Climate Change 2016 - CBRE Group, Inc.

Module: Introduction

Page: Introduction

CC0.1

Introduction

Please give a general description and introduction to your organization.

CBRE Group, Inc. (NYSE:CBG), a Fortune 500 and S&P 500 company headquartered in Los Angeles, is the world's largest commercial real estate services and investment firm (in terms of 2015 revenue). The Company has more than 70,000 employees (excluding affiliates), and serves real estate owners, investors and occupiers through more than 400 offices (excluding affiliates) worldwide. CBRE offers strategic advice and execution for property sales and leasing; corporate services; property, facilities and project management; mortgage banking; appraisal and valuation; development services; investment management; and research and consulting. Please visit our website at www.cbre.com.

CC0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Thu 01 Jan 2015 - Thu 31 Dec 2015

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD($)

CC0.6

Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx.

Further Information

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Senior Manager/Officer

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

i. Larry Midler, EVP, General Counsel, Executive Sponsor of Corporate Responsibility
ii. Dave Pogue, Global Director of Corporate Responsibility, reports to Larry Midler and is responsible for leading execution of global sustainability strategy and implementation.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

No

Further Information

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Board or individual/sub-set of the Board or committee appointed by the Board	Globally	3 to 6 years	At CBRE, the scope of our climate change risk management is a globally integrated Enterprise Risk Management process to identify, assess, respond and monitor the most significant strategic, operational, financial and compliance risks to the organization. We consider climate change a factor in each of these four risk types.

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

i. At a company level, a Director of Corporate Responsibility is responsible for evaluating climate change risks on an ongoing basis. That Director of Corporate Responsibility provides briefings to the Global Director of Corporate Responsibility who provides updates as relevant each quarter to the Global Corporate Responsibility Steering Committee. Our Global Corporate Responsibility Steering Committee is comprised of leaders across our business lines and geographic regions globally, including a member of the CBRE Board of Directors, as well as sustainability subject matter experts from each service specialty (such as CBRE Energy & Sustainability, CBRE Workplace Strategies, etc).
ii. At an asset level, a Director of Corporate Responsibility evaluates energy management procedures at the facility level according to each facility's location (state or city) since facilities are impacted by location-based variables from city/state regulations or physical climate change risks.

CC2.1c

How do you prioritize the risks and opportunities identified?

Our process for determining materiality for all environmental, social and economic issues, including climate change, is conducted by our Corporate Responsibility team every other year using guidance provided by GRI (Global Reporting Initiative). Our Global Corporate Responsibility Steering Committee, comprised of leaders across our business lines and geographic regions globally, including a member of the CBRE Board of Directors, as

well as sustainability subject matter experts from each service specialty (such as CBRE Energy & Sustainability, CBRE Workplace Strategies, etc), participates in each materiality assessment. Our senior company executives and key internal and external stakeholders also participate in the materiality assessment, which include identifying those environmental, social and economic issues that are relevant to our business as a commercial real estate service provider.

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

i. and ii. Our internal process for collecting and reporting information to influence our business strategy is policy driven. CBRE's environmental policy covers many operational services such as procurement, facility management, and client services. As part of this policy, training protocols have been put in place to educate employees on sustainability as well as internal communications to encourage employee engagement in CBRE's sustainability initiative. We also conduct sustainability reporting on a regular basis. Client interface allows us to gather information on client needs (related to sustainability) that brings forth our business strategy. iii. The aspects of climate change that have influenced our business strategy include adapting to regulatory requirements, customer behavior changes, company reputation, and weather-related variability. iv. The most important components of the short term strategy that have been influenced by climate change include establishing a stream of communication around green business opportunities to clients and integrating sustainability roles into different business functions. For example, we offer client utility insight to measure energy use, which increases client monetary savings. v. The most important components of the long term strategy that have been influenced by climate change is integrating new technology for energy use. As part of our long term strategy, we require any new lease space or lease renewal to follow sustainability criteria (i.e. LEED certified or better). CBRE has mandated that all existing offices undergoing future lease renewal and/or tenant improvements be retrofitted with EMON sub-meters to measure electric usage. This process produces real-time energy use data that supports accuracy for our corporate carbon footprint measurement and helps us meet LEED® certification credits under the USGBC LEED for Commercial Interiors rating system. Since our initial 2007 commitment, CBRE has replaced legacy office equipment with ENERGY STAR or comparable versions around the globe. vi. Integrating climate change into our business strategy has gained strategic advantage over our competitors by expanding our sustainability service business line. We improve our position as a service provider by integrating green services. We provide certification services such as green leasing, LEED certification, ENERGY STAR, and Green Star. 2015 was a particularly active year for our LEED EB consulting team who achieved 148 certifications totalling over 23 million square feet. Since their beginning in 2009 this team has certified 485 buildings, totalling more than 132 million square feet, more than any single practice in the world for LEED EB certifications. We also continue to assist our clients in achieving LEED CI certifications for their interior improvement work. During 2015 we achieved 18 new certifications, totaling nearly 1 million square feet. vi. We have committed to conducting research that will better shape our understanding of sustainability in the built environment through our initiative, the Real Green Research Challenge. In total, one million dollars (USD) was awarded to five academic institutions to conduct research on how commercial real estate could be owned, occupied and operated in a more sustainable manner. Energy usage analysis, standardized metrics and projected savings earned from green operations are all in the pipeline and already producing results. One research report, the Green Building Adoption Index, was released in 2014 and again in 2015. Additional academic reports will be released this year.

