

# Climate Change 2015 - 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 2014 revenue). The Company has more than 52,000 employees (excluding affiliates), and serves real estate owners, investors and occupiers through more than 370 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](http://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**

Wed 01 Jan 2014 - Wed 31 Dec 2014

#### 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](mailto: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?**

Board or individual/sub-set of the Board or other committee appointed by the Board

**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 the Global Operating Committee (a group of all CBRE's business line and regional leaders) 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?**

Yes

**CC1.2a**

**Please provide further details on the incentives provided for the management of climate change issues**

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Executive officer	Monetary reward	Energy reduction project	As part of CBRE's environmental policy, CBRE is focused on environmental performance, which is measured through various environmental metrics. A monetary bonus is awarded to the executive officer for sustainability management if environmental metrics including climate change and energy reduction targets are met. We give preference to certified green buildings for our leased corporate facilities, and pursue interior design and construction certification using recognized green building standards such as LEED, BREEAM, and Green Star for our relocated or refurbished facilities larger than 20,000 square feet.

**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
Six-monthly or more frequently	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. We monitor climate change-related risk and opportunities on an ongoing basis. i and ii)The Director of Operations report climate

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
				change risk assessments to the global operating committee on a quarterly basis. iii) and iv) We consider global risks 3-6 years into the future.

#### CC2.1b

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

i. At a company level, the Director of Corporate Responsibility is responsible for evaluating climate change risks on an ongoing basis. The Director of Corporate Responsibility provides risk assessment briefings to the Global Director of Corporate Responsibility who provides such risk assessments at the quarterly corporate responsibility meeting to the global operating committee.

ii. At an asset level, the Director of Operations and Sustainability 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 is objectively and regularly conducted by our Global Corporate Responsibility Steering Committee, comprised of leaders from each of our seven business lines and three geographic regions, as well as sustainability subject matter experts from each service specialty (such as CBRE Energy & Sustainability, CBRE Workplace Strategies, etc). Our risk management group, senior company executives and key stakeholders vet risk prioritization criteria and materiality assessment, which include identifying those strategic, operational, financial and compliance issues that are relevant to our business as a commercial real estate service provider. These include but are not limited to: financial performance, client expectation and requirement trends, regulatory and legislative requirements, reputational factors, current practices of leading businesses, and commercial real estate industry trends. Our prioritization criteria include magnitude of impact, frequency, likelihood, and importance to customers and other stakeholders.

#### 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. Our internal process for collecting and reporting information to influence our business strategy is policy driven. CBRE's internal policy regarding climate change 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 quarterly basis. Client interface allows us to gather information on client needs (related to sustainability) that brings forth our business strategy. ii. 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. iii. 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. iv. 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. We currently have installed 134 sub meters in 30 US offices, totalling 892,092 square feet. This equates to approximately 20% of our global footage and 40% of our 2017 goal.

In addition, since our initial 2007 commitment, CBRE has replaced legacy office equipment with ENERGY STAR or comparable versions around the globe. v. 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. 2014 was a particularly active year for our LEED EB consulting team who achieved 126 certifications totalling nearly 24 million square feet. Since their beginning in 2009 this team has certified 337 buildings, totalling more than 108 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 2014 we achieved 17 new certifications, totalling 2.1 million square feet. vi. Our substantial business decision made was to improve energy management performance. We set a goal to reduce client carbon emissions by 250 metric tons annually per LEED certified property in our managed portfolio. We have also 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. The first research report, the National Green Building Adoption Index, was released in 2014 and additional reports will be released over the next two years.

**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**

<b>Trade association</b>	<b>Is your position on climate change consistent with theirs?</b>	<b>Please explain the trade association's position</b>	<b>How have you, or are you attempting to, influence the position?</b>
Building Owners and Managers Association (BOMA)	Consistent	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.	We support & promote their position through our client services and messaging.
US Green Building Council (USGBC)	Consistent	The majority of efforts to address climate change through green building are focused on reducing greenhouse gas emissions reflected in the current US Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) rating system, which allocates over 25 percent of available points for reducing GHG emissions associated with building systems, transportation, water, waste and construction materials.	We support & promote their position through our client services and messaging.

