

C0. Introduction

C0.1

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

SL Green Realty Corp., an S&P 500 company and New York City's largest office landlord, is a fully integrated real estate investment trust, or REIT, that is focused primarily on acquiring, managing, and maximizing the value of Manhattan commercial properties.

Our core business is the ownership of high-quality commercial properties, and our primary business objective is to maximize the total return to stockholders, through strategically acquiring, redeveloping, and repositioning office properties primarily located in Manhattan, and re-leasing and managing these properties for maximum cash flow. The commercial real estate expertise resulting from owning, operating, investing, and lending in Manhattan for over 34 years has enabled us to invest in a collection of premier office and retail properties, selected multifamily residential assets, and high-quality debt and preferred equity investments.

As of March 31, 2018, SL Green held interests in 118 Manhattan buildings totaling 49.9 million square feet. This included ownership interests in 28.7 million square feet of Manhattan buildings and debt and preferred equity investments secured by 21.2 million square feet of buildings.

In addition, SL Green held ownership interests in 25 suburban buildings totaling 3.7 million square feet in Brooklyn, Long Island, Westchester County, and Connecticut.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2017	December 31 2017	Yes	3 years
Row 2	January 1 2016	December 31 2016	<Not Applicable>	<Not Applicable>
Row 3	January 1 2015	December 31 2015	<Not Applicable>	<Not Applicable>
Row 4	January 1 2014	December 31 2014	<Not Applicable>	<Not Applicable>

C0.3

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

United States of America

C0.4

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

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational 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) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Chief Executive Officer (CEO)	Marc Holliday is SL Green's CEO. In December 2017, he presented to investors and Board members on SLG's sustainability program. He has committed to consistently deliver superior performance to conserve finite resources, incorporate citywide initiatives and uphold our responsibility to the community. The sustainability team also presents annually to the Executive Team regarding SL Green's sustainability program as well as provides the team with periodic updates throughout the year.

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	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	In addition to financial and operational performance, non-financial measures, including sustainability, social and governance goals, are discussed by the Board. The Board believes that, through these ongoing efforts, they are able to focus on our performance over the short, intermediate and long term to secure the continuing health and success of the business for our stockholders.

C1.2

(C1.2) Below board-level, provide the highest-level management 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
Chief Operating Officer (COO)	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.

SL Green is committed to maintaining market-leading sustainability performance for our tenants, investors and city. With executive and Board oversight of the program, environmental, social and governance initiatives are given top-down support and are prioritized companywide. SLG's preeminent sustainability program has garnered substantial industry recognition, a testament to our distinguished approach to efficiency and the ingenuity of our employees.

The Sustainability Team is lead by Edward V. Piccinich, COO. Edward is the fearless leader of over 1,000 employees and is responsible for managing building operations, construction, IT and sustainability across 22M square feet and oversees one of the most prominent real estate programs in the country.

The rationale for the COO to be the highest-level management position with responsibility for climate-related issues is due to his position overseeing the majority of the functions related to taking full advantage of climate-related opportunities and mitigating climate-related risks for SL Green, particularly considering his oversight of building operations, construction, technology and sustainability.

The team also includes:

- Laura Vulaj, Senior Vice President and Director of Sustainability
- Evin Epstein, Assistant Director of Sustainability
- Alvis Yuen, Energy Modeler
- Pamela Seltzer, Sustainability Analyst

The sustainability team presents annually to the Executive Team regarding SL Green's sustainability program as well as provides the team with periodic updates throughout the year.

SL Green Realty Corp.'s mission is to stay committed to environmentally sustainable initiatives and innovation that deliver efficiency, value, and health for our business, tenants and community. Structured around three key areas, Efficiency, Tenant Experience, and Industry Leadership, our program continues to introduce a broad platform of market-leading initiatives to address energy usage, natural resource consumption, air quality, recycling, transportation, and education. Since the program's inception, we have invested over \$50 million in energy efficiency projects, achieved LEED certifications across 12.8 million square feet and maintained ENERGY STAR labels across 40 properties.

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.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Other, please specify (Building Energy Star Score)

Comment

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Energy reduction project

Comment

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	3	
Medium-term	3	10	
Long-term	10	30	

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.

At SL Green the process for our organization to identify and assess climate related risks is integrated into multi-disciplinary company-wide risk identification, assessment, and management processes. We proactively identify and analyze climate change risk and resiliency through life cycle assessments from asset acquisition through disposition. This process occurs every 6 months or more frequently and as new asset acquisitions and dispositions occur. We look into the future for risks and this includes risks that are out more then 6 years. A substantive financial impact for SL Green is defined as over \$50,000.

We also identify and assess NYC and NYS governing legislatures for alignment of climate goals. For example, in response to risk caused by possible NYC & NYS governing legislatures in the future we have worked towards alignment and goal setting within the NYC Carbon challenge in which we have enrolled eight of our properties—totaling more than eight million square feet. By 2026, SL Green has committed to reducing the greenhouse gas emissions of each these buildings 30 percent below their respective base years ranging from 2011 to 2014.