CC2.2c

Does your company use an internal price of carbon?

No, and we currently don't anticipate doing so in the next 2 years

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Trade associations

Other

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
Building Owners and Managers Association (BOMA)	Mixed	BOMA supports voluntary and incentive-based programs for reducing greenhouse gas emissions, and believes that buildings should accrue credits or offsets in a regulatory cap and trade program. BOMA opposes cap and trade policy options that do not reinvest funds raised into energy efficiency and would increase costs to businesses without reinvesting to effectively accomplish its environmental objective. However, CBRE generally supports regulatory requirements for building energy disclosure, which BOMA consistently opposes.	We support & promote BOMA's position on voluntary and incentive-based programs for reducing GHGs through our client services and messaging. However, we have also actively advocated for BOMA to take a different position on building energy disclosure.
US Green Building Council (USGBC)	Consistent	The majority of efforts to address climate change through green buildings are focused on reducing greenhouse gas emissions reflected in the USCBC Leadership in Energy and Environmental Design (LEED) rating system, which allocates points for reducing GHG emissions associated with building systems, transportation, water, waste and construction materials.	We support & promote USGBC's position through our client services and messaging.

CC2.3e

Please provide details of the other engagement activities that you undertake

We are involved with a number of organizations that could either directly or indirectly influence public policy on climate change. These include:

* We are a member of the Center for Climate and Energy Solutions' (C2ES) Business Environmental Leadership Council (BELC). BELC engages businesses in developing efficient, effective solutions to the climate problem.
* We are a member of The Climate Group, an international nonprofit that specializes in bold, catalytic and high-profile climate and energy initiatives with the world's leading businesses and state and regional governments. Additionally, Dave Pogue, our Global Director of Corporate Responsibility, sits on the board of directors of The Climate Group.
* We are a member of the Global Real Estate Sustainability Benchmark (GRESB), an industry-driven organization committed to assessing the ESG performance of real assets globally, including real estate portfolios and infrastructure assets. Additionally, Pieter Hendrikse of CBRE Global Investors sits on the GRESB Advisory Board and Dave Pogue, Tim Shen, and Amanda Steele of CBRE sit on the GRESB Benchmark Committee.
* We are members of the Real Estate Roundtable (RER), an organization that brings together leaders of the nation's top publicly-held and privately-owned real estate ownership, development, lending and management firms with the leaders of major national real estate trade associations to jointly address key national policy issues relating to real estate and the overall economy. Dave Pogue sits on the RER Sustainability Policy Advisory Committee (SPAC).
* We have been involved in a number of ways with the Sustainability Accounting Standards Board (SASB), an independent nonprofit whose mission is to develop and disseminate sustainability accounting standards that help public corporations disclose material, decision-useful information to investors. Laura Tyson, a member of the CBRE Board of Directors, sits on the SASB Board of Directors. Jennifer Leitsch served as a subject matter expert for the development of the SASB Fundamentals of Sustainability Accounting Level I exam. Additionally, CBRE has provided feedback to SASB during multiple public comment periods.

