) The risk council collaborates with an outside consulting firm and develops a risk inventory framework. Specific risks are aligned within 10 risk categories and considered on various time horizons. Climate-related risks are considered on short (0-1 years), medium (1-5 years), and long term (5-15+ years) time horizons. These risks are those that will impact the company's ability to operate, generate revenues and cash flows, or execute the business strategy. (3) After the risk inventory framework is developed, the relative significance of each item in the ERM Risk Inventory is assessed on two measures 1) likelihood of occurrence and 2) impact to the Company if the risk event or situation occurs. The risk assessment is scored on scales of 1-5 (1 is lowest and 5 is highest) for both risk likelihood and risk impact. Likelihood is defined as "the probability that risk could arise". Impact is defined as "the extent to which a risk event may adversely affect the company in the achievement of its objectives". When assessing impact, the full range of consequences were considered as well as the severity of those consequences. The scale of the impact severity is defined as "1" for "minor" which is \$0-25 million, "2" for "moderate", which is \$26-100 million, "3" is for "major", which is \$101-250 million and "4" is for "severe", which is \$251-500 million, and "5" is "catastrophic" which is over \$500 million. When identifying or assessing risks for LVS, substantive financial or strategic impact is defined as a scale of impact of \$101 million or more. The \$101 million threshold is less than 1% of the company annual revenue. The ASG interviews individuals who have primary knowledge of the specific risks (such as department leaders) in order to assess the likelihood and the impact severity and to document the mitigation strategy of each risk.

Under the leadership of the CPSO, the Global Sustainability Department identifies and assess all climate-related risks as part of the ERM program. The most significant risks are reported to the corporate ERM program on a quarterly basis to be ranked among all risks for the company. The climate specific related risk assessment is conducted at both company and asset level:

- (1) Company Level: Climate change risks and opportunities stemming from access to capital and changes in brand image/reputation, and other globally relevant risks are assessed at the company level. This distinction has been made because the above mentioned risks and opportunities are considered global, and thus best addressed from the top down such that directives are provided by senior corporate management and the Board of Directors. Climate-related risks and opportunities are integrated into the global sustainability strategic plan and budget for both the corporate and individual property-level teams. Plans are presented to corporate management to achieve climate change related goals and ensure the budgets are approved with sufficient funding for these projects.
- (2) Asset Level: Climate change risks and opportunities stemming from regulation, changes in customer behavior, energy price volatility, weather patterns, resource scarcity, and other location specific risks. Such risks and opportunities are best addressed from the bottom up at the asset level. Sustainability leaders at each property assess significant climate change risks and opportunities by leveraging internal and external resources. Internal entities engaged include legal, risk management and other related departments, while external resources and entities engaged include, local governments, non-governmental organizations, industry peers, consultants and universities among others. The Global Sustainability Department formally reviews the identified risks and opportunities at our global sustainability summit, where our sustainability teams from each property unite to share best practices and develop both short-term and long-term strategic plans. Additional review of identified risks and opportunities also takes place weekly during global sustainability calls with sustainability teams from each property.

## C2.2c

**(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?**

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The sustainability department and other departments as needed assess local and regional climate-related regulation on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. For example, one risk we evaluated was the timeframe of the federal Solar Investment Tax Credit (ITC), which currently allows a 30% deduction of commercial and residential solar system installation costs from federal taxes. The extension of the ITC was signed into law in 2015 and continues until the end of 2019. After 2019, the credit then drops to 26% in 2020, 22% in 2021, and then 10% moving forward. As we evaluate onsite solar in Las Vegas this will impact our return on investment. After completing our evaluation, we have determined that this risk type does not currently meet the substantive financial or strategic risk scale of impact of \$101 million or more.
Emerging regulation	Relevant, always included	The sustainability department and other departments as needed assess local and regional emerging climate-related regulation on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. For example, the Singapore government has enacted the Carbon Pricing Act in Jan of 2019, which affects large GHG emitters, such as power stations. Even though the carbon tax does not apply to the individual users of electricity, it is expected that the cost will be passed down to the users indirectly, and as such, it will impact our Marina Bay Sands (MBS) property's operational cost. If the current rate of \$5 per tonne of GHG emissions for taxable facilities is fully passed down to MBS, this would amount to approximately \$500,000. After completing our evaluation, we have determined that this risk type does not currently meet the substantive financial or strategic risk scale of impact of \$101 million or more.
Technology	Relevant, always included	The sustainability department and other departments as needed assess climate-related technology risk on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. For example, at Sands Macao, many of the HVAC chillers are approaching the end of their useful life and thus its efficiency is decreasing. We are evaluating this technology's impact on our operational efficiency and cost. HVAC chillers typically require an investment of \$250,000 or less with a payback period of less than 3 years. We also assess the environmental data reporting systems we currently use and have identified a tradeoff between high time spent on reporting vs. sustainability project implementation, as a potential risk to the overall function of the sustainability program and our ability to meet LVS' public sustainability goals. We have considered technologies such as new emissions reporting systems with more robust analytics and real-time sub-metering infrastructure for resort areas including tenant spaces, kitchen, restaurants, and exposition halls in our risk assessment. Advanced resort sub-metering is estimated to require an investment of approximately \$1-\$2 million USD per resort. After completing our evaluation, we have determined that this risk type does not currently meet the substantive financial or strategic risk scale of impact of \$101 million or more.
Legal	Relevant, always included	The sustainability department and other departments as needed assess climate-related legal risk on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. For example, at Marina Bay Sands Singapore, we review national legal requirements, product stewardship commitments, sustainability public commitments, operational license etc. in our risk assessment. However, any non-compliance issues could result in fines or penalties against the company as well as poor stakeholder perception, thus legal is a relevant risk type and always considered in our risk assessment. After completing our evaluation, we have determined that this risk type does not currently meet the substantive financial or strategic risk scale of impact of \$101 million or more.
Market	Relevant, always included	The sustainability department and other departments as needed assess climate-related market risk on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. For example, we identified the risk of increased cost of utilities in different regions and its impact on our operating cost. For some properties in Macao, we have experienced increased electricity costs although our electricity consumption has decreased. We also have experienced increased water costs across all regions including United States, Singapore and Macao. Electricity tariffs would need to double across all regions including the United States, Singapore, and Macao for the impact to satisfy our financial or strategic threshold definition. In Las Vegas, we have experienced an increase of electricity tariffs of approximately 13% from 2016 to 2017. At Marina Bay Sands we experienced an increase of tariffs on chilled water, which is used for building cooling, of 16.7% during the same time period. In 2018, these changes decreased or remained the same and are not expected to change drastically in the future. These risks do not satisfy our financial or strategic threshold definition. Further, we identified the risk of limited availability of recycling vendors for Sands China Ltd. properties due to the recent business disruption at our primary glass recycling facility because of Typhoon Hato. In addition, all of our properties have been impacted in some manner, by waste importation policy bans and changes in countries such as China, Thailand, and Vietnam. Effective waste management programs and diversion of waste from the landfill or incineration can be challenging when limited recycling vendors are available or when recycling markets do not function properly. Impacts to waste recycling can have an impact on our scope 3 emissions. After completing our evaluation, we have determined that this risk type does not currently meet the substantive financial or strategic risk scale of impact of \$101 million or more.
Reputation	Relevant, always included	The sustainability department and other departments as needed assess climate-related reputation risk on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. For example, we conducted Corporate Perception Research to understand how our company is perceived across various audiences and stakeholders. The research noted that "making a noticeable, sustainable difference in the community" can propel a company's reputation. We can be exposed to some measure of risk pursuant to brand reputation, and potential reputational damage, if we fail to demonstrate sufficient measures to reduce our environmental impact. After completing our evaluation, we have determined that this risk type does not currently meet the substantive financial or strategic risk scale of impact of \$101 million or more.
Acute physical	Relevant, always included	The sustainability department and other departments as needed assess climate-related acute-physical risk on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. For example, Typhoon Hato in 2017 was one of the strongest typhoons in the past 50 years to impact Macao. A smaller typhoon, typhoon Mangkhut, hit Macao in 2018. Typhoons of various sizes impact Macao annually. These typhoons could cause potential damage to LVS properties and/or result in partial or full resort closures, which could decrease revenue. Typhoons have not had a scale of impact of \$101 million or more on our operations. After completing our evaluation, we have determined that this risk type does not currently meet substantive financial or strategic risk scale of impact of \$101 million or more.
Chronic physical	Relevant, always included	The sustainability department and other departments as needed assess climate-related chronic physical risk on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. For example, we identified volatile and unpredictable temperature changes as a potential risk to our properties. We use an internal weather model to run regression analysis on the relationship between cooling degree-days and changes in kWh for Sands China Ltd., Marina Bay Sands, and The Venetian Resort Las Vegas, to understand how weather impacts our electricity consumption. Our model has indicated that the rate and extent of temperature change has been more volatile in the recent years, which has impacted the pattern and magnitude of both heating and air conditioning consumption in our operations. We also identified changes in precipitation and droughts as a potential risk to our operations in Las Vegas. Further, we have included water supply shortage and impact of drought on global operations in our risk assessment. We are also planning to evaluate the long-term impact of sea-level rise on Sands China Ltd. and Marina Bay Sands. After completing our evaluation, we have determined that this risk type does not currently meet the substantive financial or strategic risk scale of impact of \$101 million or more.
Upstream	Relevant, always included	The sustainability department and procurement departments assess climate-related upstream risk on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. We have considered risks such as water scarcity to our linen cleaning which could impact LVS' hotel operations by slowing our ability to prepare hotel rooms for the next guests, potentially reducing guest satisfaction and resulting in reputation and revenue loss. We also have considered risk of extreme weather conditions and the likelihood of supply disruption of water, electricity, cleaning services, and food products on hotel operations. After completing our evaluation, we have determined that this risk type does not currently meet the substantive financial or strategic risk scale of impact of \$101 million or more.
Downstream	Relevant, always included	The property sustainability department and other departments as needed assess climate-related downstream risk on a scale of 1-5 for 1) likelihood or probability that the risk could arise, and 2) impact or the extent to which a risk event may adversely affect the company in the achievement of its objectives. These risks are then included in the climate-related risk assessment. For example, we evaluate risk of inability to attract guests and clients due to inadequate sustainability services that meet their expectations. We manage this risk through green meeting services offerings, sustainable procurement, and overall sustainable operations of our properties. After completing our evaluation, we have determined that this risk type does not currently meet the substantive financial or strategic risk scale of impact of \$101 million or more.

