



## Climate Change 2015 Information Request BM&FBOVESPA

### Module: Introduction

#### Page: Introduction

#### CC0.1

##### Introduction

##### **Please give a general description and introduction to your organization.**

Bolsa de Valores, Mercadorias e Futuros S.A. – BM&FBOVESPA S.A. is a public company with stock trades under ticker symbol BVMF3 on Novo Mercado, the premium listing segment for companies with the highest standards of corporate governance. BVMF3 is tracked by the Ibovespa, IBrX-50, IBrX and ITAG indexes, among others. Headquartered in São Paulo, Brazil, the group also includes the following companies: BM&FBOVESPA Market Supervision (BSM), BM&FBOVESPA Settlement Bank and BM&FBOVESPA Institute. There are representative offices in New York, London and Shanghai to support local market players and build up relations with regulators and governments, as well as to meet potential investors and promote the Brazilian market. In 2014, BM&FBOVESPA had 1,357 employees, 85 trainees and a market value of R\$18.715 billion on December 31st. There were no relevant changes in its size, structure or equity ownership in 2014.

BM&FBOVESPA's prime goals are managing organized markets for the trading of stocks, bonds and derivatives, providing registration, clearing and settlement services and acting as central counterparty to ensure cash settlement of the transactions performed in its environments.

The company offers a range of products and services, including trading in stocks, bonds, spot foreign exchange, and derivatives contracts based on equities, financial assets, indexes, rates, agricultural commodities and spot currencies, among others. It lists companies and other issuers of securities, acts as a central securities depository, manages securities lending transactions, certifies commodities, and licenses software. It also supplies market data and operates an over-the-counter market in derivatives and fixed-income securities.

BM&FBOVESPA stands out in the exchange industry for its vertically integrated business model, which enables the company to operate in all stages of the process, as it provides all the services required by market participants (issuers, brokerage firms and investors), from organizing purchase and sale transactions to clearing and risk control, settlement, and securities custody. This structure is vital to the company's growth model, based on credibility, reputation, and on a qualified management team attentive to trends and opportunities in the global industry and to corporate governance best practices.

As an inherent part of its business, BM&FBOVESPA fosters innovation by inspiring new practices and starting new products and services that foresee needs from market players, make processes more efficient, minimize externalities, and above all add value.

The company keeps its commitment to the principles of transparency & ethics providing special listing segments for issuers with high corporate governance standards (Novo Mercado, Levels 1 and 2, and Bovespa Mais).

By sharing and spreading corporate governance, business sustainability commitment and management excellence, BM&FBOVESPA pursues market security and integrity as top priorities.

In 2009, BM&FBOVESPA began a diffusion of sustainability within the organization and formed a Sustainability Area linked to the CEO. Once the theme is a priority, it was the first exchange in the world to sign up the UN Global Compact, in 2004. Since 2009 it participated of COP Brazilian Delegation in the United Nations Climate Change Conference and in 2010 it became the first exchange in any emerging-market country to formally commit to the Principles for Responsible Investment (PRI); and in the same year it was the first exchange to become an organizational stakeholder in the Global Reporting Initiative (GRI). The exchange expects to be perceived by investors as a booster of sustainability best practices within its sector and with national Companies. In 2012, it was a founding signatory of Sustainable Stock Exchange with other peers, an agreement to foster long-term responsible investments and sustainability reporting; and since 2014, became a member of the Sustainable Working Group (SWG) at World Federation of Exchanges, which aims to address ESG concerns and tries, through a research-driven dialogue, to build consensus among its members on sensitive issues, and then present those findings to the WFE.

In line with this strong commitment, BM&FBOVESPA seeks to embed the concept of sustainability in its products & services, engaging all business areas with the guidance of a Sustainability Policy approved by the Board in 2013, which is based on four pillars that bring together relevant themes – Market, Corporate

Governance, Social, and Environmental - including climate change. Examples of initiatives are the Corporate Sustainability Index (ISE), that has a unique dimension of Climate Change, and the Carbon Efficient Index (ICO2).  
As a self-regulator and heart of capital market, BM&FBOVESPA knows its duty to raise public attention to the importance of saving and investing for the long term. Its financial education programs serve this goal by strengthen greater self-provision.

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## 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

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## 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
Brazil
United States of America
United Kingdom
China

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## 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.

BRL(R\$)

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## 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).

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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

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### Page: CC1. Governance

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#### 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

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#### CC1.1a

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

i)The highest body responsible for dealing with climate change issues at BM&FBOVESPA is the Sustainability Committee.

ii)The Committee's mission is focused on strategic guidance and approval of the Company's macro planning and initiatives. The Committee is chaired by the BM&FBOVESPA CEO and consists of 4 executive members, 4 directors and 2 external members. In 2014, the Managing Director, Internal Controls, Compliance & Corporate Risk and Managing Director of BM&FBOVESPA Bank became part as a permanent member on the Sustainability Committee, a very important step for the climate change risk management point of view. The Committee meetings were held bimonthly in 2014 with reporting to the Board of Directors. It is important to mention that the minutes of the sustainability committee's regular meetings are circulated to all directors, in order to engage them and seek for their support on the issue. The climate change is a permanent issue on the Committee agenda.

Created, among other goals, to provide support to the Sustainability Committee, the BM&FBOVESPA Sustainability Working Group is in charge of proposing and conducting the Company's sustainability agenda, as well as reporting the actions undertaken for the Committee. The Sustainability Working Group is made up of high level administration members, reports to the Sustainability Director and meetings are held on a monthly basis.

The Sustainability Committee and the Sustainability Working Group was created in 2009 (one year after the integration between BM&F and BOVESPA), when, in addition to its social and environmental responsibility activities, BM&FBOVESPA began the structured dissemination of the sustainability concept within the new organization through the creation of a Sustainability Area linked to the CEO.