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	Existing regulations play a critical role in the real estate industry and SL Green always considers these regulations in its risk assessments, from asset acquisition through disposition and all operations. A specific example of a current regulation we consider continuously is Local Law 87 (LL87 -) which mandates that buildings over 50,000 gross square feet undergo periodic energy audit and retro-commissioning measures, as part of the Greener, Greater Buildings Plan (GGBP). The other portions of the GGBP also are specific relevant examples of Current Regulations that are relevant and always included such as: GGBP consists of four regulatory pieces supplemented by job training opportunities and a financing entity called the New York City Energy Efficiency Corporation (NYCEEC).The regulations include Local Law 84: Benchmarking: annual requirement to benchmark building energy and water consumption Local Law 85: NYC Energy Conservation Code (NYCECC): New York City's local energy code Local Law 87: Energy Audits & Retro-commissioning: complete an energy audit and perform retro-commissioning once every 10 years Local Law 88: Lighting & Sub-metering: by 2025, the lighting in the non-residential space be upgraded to meet code and large commercial tenants be provided with sub-meters.
Emerging regulation	Relevant, always included	Emerging regulations can greatly affect the long term return / performance on our assets. SL Green continuously monitors emerging regulations in the localities that we operate in. NYC's Greener, Greater Buildings Plan (GGBP). For example we currently watch the NYC government's own emissions goals, codes, and local law development. Looking ahead, the City's has a plan to reduce buildings-based emissions by 80% by 2050 from a 2005 baseline. We are closely monitoring the NYC task force and technical study organized to identify the pathway New York City must take beyond 2025 to reach this goal, and working to align our own programs with these and other emerging regulations. Another example of emerging regulations that we are monitoring is NYC's Green Codes Task Force, the most comprehensive effort of any U.S. city government to green the codes and regulations that impact buildings. The Green Codes Task Force produced 111 recommendations to bring the most cost-effective green building benefits to all buildings. The proposals address the wide array of building impacts, such as water consumption, landscape practices, toxicity of materials, building resilience, occupants' physical activity and energy efficiency. After two years since the proposals were introduced, many have already been incorporated into City law or practice, while others are in the process of being crafted into workable laws.
Technology	Relevant, always included	SL Green has risks associated with technological improvements or innovations that support the transition to a lower-carbon, energy-efficient economic system and we include this in our climate-related risk assessments. One risk we consider is the decisions that we make on which of various competing climate mitigating technologies do we decide to implement and what are the various risks and costs/ ROI involved with each (or to not utilize a technology). Under NYC Local Law 87: Energy Audits Retro-commissioning, we must complete an energy audit and perform retro-commissioning once every 10 years. At SL Green we are continually performing this types of assessments to make sure that we are considering our best options and mitigating the risk of bad decision making when it comes to the selection of climate mitigating technologies.
Legal	Relevant, always included	SL Green incorporates the legal risk and possibility of litigation claims related to climate change in its risk assessments throughout its business. An example of climate-related litigation that we prioritize is brownfield reclamation. We abide to the public law of Small Business Liability Relief and Brownfields Revitalization Act. When possible, we prioritize development on commercial / industrial sites, instead of on undeveloped land that perpetuates sprawl.
Market	Relevant, always included	SL Green serves the largest corporate real estate market in the world. Changing consumer and investor demands are increasingly driving corporations to seek more from their properties when it comes to climate resiliency, energy efficiency, and other climate related features. If we do not continue to position ourselves in the market as a leader providing office space that meets the growing demands of our tenants, we have a risk of losing out to our competitors for business, and the possible decreasing of the value of our assets. For our company specifically, SL Green is able to charge a premium in our market because of the alignment with the values of our tenants, and the collaboration that we have with various tenants to help meet these shared goals on climate resiliency, energy efficiency, and other climate related features We always consider this risk in our business decision making.
Reputation	Relevant, always included	The reputation of SL Green is one of the most critical assets of our organization, and can often be a deciding factor for our tenants to choose us over our competitors. If there were negative publicity of climate related events at our properties due to a lack of resilience, or low quality services delivered due to our climate related technologies we could face significant reputational risk. For our company specifically, the NYC market is extremely competitive and the reputation that we have built in this market has helped us in the past to win large companies with shared value as tenants. We always consider this risk.
Acute physical	Relevant, always included	We are subject to risks associated with natural disasters and the physical effects of climate change, which can include storms, hurricanes and flooding, any of which could have a material adverse effect on our properties, operations and business. For our company specifically, because most of our real estate is located on the island of Manhattan and surrounded by four bodies of water, we are very aware of these types of risks which we were subject to as an example during Super Storm Sandy where we had suffered direct acute physical damage to some of our properties. We always consider this risk.
Chronic physical	Relevant, always included	To the extent climate change causes changes in weather patterns, our markets could experience increases in storm intensity and rising sea-levels which could cause damage to our properties, and have a material adverse effect on our business. Over time, climate change conditions could result in declining demand for office space in our buildings or the inability of us to operate the buildings at all. For our company specifically, because most of our real estate is located on the island of Manhattan and surrounded by four bodies of water, we are very aware of these types of risks which we were subject to as an example during Super Storm Sandy when the downtown real estate market was drastically effected by the aftereffects. We always consider this risk.
Upstream	Relevant, always included	In our upstream portion of our value chain sits our tenants. We are always attempting to mitigate risk which could happen related to climate for our tenants. Among the risks we consider upstream to our tenants are legal, physical, reputation , and regulatory. At SL Green specifically, upstream also relates to the growing trend by our tenants to demand a more sustainable office space including the utilization of climate mitigating technologies, and recognitions (such as LEED). We consider the risks upstream both to our tenants, and to the relationships we have with our tenants in every assessment of risk that we do.
Downstream	Relevant, always included	SL Green considers the risk that is caused downstream in its supply chain in all risk assessments. Some company specific examples of risks for SL Green could include disruption of our supply chain of building materials, change in cost of building materials, or disruption to our contracted workforce ability to complete work on time.

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

The Board is responsible for overseeing the Company's risk management process. The Board focuses on the Company's general risk management strategy and the most significant risks facing the Company, and ensures that appropriate risk mitigation strategies are implemented by management. The Board also is apprised of particular risk management matters in connection with its general oversight and approval of corporate matters. In particular, the Board focuses on overseeing risks relating to the structure and amount of our debt, including overall aggregate principal balance, variable rate versus fixed rate debt, maturity schedules and balance of secured and unsecured debt.

The Board delegated to the Audit Committee oversight of the Company's risk management process. Among its duties, the Audit Committee reviews with management (a) the Company policies with respect to risk assessment and management of risks that may be material to the Company (including climate-related risks and opportunities), (b) the Company's system of disclosure controls and system of internal controls over financial reporting and (c) the Company's compliance with legal and regulatory requirements (of which include climate related regulations).

The Audit Committee also is responsible for reviewing major legislative and regulatory developments that could have a material impact on the Company's contingent liabilities and risks (including climate related risks and also opportunities) .

Our other Board committees also consider and address risk as they perform their respective committee responsibilities. All committees report to the full Board as appropriate, including when a matter rises to the level of a material or enterprise level risk. In addition, our Compensation Committee considers the risks to the Company's stockholders and to the achievement of our goals that may be inherent in the Company's executive compensation program which are also linked to opportunities related to climate change.