**C2.2d**

**(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.**

Climate-related Risk Management: As part of the company Enterprise Risk Management (ERM) program, risk mitigation plans are developed and considered during company strategic and budget planning. Elements of key risk mitigation strategy are identified and evaluated on whether risk mitigation strategy/elements adequately address the risk and is fully documented. Management continues to execute mitigation improvement strategies and monitor the implementation, effectiveness and key risk indicators through the audit plan. The ERM program team periodically reports to senior management and Audit Committee on ERM process and status. New and emerging risks are timely identified, assessed, profiled, and monitored through refinement of ERM Guidelines and Protocols.

To address the identified transitional risk of increased energy costs due to emerging regulation, (such as increased pricing of GHG emissions and increased utility tariffs) or market volatility (such as increased costs per kWh of electricity), LVS has integrated monitoring, tracking and reporting of utility consumption patterns, trends, costs, supply diversification, and regulations, into the mitigation strategy. Monitoring utility consumption and cost at the asset level helps property sustainability and facilities teams identify ECOTracker energy efficiency projects that can offset increased energy costs.

To address the identified chronic physical risk of shifts in climate patterns, which could result in increased energy consumption for building cooling and thus an increase in operating costs, LVS has integrated detailed weather modelling into the mitigation strategy in order to closely monitor, manage, and improve building performance. Monitoring weather patterns at the asset level helps property sustainability and facilities teams determine how successful ECOTracker energy efficiency projects are at meeting their projected energy savings.

Overall, ECOTracker energy efficiency and conservation projects help manage both the physical and transitional risks identified above and are a core component of the global Sands ECO360 sustainability program. Since 2016, we have invested more than \$35 million in energy efficiency technologies and implemented 191 projects to reduce our electricity consumption and greenhouse gas emissions. In 2018 alone, we implemented 38 energy efficiency projects that are expected to save more than 48 million kilowatt-hours of electricity annually.

Climate-related Opportunity Management: Opportunities identified are prioritized based on the likelihood and potential impact. Sands ECO360 Action Plans are then developed and incorporated into strategic sustainability planning and budgeting. The Action Plan is translated to executable projects and programs such as emissions reduction, water reduction, waste diversion, green meetings programs, and supply chain engagement etc. The progress of implementation is reviewed on a weekly basis during global calls and plans are reviewed and updated regularly with new opportunities when applicable. For example, to address the identified transitional opportunity of changing consumer behavior of increased demand for green meetings, we have developed Sands ECO360 Green Meetings program to help our meeting clients customize sustainable events. This opportunity has the potential to increase our service offering to meet customer expectations, thereby increasing our market share and our revenues. We also identified the physical opportunity in the area of "changes in temperature extreme" with our advanced ability to use detailed weather modelling to more accurately predict future energy requirements and thus plan for more cost effective building efficiency upgrades. This opportunity has the potential to reduce short-term and long-term operational costs.

Climate-related risks and opportunities are considered on short (0-1 years), medium (1-5 years), and long term (5-15+ years) time horizons. Key risks are communicated to the board on a quarterly basis.

**C2.3**

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

No

**C2.3b**

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

	Primary reason	Please explain
Row 1	Risks exist, but none with potential to have a substantive financial or strategic impact on business	We assess climate-related risk as part of the ERM program by identifying risk likelihood and potential impact and considering timeframe, management method and cost of management. The scale of the impact severity is defined as "1" for "minor" which is \$0-25 million, "2" for "moderate", which is \$26-100 million, "3" is for "major", which is \$101-250 million and "4" for "severe", which is \$251-500 million, and "5" is "catastrophic" which is over \$500 million. When identifying or assessing risks for LVS, substantive financial or strategic impact is defined as a scale of impact of \$101 million or more. The sustainability team identifies and evaluates climate-related by category such as regulation, technology, legal, market, reputation, acute/chronic physical, and up/downstream and considers the full range of consequences. The most significant risks identified including risk of increased energy costs, restricted utility consumption, operational impact due to severe weather, prolonged heat or haze, pricing volatility, and mandatory conservation measures have a total combined estimated impact of less than \$25 million. Electricity tariffs would need to double across all operational regions for the impact to satisfy our financial or strategic threshold definition. In Las Vegas, we experienced an increase of electricity tariffs of approximately 13% from 2016 to 2017. In Singapore, we experienced an increase of tariffs on chilled water, of 16.7% during the same time period. In 2018, these changes decreased or remained the same. As another example, Typhoon Hato in 2017 was one of the strongest typhoons in the past 50 years to impact Macao. Typhoons of various sizes hit Macao annually. These typhoons could cause property damage or result in partial or full resort closures, which could decrease revenue. Typhoons have not had a scale of impact of \$101 million or more on our operations. These risks do not satisfy our substantive financial or strategic impact threshold definition of a scale of impact of \$101 million or more and will not alter the way LVS executes its major business strategy. Therefore, even though the risks exist, there are none with potential to have a substantive financial or strategic impact on the business. We update our risk assessment quarterly. The sustainability team still actively review and mitigate risks significant to the department.

**C2.4**

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

No

**C2.4b**

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

	Primary reason	Please explain
Row 1	Opportunities exist, but none with potential to have a substantive financial or strategic impact on business	We assess and prioritize climate-related opportunities by identifying the opportunities' likelihood, potential impact and time horizon. We develop mitigation strategies and identify the cost to realize the opportunity. When identifying or assessing opportunities for LVS, substantive financial or strategic impact is defined as a scale of impact of \$101 million or more. The \$101 million threshold is less than 1% of the company annual revenue. The sustainability team identifies and evaluates a list of climate related opportunities in the areas of direct operations, supply chain, and customer, breaking down the opportunity types by the categories of resource efficiency, energy source, products and services, markets and resilience. For example, the most significant opportunity we identified is related to resource efficiency. Through our Sands ECO360 Program, one of our most significant climate related opportunity energy efficiency projects in 2018 generated total savings of \$2.1 million, which is well below our threshold. Since 2010, we estimate our net savings to be approximately \$60 million, therefore averaging \$6 million per year. This does not meet our annual \$101 million threshold for substantive financial and strategic opportunities. As another example, we have assessed how expanding our sustainability offerings could attract new hotel guests and MICE clients and overall expand our market share. However, we do not consider this market opportunity to meet the substantive financial or strategic scale of impact threshold. The climate related opportunities identified will not impact how LVS executes its major business strategy. Therefore, even though the opportunities exist, none with potential to have a substantive financial or strategic impact on business. We update our opportunity assessment on a regular basis. While the opportunities might not be "substantive" to the entire company, the sustainability team still actively review and try to realize climate-related opportunities that are significant to the department.

**C3. Business Strategy**

**C3.1**

**(C3.1) Are climate-related issues integrated into your business strategy?**

Yes

**C3.1a**

**(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?**

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

**C3.1c**



### (C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

i) Influence on business strategy: After we completed an initial five-year plan, our Sands ECO360 strategy was revised in 2016. Our Vice President of Global Sustainability conducted meetings with the leaders in our company to learn about their feedback on Sands ECO360, concerns and priorities for the next five years in sustainability. We also reached out to key industry partners and advisers to seek their opinions about our program and future opportunities. In addition, in-depth research was carried out in relation to industry trends and best practices of our peers and other leading companies. Our strategy and goals are aligned with Sustainable Development Goals as well the Science Based Targets Initiative (SBTI). Our SBTI approved emission reduction science-based targets are tied to Sands ECO360 strategy as well as our overall business strategy. It is important to our business that our current properties and new development projects integrate emissions reduction and energy efficiency into their strategic operations in order to reduce our environmental impact and reduce operating expenditures.