The Sustainability Area is responsible for incorporating this approach into the Exchange business. Furthermore, the Area serves as an internal consultancy, whose duties are to mobilize, encourage and guide the construction of strategies and actions grounded in the sustainability concept.

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#### CC1.2

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

No

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Further Information

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	It is considered all the units and countries where BM&FBOVESPA has activities.	3 to 6 years	BM&FBOVESPA's committees stand for priorities such as climate change and other risks, with debates in many levels and reports to the Board. The Sustainability Committee, coordinated by the Sustainability Area, discusses corporate processes and business from a sustainability perspective and supports the CEO on strategy definition. The Committee, chaired by the CEO, consists of 4 executives, 4 directors and 2 external members. The Business Continuity Committee addresses issues that may affect the operation on short/medium term, sets up work groups for assessments and decides the best responses through actions plans. The Corporate Risk Advisory Committee meets monthly and monitors the main risks from strategic, operational, financial and regulatory views. Formal reports are issued every half-year, presented to the Board Risk Committee and on Board sessions, to ensure that risk appetite is suitable. The Sustainability Head joins the Risk Committee and brings major subjects to the forum.

CC2.1b

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

BM&FBOVESPA is a central institution in the Brazilian capital market that provides trading and post-trading services, with the role of a self-regulator of its own market. The Exchange's risk and opportunities identification process considers the complex context it is inserted with a holistic analysis, not limited only to operational questions. This process addresses endogenous and exogenous questions of strategic, operational, financial and regulatory considerations. BM&FBOVESPA is the only national stock exchange that trades shares and derivatives in a relationship with companies of many sectors interested in operation financing, while major financial institutions are also participants in its market. This makes the risk identification of BM&FBOVESPA a lot challenging and embracing. To meet its goals, BM&FBOVESPA relies on the following structure:

i) Company Level: There are 3 committees for monitoring risks with different duties: 1) The Sustainability Committee, whose mission is to identify threats linked to sustainability broad theme, mainly climate change issues. It provides international benchmarking and alignment with companies from various sectors in this field; 2) The Business Continuity Committee identifies potential threats to operation, discusses and handles action plans designed to face threats such as climate change; and 3) The Corporate Risk Advisory Committee monitors risks of any order, including those identified by the other two Committees above-named, and reports them each semester to the Executive Board, Board of Directors, audit committee, and regulatory bodies.

ii) Asset Level: The Process and Risk Department has the objective to document the corporative process, identifying its risks factors and consequences associated to the process performed. It also identifies opportunities for improvement as well as strategic, operational, financial and regulatory issues. In addition, the company has sustainability drivers in products and systems development.

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### CC2.1c

#### How do you prioritize the risks and opportunities identified?

BM&FBOVESPA has a Corporate Risk Advisory Committee, composed by a representative group of directors that aims to discuss the company's risk profile in a monthly basis and address actions to mitigate them, in addition to disseminate the risk culture. Regarding sustainability issues this committee counts with the opinion and contribution of the Exchange's Sustainability Director.

Using this approach, the Internal Controls, Compliance and Corporate Risk department has identified and reported the main risks for the company on March of 2015, including the strategic risk "Shortage of natural resources affecting BM&FBOVESPA's critical operations" related to climate change and drought, as per this risk it was prioritised and action plans were coordinated immediately. These risks are classified according to its impact and probability, and a risk level is stated according to an internal methodology, its mitigating actions are set and addressed as well. The reports issued every semester are assessed by the executive office and reported to the Audit Committee, Board Risk Committee and to the Board.

Secondly, in its bottom-up approach (asset level), the risk profile of the BM&FBOVESPA is created from detailed operational information. This level of detail provides a better definition of the response to risks and risk rating metrics, allowing a continuous oversight of risk management through a list of indicators.

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### CC2.2

#### Is climate change integrated into your business strategy?

Yes

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### CC2.2a

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

By taking a responsible attitude towards Climate Change, BM&FBOVESPA contributes to a positive change of values, while shifting to a more sustainable path in the environmental, social and economic dimensions. The establishment of a Sustainability Committee, within the Sustainability Area duties, has enabled a constant discussion of Climate Change integration into the Company's strategy. The Committee's mission is focused on strategic guidance and approval of the Company's macro planning initiatives and climate change is a permanent topic on its agenda. In 2014, BM&FBOVESPA Risk Director joined the Sustainability Committee as a permanent member, a very important step from a climate change risk management perspective. The Committee meetings were held bimonthly in 2014 with reporting to the Board of Directors. The summary of the meetings are circulated to all directors, in order to engage them.

Furthermore, the Sustainability Head in charge participates in the Exchange's strategic planning by addressing this topic.

In 2011, the Exchange's CEO was invited and accepted to be part of Honorary Council of the Carbon Disclosure Project (CDP) South America, while the Sustainability Head joined the Technical Advisory Council for the CDP South America. BM&FBOVESPA has made an inventory of its greenhouse gas emissions since 2009. Since 2010, it has been audited externally and the document has been included in the Public Registry of the Brazil GHG Protocol Program, with Gold stamp. In 2013, BM&FBOVESPA announced that it will annually compensate its greenhouse gas (GHG) emissions that it has been unable to reduce, thus becoming carbon neutral. This process dates back to 2011 and 2012 and seeks among other things to encourage the adoption of best practices in sustainability by listed companies and by the market in general. Since then, BM&FBOVESPA have already purchased 12.0007 credits from renewable energy projects from the states of Goiás, Mato Grosso, Rio Grande do Sul, São Paulo e Tocantins.

In addition, BM&FBOVESPA has a pipeline of energy efficiency projects for GHG emissions mitigation. To put in operation the best performance ones, the Exchange has a Project Prioritization Committee, which assesses the impacts of proposed projects prior to approval. The evaluation tool is a questionnaire with inquiries on environmental issues, including climate change, to ensure that prioritization decisions and implementation of projects take into account this issue.