The nature of our engagement with these organizations has also included thought leadership and advisory on climate strategies in commercial real estate, speaking engagements and sponsorships.

CC2.3f

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 a public company CBRE has a longstanding policy on non-engagement in political advocacy. However, we recognize that our leadership in the commercial real estate industry requires that we have a voice in how the commercial environment is built, sourced, traded and managed. In addition, from time to time shareholders engage us in dialogue over specific issues of importance to them as part of our annual meeting process. We do not advocate specific actions, a position aligned with our company policy. However, we provided thought leadership and resources in support of the BELC's four principles, to which CBRE subscribes: 1. We accept the scientific consensus that climate change is occurring and that the impacts are already being felt. Delaying action will increase both the risks and the costs. 2. Businesses can and should incorporate responses to climate change into their core corporate strategies by taking concrete steps in the U.S. and abroad to establish and meet greenhouse gas (GHG) emission reduction targets, and/or invest in low and zero GHG products, practices and technologies. 3. The United States should significantly reduce its GHG emissions through economy-wide, mandatory approaches, which may vary by economic sector and include a flexible, market-based program. Complementary policies may also be necessary for sectors such as buildings, electricity generation, forestry, agriculture, and transportation that will help drive innovation and ease the transition to a low-carbon economy. 4. Climate change is a global challenge that ultimately requires a global solution. An international climate framework must establish fair, effective, and binding commitments for all developed and major developing economies. All climate change strategy and activities are managed through the corporate responsibility team, ensuring consistency in all aspects of our engagement with internal and external stakeholders.

Further Information

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Absolute target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 1+2 (location-based)+3 (upstream)	2%	10%	2014	2880	2017	No, but we anticipate setting one in the next 2 years	This target covers emissions reductions for our Australia operations. We plan to set a science-based target that is global in scope within the next 2 years.

CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	33%	0%	Australia emissions increased from 2014 to 2015 due to greater reporting transparency around our vehicle fleet consumption (scope 1), increase in business travel (scope 3) and also greater transparency around our purchased electricity (scope 2)).

CC3.2

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?

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of products	Our environmental sustainability services directly enable third parties to avoid Scope 1 and Scope 2 emissions associated with energy use. These services include: i.a) Energy Program Management - CBRE has built a network of energy program professionals to manage our clients' energy consumption. Utilizing best practices, these energy managers offer CBRE-developed solutions to help clients gain a competitive advantage while driving towards peak energy performance. Strategies include: Strategic Program Planning,	Avoided emissions	Other: CBRE uses the EPA Energy Star Calculator to quantify the amount of emissions avoided due to LEED Certifications. Further calculations and references are located at http://www.epa.gov/cleanenergy/energy-resources/refs.html.			

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
	Utility Data and Carbon Footprint Management, Demand/Supply-Side Energy Management, Performance Reporting, Training and Awareness Programs. i.b) Certification Programs - CBRE helps clients improve operating efficiencies and document cost savings to provide owners and occupiers of commercial property with a market-leading economic advantage. CBRE provides expert support in green building certification standards for BREEAM, NABERS, ISO 14001, LEED and others. i.c) Transactions for Occupiers (Lessees) – CBRE assists clients who are leasing space in reviewing standard bid and contract documents, providing					

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
	revisions and additions, if necessary, and negotiating sustainable lease terms. i.d) Transactions for Owners (Lessors) – CBRE helps building owners assess their real estate goals and implement strategies that align with their business objectives. i.e.) Green Building Valuation – Accurate and reliable valuations are essential to sustainable real estate investment. CBRE valuation services include: green building cost benefit analysis; green building market and feasibility analysis; operating expense consultation; market rent estimates; lease analyses; valuation for mortgage lending; arbitration and consultation; capitalization					

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
	rate consultation; and lease analysis. Additionally, CBRE's Energy & Sustainability Services team assists CBRE clients in navigating the LEED rating system by embedding long-term, sustainable best practices at both the individual building and portfolio level. Finally, CBRE has trained over 18,500 employees in the Building Owners and Managers Association (BOMA) Energy Efficiency Program (BEEP), which educates industry professionals on how to reduce energy consumption and costs with proven no- and low-cost strategies for optimizing equipment, people and practices.					