**CC2.3g**

**Please provide details of the other engagement activities that you undertake**

i. We are part of the Center for Climate and Energy Solutions' Business Environmental Leadership Council and we are also members of The Climate Group.

ii. The topic of Center for Climate and Energy Solutions' Business Environmental Leadership Council (BELC) is

engaging businesses in developing efficient, effective solutions to the climate problem, and the topic of The Climate Group is a clean economy based on the rapid scale-up of low carbon energy and technology.

iii. The nature of our engagement with BELC and The Climate Group is thought leadership and advisory on climate strategies in commercial real estate.

iv. Actions advocated as part of these engagements include developing a series of whitepapers on climate change impacts in commercial real estate and the related financial impacts to owners and tenants, speaking engagements and sponsorships

**CC2.3h**

**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.

**CC2.4**

**Would your organization's board of directors support an international agreement between governments on climate change, which seeks to limit global temperature rise to under two degree Celsius from pre-industrial levels in line with IPCC scenarios such as RCP2.6?**

**CC2.4a**

**Please describe your board's position on what an effective agreement would mean for your organization and activities that you are undertaking to help deliver this agreement at the 2015 United Nations Climate Change Conference in Paris (COP 21)**

**Further Information**

**Page: CC3. Targets and Initiatives**

**CC3.1**

**Did you have an emissions reduction 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 (metric tonnes CO2e)	Target year	Comment
Abs1	Scope 1+2	2.44%	10%	2011	1970.91	2014	Emissions reduction at Australia offices

**CC3.1d**

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

ID	% complete (time)	% complete (emissions)	Comment
Abs1	100%	100%	Australia offices exceed the reduction goal of 10% by reducing emissions from 1970.91 metric tons CO2e per year to 1,281 metric tons CO2e per year (reduction of 35%)

### CC3.2

**Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?**

Yes

#### CC3.2a

**Please provide details of how the use of your goods and/or services directly enable GHG emissions to be avoided by a third party**

I) Our services directly enable third parties to avoid Scope 1 and Scope 2 emissions associated with energy use through our environmental sustainability services. Our environmental sustainability services are as follow: i.a) Energy Program Management - Energy represents up to 40% of operating costs for office buildings – even higher for some industrial properties. 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, Utility Data and Carbon Footprint Management, Demand/Supply-Side Energy Management, Performance Reporting, Training and Awareness Programs. i.b) Certification Programs - Around the globe, green building certification programs are becoming the standard for validating the sustainability of new and existing real estate. 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 revisions and additions, if necessary, and negotiating sustainable lease terms. Occupier services include: initial analysis of potential LEED credits for LEED CI based on the building location, base design and offered space; negotiation of Work Letter provisions during proposal negotiation process; negotiation of applicable LEED credits required by building ownership during proposal and lease; review and final negotiation of lease document to ensure enhanced cost savings and compliance of negotiated terms; and participation of project management and leasing representatives in the LEED charter. i.d) Transactions for Owners (Leasors) – CBRE helps building owners assess their real estate goals and implement strategies that align with their business objectives. Services include: communications on the value of occupying sustainable buildings; innovative ways to strategically position and market your product within a target market; access to the best advice and technical expertise vis-à-vis capital improvements, operations and maintenance; and additional resources and education channels available in sustainability. 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 rate consultation; and lease analysis.

ii) CBRE's Sustainability Programs Group, assists CBRE clients in navigating the LEED rating system by embedding long-term, sustainable best practices at both the individual building and portfolio level. Through this program, nearly 60,648 metric tonnes of CO2 emissions have been avoided annually.

iii) 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>.

We are not considering originating CERs or ERUs within the framework of CDM or JI. Since CBRE is contracted to manage buildings on behalf of client owners, any carbon credits and emission reductions are the property and priority of those clients, not CBRE.