The Company's management is responsible for day-to-day risk management, including the primary monitoring and testing function for companywide policies and procedures, and management of the day-to-day oversight of the risk management strategy for the ongoing business of the Company. This oversight includes identifying, evaluating, and addressing potential risks that may exist at the enterprise, strategic, financial, operational, and compliance and reporting levels.

We believe the division of risk management responsibilities and related opportunities described above is an effective approach for addressing the risks facing the Company and that the Board leadership structure supports this approach.

We proactively analyze climate change risk and resiliency through life cycle assessments from asset acquisition through disposition. Additionally, our Executive and Board has oversight of sustainability mission statement and goal setting. Our Annual GRI sustainability reports, which included annualized sustainability performance across the portfolio, is distributed to the Board, investors, tenants, vendor partners and government stakeholders.

To address climate issues, our team establishes 5 and 10 year capital plans to identify energy saving opportunities. To date, SL Green has spent over \$50,000,000 in energy efficiency projects, and have an additional \$50,000,000 in projects planned for the next 10 years. Additionally, sustainability performance, energy consumption, technology and resiliency are key performance indicators included in underwrites for asset acquisitions and dispositions. These sustainability performance metrics drive our decision making processes for buying and selling assets, and provide opportunities for us to engage and position ourselves positively to our tenants and potential tenants.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Acute: Increased severity of extreme weather events such as cyclones and floods

Type of financial impact driver

Write-offs and early retirement of existing assets (e.g., damage to property and assets in "high-risk" locations)

Company- specific description

We are subject to risks associated with natural disasters and the physical effects of climate change, which can include storms, hurricanes and flooding, any of which could have a material adverse effect on our properties, operations and business. The majority of SL Green's properties are located on the island of Manhattan which is surrounded on four sides by water and we therefore have a unique awareness of this risk. The superstorm Sandy was an example of the actual implications of this type of risk.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Potential financial impact

Explanation of financial impact

The potential financial impacts of climate-related weather events on SL Green's portfolio include weather-related damages, projected rent loss, relocation of building equipment and restoration efforts. An example is the estimated flood- and wind-related damages from Superstorm Sandy amounted to \$1,600,000 across our portfolio. Due to location, our most damaged property, 180 Maiden Lane, had to undergo robust recovery procedures. These procedures included moving building machinery from the basement to the third floor, restoring elevator service, restoring the façade / building envelope, reclamation of the fuel oil tank, debris clean-up, security protocols, and repairing glass / doors which amounted to over \$17,000,000.

Management method

To manage the risk associated with climate-related weather events, our team allocates funds for resiliency and energy efficiency projects, purchases insurance plans, installs generators, and trains building management and security staff on emergency protocol.

Cost of management

100000000

Comment

Cost of management includes historical monies spent on efficiency / resiliency projects, flood insurance, and restoration / recovery work for 180 Maiden Lane after Superstorm Sandy.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Changes in precipitation patterns and extreme variability in weather patterns

Type of financial impact driver

Reduced revenues from lower sales/output

Company- specific description

To the extent climate change causes changes in weather patterns, our markets could experience increases in storm intensity and rising sea-levels. SL Green specifically has an acute awareness of this risk due to most of our properties being on the island of Manhattan which is surrounded by water and prone to the effects of severe weather, such as the example of Super Storm Sandy. Over time, these conditions could result in declining demand for office space in our buildings or the inability of us to operate the buildings at all.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Potential financial impact

Explanation of financial impact

The potential financial impacts of climate-related weather events on SL Green's portfolio include weather-related damages, projected rent loss, relocation of building equipment and restoration efforts. An example is the estimated flood- and wind-related damages from Superstorm Sandy amounted to \$1,600,000 across our portfolio. Due to location, our most damaged property, 180 Maiden Lane, had to undergo robust recovery procedures. These procedures included moving building machinery from the basement to the third floor, restoring elevator service, restoring the façade / building envelope, reclamation of the fuel oil tank, debris clean-up, security protocols, and repairing glass / doors which amounted to over \$17,000,000. In addition, the market for real estate in downtown Manhattan suffered a lower demand for years after Superstorm Sandy, and this led to decreased rental rates, and demand for space. Chronic changes in weather patterns could lead to more of this type of effect

Management method

To manage the risk associated with climate-related weather events, our team allocates funds for resiliency and energy efficiency projects, purchases insurance plans, installs generators, and trains building management and security staff on emergency protocol.

Cost of management

100000000

Comment

Cost of management includes historical monies spent on efficiency / resiliency projects, flood insurance, and restoration / recovery work for 180 Maiden Lane after Superstorm Sandy.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Technology: Costs to transition to lower emissions technology

Type of financial impact driver

Technology: Capital investments in technology development

Company- specific description

Climate change may have an indirect effect on our business by requiring us to expend funds as we seek to repair and protect our properties against such risks. Specifically at SL Green, an operational priority across the company is to reduce our energy consumption by replacing existing technology and exploring new technology.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Potential financial impact

Explanation of financial impact

The financial impact of making capital investments in energy efficient technology include labor, insurance, removal costs, installation costs, maintenance agreements and construction / demolition fees. Whenever exploring technological opportunities, we bundle all potential costs and will implement technologies if we are net positive after reducing the building's operating expenses and energy consumption.

Management method

Whenever possible, we try to bundle and scale energy efficient technologies across the portfolio. Portfolio-wide initiatives that have resulted in energy savings include LED retrofits, variable frequency drive installations, steam station insulation and BMS upgrades. We also pursue all available rebates and incentives to drive down the costs of implementing these technologies. The team also continuously evaluates the newest technologies and meets with vendors throughout the year. We often pilot emerging technologies to evaluate effectiveness before rolling the technology out at a portfolio scale. An example is we are exploring a fuel cell installation at one of our properties. Additionally, we will be installing a 1.2 megawatt cogeneration system at our ground-up development, One Vanderbilt. One Vanderbilt is projected to achieve one of the lowest carbon footprints across buildings of similar density and scale in New York City. We have invested \$17,000,000 in sustainability features at the property that go above and beyond code requirements.