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and/or implementation phases)
Yes

CC3.3a
Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	
To be implemented*	0	
Implementation commenced*	0	
Implemented*	3	16180
Not to be implemented	0	

CC3.3b
For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	CBRE has continuously and rigorously promoted adoption and utilization of the ENERGY STAR® program voluntarily as the foundation of our broad energy and sustainability platform since 2006. In 2016, we were named an ENERGY STAR Partner of the Year for the ninth year in a row. Our managed footprint continues to	15980	Scope 3	Voluntary				Ongoing	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	grow, standing now at more than 1.9 billion square feet in the U.S. alone, and the programs and practices provided by ENERGY STAR continue to be an important foundational element of our efforts to effectively and efficiently manage these assets. Highlights of our 2015 efforts include: more than 1,600 buildings and 260 million square feet registered, 346 labeled buildings, average ENERGY STAR score of 79.5.								
Energy efficiency: Building services	CBRE is implementing multiple programs to voluntarily reduce Scope 1 and 2 energy consumption including installing new	200	Scope 1 Scope 2 (location-based)	Voluntary				Ongoing	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	energy efficient multi-function devices, updated PC and laptop settings, and office relocation and refurbishment. Since acquiring our first LEED certified space in Washington DC in 2008, we have purposefully sought and occupied certified space whenever possible. Beginning in 2014 and continuing through 2015, we added 12 new spaces to the list and now have more than 74% of our 50 largest spaces in environmentally labeled locations including 33 LEED or LEED CI, 2 ISO 14001, 1 NABERS, and 1 Gold Star. This exceeds								

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	our 2017 goal of having 70% certified. Additionally, all occupied offices in the UK are ISO 14001 certified.								
Energy efficiency: Building services	CBRE's workplace strategy program, Workplace360, eliminates assigned offices and workstations — instead offering up to 15 different types of workspaces based on carefully calculating employee usage patterns. As a result our new spaces are, on average, 38% more space-efficient than the offices they replaced. In addition, Workplace360 offices calculate to only 150-175 square feet per employee compared to 280 square feet in the		Scope 1 Scope 2 (location-based)	Voluntary				Ongoing	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	offices they replaced while offering greater functionality and flexibility. This lower per-employee footprint means lower energy use and carbon emissions.								

CC3.3c
What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	This applies to investments in reducing our own emissions.
Dedicated budget for low carbon product R&D	This applies to investments in reducing emissions in the properties we manage for our clients.
Other	Client requirement trends drive investments in reducing emissions in the properties we manage on their behalf.
Financial optimization calculations	CBRE Global Investors identify properties for green retrofits. These investment decisions are driven by financial optimization calculations.

Further Information

Page: CC4. Communication

CC4.1
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	Status	Page/Section reference	Attach the document	Comment
In voluntary communications	Underway - previous year attached	Environmental Sustainability section, page 19	2014_CBRE_CR_Report.pdf	

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Risks driven by changes in regulation
Risks driven by changes in physical climate parameters
Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Emission reporting obligations	Currently, increasing emission reporting obligations for the 5 billion SF of property we manage require significant manpower, education, systems and other resources. We have identified emissions reporting as a fundamental requirement of effective energy management, and these requirements will likely increase. Reporting obligations vary by city, country, and regionally such as AB1103 in CA, USA or ESOS EU Article 8	Increased operational cost	1 to 3 years	Indirect (Client)	More likely than not	Medium	The potential financial implication of risk driven by climate change regulation is estimated as less than 5 percent of annual revenue for each service line. The implication of emission reporting obligation is likely to increase over time.	We are at risk from the increasing emission reporting obligations which require significant manpower, education, systems, and other resources. Our current method for managing this risk driven by climate change regulation includes evaluating regulation requirements at the federal, state, and local level. For example we have a team at CBRE that specifically identifies and evaluates regulation requirements for	The cost of managing this risk driven by climate change regulation is part of doing business, which we estimate to be 1 percent of the cost of sustainability services and 1 to 2 percent of an employee's time.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	reporting in UK. The variations by location increase risks of noncompliance and costs of compliance.							emissions reporting. In addition, we also integrate "sustainability personnel" throughout groups in the company to help with employee education and provide support for emission reporting. These management methods allow CBRE to respond to reporting obligations such as AB1103 in CA, USA and ESOS in UK.	