### 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	0
Implementation commenced*	0	0
Implemented*	2	30800.0
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: Processes	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. We have introduced the ENERGYplus platform that automatically uploads building data to ENERGY STAR and the development of a coordinated and centralized ENERGY STAR label engineering service to improve building performance	30600	Scope 3	Voluntary	3040000 0	10000	<1 year	3-5 years	

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
	and reduce scope 3 emissions (CBRE clients). This program will continue for the next five years.								
Energy efficiency: Building services	CBRE is implementing multiple programs to voluntarily reduce Scope 1 and 2 energy consumption including installing new 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. During 2014 we added 12 new spaces to the list and now have more than	200	Scope 1 Scope 2	Voluntary					These activities support meeting our absolute emission reduction



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
	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. All occupied offices in the UK are ISO 14001 certified. We exceeded our 2017 goal early by achieving 74% in 2014.								

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

Comment	
Method	
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)**

Page/Section reference			
Publication	Status	Attach the document	
In voluntary communications	Underway - previous year attached	Environmental Sustainability, 14, 26	<a href="#">CBRE 2013 CRReport PagesDeleted Compressed.pdf</a>

#### 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 3.5 billion SF of property we manage require significant manpower, education, systems and other resources. We have identified a global emissions reporting requirement as a game changer for our business, as those requirements will likely increase. Reporting obligations	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.	The cost of managing this risk driven by climate change regulation is part of doing business, which is 1 percent of the cost of sustainability services and 3 to 5 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
	vary by city, country, and regionally such as AB1103 in CA, USA or ESOS EU Article 8 reporting in UK. The variations by location increase risks of noncompliance and costs of compliance.							For example we have a team at CBRE that specifically identifies and evaluates regulation requirements for 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 change 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 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 370 facilities around the globe, which all but guarantee CBRE employees will be touched by weather events associated with climate change.	Inability to do business	Unknown	Direct	Virtually certain	Medium	The potential financial implications of the risk driven by physical climate parameters is 1 to 25% of total operating costs, which is approximately \$500,000 to \$1 million. The implication of change in physical climate parameters is likely to increase over time.	Our current method for managing the risk driven by physical climate parameters is through CBRE's Business 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	The cost of managing risk driven by physical climate parameters is approximately \$1,400,000.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								physical locations. In addition, the program prepares for potential market impact, such as droughts and severe 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	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, or approximately \$65 million to \$975 million due to the reduction of demand for our	Our current method for managing the risk drive by other climate-related development is to incorporate employee sustainability training as part of CBRE's protocol and integrate sustainability services as part of CBRE's long term	The costs of managing risk driven by the loss of reputation is approximately \$500,000 to \$1,000,000 .

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	service capacity.						green services. As the knowledge of climate change increase and becomes more mainstream the risk of losing market share and associated financial implications will increase over time.	business strategy. As an example, to further CBRE's sustainability offerings and positioning, CBRE in 2014 evaluated opportunities to enhance service offerings in the sustainability market to reduce risk of lost business.	

#### 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	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	We are managing this opportunity by monitoring regulatory trends and	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
	<p>whose property portfolios we manage. A slow and steady increase in emission reporting obligations (or voluntary reporting) could present a viable business opportunity for our company.</p>						<p>ity among existing clients and the opportunity to win new clients based on a service our competitors do not offer. ii. We estimate an increase of 1 to 15 percent of total revenue, which ranges from \$65 million to \$975 million per year that will likely increase over time.</p>	<p>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 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 complements internal reporting efforts while providing</p>	<p>which we estimate as \$1.5 to 1.75 million.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								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 precipitation extremes and droughts	We manage more than 3.7 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,	Increased demand for existing products/services	1 to 3 years	Indirect (Client)	More likely than not	Medium	The potential financial implications associated with remediation and recovery efforts from the effects of severe weather events is 1 to 25% of CBRE's total operating costs, which is about \$1.5 million to \$1.75 million that will likely increase over time.	Our current method for managing 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 backup and recovery; alternative communication	The cost of managing the effects of severe weather events is associated with employee staffing to meet remediation and recovery needs that will likely increase over time, which we estimate as \$1.65 million.



Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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 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.</p>							<p>tions 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 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.</p>	

**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 green services will increase the demand for services and impact our service capacity.	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 reputation is an increase of 1 to 15 percent in revenue that will likely increase over time.	Our current method for managing this business opportunity from increase in reputation 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, CBRE in 2014 evaluated opportunities to enhance service offerings in the sustainability market, thereby	The cost of managing the increase in reputation is associated with employee staffing to provide green services that will likely increase over time, which we estimate as \$500,000 to \$1,000,000.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								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	Sat 01 Jan 2011 - Sat 31 Dec 2011	20646.18
Scope 2	Sat 01 Jan 2011 - Sat 31 Dec 2011	29977.04

##### 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 Second Assessment Report (SAR - 100 year)
N2O	IPCC Second Assessment Report (SAR - 100 year)
CO2	IPCC Second Assessment Report (SAR - 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
Diesel/Gas oil	19.4	lb CO2 per gallon	GHG Protocol Emissions from Cross Sector Tools (others attached below)

#### Further Information

**Attachments**

[CBRE MultipleEmissionFactors\\_23June2015.xlsx](#)

**Page: CC8. Emissions Data - (1 Jan 2014 - 31 Dec 2014)**

**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**

34654

**CC8.3**

**Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e**

30605

**CC8.4**

**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

**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**

<b>Scope</b>	<b>Uncertainty range</b>	<b>Main sources of uncertainty</b>	<b>Please expand on the uncertainty in your data</b>
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	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.

**CC8.6**

**Please indicate the verification/assurance status that applies to your reported Scope 1 emissions**

Third party verification or assurance complete

**CC8.6a**

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

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Limited assurance	<a href="#">CBRE LimitedVerificationStatement_GHG2014_23June2015.pdf</a>	1-3	ISO14064-3	100

**CC8.7**  
Please indicate the verification/assurance status that applies to your reported Scope 2 emissions  
Third party verification or assurance complete

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

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Limited assurance	<a href="#">CBRE LimitedVerificationStatement_GHG2014_23June2015.pdf</a>	1-3	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 2014 - 31 Dec 2014)**

**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)	1386
Canada	2432
South America	89
Europe, Middle East and Africa (EMEA)	1026
United States of America	29721

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

**CC9.2d**

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
Mobile	27856
Stationary	6798

**Further Information****Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2014 - 31 Dec 2014)****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 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)
Asia Pacific (or JAPA)	3422	4911	
Canada	730	3668	
South America	198	610	
Europe, Middle East and Africa (EMEA)	5201	13617	
United States of America	21054	44000	

**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 fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	MWh
Fuel	139874
Electricity	66806
Heat	0
Steam	0
Cooling	0

**CC11.3**

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	33854
Motor gasoline	104590
Diesel/Gas oil	1430

**CC11.4**

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

Basis for applying a low carbon emission factor	MWh 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	

#### 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	Comment
Emissions reduction activities	0.4	Decrease	Emission reductions due to multiple programs to voluntarily reduce Scope 1 and 2 energy consumption including increased efficiency devices, settings, office locations, and refurbishment. Percent reduction based on 200 ton decrease compared with 2013 inventory of 55,327 tons ( $200/55,327=0.4\%$ ).
Divestment			
Acquisitions			
Mergers			
Change in output	18	Increase	Revenue increased by more than 25% from 2013 to 2014 as a result of increased business. This resulted in an increase in employees of more than 18% as well as a considerable increase in mobile fuel due to additional vehicles required. $[(\$9.05 \text{ billion} - 7.18 \text{ billion}) / 7.18 \text{ billion} = 25\% \text{ increase}]$ Non-energy space optimization activities such as the Workplace 360 initiative increases flexibility to employees to allow for telecommuting as well as improved flexibility of spaces in the workplace resulting in higher employee count per floor space. This initiative allows increased revenue (Increase of 25%) and employee count (increase of 18%) with a much lower increase in floorspace (5%). Despite increase in floorspace, electricity and natural gas decreased 2.4% $[(64,459 - 66,039) / 66,039 = -2.4\%]$ . Overall increase of 18% primarily due to increase in mobile emissions due to increase in employee count / change in output / revenue increase. $18\% = 0.4\%$ decrease emissions reductions +18% increase change in output.
Change in methodology			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

#### 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	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.0000072	metric tonnes CO2e	unit total revenue	6.4	Decrease	CBRE's revenue increased from 7.2 to 9.0 billion from 2013 to 2014. In addition, emissions per dollar revenue decreased due to emission reduction activities and space utilization improved efficiency.