Cost of management

100017000

Comment

Cost of management includes \$50,000,000 in historical energy efficiency projects since 2010, \$50,000,000 in additional projects spanning the next 10 years, and \$17,000,000 in sustainability features that go above and beyond code requirements at One Vanderbilt.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Participation in renewable energy programs and adoption of energy-efficiency measures

Type of financial impact driver

Increased revenue through new products and services related to ensuring resiliency

Company- specific description

SL Green has the potential to attract more clients, and charge a premium for climate resilient buildings. For example our LEED Strategy across the 9 properties that earned LEED certifications through the LEED Volume program in 2017, we: Implemented LEED Plans and policies through 100% of properties Decreased average water consumption by 24%. Offset 9,200 mtCO2e through wind-power generation. Met sustainable criteria with 75% of janitorial cleaning and paper product purchases. Our LEED Volume efforts reduced energy consumption by 697,708 kWh/year. This is equivalent to 490 metric tons of CO2 avoided per building.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Potential financial impact**Explanation of financial impact**

Our construction team determined that building out tenant spaces that have sustainable specs in alignment with LEED have an incremental cost of \$5.00 per square foot. That being said, the US Green Building Council has released a study that shows LEED certified building values increased by 10.9% for new construction and 6.8% for existing building projects. Additionally, it is estimated that operating costs decreased by 13.6% for new construction and 8.5% for existing building projects post-LEED certification. Thirdly, a business case study examining the San Diego real estate market showed that the overall vacancy rate for green buildings was 4 percent lower than for non-green properties—11.7 percent, compared to 15.7 percent—and that LEED-certified buildings routinely commanded the highest rents.

Strategy to realize opportunity

Due to all of the aforementioned benefits of green building designations, we pursue these opportunities wherever possible. Through an economies of scale process called LEED Volume, we certified 9 properties in 2017 and will certify an additional 5 properties in 2018. 73% of SL Green's NYC portfolio will be LEED certified by year end.

Cost to realize opportunity

1300000

Comment

Cost to realize opportunity reflects costs to achieve LEED certifications across 15 properties in 2017 and 6 properties in 2018

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of new technologies

Type of financial impact driver

Reputational benefits resulting in increased demand for goods/services

Company- specific description

Our investments in clean technology have resulted in various valuable recognition and ratings for our buildings which result in reputational benefits leading to increased demand for our buildings. For example, SLG has installed a real-time energy management platform across 20.5M square feet to manage building systems and compute valuable diagnostics. The latest evolution of Energy Desk occurred in January 2017, when the need to track GHG emissions arose to facilitate both our own and our tenants' participation in the Carbon Challenge. Facilitating data transparency with tenants through Energy Desk is critical in achieving meaningful reductions. This effort was awarded Business Intelligence Group's "2017 Sustainability Award" and the Institute of Real Estate Management's "Corporate Innovation" REME Award in recognition of this cutting-edge platform. We have also been awarded the #1 Most Sustainable REIT by Real Estate Finance & Investment (2017), 15 Energy Star Labels, and an "A" rating for ESG performance from The GRESB Public Disclosure Report (2017).

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Potential financial impact**Explanation of financial impact**

The financial impact of making capital investments in energy efficient technology include labor, insurance, removal costs, installation costs, maintenance agreements and construction / demolition fees. Whenever exploring technological opportunities, we bundle all potential costs and will implement technologies if we are net positive after reducing the building's operating expenses and energy consumption.

Strategy to realize opportunity

Whenever possible, we try to bundle and scale energy efficient technologies across the portfolio. Portfolio-wide initiatives that have resulted in energy savings include LED retrofits, variable frequency drive installations, steam station insulation and BMS upgrades. We also pursue all available rebates and incentives to drive down the costs of implementing these technologies. The team also continuously evaluates the newest technologies and meets with vendors throughout the year. We often pilot emerging technologies to evaluate effectiveness before rolling the technology out at a portfolio scale. An example is we are exploring a fuel cell installation at one of our properties. Additionally, we will be installing a 1.2 megawatt cogeneration system at our ground-up development, One Vanderbilt. One Vanderbilt is projected to achieve one of the lowest carbon footprints across buildings of similar density and scale in New York City. We have invested \$17,000,000 in sustainability features at the property that go above and beyond code requirements.

Cost to realize opportunity

100017000

Comment

Cost of management includes \$50,000,000 in historical energy efficiency projects since 2010, \$50,000,000 in additional projects spanning the next 10 years, and \$17,000,000 in sustainability features that go above and beyond code requirements at One Vanderbilt.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of recycling

Type of financial impact driver

Benefits to workforce management and planning (e.g., improved health and safety, employee satisfaction resulting in lower costs)

Company- specific description

Outlined in the OneNYC Plan, Mayor de Blasio set the ambitious goal of sending zero waste to landfills by 2030. New York City enacted a new recycling law enforced as of August 1, 2017 that mandates source-separated recycling to help meet this goal. At SL Green specifically, we are implementing strategies to ensure that we are in line with this regulation. As a result of these legislative updates, SL Green became responsible for ensuring compliance across 22M square feet of base building space, janitorial operations and tenant procedures. SLG's sustainability team focused on educational strategies to achieve recycling compliance and drive behavior change. SLG collaborated with the union, SEIU Local 32BJ, to streamline trainings for over 500 cleaning employees. Because there are a variety of languages spoken by our staff, we had all presentation materials translated into several languages. We also color-coordinated liners and sorting areas on the loading dock to facilitate pickups and minimize contamination. To ensure that we are also maintaining training for new and temporary employees, we worked with the union and Alliance Building Services to include the recycling training in on-boarding presentations. Phase two of our educational efforts encompassed on-site trainings for tenant employees across 26 properties that explained the legal requirements and included a hands-on sorting exercise. To reinforce and disseminate what was learned in the trainings, we distributed presentation materials, a training recording and sample signage to tenants portfolio-wide. As a result of our efforts, over 1,000 people have been educated on recycling best practices. We have created a self-sustaining educational system and have laid the foundation for successful compliance. Additionally, we achieved a 75% recycling rate during the demolition phase of SLG's ground-up development project at One

Vanderbilt. Wherever possible we are sourcing material with recycled content, such as the structural steel.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Potential financial impact

Explanation of financial impact

By getting the portfolio in compliance with Local Law 87, we are avoiding city-issued fines for non-compliance. Additionally, we encourage our tenants to centralize all waste bins and remove under the desk bins. Centralizing waste bins require fewer liners, which also result in less resource consumption and reduced operating costs for tenants. Thirdly, generating a cleaner waste stream that does not contaminate recycled material reduces overall resource consumption if the material can be sufficiently recycled instead of sent to a landfill, which is also a revenue generator for both landlords and haulers. Specifically, we require all tenants to have paper-only bins to avoid contamination by food and liquid.