Revisions to our strategy were developed based on the areas with the largest climate change related impact, risks and opportunities. In addition, a comprehensive roadmap was established for long-term objectives. Performance is monitored and measured through our EcoTracker, an internal tracking system for efficiency projects. The progress is reported to property and corporate management monthly, and communicated to Team Members and other external stakeholders quarterly. Sustainability and climate change related results and strategies are reviewed annually at our Global Sustainability Strategic Summit. Long-term and short-term strategies and implementation plans are adjusted accordingly.

ii) Examples of most substantial business decision made: to continue mitigating the risk of change in global temperature which is directly related to our energy cost. In 2018, we completed 38 efficiency projects globally, which are expected to save more than 48 million kilowatt-hours of electricity annually. The main projects implemented include energy efficient lighting upgrades (such as installation of LEDs and de-lamping), fan speed optimization, chiller plant optimization, and commissioning of our buildings, etc.

iii) Aspects of climate change that have influenced the strategy: our Sands ECO360 global sustainability strategy focuses on four pillars: (1) Green Buildings; (2) Environmentally Responsible Operations; (3) Green Meetings and Events; (4) Stakeholder Engagement. We have set short and long-term strategies with both quantitative and qualitative goals. These strategies and goals were influenced by climate change related risks and opportunities we identified, such as regulatory change; change in global temperature, which directly affects energy usage and cost; global water supply; corporate reputation; and changing consumer behaviors. Meeting carbon reduction goals in our high-performance facilities will help us respond to opportunities seen in the future low carbon economy. By building and managing environmentally certified and energy efficient buildings, we are not only reducing our operational cost, but also responding to the growing market demand for "green" facilities increasingly driven by meeting and convention businesses and guests. It also enhances the corporate brand and reputation, and the way we design new developments.

iv) Influence on short-term strategy: We established short-term business objectives to help reduce our impact on climate change. The quantitative goals are assigned to individual years to help us attain our long-term targets. Our internal action plan items also set qualitative goals that included, among other items: incorporating sustainable development standards into our remodel and renovation projects, executing revised waste strategies based on internal waste audits, hosting signature events for green meetings, and conducting Team Member engagement events. These goals help us mitigate climate change related risks and opportunities we have identified, such as increased energy cost due to change in global temperature, global water supply, and changing in customer behavior.

v) Influence on long-term strategy: As part of our long-term business strategy, LVS has also implemented quantitative targets and qualitative goals related to climate change. Our quantitative targets include, for our existing resorts which were in full operation in 2015, achieving 9% of Scope 1 and Scope 2 carbon emissions reduction by 2021 from a 2015 base-year. For our ferry operations, reduce absolute scope 1 emissions by 19% by 2030 from a 2015 base-year. These targets have been approved by Science Based Targets Initiative. These targets have been influenced by climate change related risks and opportunities identified such as increased energy cost due to change in global temperature. Our qualitative goals include establishing sustainability as an integral part of the corporate culture which will help us carry out emissions reduction efforts through our Team Members. Sustainability as a part of the corporate culture also helps establish our corporate reputation as a responsible company. The other long-term qualitative goal of becoming premier green meeting destinations directly influences the climate change related opportunity we identified – changing consumer behaviors of our meeting clients.

vi) Strategic advantage: Many of the strategies and activities described above contribute directly to increased operational efficiency, improved building occupant comfort and enhanced branding and public image opportunities, which will ultimately help our company maintain a competitive advantage. We will attract and retain a growing consumer base that seeks environmentally-friendly products and services (e.g., sustainable meetings). In addition, our proven track record of developing green buildings will help us in the pursuit of new business opportunities.

The climate related risks/opportunities mentioned above have been identified, but are not estimated to have substantive financial or strategic impact on our business. These risks are still significant to the sustainability department and are integrated into the department's business objectives and strategy.

### C3.1g

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**(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?**

The biggest challenge for LVS to use climate-related scenario analysis is that we are not able to conduct an analysis that can provide actionable, business-specific, insights without the help of niche subject matter experts and consultants that have strong experience in climate scenario analysis, hospitality and gaming, and translating climate analysis into tangible business action. There are extremely limited publicly accessible climate-related scenario analysis models for the hospitality industry that consider business relevant parameters such as the impact increased instances of extreme weather, weather volatility, and higher temperatures on Las Vegas, Singapore, Macao, flight patterns and tourist visitation.

From a resource stand point, the necessity to consult with external entities that may or may not provide applicable business specific insights, creates a financial barrier for LVS that may not be adequately justified given our current assessment of the financial and strategic impact of the risks and opportunities. Other specific challenges per Task Force on Climate-Related Financial Disclosure include:

- (1) The majority of publicly available climate-related scenario (both transition and physical risk scenarios) were not designed for individual company risk assessment or financial analysis. A majority of transition risk scenarios provide outputs such as the energy mix under given circumstances in the future, but not sector-or activity-specific results in most instances. The outputs of climate modeling of physical scenarios, undertaken within the framework of the IPCC, are currently not easily accessible to wide majority of organizations.
- (2) Scenario-based climate assessments are still in their infancy.
- (3) For those organizations that use scenario analysis, whether for transition and/or physical risk, in their strategic planning and risk management process, the number that have publicly disclosed information about these analyses is limited.

In the next two years, we are planning to talk to experienced subject matter experts and consultants to learn more about climate-related scenario analysis and their applicability to our industry and our business. If we believe the methodology is mature and valuable and applicable to our sector, we will engage a consultant to help us conduct a climate-related scenario assessment and integrate the results into our business strategy.

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**C4. Targets and performance**

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**C4.1**

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

Absolute target

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**C4.1a**

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

**Target reference number**

Abs 1

**Scope**

Scope 1+2 (location-based)

**% emissions in Scope**

85

**Targeted % reduction from base year**

9

**Base year**

2015

**Start year**

2016

**Base year emissions covered by target (metric tons CO2e)**

882952

**Target year**

2021

**Is this a science-based target?**

Yes, this target has been approved as science-based by the Science-Based Targets initiative

**% of target achieved**

65

**Target status**

Underway

**Please explain**

This target applies to our Resort Operations business. The science-based target is calculated based on the SDA service/commercial buildings sector model. Our 9% reduction target is in addition to offsetting the emissions from two newly opened resorts - The Parisian Macao and St. Regis Macao. Our actual reduction target is 23% from our 2015 baseline when we factor in the emissions growth of the newly opened resorts. By the end of 2018, we have achieved 65% of emission reduction required to meet the 9% absolute emissions reduction goal.

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**Target reference number**

Abs 2

**Scope**

Scope 1

**% emissions in Scope**

63

**Targeted % reduction from base year**

19

**Base year**

2015

**Start year**

2016

**Base year emissions covered by target (metric tons CO2e)**

154859

**Target year**

2030

**Is this a science-based target?**

Yes, this target has been approved as science-based by the Science-Based Targets initiative

**% of target achieved**

0

**Target status**

Underway

**Please explain**

This target applies to our Ferry Operations business. The science-based target is calculated based on the SDA transport services sector model. Given an increase in the number of voyages from 2015, the emissions of our Cotai Water Jet Ferry service have gone up. We are currently evaluating technologies to increase ship fuel efficiency.

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**C4.2**

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**(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.**

**Target**

Waste

**KPI – Metric numerator**

% diversion for current year

**KPI – Metric denominator (intensity targets only)**

% diversion for baseline year

**Base year**

2015

**Start year**

2016

**Target year**

2020

**KPI in baseline year**

30

**KPI in target year**

35

**% achieved in reporting year**

2.7

**Target Status**

Underway

**Please explain**

This target applies to our resort operations and is part of our commitment to SDG 12, responsible consumption and production. This target calls for an increase in our overall waste diversion rate of 5%. In 2018, we increased our diversion rate by 2.7%. Waste generation and recycling efforts impact our scope 3 emissions.

**Part of emissions target**

No

**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

**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	
To be implemented*	9	3662
Implementation commenced*	8	16832
Implemented*	38	39418
Not to be implemented	0	

**C4.3b**

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

**Initiative type**

Energy efficiency: Building services

**Description of initiative**

Building controls

**Estimated annual CO2e savings (metric tonnes CO2e)**

1503

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

176636

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

73779

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

3-5 years

**Comment**

---

**Initiative type**

Energy efficiency: Building services

**Description of initiative**

Building controls

**Estimated annual CO2e savings (metric tonnes CO2e)**

1361

**Scope**

Scope 1

**Voluntary/Mandatory**

Voluntary

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

114811

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

197721

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

3-5 years

**Comment**

---

**Initiative type**

Energy efficiency: Building services

**Description of initiative**

HVAC

**Estimated annual CO2e savings (metric tonnes CO2e)**

6756

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

1692369

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

2960000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

---

**Initiative type**

Energy efficiency: Building services

**Description of initiative**

Lighting

**Estimated annual CO2e savings (metric tonnes CO2e)**

6660

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

1490537

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

4466519

**Payback period**

4 - 10 years

**Estimated lifetime of the initiative**

3-5 years

**Comment**

---

**Initiative type**

Energy efficiency: Building services

**Description of initiative**

Motors and drives

**Estimated annual CO2e savings (metric tonnes CO2e)**

598

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

152180

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

494712

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

11-15 years

**Comment**

---

**Initiative type**

Energy efficiency: Processes

**Description of initiative**

Cooling technology

**Estimated annual CO2e savings (metric tonnes CO2e)**

22083

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

2985027

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

5400000

**Payback period**

1-3 years

**Estimated lifetime of the initiative**

6-10 years

**Comment**

---

**Initiative type**

Energy efficiency: Processes

**Description of initiative**

Heat recovery

**Estimated annual CO2e savings (metric tonnes CO2e)**

359

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

210791

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

986996

**Payback period**

4 - 10 years

**Estimated lifetime of the initiative**

11-15 years

**Comment****Initiative type**

Process emissions reductions

**Description of initiative**

Behavioral change

**Estimated annual CO2e savings (metric tonnes CO2e)**

98

**Scope**

Scope 2 (location-based)