#### CC12.3

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
1.25	metric tonnes CO2e	FTE employee	0.2	Decrease	CBRE's FTEs increased from 44,000 to 52,000 from 2013 to 2014. In addition, emissions per dollar revenue decreased due to emission reduction activities and space utilization improved efficiency.

#### CC12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.0084	metric tonnes CO2e	square foot	2	Decrease	Square footage increased 5% while electricity and natural gas for facility use decreased 2%. Decrease in metric due to emission reduction activities and space utilization improved efficiency.

#### 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, calculated	174	Australian NCOS	100.00%	Australia operations vehicle use, electricity T&D losses
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	8	Australian NCOS	100.00%	Australia operations only: office waste sent to landfills.
Business travel	Relevant, calculated	12683	CO2 Emissions from Business Travel are calculated using methodologies, definitions and factors developed by the World Resources Institute (WRI), DEFRA UK and the GHG Protocol Mobile Combustion process (July 2008). Calculations are based on distance travelled using Kg of CO2 per passenger mile. An average of 91.38 miles per rental car day was used. Hotel impact per U.S. EPA hotel night emission factor.	100.00%	Includes US Air, Rail, rental car and hotel; Australia air and vehicle travel.
Employee commuting	Relevant, not yet calculated				
Upstream leased assets	Relevant, calculated	342	Australian NCOS	0.00%	Common areas associated with Australia leased assets included in Scope 1 and 2 inventory.
Downstream transportation and distribution	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
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.
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				No longer applicable to our primary business as a service company. The 2014 Form 10-K reports that previously CBRE had a portfolio of properties with multifamily / residential rental revenues that are no longer applicable. The 10-K documents a considerable reduction in rental revenue from 2012 to 2014 (almost 75% reduction in rental revenue), which results in rental revenue comprising less than 0.2% of total CBRE revenue today. Only two locations have constructed properties that fail to meet CBRE's criteria of held for sale and remain classified as held for investment per the 10-K.
Franchises	Not relevant, explanation provided				Franchise operations not included
Investments	Not relevant, explanation provided				Not applicable to our operations
Other (upstream)	Not relevant,				No other sources

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
	explanation provided				
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 complete

#### CC14.2a

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

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of Scope 3 emissions verified (%)
Limited assurance	<a href="#">CBRE Limited Verification Statement GHG2014 23 June 2015.pdf</a>	1-3	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	5	Increase	Business travel emissions boundary expanded to include US Hotel.
Upstream leased assets	Change in boundary	3	Increase	Upstream emissions not included in Scope 1 or 2 associated with leased assets added for Australia sites only.

#### 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 engagements and measures of success

i. As part of CBRE's long term business plan, 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.

ii. Our strategy for prioritizing engagements is determining which offices have expiring leases and need sub-meter installations as a part of their retrofit or newly leased space. Our success is determined by progress against our stated 2012 Environmental Policy goal of “By 2017, we will have the capability to monitor and measure utility usage in our 50 largest carbon emitting locations through the installation of separate metering devices.” To measure our own use requires the installation of separate utility meters in those spaces. Continuing our historical efforts we now have installed 134 sub-meters in 30 US offices, totaling 892,092 square feet. This equates to approximately 20% of our global footage and 40% of our 2017 goal. 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. 2014 was a particularly active year for our LEED EB consulting team who achieved 126 certifications totaling nearly 24 million square feet. Since their beginning in 2009 this team has certified 337 buildings, totaling more than 108 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 2014 we achieved 17 new certification, totaling 2.1 million square feet. Our substantial business decision made was to improve energy management performance. We set a goal to reduce client carbon emissions by 250 metric tons annually per LEED certified property in our managed portfolio.

#### 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

CDP: [X][.-][P2]