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitation extremes and droughts	The increasing frequency and severity of weather and precipitation events	Inability to do business	Unknown	Direct	Virtually certain	Medium	The potential financial implications of the risk driven by physical climate parameters is 1 to	Our current method for managing the risk driven by physical climate parameters is through CBRE's Business	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	such as drought, flooding, tropical cyclones, and snow/ice associated with climate change put our business operations at risk. Much of our workforce is mobile and we occupy more than 400 facilities around the globe, which all but guarantees CBRE employees will be touched by weather events associated with climate change.						25% of total operating costs. The implication of change in physical climate parameters is likely to increase over time.	Continuity program. The Business Continuity program provides services related to the preparation and response to significant weather or natural disaster which includes planned emergency responses to safeguard people, properties and the interests of employees, tenants and clients. The program addresses such vital areas as data back-up and recovery; alternative communications with tenants, clients and employees; and alternative physical locations. In addition, the program prepares for potential market impact, such as droughts and severe	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								weather events limiting expansion of the real estate market in some areas.	

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	The inability to provide green services for climate change-related requirements is a risk to our business reputation. The inability to provide these green services will reduce the demand for services and impact our service capacity.	Reduced demand for goods/services	1 to 3 years	Indirect (Client)	More likely than not	Medium	The potential financial implications of the risk driven by the loss of reputation from the inability to provide green services is the loss of 1 to 15 percent of total revenue. As the knowledge of climate change increase and becomes more mainstream the risk of losing market share and associated financial implications will	Our current method for managing the risk is to incorporate employee sustainability training as part of CBRE's protocol and integrate sustainability services as part of CBRE's long term business strategy. As an example, to further CBRE's sustainability offerings and positioning, in 2015, we trained more than	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							increase over time.	2,000 brokers on sustainability issues.	

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation
Opportunities driven by changes in physical climate parameters
Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Emission reporting obligations	Currently, we provide fee-based reporting support for clients whose property portfolios we manage. A slow and steady increase in emission reporting obligations (or voluntary reporting) could present a viable business	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	Medium	i. Broadly, this opportunity represents a fee-generation opportunity among existing clients and the opportunity to win new clients based on a service our competitors may not offer. ii. We estimate an increase of 1 to 15 percent	We are managing this opportunity by monitoring regulatory trends and staffing to existing requirements; we are also educating clients on the importance of reporting GHG emissions associated with their properties and helping them develop processes	The cost of managing this opportunity is associated with staffing capacity.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	opportunity for our company.						of total revenue.	and data that supports common GHG emissions reporting requirements. As an example, the client service offering for reporting obligations such as AB1103 in CA, USA and ESOS in UK supports and compliments internal reporting efforts while providing increased resources within CBRE available to identify and meet requirements.	

CC6.1b

Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in precipitat	We manage more	Increased demand for existing	1 to 3 years	Indirect	More likely than not	Medium	The potential financial	Our current method for managing	The cost of managing

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
ion extremes and droughts	than 5 billion square feet of property globally. As part of our business continuity program, we provide remediation and recovery efforts due to severe acts of weather. As climate change increases the likelihood of droughts, flooding, tropical cyclones, snow, and ice, there is an opportunity for us to increase our business in remediation and recovery. Weather can result in storm-related consequences primarily limited to recovery	products/services		(Client)			implications associated with remediation and recovery efforts from the effects of severe weather events is 1 to 25 percent of CBRE's total operating costs.	the effects of severe weather events is through CBRE's Business Continuity program, which provides planned emergency responses to safeguard people, properties and the interests of employees, tenants and clients. The program addresses such vital areas as data back-up and recovery; alternative communications with tenants, clients and employees; and alternative physical locations. CBRE's managers also include weather changes in business planning. For example, managers take into consideration the potential	the effects of severe weather events is associated with employee staffing to meet remediation and recovery needs that will likely increase over time.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	from the event or can result in more persistent business impact such as may arise from repeated storms in a similar area or ongoing drought.							for market impact arising from persistent droughts and severe weather events limiting expansion of the real estate markets in some areas while encouraging expansion in less weather-stricken areas.	

CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Our ability to provide services for climate change-related regulatory requirements is an opportunity to enhance business reputation. The ability to provide these	Increased demand for existing products/services	1 to 3 years	Direct	More likely than not	Medium	The potential financial implications associated with our ability to provide services for climate change-related reporting requirements due to increase in	Our current method for managing this business opportunity from increase in reputation is to incorporate employee sustainability training as part of CBRE's	The cost of managing the increase in reputation is associated with employee staffing to provide green services that will likely increase over time.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	green services will increase the demand for services and impact our service capacity.						reputation is an increase of 1 to 15 percent in revenue that will likely increase over time.	protocol and integrate sustainability services as part of CBRE's long term business strategy. As an example, to further CBRE's sustainability offerings and positioning, in 2015, we evaluated opportunities to enhance service offerings in the sustainability market, thereby providing business opportunities arising from improved positioning and reputation in the marketplace.	

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Wed 01 Jan 2014 - Wed 31 Dec 2014	34654
Scope 2 (location-based)	Wed 01 Jan 2014 - Wed 31 Dec 2014	30605
Scope 2 (market-based)		

CC7.2
Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

CC7.2a
If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3
Please give the source for the global warming potentials you have used

Gas	Reference
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)

CC7.4
Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference

Further Information
Please find attached the spreadsheet of emissions factors for question CC7.4.

Attachments
Emission Factors CDP.xlsx

Page: CC8. Emissions Data - (1 Jan 2015 - 31 Dec 2015)

CC8.1
Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory
Operational control

CC8.2
Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e
39105

CC8.3
Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?
No

CC8.3a
Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
29982		

CC8.4
Are there are 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

CC8.5
Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 10% but less than or equal to 20%	Data Gaps	The main source of uncertainty relates to gaps in our energy usage data. Because we are a tenant in multi-tenant buildings we do not have direct control of or access to energy usage data for our facilities and, especially within the US where we have the greatest concentration of facilities, our spaces are not separately submetered for utilities. Where we do not have direct access to the data we rely on the building landlord to provide total building energy usage for the building, which we then prorate for our applicable portion of the total building space. When we are not able to obtain data from a landlord we must estimate energy usage using published energy intensity factors appropriate for each region.
Scope 2 (location-based)	More than 10% but less than or equal to 20%	Data Gaps	The main source of uncertainty relates to gaps in our energy usage data. Because we are a tenant in multi-tenant buildings we do not have direct control of or access to energy usage data for our facilities and, especially within the US where we have the greatest concentration of facilities, our spaces are not separately submetered for utilities. Where we do not have direct access to the data we rely on the building landlord to provide total building energy usage for the building, which we then prorate for our applicable portion of the total building space. When we are not able to obtain data from a landlord we must estimate energy usage using published energy intensity factors appropriate for each region.
Scope 2 (market-based)			

CC8.6
Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

Third party verification or assurance process in place

CC8.6a
Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	Verification Statement CBRE 2015.pdf	All	ISO14064-3	100

CC8.7
Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

CC8.7a
Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited assurance	Verification Statement CBRE 2015.pdf	All	ISO14064-3	100

CC8.8
Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	

CC8.9
Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?
No

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

CC9.1
Do you have Scope 1 emissions sources in more than one country?
Yes

CC9.1a
Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e
Asia Pacific (or JAPA)	2639
Americas	35023
Europe, Middle East and Africa (EMEA)	1443

CC9.2
Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)
By GHG type
By activity

CC9.2c
Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	38964
CH4	50
N2O	91

CC9.2d
Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Mobile	30954
Stationary	8151

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

CC10.1
Do you have Scope 2 emissions sources in more than one country?

Yes

CC10.1a
Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes 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)
Asia Pacific (or JAPA)	3623		5306	
Americas	20751		46311	
Europe, Middle East and Africa (EMEA)	5608		14142	

CC10.2
Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)
Further Information

Page: CC11. Energy

CC11.1
What percentage of your total operational spend in the reporting year was on energy?
More than 0% but less than or equal to 5%

CC11.2
Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	Energy purchased and consumed (MWh)
Heat	0
Steam	0
Cooling	0

CC11.3
Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year
167111

CC11.3a
Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	33386
Motor gasoline	127283
Diesel/Gas oil	392
Residual fuel oil	4973
Distillate fuel oil No 2	1077

CC11.4
Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	

CC11.5
Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
65759	65759	0	0		

Further Information

Page: CC12. Emissions Performance

CC12.1

How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?