**Voluntary/Mandatory**

Voluntary

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

0

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

2700

**Payback period**

No payback

**Estimated lifetime of the initiative**

1-2 years

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

Method	Comment
Compliance with regulatory requirements/standards	Our Sands ECO360 program drives investment in emission reduction activities along with other environmental initiatives each year. Our 'ECOTracker' projects are efficiency, conservation, and optimization driven projects related to energy, water, and waste. Additionally, the Sands ECO360 program carries out other types of environmental initiatives related to our 'key themes' including energy, water, waste, transportation, food, and procurement. The program is based on four pillars: Green Buildings, Environmentally Responsible Operations, Green Meetings and Events, and Stakeholder Engagement. We consider compliance with regulatory requirements/standards during Sands ECO360 annual planning.
Dedicated budget for energy efficiency	Our Sands ECO360 program drives investment in emission reduction activities along with other environmental initiatives each year. Our 'ECOTracker' projects are efficiency, conservation, and optimization driven projects related to energy, water, and waste. Additionally, the Sands ECO360 program carries out other types of environmental initiatives related to our 'key themes' including energy, water, waste, transportation, food, and procurement. The program is based on four pillars: Green Buildings, Environmentally Responsible Operations, Green Meetings and Events, and Stakeholder Engagement. Sands ECO360 has a dedicated property specific budget each year for energy, water, and waste projects.
Dedicated budget for low-carbon product R&D	Our Sands ECO360 program drives investment in emission reduction activities along with other environmental initiatives each year. Our 'ECOTracker' projects are efficiency, conservation, and optimization driven projects related to energy, water, and waste. Additionally, the Sands ECO360 program carries out other types of environmental initiatives related to our 'key themes' including energy, water, waste, transportation, food, and procurement. The program is based on four pillars: Green Buildings, Environmentally Responsible Operations, Green Meetings and Events, and Stakeholder Engagement. We consider low-carbon products throughout the year and during annual ECOTracker project planning. We also work with some suppliers to identify and develop low-carbon products for our properties.
Dedicated budget for other emissions reduction activities	Our Sands ECO360 program drives investment in emission reduction activities along with other environmental initiatives each year. Our 'ECOTracker' projects are efficiency, conservation, and optimization driven projects related to energy, water, and waste. Additionally, the Sands ECO360 program carries out other types of environmental initiatives related to our 'key themes' including energy, water, waste, transportation, food, and procurement. The program is based on four pillars: Green Buildings, Environmentally Responsible Operations, Green Meetings and Events, and Stakeholder Engagement. Our ECOTracker budget includes projects such as building optimization, process improvement and sub-metering, in addition to energy efficiency, aimed at reducing emissions.
Internal finance mechanisms	Our Sands ECO360 program drives investment in emission reduction activities along with other environmental initiatives each year. Our 'ECOTracker' projects are efficiency, conservation, and optimization driven projects related to energy, water, and waste. Additionally, the Sands ECO360 program carries out other types of environmental initiatives related to our 'key themes' including energy, water, waste, transportation, food, and procurement. The program is based on four pillars: Green Buildings, Environmentally Responsible Operations, Green Meetings and Events, and Stakeholder Engagement. We evaluate all Sands ECO360 and ECOTracker projects using internal finance mechanisms and sometimes make exceptions for environmentally beneficial projects that have low ROIs or otherwise do not meet certain company criteria, based on other indirect benefits identified.
Lower return on investment (ROI) specification	Our Sands ECO360 program drives investment in emission reduction activities along with other environmental initiatives each year. Our 'ECOTracker' projects are efficiency, conservation, and optimization driven projects related to energy, water, and waste. Additionally, the Sands ECO360 program carries out other types of environmental initiatives related to our 'key themes' including energy, water, waste, transportation, food, and procurement. The program is based on four pillars: Green Buildings, Environmentally Responsible Operations, Green Meetings and Events, and Stakeholder Engagement. We evaluate all Sands ECO360 and ECOTracker projects using internal finance mechanisms and sometimes make exceptions for environmentally beneficial projects that have low ROIs or otherwise do not meet certain company criteria, based on other indirect benefits identified. In addition, we consider projects such as water conservation that typically have lower ROIs that fall below our company's ROI threshold in order to advance water conservation.
Financial optimization calculations	Our Sands ECO360 program drives investment in emission reduction activities along with other environmental initiatives each year. Our 'ECOTracker' projects are efficiency, conservation, and optimization driven projects related to energy, water, and waste. Additionally, the Sands ECO360 program carries out other types of environmental initiatives related to our 'key themes' including energy, water, waste, transportation, food, and procurement. The program is based on four pillars: Green Buildings, Environmentally Responsible Operations, Green Meetings and Events, and Stakeholder Engagement. We conduct financial optimization calculations for all ECOTracker projects.
Employee engagement	Our Sands ECO360 program drives investment in emission reduction activities along with other environmental initiatives each year. Our 'ECOTracker' projects are efficiency, conservation, and optimization driven projects related to energy, water, and waste. Additionally, the Sands ECO360 program carries out other types of environmental initiatives related to our 'key themes' including energy, water, waste, transportation, food, and procurement. The program is based on four pillars: Green Buildings, Environmentally Responsible Operations, Green Meetings and Events, and Stakeholder Engagement. Our one million actions goal by 2020 encourages Team Members to take 'eco-actions' such as carpooling to working, attending eco-education series, or conserving energy and water, promoting reduced environmental impact in our operations at home in our Team Members daily lives.
Internal incentives/recognition programs	Our Sands ECO360 program drives investment in emission reduction activities along with other environmental initiatives each year. Our 'ECOTracker' projects are efficiency, conservation, and optimization driven projects related to energy, water, and waste. Additionally, the Sands ECO360 program carries out other types of environmental initiatives related to our 'key themes' including energy, water, waste, transportation, food, and procurement. The program is based on four pillars: Green Buildings, Environmentally Responsible Operations, Green Meetings and Events, and Stakeholder Engagement. Members of our management and leadership teams's SMART goals and annual bonus are tied to environmental performance. Further, we recognize sustainable suppliers in our annual Supplier Excellence awards, which takes place at each of our properties globally.

## C4.5

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**(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?**

No

## C5. Emissions methodology

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### C5.1

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

#### Scope 1

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

244964

**Comment**

#### Scope 2 (location-based)

**Base year start**

January 1 2015

**Base year end**

December 31 2015

**Base year emissions (metric tons CO2e)**

792847

**Comment**

#### Scope 2 (market-based)

**Base year start**

**Base year end**

**Base year emissions (metric tons CO2e)**

**Comment**

### C5.2

---

**(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.**

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

## C6. Emissions data

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### C6.1

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**(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)**

257800

**Start date**

January 1 2018

**End date**

December 31 2018

**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**

743970

**Scope 2, market-based (if applicable)**

695111

**Start date**

January 1 2018

**End date**

December 31 2018

**Comment**

## C6.4

---

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

No

## C6.5

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

### Purchased goods and services

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

301846

**Emissions calculation methodology**

Using our sector, revenue and spend information, Trucost's EEI-O model was used to calculate the supply chain GHG emissions through all tiers up to and including raw relevant extraction.

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

**Explanation**

### Capital goods

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

2613

**Emissions calculation methodology**

Using our sector, revenue and spend information, Trucost's EEI-O model was used to calculate the supply chain GHG emissions through all tiers up to and including raw relevant extraction.

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

**Explanation**

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

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

220601

**Emissions calculation methodology**

Using our actual energy consumption data by fuel type, Trucost applied fuel specific 2016 DEFRA factors to calculate GHG emissions associated with fuel-and-energy-related activities

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

**Explanation**

**Upstream transportation and distribution**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

1303

**Emissions calculation methodology**

Using our sector, revenue and spend information, Trucost's EEI-O model was used to calculate the upstream transportation and distribution GHG emissions.

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

**Explanation**

**Waste generated in operations**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

41352

**Emissions calculation methodology**

Monthly tonnages for landfilled, diverted (i.e., recycled) and incinerated waste were used to derive the total MT CO2e equivalent. Emission factors were used from the EPA Waste Reduction Model (WARM) v14 (03/2016) and 2016 Climate Registry Default Emission Factors. For diverted (i.e., recycled) waste, an emission factor of 0 MT CO2e/MT waste was used per the guidance in WRI's Corporate Value Chain [Scope 3] Accounting and Reporting Standard. GWP data was referenced from The Climate Registry's General Reporting Protocol. Our raw waste data is tracked monthly via backup waste hauling receipts; therefore data is accurate and verified.

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

**Explanation**

**Business travel**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

9828

**Emissions calculation methodology**

Using our sector, revenue and actual travel spend information, Trucost's EEI-O model was used to calculate business travel GHG emissions.

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

**Explanation**

**Employee commuting**

**Evaluation status**

Relevant, calculated

**Metric tonnes CO2e**

17283

**Emissions calculation methodology**

Using our global employee head count (by country) and country-specific statistics on commuting time, transportation mode and distance the emissions from employee commuting were calculated.

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

**Explanation**

## Upstream leased assets

### Evaluation status

Relevant, calculated

### Metric tonnes CO<sub>2</sub>e

7667

### Emissions calculation methodology

Our company has leased assets in both Singapore and Las Vegas. In Las Vegas, our leased assets include aircraft, a shared parking garage, and warehouse space. In Singapore, we lease office space. The Greenhouse Gas Protocol Corporate Value Chain [Scope 3] Accounting and Reporting Standard was used to calculate emissions associated with Scope 3 electricity and jet fuel consumption.