The assimilation of sustainability and climate change in the Exchange's business strategy strongly occurred with sustainable products and services release, once it took the responsibility to stimulate and foster market participants on developing best practices. The most important business decision undertaken by BM&FBOVESPA regarding Climate Change was the creation of a Carbon Efficient Index (ICO2). The initiative was announced at a workshop of COP 15 meeting in Copenhagen, and ICO2 first portfolio was launched at the COP 16 meeting of Cancun (2010). The ICO2 Index is the result of a partnership between BM&FBOVESPA and the Brazilian Development Bank (BNDES) and its development was supported by a sustainability specialized international consulting firm. Before this initiative, only 30% of IBrX-50 companies reported their emissions, today almost 80% do it. The main goal of the ICO2 Index is to measure the return of a theoretical portfolio consisting of shares from IBrX-50 companies which adhere to the ICO2, weighted by its free float factor and by those companies' emissions ratio. In 2014, 31 companies participated in the ICO2 process. This methodology is not a static process and each year the Company will assess, together with BNDES, the minimum requirements related to GHG emissions inventories to be provided by participants. The minimum emission sources comprised by the initiative are gradually expanded, inducing participating companies to upgrade their inventories quality and completeness. BM&FBOVESPA hopes to prepare ICO2 participants for the competitive environment in a low carbon economy at the same pace that the Climate Change Dimension of the Corporate Sustainability Index (ISE) and the ICO2 are encouraging the emissions inventories' development and disclosure. BM&FBOVESPA also hopes to offer the market transparent information of companies' emissions by creating investment opportunities for investors sensitive to climate issues.

BM&FBOVESPA's approach involves all internal and external stakeholders, from its employees, suppliers and contractors to brokerage houses, analysts, opinion formers, shareholders, investors, governments and civil society, with the aim of encouraging reflection both inside and outside the company on the main sustainability-related issues in Brazil and abroad.

Moreover, in 2013, BM&FBOVESPA's Sustainability Policy was approved by the Board and it is under implementation at all company's levels. Environment is one of the four sustainability's pillars, in which the company commits itself (in long and short term of its strategy) to adopt eco-efficiency programs in its facilities, optimize energy and manage its GHG emissions, in order to reduce the Exchange direct impact and to prevent the company from the climate change risks. Approximately 50 awareness meetings were conducted with 17 areas to present the Sustainability Policy after its approval and Working Groups were defined to map and identify new initiatives to reduce GHG emissions. The proposed initiatives were approved by the Sustainability Committee in 2013 and, since then, initiatives started to be implemented by the responsible areas. The complete text of BM&FBOVESPA's Sustainability Policy is available at <http://ri.bmfbovespa.com.br>, in Corporate Governance, Bylaws, Codes and Policies.

To gain competitive advantage over its competitors, BM&FBOVESPA is taking forward sustainability and climate change issues and providing relevant information of listed companies to the investors, by ISE, ICO2 and "Report or Explain" initiative.

BM&FBOVESPA ranked third among companies in emerging countries with "Lowest Absolute Emitters (Scope 1 & 2 Only)", according to the latest study by the Environmental Investment Organization, a UK-based climate change and finance think tank, "ET BRICS 300 2015 CARBON RANKING REPORT" ([http://etindex.com/images/assets/ET\\_BRICS\\_300\\_Carbon\\_Ranking\\_Report\\_2015.pdf](http://etindex.com/images/assets/ET_BRICS_300_Carbon_Ranking_Report_2015.pdf)).

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**Does your company use an internal price of carbon?**

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

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**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)**

Other

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**CC2.3g****Please provide details of the other engagement activities that you undertake**

To BM&FBOVESPA, sustainability is a new management model that inspires conducting business in synergy with the current and future interests, such as the society and the planet, and tries to incorporate the concept of sustainability to its products and services, involving all areas of the company's business.

As already mentioned, examples of this induction of good practice's policy, is the development of "green" stock indexes, such as the Corporate Sustainability Index (ISE) and the Carbon Efficient Index (ICO2), and the initiative "Report or Explain", where the Exchange requires information about the existence of Sustainability Report by the participants – If so, the information about where it is available is followed, while an explanation is requested, in case response is negative.

Besides that, BM&FBOVESPA operate under the World Federation of Exchanges (WFE) integrating its Sustainability Working Group since 2014. The company is also a member of the following initiatives, among others:

- Member, Social Responsibility & Sustainability Committee, FEBRABAN
- Member, Network of Brazilian Women Leaders for Sustainability, Ministry of the Environment
- Member, Business for Climate Platform (Empresas pelo Clima), FGV – seat on advisory board
- Member, GRI Focal Point Brazil Advisory Group
- Member, GRI Stakeholder Council
- Member, Steering Committee, Ethos Indicators, Third Generation
- Member, Technical Advisory Council, Carbon Disclosure Project (CDP), Latin America
- Signatory, UN Global Compact – member, Brazilian Global Compact Committee
- Signatory, Principles for Responsible Investment (UN PRI) – member, PRI Engagement Group Brazil

Moreover, the Exchange supports the following initiatives:

- "Inquiry into the Design of a Sustainable Financial System: Policy Innovations for a Green Economy" initiative from UNEP (United Nations Environment Programme), supported by BM&FBOVESPA as part of Social Responsibility & Sustainability Committee of FEBRABAN.
- Communication to Stakeholders: an initiative from the Sustainable Stock Exchanges (SSE) to engage capital market participants in a dialogue on responsible investment and sustainable business practices.
- Model Guidance: an initiative from the Sustainable Stock Exchanges (SSE) that aims to unify the several sustainability guides around the world.