Strategy to realize opportunity

To start, SLG collaborated with the union, SEIU Local 32BJ to streamline training and education for the cleaners that are employed in our buildings. We created a presentation that would be digestible and understandable for the cleaning staff that are employed throughout the portfolio. Because there are a variety of languages spoken by our cleaning staff, we had all recycling materials that were distributed translated into several languages. We also implemented a color-coordinated liner system and color-coordinated areas on the loading dock for each waste stream to facilitate pick-ups and minimize confusion among our cleaners. Another tool that we implemented for the night cleaners is a compliance notepad. Since the biggest challenge for this law is driving tenant behavior change, we wanted to give the cleaners a tool that would help them track tenant progress and non-compliance. These notepads will track the floor, office number and company of tenants that are not recycling properly so that the property management staff can approach and warn repeat offenders. Not only are we responsible for educating our cleaning staff, but we also educated our tenants on the upcoming law. To start, we developed and distributed a notification letter and FAQ that were emailed to 100,000 tenants that work within SL Green's buildings. To support tenant compliance, we also sent out a recording of the presentation and sample signage to all tenants.

Cost to realize opportunity

50000

Comment

C2.5

(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

	Impact	Description
Products and services	Impacted	SL Green's products and services have been impacted by opportunities related to building efficiency and sustainable property recognitions which are helping to meet customer demand for resilient and sustainable buildings. On the risk side, we have been prone to extreme weather which could cause damage to buildings or make them less attractive to potential tenants. One example is the estimated flood- and wind-related damages from Superstorm Sandy. This amounted to \$1,600,000 across all of our buildings. Due to location, our most damaged property, 180 Maiden Lane, had to undergo robust recovery procedures. These procedures included moving building machinery from the basement to the third floor, restoring elevator service, restoring the façade / building envelope, reclamation of the fuel oil tank, debris clean-up, security protocols, and repairing glass / doors which amounted to over \$17,000,000.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	SL Green's supply chain has been impacted on the risk side by issues related to climate change affecting supply chain management through higher costs and less availability of materials needed for our buildings, which we witnessed during Super Storm Sandy. On the opportunity side, up the value chain we have observed positive impacts working with our tenants to improve energy data sharing, recycling and working on climate-related awareness programs through stronger relationships with our tenants, positive competitive positioning, and increased value of our rent and buildings. For example, we have been awarded the #1 Most Sustainable REIT by Real Estate Finance & Investment (2017), 15 Energy Star Labels, and an "A" rating for ESG performance from The GRESB Public Disclosure Report (2017) which has helped to increase the value of our relationships up the value chain with our tenants.
Adaptation and mitigation activities	Impacted	SL Green's investments in Adaptation and Mitigation activities have had an opportunity impact on the attractiveness of our buildings to potential tenants through alignment with their growing demand for more sustainable office space. Our investments in clean technology have resulted in various valuable recognition and ratings for our buildings which result in reputational benefits leading to increased demand for our buildings. For example, SLG has installed a real-time energy management platform across 20.5M square feet to manage building systems and compute valuable diagnostics. The latest evolution of Energy Desk occurred in January 2017, when the need to track GHG emissions arose to facilitate both our own and our tenants' participation in the Carbon Challenge. Facilitating data transparency with tenants through Energy Desk is critical in achieving meaningful reductions. This effort was awarded Business Intelligence Group's "2017 Sustainability Award" and the Institute of Real Estate Management's "Corporate Innovation" REME Award in recognition of this cutting-edge platform. Our construction team determined that building out tenant spaces that have sustainable specs in alignment with LEED have an incremental cost of \$5.00 per square foot. That being said, the US Green Building Council has released a study that shows LEED certified building values increased by 10.9% for new construction and 6.8% for existing building projects. Additionally, it is estimated that operating costs decreased by 13.6% for new construction and 8.5% for existing building projects post-LEED certification. On the risk side, to mitigate against climate-related weather events, we are covered under insurance policies of \$2.65 billion annually. We have seen rises in our insurance rates in some areas like downtown Manhattan due to climate-related issues such as being located in possible flood zones. On the opportunity side, we have also seen decreases in insurance rates when we implement certain climate-related resiliency features into our buildings. The total cost of management of \$100,017,000 includes \$50,000,000 in historical energy efficiency projects since 2010, \$50,000,000 in additional projects spanning the next 10 years, and \$17,000,000 in sustainability features that go above and beyond code requirements at One Vanderbilt.
Investment in R&D	Impacted	SL Green has realized opportunities through the research and implementation of climate-related technologies in our buildings. The financial impact of making capital investments in energy efficient technology have included labor, insurance, removal costs, installation costs, maintenance agreements and construction / demolition fees. When we explore technological opportunities at SL Green, we bundle all potential costs. We then implement technologies only if we are net positive after reducing the building's operating expenses and energy consumption. Portfolio-wide initiatives that have resulted in energy savings include LED retrofits, variable frequency drive installations, steam station insulation and BMS upgrades. We also pursue all available rebates and incentives to drive down the costs of implementing these technologies. The team also continuously evaluates the newest technologies and meets with vendors throughout the year. We often pilot emerging technologies to evaluate effectiveness before rolling the technology out at a portfolio scale. Another example is that we are exploring a fuel cell installation at one of our properties. Additionally, we will be installing a 1.2 megawatt cogeneration system at our ground-up development, One Vanderbilt. One Vanderbilt is projected to achieve one of the lowest carbon footprints across buildings of similar density and scale in New York City. We have invested \$17,000,000 in R&D and implementation of sustainability features at the property that go above and beyond code requirements.
Operations	Impacted	SL Green's business has been impacted at our operations level in many ways by climate related issues. Climate related issues play a critical role throughout the operations at SL Green and we always consider these issues in our risk assessments, from asset acquisition through disposition and all operations. Specifically at SL Green, an operational priority across the company is to reduce our energy consumption by replacing existing technology and exploring new technology. Another example is our investments and actions to align with Mayor de Blasio's OneNYC Plan which set the ambitious goal of sending zero waste to landfills by 2030. A new recycling law enacted by NYC was enforced as of August 1, 2017 that mandates source-separated recycling to help meet this goal. At SL Green specifically, we are implementing strategies to ensure that we are in line with this regulation. Investing in our operations to get SL Green's portfolio in compliance with Local Law 87 helped us to avoid city-issued fines for non-compliance. We encourage our tenants to centralize all waste bins and remove under the desk bins. Centralizing waste bins require fewer liners, which also result in less resource consumption and reduced operating costs for tenants. Generating a cleaner waste stream that does not contaminate recycled material reduces overall resource consumption if the material can be sufficiently recycled instead of sent to a landfill, which is also a revenue generator for both landlords and haulers. The cost to realize this opportunity was around \$50,000 invested.
Other, please specify	Please select	