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

#### Explanation

## Downstream transportation and distribution

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

#### Explanation

In accordance with the guidance, the definition of downstream transportation and distribution is “transportation and distribution of products sold by the reporting company between the reporting company’s operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company)”. Our product is hotel room nights and the use of casino space, meeting space, retail space and other amenities, which are not typical goods that can be transported.

## Processing of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

#### Explanation

Our product is hotel room nights and the use of casino space, meeting space, retail space and other amenities; the energy used has been captured in Scope 1 and 2 emissions.

## Use of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

#### Explanation

The energy consumption of our sold products: hotel room nights, use of casino space, meeting space, retail space and other amenities have been captured in Scope 1 and 2 emissions.

## End of life treatment of sold products

### Evaluation status

Not relevant, explanation provided

### Metric tonnes CO<sub>2</sub>e

<Not Applicable>

### Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

#### Explanation

Our products are hotel room nights, use of casino space, meeting space, retail space and other amenities; the energy used has been captured in Scope 1 and 2 emissions.

#### Downstream leased assets

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

**Explanation**

We used financial control method to define the boundary, and the emissions from our leased assets have been captured in Scope 1 and Scope 2 emissions.

#### Franchises

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

**Explanation**

We used financial control method to define the boundary, and the emissions from our assets under franchising agreements have been captured in Scope 1 and Scope 2 emissions.

#### Investments

**Evaluation status**

Not relevant, explanation provided

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

**Explanation**

We do not have significant financial investments that are not included in scope 1 and scope 2, including equity investments, debt investments, project finance, and managed investments and client services.

#### Other (upstream)

**Evaluation status**

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

**Explanation**

#### Other (downstream)

**Evaluation status**

**Metric tonnes CO2e**

<Not Applicable>

**Emissions calculation methodology**

<Not Applicable>

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

<Not Applicable>

**Explanation**

### C6.7

**(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

Yes

## C6.7a

---

(C6.7a) Provide the emissions from biologically sequestered carbon relevant to your organization in metric tons CO<sub>2</sub>.

### Row 1

**Emissions from biologically sequestered carbon (metric tons CO<sub>2</sub>)**

14.32

**Comment**

This includes use of biodiesel as a fuel source.

## C6.10

---

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

**Intensity figure**

0.00007297

**Metric numerator (Gross global combined Scope 1 and 2 emissions)**

1001770

**Metric denominator**

unit total revenue

**Metric denominator: Unit total**

13729000000

**Scope 2 figure used**

Location-based

**% change from previous year**

6.8

**Direction of change**

Decreased

**Reason for change**

Emission reduction activities such as energy efficiency and conservation projects, executed through the Sands ECO360 program and our ECOTracker initiatives, continue to help us decrease our emissions in absolute terms and per unit of revenue. We increased our total revenue by 7.86% while also decreasing our total Scope 1 and 2 emissions from 2017 to 2018. This demonstrates our ability to decouple business growth from environmental impact.

---

**Intensity figure**

0.02025796

**Metric numerator (Gross global combined Scope 1 and 2 emissions)**

1001770

**Metric denominator**

square foot

**Metric denominator: Unit total**

49450693

**Scope 2 figure used**

Location-based

**% change from previous year**

10.18

**Direction of change**

Decreased

**Reason for change**

Emission reduction activities such as energy efficiency and conservation projects that are executed through the Sands ECO360 program and our ECOTracker initiatives continue to help us decrease our emissions in absolute terms and per square foot. For this intensity metric, we utilized "conditioned space" for the denominator, as this is the most relevant intensity metric for our Integrated Resorts. This year, we increased our conditioned space by 3.8% (1.8 million square feet) through expansion into new resort areas and the addition of new restaurants and retail space. During the same time, we were also able to decrease our Scope 1 and 2 emissions per square foot of conditioned space by 10.18%.

## C7. Emissions breakdowns

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### C7.1

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(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	239046	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	151	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	2873	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	15730	IPCC Fifth Assessment Report (AR5 – 100 year)

### C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	46265
Singapore	3928
China, Macao Special Administrative Region	207607

### 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)
Mobile Combustion – Vehicles (mobile CNG, diesel, gasoline and bio diesel)	8140
Mobile Combustion – Ships (Macao Sands Cotai Jet ferry operation)	168382
Mobile Combustion – Aviation (Corporate Jet)	16562
Fugitive Emissions – (refrigerants)	15730
Stationary Combustion – (natural gas, LPG and stationary diesel for emergency generators)	48986
Renewable Energy Generated (solar pv and solar thermal)	0

### C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
United States of America	100344	68967	221871	0
Singapore	103098	85616	241171	0
China, Macao Special Administrative Region	540528	540528	645021	0

### C7.6

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

By activity

### C7.6c

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

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Electricity	714782	
Heating Electricity	1212	
Cooling Electricity	27976	

**C7.9**

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

Decreased

**C7.9a**

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	At The Venetian Resort Las Vegas, we generate renewable energy through our roof top solar PV and thermal systems. We also generate renewable energy at Marina Bay Sands through roof top solar PV. We apply an emission factor of 0 to all self-generated renewable energy.
Other emissions reduction activities	45738.73	Decreased	4.26	In 2018, emissions reduction activities contributed to a 4.26% decrease in GHG emissions. These savings represent the estimated annualized GHG emissions listed in CC4.3a as well as additional actual savings. Emissions reduction activities implemented in CY 2018 include both operational improvements (e.g., commissioning activities, chiller plant optimization) and energy efficiency building projects (e.g., installation of LEDs, delamping). Our total Scope 1 and Scope 2 emission in 2017 was 1,074,292 MTCO2e, therefore, we arrived at 4.26% through $(45738.73/1,074,292)*100$ .
Divestment		<Not Applicable >		
Acquisitions		<Not Applicable >		
Mergers		<Not Applicable >		
Change in output	4839.12	Increased	0.45	In 2018, our Cotai Jet ferry operation and Sands Aviation operations increased their consumption of marine fuel and aviation fuel due to more ferry and plane trips. The resulting increase in trips increased emissions by 4839.12 MT CO2e compared to last year. Our total Scope 1 and Scope 2 emission in 2017 was 1,074,292 MTCO2e, therefore, we arrived at 0.45% through $(4839.12/1,074,292)*100$ .
Change in methodology	15741	Decreased	1.47	Location-based scope 2 emission factors decreased in three regions in 2018. The Las Vegas region emission factor decreased by 9.4%, the Pennsylvania region emission factor decreased by 11.6%, and the Macao emission factor decreased by 7.4%. These changes resulted in a decrease of 15,741 MT CO2e. Our total Scope 1 and Scope 2 emission in 2017 was 1,074,292 MTCO2e, therefore, we arrived at 1.47% through $(15,741/1,074,292)*100$ .
Change in boundary		<Not Applicable >		
Change in physical operating conditions	1994.75	Decreased	0.18	We utilize weather modeling to predict and analyze electricity usage and the impact of weather. In 2018 we experienced a weather "benefit" which caused us to utilize less electricity in most of regions (excluding for Marina Bay Sands). This led to a decrease in emissions of 1,994.75 MT CO2e. Our total Scope 1 and Scope 2 emission in 2017 was 1,074,292 MTCO2e, therefore, we arrived at 0.18% through $(1994.75/1,074,292)*100$ .
Unidentified	13934.94	Decreased	1.3	We are not able to identify the remaining portion of our total decrease in Scope 1 and 2 emissions. With the ongoing sale of our property of Sands Bethlehem in Pennsylvania, we have not tracked efficiency projects or the impacts of weather. Therefore, some of the unidentified emissions are as result of this. The remaining unidentified emissions are from operational variances. Our total Scope 1 and Scope 2 emission in 2017 was 1,074,292 MTCO2e, therefore, we arrived at 1.30% through $(13,934.94/1,074,292)*100$ .
Other		<Not Applicable >		

**C7.9b**

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

Location-based

**C8. Energy**

**C8.1**

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

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

**C8.2**

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

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	Yes
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 MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	56	1023432	1023488
Consumption of purchased or acquired electricity	<Not Applicable>	0	1039787	1039787
Consumption of purchased or acquired heat	<Not Applicable>	0	2834	2834
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	0	65443	65443
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	2198	<Not Applicable>	2198
Total energy consumption	<Not Applicable>	2254	2131496	2133750

**C8.2b**

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

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

**C8.2c**

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

**Fuels (excluding feedstocks)**

Jet Kerosene

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

66697

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

66697

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Comment**



**Fuels (excluding feedstocks)**

Biodiesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

56

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

56

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

---

**Fuels (excluding feedstocks)**

Compressed Natural Gas (CNG)

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

14717

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

14717

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

---

**Fuels (excluding feedstocks)**

Diesel

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

13551

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

13551

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

---

**Fuels (excluding feedstocks)**

Distillate Oil

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

385

**MWh fuel consumed for self-generation of electricity**

385

---

**MWh fuel consumed for self-generation of heat**

0

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

---

**Fuels (excluding feedstocks)**

Motor Gasoline

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

7500

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

7500

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

---

**Fuels (excluding feedstocks)**

Liquefied Petroleum Gas (LPG)

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

50369

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

50369

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

---

**Fuels (excluding feedstocks)**

Marine Fuel Oil

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

659641

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

659641

**MWh fuel consumed for self-generation of steam**

0

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

---

**Comment**

---

**Fuels (excluding feedstocks)**

Natural Gas

**Heating value**

HHV (higher heating value)