Influencing Public Policy is a continuous commitment of BM&FBOVESPA to encourage environmental impacts mitigation in alignment to cost reduction, both internally and externally, and also to induce companies to measure their impacts on climate change and constantly improve their management in the theme.

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**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?**

In 2013, BM&FBOVESPA's Sustainability Policy was approved by the Board and it is under implementation at all company's levels following the Board of Directors' approval. Environmental is one of the four sustainability's pillars, in which the company commits itself to adopt eco-efficiency programs in its facilities, optimize energy and manage its greenhouse gas emissions. The Exchange is also committed to

promote, induce and assure the sustainability best practice. The opportunities from sustainability (including climate change) to generate new businesses and to promote the best practice are the main aspects of climate change that have influenced the Exchange's Business Strategy, in short and long terms. The complete text of BM&FBOVESPA's Sustainability Policy is available at <http://ri.bmfbovespa.com.br>, in Corporate Governance, Bylaws, Codes and Policies.

The existence of a Sustainability Committee and a Sustainability Area, which are performing Climate Change integration to the Company's strategy is constantly under discussion, to ensure that the direct and indirect activities that influence policy are consistent with the overall climate change strategy. Once the Committee's mission is focused on strategic guidance and approval of the Company's macro planning, initiatives and activities, it is chaired by the BM&FBOVESPA CEO and consists of executive members of the Company.

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#### 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?**

Yes

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#### 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)**

In overall, BM&FBOVESPA supports an international agreement between governments on climate change, however it is needed a deep study of the impact of this agreement to affirm it. From BM&FBOVESPA point of view, an effective agreement is extremely important to set the course of climate change policy and strategy not only within the Exchange, but also within the listed companies. This agreement would lead the company to have some adjustments in the short time to develop a carbon market adequately. Since 2009 BM&FBOVESPA participated of COP Brazilian Delegation in the United Nations Climate Change Conference.

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#### Further Information

**Page: CC3. Targets and Initiatives**

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#### CC3.1

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

No

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#### CC3.1e

**Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years**

i) BM&FBOVESPA's activities and services are not as carbon intensive as construction or power generation companies, since their main emissions are indirect and related to commuting, business travel and electricity purchased in its offices. Therefore, the low amount of annual emissions makes it harder for BM&FBOVESPA to establish both absolute and intensity targets over these emissions due to their high



vulnerability to unexpected events. In terms of indirect emissions from purchased electricity, Brazilian interconnected grid has a significant contribution from hydro power plants, which makes it vulnerable to droughts and other climate events that might double, or reduce by half, the national emission factor from one year to another. BM&FBOVESPA has no control over this factor and for this reason the company monitor and manage its energy consumption, regardless of GHG emissions associated to the electricity generation. Even though there are no specific targets to reach, the company has been implementing energy efficiency measures, such as modernization of the lifts and refrigeration systems, reducing its business travel by installing video conference call meeting rooms, using the “bike boy” option for short distance transportation services instead of motor boy services, installing a bicycle parking, developing a carpool project – called “Carona Solidária”, restricting the use of taxis by employees – named “Política de Táxi”, so they can reduce their emissions during commuting. In addition to these measures, information about sustainability is shared on BM&FBOVESPA’s intranet, leading to the adoption of best practices, especially related to climate change, contributing to reduce the environmental impact of BM&FBOVESPA’s activities.

ii) For the next five years, BM&FBOVESPA believes that its GHG emissions may increase at the following sources:

- Scope 1: Increased consumption and combustion of fossil fuels by BM&FBOVESPA’s own fleet of vehicles due to an increase in business activities, however it may be reduced by the initiatives mentioned above;
- Scope 1: Increase in emissions from the release of refrigerant gases due to an increase in the number of staff and facilities;
- Scope 2: increased electricity consumption due to an increase in staff and facilities;
- Scope 2: Increase in the emission factor for consumption of electricity purchased from the national power grid due to long drought periods and higher thermal power plant activity. The Brazilian emission factor increased around 165% from 2010 to 2014. If we expect the same increase in the next five years, the Scope 2 emission of BM&FBOVESPA could be increased on 165%, as well.

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### CC3.2

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

Yes

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### 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**

BM&BOVESPA enable GHG emissions to be avoided by the companies listed by promoting, inducing and assuring climate change best practice through the ISE (Corporate Sustainability Index), ICO2 (Carbon Efficient Index) and “Report or Explain” initiative. The creation of ICO2 was announced at a workshop held at the COP 15 meeting in Copenhagen, and the Exchange’s first portfolio was launched at the COP 16 meeting held in Cancun in late 2010. The ICO2 Index is the result of a partnership between BM&FBOVESPA and the Brazilian Development Bank (BNDES) and its creation relied on the support of an international consulting firm specialized in sustainability. Before this initiative was launched, only 30% of IBrX-50 public reported their emissions, today almost 80% reports its emission. This means a great progress by the companies with regard to the internal carbon management. The main goal of the ICO2 Index is to measure the return of a theoretical portfolio consisting of shares from IBrX-50 companies which adhere to the ICO2 weighted by its free float factor and by those companies’ emissions ratio. In 2014, 31 companies participated in the ICO2 process. With regard to the methodology for calculating the ICO2 Index, it is worth mentioning that BM&FBOVESPA held a public hearing before its official launch in February of 2010. It should be noted that this methodology is not a static process and each year the Company will assess, together with BNDES, the minimum requirements related to GHG emissions inventories to be provided by participating companies. The minimum emission sources comprised by the initiative are gradually expanded, inducing participating companies to upgrade the quality and completeness of their inventories. ICO2 is managed by the BlackRock Company in the iShares Carbon Efficient Index Brasil Index Fund, an Exchange Traded Funds (ETF), which seeks to obtain returns on investments that correspond, in general, to the performance, before fees and expenses, all companies of Carbon Efficient Index. By using this approach BM&FBOVESPA hopes to prepare participating companies for the competitive environment in a low carbon economy and the Climate Change Dimension of the Corporate Sustainability Index (ISE) and the ICO2 are encouraging the emissions inventories’ development and disclosure, as well as emissions reductions. BM&FBOVESPA also hopes to provide the

market with transparent information on emissions from Brazilian companies by creating investment opportunities for investors who are sensitive to climate issues.