C2.6

(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

	Relevance	Description
Revenues	Impacted for some suppliers, facilities, or product lines	Climate-related weather events can be a risk associated with SLG's revenue since these events can potentially damage our assets. In some cases, such as Superstorm Sandy, we can potentially lose tenant rent if the building is compromised. Energy efficiency is an opportunity for SL Green's revenue because by having best-in-class systems and green building designations, the resale value of our assets increases. The magnitude of this impact has been Medium-low.
Operating costs	Impacted	Energy represents 25-30% of the total operating costs for SL Green's buildings. To mitigate against price fluctuations in energy, we lock in our energy costs through procurement 2 to 3 years in advance. These fluctuations occur due to climate-related weather events and resource availability. We pursue energy efficiency projects and green building designations to lower our energy consumption, therefore lowering overall operating expenses for both the base building and for our tenants. The magnitude of this impact has been Medium-high.
Capital expenditures / capital allocation	Impacted	To mitigate against climate risk, our team develops 5- and 10-year capital plans that increase both energy efficiency and resiliency across our entire portfolio. Our engineering, operations and sustainability teams collaborate to map out projects for the next 5- and 10- years that are in alignment with SL Green's GHG emission intensity goal and NYC's GHG emission reduction goal. Capital planning and allocation is key in our strategy to achieve meaningful reductions. Capital allocation also facilitates the opportunity to invest in emerging green technologies, including fuel cells and cogeneration. The magnitude of this impact has been Medium.
Acquisitions and divestments	Impacted for some suppliers, facilities, or product lines	SL Green's team incorporates climate-risk in underwrites and decision making surrounding asset acquisition and disposition. Our underwriting team will flag properties if they are vulnerable to climate-related weather events (i.e., located in a flood zone). 5-year capital plans are created for every potential acquisition to ensure the property is positioned to be resilient and energy efficient. We evaluate the energy performance of every asset, both current and potential. Additionally, the efficiency of installed building systems are factored into decision-making and capital-planning, and green building designations are noted. The magnitude of this impact has been Medium.
Access to capital	Impacted for some suppliers, facilities, or product lines	To mitigate against climate risk, our team develops 5- and 10-year capital plans that increase both energy efficiency and resiliency across our entire portfolio. Our engineering, operations and sustainability teams collaborate to map out projects for the next 5- and 10- years for each building that are in alignment with SL Green's GHG emission intensity goal and NYC's GHG emission reduction goal. Capital planning and allocation is key in our strategy to achieve meaningful reductions. Access to capital also facilitates the opportunity to invest in emerging green technologies, including fuel cells and cogeneration. The magnitude of this impact has been Medium.
Assets	Impacted	Climate-related weather events can be a risk associated with SLG's revenue since these events can potentially damage our assets. In some cases, such as Superstorm Sandy, we incurred \$17M of damage at a single property. We also capitalize on climate-related opportunities at our assets as we implement energy efficiency projects as an opportunity to reduce overall operating expenses and increase the resale value of our assets. Pursuing innovative technologies, efficient building systems and green building designations also increase the value of our assets. The magnitude of this impact has been Medium.
Liabilities	Impacted for some suppliers, facilities, or product lines	Climate-related weather events can be considered a liability since these events can potentially damage our assets. To manage this liability, SL Green has portfolio-wide flood, wind and earthquake insurance policies which amounts to \$2.65 billion annually. Additionally, our building staff is trained on emergency response protocol to mitigate potential liability. To manage the risk associated with climate-related weather events, our team allocates funds for resiliency and energy efficiency projects, purchases insurance plans, installs generators, and trains building management and security staff on emergency protocol. The magnitude of this impact has been Medium.
Other	Please select	

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?

Yes, qualitative

C3.1c

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

To address climate issues, our team establishes 5 and 10 year capital plans to identify energy saving opportunities. To date, SL Green has spent over \$50,000,000 in energy efficiency projects, and have an additional \$50,000,000 in projects planned for the next 10 years. Additionally, sustainability performance, energy consumption, technology and resiliency are key performance indicators included in underwrites for asset acquisitions and dispositions. These sustainability performance metrics drive our decision making processes for buying and selling assets.

As New York City's largest commercial landlord, we recognize our responsibility to operate efficiently and minimize our carbon footprint. Mayor de Blasio's citywide goal of an 80% reduction in GHG emissions by 2050 (80x50) drives our operational, acquisitions and construction decisions. Positioning our portfolio to be alignment with these goals is an organizational priority.

Energy performance is also at the forefront of our decision making when it comes to implementing new technologies, and/or replacing existing equipment. Our team constantly meets with innovative vendors and explores emerging technologies to reduce our energy consumption. Examples include fuel cells, cogeneration, variable frequency drives, and BMS installation.