**Total fuel MWh consumed by the organization**

210572

**MWh fuel consumed for self-generation of electricity**

0

**MWh fuel consumed for self-generation of heat**

90224

**MWh fuel consumed for self-generation of steam**

120348

**MWh fuel consumed for self-generation of cooling**

<Not Applicable>

**MWh fuel consumed for self-cogeneration or self-trigeneration**

<Not Applicable>

**Comment**

---

**C8.2d**

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**(C8.2d) List the average emission factors of the fuels reported in C8.2c.**

**Biodiesel**

**Emission factor**

2527.55368

**Unit**

kg CO2e per m3

**Emission factor source**

2018 Climate Registry Default Emission Factors, Feb 2018, pg.32, Table 13.1

**Comment**

**Compressed Natural Gas (CNG)**

**Emission factor**

53.68019

**Unit**

kg CO2e per GJ

**Emission factor source**

2018-Climate-Registry-Default-Emission-Factors.pdf\* (Pg. 33); Table 13.1

**Comment**

**Diesel**

**Emission factor**

2730.82784

**Unit**

kg CO2e per m3

**Emission factor source**

2018 Climate Registry Default Emission Factors, Feb 2018, pg.32, Table 13.1

**Comment**

**Distillate Oil**

**Emission factor**

0.07408

**Unit**

metric tons CO2 per million Btu

**Emission factor source**

2018 Climate Registry Default Emission Factors, Feb 2018, pg.5, Table 12.1

**Comment**

**Jet Kerosene**

**Emission factor**  
2597.37909

**Unit**  
kg CO2e per m3

**Emission factor source**  
2018 Climate Registry Default Emission Factors, Feb 2018, pg.32, Table 13.1

**Comment**

**Liquefied Petroleum Gas (LPG)**

**Emission factor**  
0.06279

**Unit**  
metric tons CO2e per million Btu

**Emission factor source**  
2018 Climate Registry Default Emission Factors, Feb 2018, pg. 6, Table 12.1

**Comment**

**Marine Fuel Oil**

**Emission factor**  
2729.14282

**Unit**  
kg CO2e per m3

**Emission factor source**  
2018 Climate Registry Default Emission Factors, Feb 2018, pg.32, Table 13.1

**Comment**

**Motor Gasoline**

**Emission factor**  
2348.35146

**Unit**  
kg CO2e per m3

**Emission factor source**  
2018 Climate Registry Default Emission Factors, Feb 2018, pg.32, Table 13.1

**Comment**

**Natural Gas**

**Emission factor**  
0.05332

**Unit**  
metric tons CO2e per million Btu

**Emission factor source**  
2018 Climate Registry Default Emission Factors, Feb 2018,pg. 4 Table 12.1

**Comment**

**C8.2e**

**(C8.2e) 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	323	323	323	323
Heat	1874	1874	1874	1874
Steam	0	0	0	0
Cooling	0	0	0	0

**C8.2f**

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

**Basis for applying a low-carbon emission factor**

No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

**Low-carbon technology type**

<Not Applicable>

**Region of consumption of low-carbon electricity, heat, steam or cooling**

<Not Applicable>

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**

<Not Applicable>

**Emission factor (in units of metric tons CO2e per MWh)**

<Not Applicable>

**Comment**

**C9. Additional metrics**

**C9.1**

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

**C10. Verification**

**C10.1**

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

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

**C10.1a**

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

**Scope**

Scope 1

**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**

LVS final AS v2-TR2.pdf

**Page/ section reference**

Page 1-2

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

**Scope**

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**

LVS final AS v2-TR2.pdf

**Page/ section reference**

Page 1-2

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

**Scope**

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**

LVS final AS v2-TR2.pdf

**Page/ section reference**

Page 1-2

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

---

C10.1b

---

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

**Scope**

Scope 3- at least one applicable category

**Verification or assurance cycle in place**

Annual process

**Status in the current reporting year**

Complete

**Attach the statement**

LVS final AS v2-TR2.pdf

**Page/section reference**

Page 1-2

**Relevant standard**

ISO14064-3

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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?

No, but we are actively considering verifying within the next two years

C11. Carbon pricing

---

C11.1

---

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

No, and we do not anticipate being regulated in the next three years

C11.2

---

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

---

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

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

---

C12.1

---

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

Yes, our suppliers

Yes, other partners in the value chain

C12.1a

---

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

**Type of engagement**

Compliance & onboarding

**Details of engagement**

Included climate change in supplier selection / management mechanism

**% of suppliers by number**

100

---

**% total procurement spend (direct and indirect)**

100

**% Scope 3 emissions as reported in C6.5**

50

**Rationale for the coverage of your engagement**

Environmental sustainability is integrated into supplier selection and management mechanisms through the compliance and onboarding process. 100% of our suppliers must acknowledge and comply with the Supplier Code of Conduct, which requires suppliers to “use commercially reasonable efforts to conduct operations in a manner that is environmentally responsible, conserves natural resources, and minimizes pollution and harmful emissions”. Additionally, through the Code of Conduct, suppliers “shall make continuous improvements in their environmental protection strategies, measure the result and further comply with all environmental laws and regulations.” If a supplier does not comply with the Supplier Code of Conduct then we do not conduct business with that supplier. Thus, our coverage of engagement is 100% of suppliers as this is standard practice for our business and integral to operating as a responsible corporation.

**Impact of engagement, including measures of success**

The impact of our engagement includes increased awareness of sustainability and environmental issues within our supply base. Showing our expectation of commitment from suppliers to protect the environment from the very beginning of engagement paves the way to more targeted engagement and assessment with suppliers at the product level. As a result of the Supplier Code of Conduct and auditing against the code, multiple suppliers have made advances in environmental stewardship and improved documentation of their climate and environmental initiatives. Suppliers such as FF&E (furniture, fixture, and equipment suppliers) and food suppliers are more likely to be in compliance with environmental regulations than they were before our Supplier Code of Conduct was updated with climate and environmental requirements. We periodically assess our contracts and update them with the new procedures and policies, including climate change related criteria. We measure success by striving for 100% supplier compliance. Since adding environmental criteria into our Supplier Code of Conduct, we have seen a positive response from our suppliers and a willingness to engage on environmental issues.

**Comment**

When evaluating suppliers we also consider their alignment with our Sustainability Procurement Policy. The Policy aims to minimize negative environmental impacts by ensuring the procurement of products and services that: 1) Conserve natural resources, materials and energy 2) Maximize recyclability and recycled content, and 3) Reduce toxicity. The policy covers products and materials in the following three categories: 1) Required sustainable products: products that must meet the specified sustainability criteria. Any exception or deviation from the sustainability guidelines shall be approved in advance. 2) Recommended sustainable products – products that should follow the sustainability criteria where feasible. 3) Potential sustainable products – products for which sustainability attributes and criteria should be explored.

**Type of engagement**

Information collection (understanding supplier behavior)

**Details of engagement**

Other, please specify (Identification of sustainable products)

**% of suppliers by number**

4

**% total procurement spend (direct and indirect)**

4

**% Scope 3 emissions as reported in C6.5**

2

**Rationale for the coverage of your engagement**

When evaluating suppliers we consider their alignment with our Sustainability Procurement Policy. The Policy aims to minimize negative environmental impacts by ensuring the procurement of products and services that: 1) Conserve natural resources, materials and energy 2) Maximize recyclability and recycled content, and 3) Reduce toxicity. The policy covers products and materials in the following three categories: 1) Required sustainable products: products that must meet the specified sustainability criteria. Any exception or deviation from the sustainability guidelines shall be approved in advance. 2) Recommended sustainable products – products that should follow the sustainability criteria where feasible. 3) Potential sustainable products – products for which sustainability attributes and criteria should be explored. We collect information from suppliers to evaluate whether their products meet our policy, if not, we work with suppliers for alternative sustainable products. Suppliers selected for this type of engagement are those in targeted commodity categories, who can or do supply us with sustainable product alternatives. Currently, we collect information for about 4% of suppliers comprising approximately 4% of total procurement spend. Since collecting information on sustainable products from suppliers began, we have seen our sustainable procurement spend for targeted commodity categories increase by a few percentage points.

**Impact of engagement, including measures of success**

We measure the success of our product level sustainability program by monitoring the percentage of purchased products that are compliant with our sustainability standards. We also set annual sustainable procurement targets for each product category. We assess and measure the success of this initiative regularly through monthly sustainable procurement reports and annual reviews with property sustainability leaders and the procurement department. The impact of our engagement includes increased purchasing of sustainable product alternatives and creation of demand for these products from our supply base. Since monitoring and measuring sustainable products, we have increased purchasing of sustainable products with credible sustainability certifications in our F&B category including procuring FairTrade coffee, Rainforest alliance bananas, and USDA organic vegetables at our Las Vegas properties. At Marina Bay Sands, we have increased our sustainable seafood purchasing and increased procurement of MSC certified seafood products. Marina Bay Sands has set a goal to procure 50% of annual seafood spend from responsible sources by 2020. We also monitor and measure in dollar spend, procurement of sustainable products including LED light bulbs, Energy Star or energy efficient technology and appliances, FSC certified paper, environmentally friendly cleaning supplies and more.

**Comment**

Our procurement team works with our suppliers to collect sustainability and environmental information and to identify whether specific products meet our internal standards. We code products according to compliance with our sustainability standards and analyze product categories to understand total dollar spend on sustainable products. We also collect climate related information from key suppliers globally during our Supplier Business Review. This helps us understand the environmental practices of critical suppliers we conduct business with and creates opportunities for further sustainability engagement with key suppliers.