### 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	4	0
To be implemented*	1	0
Implementation commenced*	0	0
Implemented*	5	1324.87
Not to be implemented		

### 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	Construction of a new data center: the facility is certified to the US Green Building Council's sustainable building standard LEED (Leadership in Energy and Environmental Design) and has sustainable	1324.2	Scope 2	Voluntary	2033835	23130000		11-15 years	Estimated Energy and Emissions savings were calculated on ASHRAE 90.1 -2007 baseline. The invested value covers investments in technology infrastructure and IT resources, including not only the constructio

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
	Equipment such as very high energy efficient generators and chillers.								Part of the new data center, but also other projects as for example, the new integrated clearinghouse. Therefore, it was not possible to calculate the payback period since the monetary saving refers only to the data center.
Energy efficiency: Buildings services	Replacement of fluorescent bulbs at the mezzanine of Rua XV de Novembro site.	0.56	Scope 2	Voluntary	100000	354000	4-10 years	6-10 years	The investment of R\$ 354,000.00 refers to an estimated cost of the complete project of fluorescent bulbs replacement to LEDs. The CO2 savings are a result of a test phase implementation, that took place in 2014, but the major replacements are still on a planning and investigation stage. Annual monetary savings

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
									were also estimated based on the whole project.
Energy efficiency: Building services	Installation of automatic lighting at Libero Badaró site. The system is programmed to switch on and off at a certain time for power savings.	0.11	Scope 2	Voluntary	2000	2000	<1 year	6-10 years	
Energy efficiency: Building services	Use of passenger detectors on the escalator at Praça Antonio Prado building to switch the equipment into "intermittent", "stand-by" or "sleep" modes. This enables energy consumption reduction.	0	Scope 2	Voluntary	0	0	<1 year	16-20 years	The detectors were already part of the equipment but weren't activated, what explains zero investment. There could be GHG and monetary savings if data were measured or estimated. Considering that there isn't available data, an assumption of zero savings was undertaken as a conservative approach.

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	Extension of the campaign deactivate elevators during off-peak hours	0	Scope 2	Voluntary	0	0	<1 year	Ongoing	There could be GHG and monetary savings if data were measured or estimated. Considering that there isn't available data, an assumption of zero savings was undertaken as a conservative approach.

### CC3.3c

What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for other emissions reduction activities	Funds come from the Sustainability, Administrative and IT areas through annual budget allocations.
Other	Dedicated budget for infrastructure modernization: Funds come from the Building Administration Area through annual budget allocations.

### 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
In voluntary	Complete	The whole document related to climate change: <a href="http://www.bmfbovespa.com.br/pt-br/a-bmfbovespa/download/Inventario-de-GEE-2014.pdf">http://www.bmfbovespa.com.br/pt-br/a-bmfbovespa/download/Inventario-de-GEE-2014.pdf</a>	<a href="https://www.cdp.net/sites/2015/35/22735/Climate%20Change%202015/Shared">https://www.cdp.net/sites/2015/35/22735/Climate Change 2015/Shared</a>

Publicati on	Statu s	Page/Section reference	Attach the document
communi cations			Documents/Attachments/C C4.1/CC4.1_1.pdf
In mainstre am financial reports in accordan ce with the CDSB Framewo rk	Unde rway - previ ous year attac hed	Pages 70 to 73 - <a href="http://ir.bmfbovespa.com.br/enu/2301/RA2014_Ingles.pdf">http://ir.bmfbovespa.com.br/enu/2301/RA2014_Ingles.pdf</a>	<a href="https://www.cdp.net/sites/2015/35/22735/ClimateChange2015/SharedDocuments/Attachments/C4.1/CC4.1_2.pdf">https://www.cdp.net/sites/2015/35/22735/ClimateChange2015/SharedDocuments/Attachments/C4.1/CC4.1_2.pdf</a>
In voluntary communi cations	Unde rway - previ ous year attac hed	Page 1 - <a href="http://www.bmfbovespa.com.br/Indices/ResumoEmisaoGEE.aspx?Indice=ICO2&amp;idioma=pt-br">http://www.bmfbovespa.com.br/Indices/ResumoEmisaoGEE.aspx?Indice=ICO2&amp;idioma=pt-br</a>	<a href="https://www.cdp.net/sites/2015/35/22735/ClimateChange2015/SharedDocuments/Attachments/C4.1/CC4.1_3.jpg">https://www.cdp.net/sites/2015/35/22735/ClimateChange2015/SharedDocuments/Attachments/C4.1/CC4.1_3.jpg</a>
In voluntary communi cations	Unde rway - previ ous year attac hed	Page 1 - <a href="https://registropublicoemissoes.com.br/index.php/participante/11">https://registropublicoemissoes.com.br/index.php/participante/11</a>	<a href="https://www.cdp.net/sites/2015/35/22735/ClimateChange2015/SharedDocuments/Attachments/C4.1/CC4.1_4.pdf">https://www.cdp.net/sites/2015/35/22735/ClimateChange2015/SharedDocuments/Attachments/C4.1/CC4.1_4.pdf</a>
In voluntary communi cations	Unde rway - previ ous year attac hed	Page 1 - <a href="http://www.sseinitiative.org/fact-sheet/bovespa/">http://www.sseinitiative.org/fact-sheet/bovespa/</a>	<a href="https://www.cdp.net/sites/2015/35/22735/ClimateChange2015/SharedDocuments/Attachments/C4.1/CC4.1_5.pdf">https://www.cdp.net/sites/2015/35/22735/ClimateChange2015/SharedDocuments/Attachments/C4.1/CC4.1_5.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
Fuel/energy taxes and regulations	In Brazil energy and water rates are controlled by the government. About 70% of the energy supply of the country is based on hydroelectric, a low cost and clean energy source, but also risky considering climate change effects of extreme precipitation and droughts. Mandatory rationing of energy and water, higher costs or lack of supply could affect the continuity of business, especially if there isn't appropriate contingency strategies in place.	Increased operational cost	>6 years	Direct	Very likely	High	According to BM&FBO VESPA Risk Analysis Matrix this is a high impact risk. The company methodology determines the impact based on qualitative and quantitative criteria.	After risk identification, classification and prioritization, BM&FBO VESPA has put more than 50 action plans from immediate to long term conclusion, to ensure the best answer to the water and energy crisis. Energy reduction activities include the construction of a new datacenter, replacement of fluorescent with LED bulbs, automatic lightning, reduction of air-conditioning working hours and flexibility of dress code to allow lighter clothing. Regarding water use optimization, the initiatives include	Fifty action plans that were designed to allow a lower water and energy consumption and prepare the company for the lack and cost increase of these resources. They represent a cost of R\$500.814 in investments of capital acquisition and R\$494.532 related to operational costs, such as maintenance and consumable costs.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								the inspection on the circuit of pipes to identify and fix leakages, adjustments of the flushing time, rainwater and air conditioning condensed water collection, deactivation of useless taps, placing of tap aerators, as well as campaigns for employee awareness. Besides the economy measures, a contingency plan was developed and an alternative service was contracted to ensure supply if the crisis gets worse.	
International agreements	This consideration is based on risk analysis of BM&FBOV ESPA's trades in	Reduced demand for goods/services	>6 years	Indirect (Client)	About as likely as not	Medium	In this preliminary analysis, regulatory risks from climate change are	Through an analysis of the companies listed on the Exchange, we could	The methods for managing regulatory risks described entail



Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>congruence with the likely political and regulatory developments of impacts of climate change on the global market, if a new commitment period under the Kyoto Protocol is agreed upon between the parties whereby the Annex II countries set goals to reduce GHG emissions and are under commitment. An eventual imposition of regulatory targets for emissions reduction may result in changing the competitiveness of the domestic market against the international market, as such measures would lead to higher costs in the operations of the companies affected,</p>						<p>considered indirect. Given this, there is a complexity in anticipating the potential financial implications of the risk listed.</p>	<p>identify companies in critical sectors as regards climate change i.e. agribusiness, energy, mining, steel and oil and gas. Therefore, one of the regulatory risk management methods focuses on monitoring of laws and national and international agreements involving regulatory measures that might eventually focus on two main issues: emissions taxation and/or creation of a cap-and-trade market which might or might not be tied to binding reduction targets. Another method used by the Exchange</p>	<p>a cost to the company. However, since they were not developed exclusively for risk mitigation, they are still difficult to quantify.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and could eventually have some sort of impact on the value and liquidity of their shares.							is the development of products, events and availability of materials related to climate change to familiarize its customers and prepare them for possible laws and/or agreements. As an example of this, we can mention the ICO2 and ISE indexes, several published educational materials, workshops, and direct interaction with government agencies. Moreover, at the present moment, the Legal department is responsible for monitoring the regulations that might affect the company and form work	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								groups amongst the involved areas to define actions that might be needed to be compliant to the rules. The compliance department is responsible to assess in all the regulatory spheres those rules that might not have been identified as applicable for BM&FBO VESPA within the regulatory framework available, and take actions on those that the company is not adherent.	
Carbon taxes	This consideration is based on risk analysis of BM&FBO VESPA's trades in congruence with the likely political	Reduced demand for goods/services	3 to 6 years	Indirect (Client)	About as likely as not	Medium	In this preliminary analysis, regulatory risks from climate change are considered indirect. Given this, there	Through an analysis of the companies listed on the Exchange, we could identify companies in critical	The methods for managing regulatory risks described entail a cost to the company.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>and regulatory developments of impacts of climate change on the global market. On a national scale, a trend is observed toward carbon pricing through various mechanisms, with a clearer interest in market pricing mechanisms either on a state or national level. However, in the case of São Paulo State, which boasts the largest concentration of companies in Brazil, public fees and taxes are mentioned as viable options for carbon pricing. Law No. 13.798 enacted in São Paulo State, which sets forth the State Policy on Climate Change, stipulates:</p>						<p>is a complexity in anticipating the potential financial implications of the risk listed.</p>	<p>sectors as regards climate change i.e. agribusiness, energy, mining, steel and oil and gas. Therefore, one of the regulatory risk management methods focuses on monitoring of laws and national and international agreements involving regulatory measures that might eventually focus on two main issues: emissions taxation and/or creation of a cap-and-trade market which might or might not be tied to binding reduction targets. Another method used by the Exchange is the development of products,</p>	<p>However, since they were not developed exclusively for risk mitigation, they are still difficult to quantify.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Article 22 – For the purpose of this Act, the Executive Power shall: II - Set public fees, tariffs, taxes and other types of charges for business activities releasing greenhouse gases. An eventual imposition of regulatory government fees and taxes on GHG emissions may result in changing the competitiveness of the domestic market against the international market, as such measures would lead to higher costs in the operations of the companies affected, and could eventually have some sort of impact on the value and liquidity of their shares.</p>							<p>events and availability of materials related to climate change to familiarize its customers and prepare them for possible laws and/or agreements. As an example of this, we can cite the ICO2 and ISE indexes, several published educational materials, workshops, and direct interaction with government agencies. Moreover, at the present moment, the Legal department is responsible for monitoring the regulations that might affect the company and form work groups amongst the involved areas to</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								define actions that might be needed to be compliant to the rules. The compliance department is responsible to assess in all the regulatory spheres those rules that might not have been identified as applicable for BM&FBO VESPA within the regulatory framework available, and take actions on those that the company is not adherent.	
Cap and trade schemes	This consideration is based on risk and trades in congruence with the likely political and regulatory developments of impacts of climate change on the global	Reduced demand for goods/services	3 to 6 years	Indirect (Client)	About as likely as not	Medium	In this preliminary analysis, regulatory risks from climate change are considered indirect. Given this, there is a complexity in anticipating the	Through an analysis of the companies listed on the Exchange, we could identify companies in critical sectors as regards climate change i.e.	The methods for managing regulatory risks described entail a cost to the company. However, since they were not