C3.1d

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios	Details
Other, please specify (Climate-Related Scenario In Underwrites)	Sustainability performance, energy consumption, technology and resiliency are key performance indicators related to climate-change that are included in our underwrites for asset acquisitions, dispositions, and any other investment opportunities. These sustainability performance metrics including climate-related scenarios drive our decision-making processes for buying and selling assets. For example, our management team is less likely to purchase buildings that are vulnerable to climate-related weather events. To further mitigate against climate-related risks, 5- and 10-year capital plans are developed incorporating climate-related scenarios with the goal of improving building resiliency and energy performance. Another example is that Mayor de Blasio has taken a strong stance on climate action. Globally, the Mayor pledged that New York City would uphold the Paris Climate Accord and locally, he has set the ambitious goal of reducing citywide greenhouse gas emissions 80% by 2050. To achieve meaningful reductions, the Mayor has introduced climate-related legislation that would cap whole building emissions and energy consumption. SL Green's team conducts an ongoing scenario analysis to determine the impact of this climate legislation and possible future legislation across all of our assets considering a high regulations scenario, and a lower regulations scenario. Buildings that could exceed these caps in our scenarios have been flagged and earmarked for requiring additional investments in energy efficiency projects.

C4. Targets and performance

C4.1

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

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Scope

Scope 1+2 (location-based) +3 (downstream)

% emissions in Scope

100

% reduction from baseline year

30

Metric

Metric tons CO2e per square foot*

Base year

2012

Start year

2017

Normalized baseline year emissions covered by target (metric tons CO2e)

0.009302173

Target year

2025

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% achieved (emissions)

25.9

Target status

Underway

Please explain

Our target is set for a 30% intensity reduction in Scope 1+2+3 CO2e per square foot, with a baseline of 2012, and a target year of 2025.

% change anticipated in absolute Scope 1+2 emissions

30

% change anticipated in absolute Scope 3 emissions

30

C4.2

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

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 projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	1	635
Implemented*	0	0
Not to be implemented	0	0

C4.3b

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

Activity type

Energy efficiency: Building services

Description of activity

HVAC

Estimated annual CO2e savings (metric tonnes CO2e)

635

Scope

Scope 1

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)

732754

Investment required (unit currency – as specified in CC0.4)

7143000

Payback period

4 - 10 years

Estimated lifetime of the initiative

16-20 years

Comment

Installation of new high efficiency chillers and ice storage system replacing equipment near end of useful life will reduce energy expense and carbon footprint of the building.

C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	
Compliance with regulatory requirements/standards	
Employee engagement	
Internal incentives/recognition programs	

C4.5

(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

C5.1

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

Scope 1

Base year start

January 1 2012

Base year end

December 31 2012

Base year emissions (metric tons CO2e)

27925

Comment

Scope 2 (location-based)

Base year start

January 1 2012

Base year end

December 31 2012

Base year emissions (metric tons CO2e)

101332

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

C6.1

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

Row 1

Gross global Scope 1 emissions (metric tons CO2e)

9260.8

End-year of reporting period

<Not Applicable>

Comment

Row 2

Gross global Scope 1 emissions (metric tons CO2e)

8813.4

End-year of reporting period

2016

Comment

Row 3

Gross global Scope 1 emissions (metric tons CO2e)

21954

End-year of reporting period

2015

Comment

Row 4

Gross global Scope 1 emissions (metric tons CO2e)

11434

End-year of reporting period

2014

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 have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report 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?

Row 1

Scope 2, location-based

88708.8

Scope 2, market-based (if applicable)

<Not Applicable>

End-year of reporting period

<Not Applicable>

Comment

Row 2

Scope 2, location-based

104486

Scope 2, market-based (if applicable)

<Not Applicable>

End-year of reporting period

2016

Comment

Row 3

Scope 2, location-based

159235

Scope 2, market-based (if applicable)

<Not Applicable>

End-year of reporting period

2015

Comment

Row 4

Scope 2, location-based

105670

Scope 2, market-based (if applicable)

<Not Applicable>

End-year of reporting period

2014

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

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

Purchased goods and services

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Capital goods

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

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

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Business travel

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Employee commuting

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Downstream leased assets

Evaluation status

Relevant, calculated

Metric tonnes CO2e

49573

Emissions calculation methodology

Energy consumption outside of the organization was considered tenant energy consumption, as property management has no oversight on the energy consumption practices of tenants, other than energy efficiency requirements during design and construction. This data has been gathered from submeter vendors, as all properties must have tenants submetered in accordance with LL85: NYC Energy Conservation Code (NYCECC).

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

100

Explanation

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Investments

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

None of the criteria (size, influence, risk, stakeholders, outsourcing, etc.) deemed as relevant under the WRI/WBCSD "Corporate Value Chain (Scope 3) Accounting & Reporting Standard" criteria of "sector guidance" as defined in Table 6.1 based are met by this scope 3 category when considering SL Green's operations.

Other (upstream)

Evaluation status

Not evaluated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

Other (downstream)

Evaluation status

Not evaluated

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

C6.7

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

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0000648173

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

97969.58

Metric denominator

unit total revenue

Metric denominator: Unit total

1511473000

Scope 2 figure used

Location-based

% change from previous year

6

Direction of change

Increased

Reason for change

Due to a decrease in revenue from 2016 to 2017, the intensity metric increased. SL Green's revenue is tied to portfolio-wide occupancy, and therefore fluctuates year over year. However, Scope 1 and 2 emissions remain relatively constant year over year to maintain base building conditions. With a constant numerator and changing denominator, we expect year over year fluctuations.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?

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
HFCs	3517.7	IPCC Fourth Assessment Report (AR4 - 100 year)
CO2	5743.1	IPCC Fourth Assessment Report (AR4 - 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)
Other, please specify (New York) <i>All SL Green locations are in one country - The United States</i>	7646
Other, please specify (Connecticut)	1614.8

C7.3

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

By business division

C7.3a

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

Business division	Scope 1 emissions (metric ton CO2e)
Manhattan	4322.9
Reckson	4937.9

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)
Other, please specify (New York)	84127.5	0	363896	28547
Other, please specify (Connecticut)	4581.3	0	17984	0

C7.6

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

By business division

C7.6a

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

Business division	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Manhattan	80998	0
Reckson	7710.8	0