**Type of engagement**

Engagement &amp; incentivization (changing supplier behavior)

**Details of engagement**

Climate change performance is featured in supplier awards scheme

Offer financial incentives for suppliers who reduce your operational emissions (Scopes 1 &amp;2)

Offer financial incentives for suppliers who reduce your downstream emissions (Scopes 3)

**% of suppliers by number**

100



**% total procurement spend (direct and indirect)**

100

**% Scope 3 emissions as reported in C6.5**

50

**Rationale for the coverage of your engagement**

100% of our suppliers can be nominated for recognition through our Sands Supplier Excellence Awards. These awards provide an opportunity for our company to acknowledge suppliers that uphold values that align with our own company values, including in the award category of environmental stewardship and sustainability. We chose to engage with 100% of our suppliers with the Sands Supplier Excellence Awards because we want all of our suppliers to have the opportunity to be acknowledged for upholding values that align with our own company values, including in the award category of environmental stewardship and sustainability. We also engage recyclers through our ongoing profit sharing program. This initiative creates a win-win for our company and recyclers, as it maximizes our ability to reduce waste and increase diversion rates and it incentivizes our recyclers to recycle more. We choose to engage recycling suppliers specifically because they can help us meet our global waste diversion goal.

**Impact of engagement, including measures of success**

We engage all of our suppliers through the Sands Supplier Excellence Awards as it is important to recognize and incentivize our large supplier base to incorporate strong values into their operations. We view our suppliers as an extension of our business. Last year in Macao alone, we invited more than 400 participants, representing 150 suppliers, from small, medium, and large sized enterprises to the Sands China Ltd. Supplier Excellence Awards. Diversy Hong Kong Limited received the award for Corporate Culture and Sustainability because of its production of 100% biodegradable chemicals and for certifying its production plants ISO 14001 or higher which specifies standards for an effective environmental management system. We measure the success of our Sands Supplier Excellence awards by the level of environmental efforts of the nominated and winning suppliers. We also seek feedback from nominated suppliers annually and incorporate this feedback into next year's awards. We also track the number the suppliers that are nominated and selected for awards each year. We chose to engage with 100% of our suppliers with the Sands Supplier Excellence Awards because we want all of our suppliers to have the opportunity to be acknowledged for upholding values that align with our own company values, including in the award category of environmental stewardship and sustainability. We measure the success of the recycler profit sharing program by assessing waste to landfill and waste diversion rates over time and identifying opportunities for improvement. We have increased our diversion rate in Las Vegas from 35%-55% after the incentive program was put in place. We choose to engage recycling suppliers specifically because they can help us meet our global waste diversion goal. The impact of our engagement includes increased awareness of sustainability and environmental issues with our supply base, relationship building and trust creation with suppliers, and increased performance by our recyclers to divert more waste.

**Comment**

Climate change performance is featured in supplier awards scheme through our global annual Sands Supplier Excellence Awards program. We acknowledge suppliers based on shared value and principles; strong leadership, vision and strategy; and strong supplier code of conduct and environmental policy. We have a dedicated award category "Corporate Culture & Sustainability" which recognizes suppliers that share our company's environmental and sustainability values. We also offer financial incentives for suppliers who reduce our upstream emissions. In Las Vegas, we engage our waste recycling supplier through an ongoing profit sharing program. The higher the recycling rate our supplier achieves, the larger percentage share of the commodity rebate they receive. In addition, they are also required to share a portion of the proceeds with their employees that separate the recyclables at our recycling dock.

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**Type of engagement**

Innovation & collaboration (changing markets)

**Details of engagement**

Run a campaign to encourage innovation to reduce climate impacts on products and services  
Other, please specify (Co-developing products)

**% of suppliers by number**

0.5

**% total procurement spend (direct and indirect)**

0.5

**% Scope 3 emissions as reported in C6.5**

0.3

**Rationale for the coverage of your engagement**

We select specific suppliers that we have developed strong relationships with to form innovative and collaborative partnerships. The goal of these types of collaborations is to establish relationships that both help us achieve our sustainability goals and also help the supplier innovate and improve their practices. In total we engaged with over 30 suppliers directly to innovate, collaborate, and co-develop products that reduce our climate and environmental impacts

**Impact of engagement, including measures of success**

We measure the success of these types of engagements through monthly sustainable procurement reports and annual reviews. Our ability to leverage these partnerships to achieve our sustainability goals also factors into our overall measure of success of these engagements. We collaborate and innovate with a variety of suppliers to develop products and services that help us achieve our environmental and sustainability goals and also reduce our scope 3 emissions. For example, we frequently work with lighting suppliers to develop highly efficient lightbulbs that our customized to our unique operations and needs. This type of collaboration drives supplier product innovation and also a reduction in environmental impact. We've also worked with suppliers to develop customized waste management technology for food waste which allows us to more effectively divert food waste from landfill. Some further examples of other supplier innovation and collaboration include working with our shuttle busses to reduce idling and improve fuel efficiency and partnering with our linen suppliers to develop towels and linen that use less resources and require less water and energy to wash. In, Las Vegas we have worked with our suppliers on a dock optimization project which reduced vehicle idling by allowing suppliers to schedule deliveries online. The new process has reduced both congestion and emissions as a result. Further, we also host supplier workshops and work with suppliers to develop cost neutral solutions to purchase sustainable food products.

**Comment**

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C12.1c

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

Our climate-related engagement strategy with other partners in the value chain includes seeking out unique opportunities to work with those that have an impact on our sustainability goals, a direct impact on our business, or can benefit from partnership with our company. We consider value chain partners to be organizations in our value chain that are not our direct suppliers. In 2017, our property, Marina Bay Sands Singapore partnered with the World Wide Fund for Nature (WWF) to improve the sustainability practices of fish farms in Malaysia through their Aquaculture Improvement Project. As a large purchaser of seafood, we saw this value-chain partnership as an opportunity to help restore the health of our ocean ecosystems and improve the livelihoods of nearby fishing communities, both of which are negatively impacted by climate change. This partnership also helps our business by helping us receive higher quality sustainability seafood products. Through this partnership, Marina Bay Sands set sustainability 2020 sustainability seafood goals. As of now, 28% of Marina Bay Sands seafood is sourced sustainably. At Sands China Ltd., we also worked with Standard Textile to procure towels, bathrobes, and rugs that require significantly less water, energy, and chemicals to launder. Although we do not save water and energy directly, our linen cleaning supplier is saving these resources within their operations, which helps to improve sustainability within our supply chain and reduces greenhouse gas emissions associated with linen cleaning. We approach other value-chain partnerships similarly, by adapting strategies where the social, environmental, and economic benefits extend beyond our business into our community and up and down our value chain.

**C12.3**

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

- Direct engagement with policy makers
- Trade associations
- Other

**C12.3a**

**(C12.3a) On what issues have you been engaging directly with policy makers?**

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Clean energy generation	Support	In 2018, we, along with our peers in the local hospitality industry as well as interested companies, supported the Energy Choice Initiative ballot measure.	Specifically, we supported Nevada ballot question 3, The Energy Choice Initiative, in both 2016 and 2018. The initiative would have required the state legislature to pass laws to establish "an open, competitive retail electric energy market," prohibit the state from granting electrical-generation monopolies, and protect "against service disconnections and unfair practices" and declare that persons, businesses, and political subdivisions have a "right to choose the provider of its electric utility service" and cannot be forced to purchase electricity from one provider. Although the ballot passed in 2016, it failed to pass in 2018 meaning it was not put forth into law.

**C12.3b**

**(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?**

Yes

**C12.3c**

**(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.**

**Trade association**

The National Environment Agency of Singapore

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

Formed on July 1st, 2012, the National Environment Agency (NEA) is the leading public organization responsible for improving and sustaining a clean and green environment in Singapore. The NEA develops and spearheads environmental initiatives and programs through its partnership with the People, Public and individual to take up environmental ownership and to care for the environment as a way of life. By protecting Singapore's resources from pollution, maintaining a high level of public health and providing timely meteorological information, the NEA endeavors to ensure sustainable development and a quality living environment for present and future generations. The NEA and the country of Singapore publically communicate their stance on climate change and proactively put plans in place to address its impacts. More on their efforts can be found here: <https://www.nea.gov.sg/our-services/climate-change-energy-efficiency/climate-change/singapore-s-efforts-in-addressing-climate-change>

**How have you influenced, or are you attempting to influence their position?**

Our Executive Director of Sustainability and Property Development at Marina Bay Sands in Singapore is on the executive committee of NEA's 3R MICE Force. He participates in meetings every two months to execute strategies and plans to drive better waste management across the MICE (meetings, incentives, conferences and exhibitions) industry in Singapore.

**Trade association**

Singapore Packaging Agreement

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The Singapore Packaging Agreement (SPA) is a joint initiative by government, industry and NGOs to reduce packaging waste, which constitutes to roughly one-third (by weight) of Singapore's total domestic waste. The National Environment Agency (NEA) leads this initiative. The NEA and the country of Singapore publically communicate

their stance on climate change and proactively put plans in place to address its impacts. More on their efforts can be found here: <https://www.nea.gov.sg/our-services/climate-change-energy-efficiency/climate-change/singapore-s-efforts-in-addressing-climate-change>

**How have you influenced, or are you attempting to influence their position?**

Both our Vice President of Procurement and Executive Director of Sustainability and Property Development at Marina Bay Sands in Singapore are on the SPA governing committee. They participate in quarterly meetings and strategy discussions to encourage the use of less packaging in Singapore.