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>market. On a national scale, a trend is observed toward carbon pricing through various mechanisms, with a clear interest in evaluating the feasibility of market pricing mechanisms either on a state or national level. These markets are necessarily tied to a binding target, as stipulated in São Paulo State laws and in the national Law No. 12.187/2009 - National Policy on Climate Change (PNMC), although the obligation of a national target is still under debate. An eventual imposition of regulatory targets for emissions reduction may result</p>						<p>potential financial implications of the risk listed.</p>	<p>agribusiness, energy, mining, steel and oil and gas. Therefore, one of the regulatory risk management methods focuses on monitoring of laws and national and international agreements involving regulatory measures that might eventually focus on two main issues: emissions taxation and/or creation of a cap-and-trade market which might or might not be tied to binding reduction targets. Another method used by the Exchange is the development of products, events and availability of materials</p>	<p>developed exclusively for risk mitigation, they are still difficult to quantify.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>in changing the competitiveness of the domestic market against the international market, if not well implemented. In that case, measures could lead to higher costs in the operations of the companies affected, and could eventually have some sort of impact on the value and liquidity of their shares.</p>							<p>related to climate change to familiarize its customers and prepare them for possible laws and/or agreements. As an example of this, we can cite the ICO2 and ISE indexes, several published educational materials, workshops, and direct interaction with government agencies. Moreover, at the present moment, the Legal department is responsible for monitoring the regulations that might affect the company and form work groups amongst the involved areas to define actions that might be needed to</p>	



Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								be compliant to the rules. The compliance department is responsible to assess in all the regulatory spheres those rules that might not have been identified as applicable for BM&FBO VESPA within the regulatory framework available, and take actions on those that the company is not adherent.	

**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
Induced changes in natural resources	Shortage of natural resources affecting BM&FBOV ESPA's critical operations: The reduction of available	Inability to do business	>6 years	Direct	Very likely	High	According to BM&FBOvespa Risk Analysis Matrix this is a high impact risk. The company methodology	The Business Continuity Committee created a Water Crisis Working Group with the task to measure	The 50 action plans represent a cost of R\$500.814 in investments of capital acquisition

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>natural resources such as energy and water is a climate change effect due to extreme droughts and precipitation significant variations. Mandatory rationing or lack of supply of energy and water could affect the continuity of business, especially if there isn't appropriate contingency strategies in place</p>						<p>determines the impact based on qualitative and quantitative criteria</p>	<p>the impact of the water crisis that Sao Paulo State is facing, on the operation of BM&amp;FBO VESPA and propose some measures to guarantee the sustainability of the business. Discussions of alternative supply sources and measures to reduce consumption are being conducted by this Group that comprise representatives of Engineering, Technology, Human Resources, Communication, Operations, Business Continuity, and Corporate Risk, which coordinates the work. After risk</p>	<p>on and R\$494.532 related to operational costs, such as maintenance and consumable costs.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>identification, classification and prioritization, BM&amp;FBO VESPA has put more than 50 action plans from immediate to long term conclusion, to ensure the best answer to the water and energy crisis. Regarding the optimization water use, the initiatives include the inspection on the circuit of pipes to identify and fix leakages, adjustments of the flushing time, rainwater and air conditioning condensed water collection, deactivation of useless taps, placing of tap aerators, as well as campaigns for employee</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								awareness. Besides the economy measures, a contingency plan was developed and an alternative service was contracted to ensure supply if the crisis gets worse. As a mitigation, the company is planning a study about the feasibility of drilling wells at two sites, to reduce the dependency on the local water utility company.	
Change in mean (average) temperature	This consideration is based on risk analysis of BM&FBOV ESPA's trades regarding the physical impacts of a change in the average temperature in Brazil on the	Reduced demand for goods/services	Unknown	Indirect (Client)	About as likely as not	Medium-high	Since this is an indirect risk and the uncertainties involved are large, it becomes very difficult to estimate quantitatively the potential financial implications for the company.	Among the tools the agribusiness sector, that participate in the Exchange, could use to mitigate or adapt to the risks related to price fluctuation	The risk management methods for climate events described above entail a cost to the company, but it is very difficult to

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	country's agriculture and consequently on the commodities trading market. The main agricultural commodities traded on BM&FBOV ESPA are Coffee, Corn, Soybean, Live Cattle and Ethanol. It should be noted that these commodities are from the agricultural sector, which is very likely to be affected by physical events of climate change. Therefore, the impacts may influence the price of such commodities and eventually increase the demand for the risk management instruments traded on the Exchange.						This consideration is based on risk analysis of BM&FBOV ESPA's trades regarding the possible physical impacts of a climate change on the commodities trading market.	are the hedging transactions (i.e. price setting) through derivatives contracts. In this respect, BM&FBOV ESPA offers agribusiness market participants the possibility to trade futures and options contracts.	estimate.
Change in mean (average)	This consideration is based on	Reduced demand for	Unknown	Indirect (Client)	About as likely as not	Medium-high	Since this is an indirect risk and	Among the tools the agribusiness	The risk management method