Increased

CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities			
Divestment			
Acquisitions			
Mergers			
Change in output	5.9	Increase	CBRE revenue increased 20% from 2014 ($9,049,918,000) to 2015 ($10,855,810,000) as a result of increased business as well as an acquisition at the end of Q3 2015. Employee headcount also increased 35% from 2014 (52,000) to 2015 (70,000). However, our emissions only increased 5.9% [(69087-65259)/65259=5.9%].
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.0000064	metric tonnes CO2e	10855810000	Location-based	11	Decrease	CBRE's revenue increased 20%

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
						from 2014 to 2015 but emissions only increased 5.9% over the same time period.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.99	metric tonnes CO2e	full time equivalent (FTE) employee	70000	Location-based	21	Decrease	Employee headcount increased 35% from 2014 to 2015 but emissions only increased 5.9% over the same time period.

Further Information

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

No

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	47	Australian NCOS	100.00%	Paper product purchased from Australia.
Capital goods	Not relevant, explanation provided				No significant capital goods purchased during reporting period.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, not yet calculated				This category is relevant to us since we are an end user of electricity but we have not yet calculated emissions for this source.
Upstream transportation and distribution	Not relevant, explanation provided				No significant transport of purchased goods associated with leased office space and vehicle use
Waste generated in operations	Relevant, calculated	7	Australian NCOS	100.00%	Australia operations only: office waste sent to landfills.
Business travel	Relevant, calculated	13161	Emissions related to business travel are calculated using the emissions factors included in the spreadsheet attached for question CC7.4.	100.00%	Includes US, Asia, and Australia travel data.
Employee commuting	Relevant, not yet calculated				Emissions related to our employees commuting are relevant but have not yet been calculated.
Upstream leased assets	Not relevant, explanation provided				Emissions associated with upstream leased assets are accounted for in our Scope 1 and 2 emissions.
Downstream transportation and distribution	Not relevant, explanation provided				Not applicable to our business as a service company.
Processing of sold products	Not relevant, explanation provided				Not applicable to our business as a service company.
Use of sold products	Not relevant, explanation provided				Not applicable to our business as a service company.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
End of life treatment of sold products	Not relevant, explanation provided				Not applicable to our business as a service company.
Downstream leased assets	Not relevant, explanation provided				Not applicable to our business as a service company.
Franchises	Not relevant, explanation provided				Franchise operations not included
Investments	Not relevant, explanation provided				Not applicable to our operations
Other (upstream)	Not relevant, explanation provided				No other sources
Other (downstream)	Not relevant, explanation provided				No other sources

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

Third party verification or assurance process in place

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	Verification Statement CBRE 2015.pdf	All	ISO14064-3	100

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Change in boundary	3.8	Increase	In 2014, we reported business travel for the US and Australia. In 2015, we again reported data for the US and Australia but also reported data for Asia for the first time.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our customers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagement and measures of success

i. We engage with customers by providing environmental sustainability services that directly enable them to avoid Scope 1 and Scope 2 emissions associated with energy use. These services include energy program management, certification programs, transactions for occupiers, and transaction for owners.

ii. Integrating climate change into our business strategy has gained strategic advantage over our competitors by expanding our sustainability service business line. We improve our position as a service provider by integrating green services. We provide certification services such as green leasing, LEED certification, ENERGY STAR, and Green Star. LEED Certification continues to be the most recognized rating system of sustainable construction and management practices worldwide and CBRE continues to assist our clients in their efforts to gain these certifications.

iii. We are successful when we provide these services to clients globally and continue to increase the number of certifications we provide each year. 2015 was a particularly active year for our LEED EB consulting team who achieved 148 certifications totaling over 23 million square feet. Since their beginning in 2009 this team has certified 485 buildings, totaling more than 132 million square feet, more than any single practice in the world for LEED EB certifications. We also continue to assist our clients in achieving LEED CI certifications for their interior improvement work. During 2015 we achieved 18 new certifications, totaling nearly 1 million square feet.

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Jennifer Leitsch	Director of Corporate Responsibility	Environment/Sustainability manager

Further Information