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**Trade association**

US Green Building Council

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

The U.S. Green Building Council (USGBC) is a nonprofit organization committed to a prosperous and sustainable future for the United States through cost-efficient and energy-saving green buildings. USGBC works toward its mission of market transformation through its LEED green building program, robust educational offerings, a nationwide network of chapters and affiliates, the annual Greenbuild International Conference & Expo, and advocacy in support of public policy that encourages and enables green buildings and communities. USGBC advances emission reduction and overall sustainable building practices that help combat climate change. More on their efforts can be found here: <https://www.usgbc.org/articles/tackling-climate-change-through-leed> and on their main website here: <https://new.usgbc.org/>.

**How have you influenced, or are you attempting to influence their position?**

In Las Vegas, our Vice President of Global Sustainability and Executive Director of Sustainability are part of the USGBC LEED Hospitality User Group. The goal of the hospitality user group is to establish a collaborative community and identify, share and publicize the best-known methods related to the design, operations and maintenance of green hospitality and venue facilities. Our team participates in teleconferences, email collaboration, face-to-face meetings and annual Greenbuild conferences. Our team actively provides support to USGBC and all user group participants in the following areas: a) sharing knowledge on best practices to improve hospitality environmental practices, such as energy efficient projects that help reduce GHG emissions b) discuss methods on how to achieve the LEED pre-requisites and credits for new construction and existing building and c) collaborate for ongoing and expanded interaction and industry leadership. The team also played an active role in identifying high-level priorities and developing the work plan for the user group.

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**Trade association**

Public Utilities Board (PUB) Water Network 7th Panel

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

PUB is a statutory board under the Ministry of the Environment and Water Resources and is the national water agency that manages Singapore's water supply, water catchment and used water. PUB's Water Network was formed in 2004 with the objective of playing a consultative and advisory role to enhance PUB's policies and programs, to encourage greater ownership of Singapore's water resources. The Ministry of the Environment and Waste Resources and the country of Singapore publically communicate their stance on climate change and proactively put plans in place to address its impacts. More on their efforts can be found here: <https://www.mewr.gov.sg/resources-climate-action-sg>.

**How have you influenced, or are you attempting to influence their position?**

Our Executive Director of Sustainability and Property Development at Marina Bay Sands in Singapore is a member of the PUB's Water Network 7th Panel. He attends two formal meetings annually to provide feedback on PUB's engagement and public education programs to help develop better policies and programs to encourage greater ownership of Singapore's water resources. He also attends subgroup meetings on specific topics where necessary and attends PUB activities and events when possible.

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**Trade association**

ASHRAE

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its members focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability within the industry. Through research, standards writing, publishing and continuing education, ASHRAE shapes tomorrow's built environment today. ASHRAE was formed as the American Society of Heating, Refrigerating and Air-Conditioning Engineers by the merger in 1959 of American Society of Heating and Air-Conditioning Engineers (ASHAE) founded in 1894 and The American Society of Refrigerating Engineers (ASRE) founded in 1904. In 2012, as part of a rebranding, ASHRAE began doing business as "ASHRAE" vs. using its full legal name of the American Society of Heating, Refrigerating and Air-Conditioning Engineers. Use of ASHRAE reflects the Society's worldwide membership and that services will continue evolving globally. ASHRAE's Position Document on Climate Change can be found here: <https://www.ashrae.org/File%20Library/About/Position%20Documents/ASHRAE-Position-Document-on-Climate-Change.pdf>

**How have you influenced, or are you attempting to influence their position?**

Our Executive Director of MEP and Plant Operations in Macao is the President of ASHRAE Macao Chapter and the chair of the Sustainability Committee. As Chapter President, he guides the direction of the chapter operations and organizes technical seminars and symposium. Topics such as energy efficiency, sustainability, indoor air quality, buildings performance, retro-commissioning, LEED and bEQ (building energy quotient) certifications are discussed with engineers, industry professionals in Macao, and regional countries as part of the chapters aim to create a platform for knowledge sharing and further education, training, development for professionals. Our Executive Director collaborates with other similar local and international trade associations and governmental bodies for knowledge sharing, green building standard updates, and participation in discussions of future developments. Our Executive Director actively participates and shares ideas and improvements to several committees within ASHRAE in regional chapters through annual conferences and regional planning meetings. He is also the international panel member of ASHRAE's 14th Asia Pacific Conference on Built Environment (APCBE) and presented a technical paper on Sustainable Future and role of professionals to lead and innovate.

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C12.3e

**(C12.3e) Provide details of the other engagement activities that you undertake.**

(1) Better Building Challenge: Las Vegas Sands is a member of the Better Buildings Alliance facilitated by the U.S. Department of Energy. Part of our commitment to this initiative was joining the Better Buildings Challenge and committing to making our portfolio 20% more energy efficient over the next decade by reducing the GHG emissions of our buildings. To date we have taken part in a number of working groups to assess the scope of the initiative and better determine the areas where we can have the most impact in terms of energy efficiency upgrades and energy consumption reductions. We track energy consumption and disclose that to the Better Buildings Challenge working group on an annual basis.

(2) Marina Bay Sands has a formal partnership with the World Wide Fund for Nature (WWF). The partnership entails collaboration around three key areas: improving sustainability in Marina Bay Sands' seafood supply chain; sponsoring three fishery conservation projects in the region; and raising guest awareness on sustainability. This partnership helps mitigate against the negative impacts of climate change on ocean ecosystem health and the livelihoods of nearby fishing communities.

(3) Macao International Environmental Conference and Forum (MIECF) Technical Visit Initiative: Sands China Ltd. has collaborated with Macao Environmental Protection Agency to share sustainability best practices with the delegates and industry professionals of MIECF. The collaboration has three objectives: is to raise awareness of sustainability; share technology, techniques and best practices; and inspire both individuals and companies to embrace the waste reduction and recycling efforts.

(4) Marina Bay Sands is a member of the World Building Council for Sustainable Development (WBCSD), Singapore Chapter. WBCSD is a global, CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world. Within the Singapore Chapter, representatives from Marina Bay Sands participate in discussions that are critical to local and regional sustainability issues.

(5) Our Executive Director of MEP and Plant Operations in Macao is an active member of Sustainable Energy Association of Singapore (SEAS) where he contributes to their program in relation to energy efficiency and renewable energy. He is also a senior member of International Society of Sustainability Professionals (ISSP).

**C12.3f**

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

As part of the Sands ECO360 strategy, we monitor corporate activities each year, including external stakeholder engagements, affiliations, memberships, and other activity types to ensure that such activities align with the overall corporate climate change strategy. Every year we evaluate our involvement and position in policy making, associations, research organizations and other main stakeholders. We also evaluate the direction and capability of such organizations every year. We allocate the financial and personnel resources required for these involvements globally and align our activities with our overall climate change strategy. We are committed to environmental responsibility by promoting sustainable development and reducing the impact of our operations on the natural environment. Concurrently, we also strive to enhance the resort experience of our guests as well as the quality of life in the communities in which we live and operate. Our activities that directly and indirectly influence policy reflect this commitment.

To ensure engagement is consistent, our Chief Procurement/Sustainability Officer as part of the ECO360 strategy, has the oversight and sign-off capabilities over all Sands ECO360 direct and indirect activities to ensure these activities would be consistent with the overall climate change strategy.

**C12.4**

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(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**

2018 Sands China Ltd. Sustainability Report.pdf

**Page/Section reference**

Entire document

**Content elements**

Governance  
Strategy  
Emissions figures  
Emission targets  
Other metrics

**Comment**

<https://www.sandschina.com/community-affairs/download-reports.html>

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**Publication**

In mainstream reports

**Status**

Complete

**Attach the document**

SCL\_2018 Annual Report\_ENG.pdf

**Page/Section reference**

Page 58-60

**Content elements**

Governance  
Strategy  
Other metrics

**Comment**

[http://media.corporate-ir.net/media\\_files/IROL/23/233498/2019/1\\_2018%20Annual%20Report\\_ENG.pdf](http://media.corporate-ir.net/media_files/IROL/23/233498/2019/1_2018%20Annual%20Report_ENG.pdf)

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**Publication**

In voluntary sustainability report

**Status**

Complete

**Attach the document**

sands-eco360-2018-environmental-report.pdf

**Page/Section reference**

Full Report

**Content elements**

Strategy  
Emissions figures  
Emission targets  
Other metrics

**Comment**

<https://www.sands.com/sands-eco-360/our-news/environmental-report.html>

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**Publication**

In voluntary communications

**Status**

Complete

**Attach the document**

Supplementary-Earnings-Presentation.pdf

**Page/Section reference**

Page 4- 8

**Content elements**

Strategy  
Emissions figures  
Emission targets  
Other metrics

**Comment**

[https://s21.q4cdn.com/635845646/files/doc\\_financials/2018/Q4/Supplementary-Earnings-Presentation.pdf](https://s21.q4cdn.com/635845646/files/doc_financials/2018/Q4/Supplementary-Earnings-Presentation.pdf)

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C14. Signoff

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C-FI

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(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.

C14.1

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(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Executive Vice President and Chief Financial Officer, Las Vegas Sands Corp.	Chief Financial Officer (CFO)

Submit your response

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In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

Please confirm below

I have read and accept the applicable Terms