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	
Other emissions reduction activities	5109.94	Decreased	5.21	In 2017, SL Green spent \$3.3 million in efficiency projects including Building Management System (BMS) upgrades, steam station insulation, turbine controls and LED lighting retrofits.
Divestment	5109.94	Decreased	5.21	SL Green divested from six core, owned and managed properties in 2017.
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	0	No change	0	
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	5109.94	Decreased	5.21	2016 was a historically warm summer that required 303 more cooling degree days than in 2017 (reference: https://www.nysersda.ny.gov/About/Publications/EA-Reports-and-Studies/Weather-Data/Monthly-Cooling-and-Heating-Degree-Day-Data).
Unidentified	0	No change	0	
Other	0	No change	0	

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 25% but less than or equal to 30%

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	No
Consumption of purchased or acquired steam	Yes
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	31555.7	31555.7
Consumption of purchased or acquired electricity	<Not Applicable>	28547	163291	191838
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	188648	188648
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	28547	383494.7	412041.7

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	No
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)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

28238.7

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

28238.7

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>

Fuels (excluding feedstocks)

Fuel Oil Number 2

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

3317

MWh fuel consumed for the self-generation of electricity

<Not Applicable>

MWh fuel consumed for self-generation of heat

3317

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>

C8.2d

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

Fuel Oil Number 2

Emission factor

73.16

Unit

kg CO2 per million Btu

Emission factor source

U.S. Energy Information Administration Emission Factors https://www.eia.gov/environment/emissions/co2_vol_mass.php

Comment

Natural Gas

Emission factor

53.07

Unit

kg CO2 per million Btu

Emission factor source

U.S. Energy Information Administration Emission Factors https://www.eia.gov/environment/emissions/co2_vol_mass.php

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	0	0	0	0
Heat	31555.7	31555.7	0	0
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

Energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

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

28547

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

0

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	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

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?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

Credit origination or credit purchase

Credit purchase

Project type

Wind

Project identification

Green-e certified Carbon Offset purchases from Schneider Electric for three properties during LEED certification: 1185 Avenue of the Americas 1350 Avenue of the Americas 220 East 42nd Street

Verified to which standard

Other, please specify (Green-e)

Number of credits (metric tonnes CO2e)

9327.31

Number of credits (metric tonnes CO2e): Risk adjusted volume

0

Credits cancelled

No

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Wind

Project identification

Clean Source Green Power purchased from Schneider Electric for three properties during LEED certification: 1185 Avenue of the Americas 1350 Avenue of the Americas 220 East 42nd Street

Verified to which standard

Other, please specify (Green-e)

Number of credits (metric tonnes CO2e)

27406

Number of credits (metric tonnes CO2e): Risk adjusted volume

0

Credits cancelled

No

Purpose, e.g. compliance

Voluntary Offsetting

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 customers

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

Share information about your products and relevant certification schemes (i.e. Energy STAR)

Size of engagement

100

% Scope 3 emissions as reported in C6.5

100

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

We engage and educate all of our tenants on climate-related issues which include over 100,000 tenants across 1,200 companies. It is estimated that 60% of total building energy is consumed by tenants. Therefore, to achieve meaningful reductions, it is critical that we educate and partner with all of our tenants to improve overall building energy performance. Our educational and efforts include webinars, in-person meetings, distribution of annual sustainability reports, and sustainability events.

Impact of engagement, including measures of success

SL Green is committed to supporting our tenants' corporate environmental goals by ensuring our data is transparent and our policies are aligned with green standards. Our team is positioned to assist tenants pursue LEED and WELL certifications and pursue energy-saving opportunities. In August 2012, Viacom Inc. renewed and extended its lease with SL Green Realty Corp., occupying 1.3 million square feet for its global headquarters at 1515 Broadway in Times Square. Located in a densely populated area with a Broadway theater and concert venue as tenants, the building provides significant opportunities to increase sustainability. As part of the lease renewal, SL Green agreed to enhance the operational efficiency of both the base building and Viacom's leased spaces. To advance energy reduction initiatives, the companies created employee "green teams", comprised of executive leadership and staff from operations, engineering, leasing, and facilities. Together, these teams evaluated vendors and new technologies, and implemented energy efficiency and sustainability strategies. Projects completed through this partnership include the retrofitting of all common spaces with LED lighting, optimization of steam plant controls and pipe insulation, and improvements in the flexibility and efficiency of air handlers, as well as the implementation of a building management system (BMS) to track and improve building efficiency, and software to power down computers and phones after-hours. Additional enhancements include the planting of a green roof and terrace garden on-premises to reduce the urban heat island effect of the building and supply local produce for the cafeteria. To date, Viacom and SL Green have achieved a 24 percent energy reduction, resulting in \$2.3 million of annual utility savings during the course of improvements and \$7 million of overall savings. SL Green expects an additional five percent reduction in energy once all measures are fully operational. In recognition of these efforts, the building has been awarded a LEED Gold certification for Existing Buildings: Operations and Maintenance, and Viacom holds LEED Commercial Interiors certifications across nine of the 45 floors that it occupies. Viacom has also agreed to partner with SL Green in the New York City Mayor's Carbon Challenge, and jointly pledged to reduce GHG emissions 30% by 2026.

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

Funding research organizations

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
Energy efficiency	Support with minor exceptions	SLGreen is part of a working group to compile recommendations that are then presented to the mayors office and city counsel to guide draft legislation for the Mayors 80% by 2050 (known as 80x50) carbon reduction goal.	Reduce city GHG emissions 80% by 2050 (known as 80x50).

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

Local SEIU 32BJ

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The union supports the Mayors GHG Reduction policy.

How have you, or are you attempting to, influence the position?

We support their position, and participate in working groups and council member debriefs which help to advance the agenda.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

No

C12.3f

(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?

At SL Green all direct and indirect activities that influence policy are reviewed and approved by our COO to ensure that they are consistent with our overall climate change strategy.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In voluntary sustainability report

Status

Underway – previous year attached

Attach the document

SL_Green_2017_Sustainability_Report[1].pdf

Content elements

Governance

Strategy

Emissions figures

Emission targets

Other metrics

C14. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C14.1

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

	Job title	Corresponding job category
Row 1	Chief Operating Officer (COO)	Chief Operating Officer (COO) <i>Edward V. Piccinich</i>

Submit your response

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	Non-public	Investors

Please confirm below

I have read and accept the applicable Terms