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
ge) precipitation	risk analysis of BM&FBOV ESPA's trades regarding the physical impacts of a change in the average rainfall in Brazil on the country's agriculture and consequently on the commodities trading market. The main agricultural commodities traded on BM&FBOV ESPA are Coffee, Corn, Soybean, Live Cattle and Ethanol. It should be noted that these commodities are from the agricultural sector, which is very likely to be affected by physical events of climate change. Therefore, the impacts may influence the price of such commodities and eventually	goods/services					the uncertainties involved are large, it becomes very difficult to estimate quantitatively the potential financial implications for the company. This consideration is based on risk analysis of BM&FBOV ESPA's trades regarding the possible physical impacts of a climate change on the commodities trading market.	ess sector, that participate in the Exchange, could use to mitigate or adapt to the risks related to price fluctuations are the hedging transactions (i.e. price setting) through derivatives contracts. In this respect, BM&FBOV ESPA offers agribusiness market participants the possibility to trade futures and options contracts.	s for climate events described above entail a cost to the company, but it is very difficult to estimate.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	increase the demand for the risk management instruments traded on the Exchange.								
Change in precipitation pattern	This consideration is based on risk analysis of BM&FBOV ESPA's trades regarding the physical impacts of a change in the average rainfall in Brazil on the country's agriculture and consequently on the commodities trading market. The main agricultural commodities traded on BM&FBOV ESPA are Coffee, Corn, Soybean, Live Cattle and Ethanol. It should be noted that these commodities are from the agricultural sector, which is very likely to be	Reduced demand for goods/services	Unknown	Indirect (Client)	About as likely as not	Medium-high	Since this is an indirect risk and the uncertainties involved are large, it becomes very difficult to estimate quantitatively the potential financial implications for the company. This consideration is based on risk analysis of BM&FBOV ESPA's trades regarding the possible physical impacts of a climate change on the commodities trading market.	Among the tools the agribusiness sector, that participate in the Exchange, could use to mitigate or adapt to the risks related to price fluctuations are the hedging transactions (i.e. price setting) through derivatives contracts. In this respect, BM&FBOV ESPA offers agribusiness market participants the possibility to trade futures and options contracts	The risk management methods for climate events described above entail a cost to the company, but it is very difficult to estimate.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	affected by physical events of climate change. Therefore, the impacts may influence the price of such commodities and eventually increase the demand for the risk management instruments traded on the Exchange.								

**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
Changing consumer behaviour	This risk arises from the influence of climate change impacts on the cultural transformation of citizens and society. This perspective is reaffirmed through surveys and by popular	Reduced demand for goods/services	3 to 6 years	Direct	About as likely as not	Medium-high	The financial impact of this risk is difficult to measure, since it is related to social behaviour, namely, an intangible value. To make a quantitative	In order to manage this risk, BM&FBOV ESPA has an active and engaging position through the creation of sustainably focused products and services, such as the Corporate Sustainability Index	This risk arises from the influence of climate change impacts on the cultural transformation of citizens and society. Risk management methods from changing customer



Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>demand from those participating in the last COP Meetings. Therefore, there are risks associated with certain aspects of the market through socially and environmentally responsible choices and attitudes of institutions.</p>						<p>estimate the adoption of several assumptions would be required and it would not accurately reflect the reality. In fact, changes in consumption pattern and behaviour should bring about – and this has already been taking place – an updating of listed companies as old businesses may disappear and new businesses may emerge and join the Exchange.</p>	<p>(ISE) and the Carbon Efficient Index (ICO2). Besides that, the BM&amp;FBOV ESPA Institute of Education (IE), created in 1987, offers courses and trainings for the stakeholders – specially the investors and professionals that wants to work at the financial and capital market, which includes sustainability modules in some of them. The IE majored more than 50 thousand of students directly and attended more than 4 million on its programs of financial education for the capital market, which makes the Institute a reference in the</p>	<p>habits as described above entail a cost to the company, but it is very difficult to estimate.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								financial segment. Also, the IE offers professional certificates solutions and in company programs, elaborated in a personalized way in accordance with the need of the client.	

**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 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
International agreements	BM&FBOV ESPA identifies that its main opportunity arising from climate change regulations	New products/ business services	3 to 6 years	Direct	About as likely as not	Medium	These are opportunities whose potential financial implications	Within the Carbon Market institution alization process, in 2010, BM&FBO VESPA, in	The methods identified to make use of the opportunities

Opportunity driver	Description	Potential impact	Time frame	Direct/indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>is available through the institutionalization of the Carbon Market and other environmental asset-related markets/instruments, which in the long term can bring financial gains to the institution if Brazil and Brazilian companies set some kind of target for GHG emissions reduction.</p>						<p>tions are difficult to measure, since they are related to an intangible value, namely, international agreements. To make a quantitative estimate, the adoption of several assumptions would be required and it would not necessarily reflect the reality.</p>	<p>partnership with the World Bank and FINEP - Brazilian Studies and Projects Financing Agency, organized a program involving studies on the carbon market as well as training seminars for market agents and dissemination of the carbon market. In 2011, BM&amp;FBO VESPA partnered with Interamerican Bank (IDB) in order to coordinate a study related to pre-compliance market in Brazil. Another initiative undertaken by BM&amp;FBO VESPA is the creation of a carbon auction platform, which also includes</p>	<p>arising from climate change regulations do lead to an increase in the internal costs to the company, but it is very difficult to quantify.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								the so-called voluntary or non-regulated market, in which the regulated market framework can be used to create and structure the market for buying and selling emission reduction certifications outside the Kyoto Protocol protocols.	
Cap and trade schemes	BM&FBOV ESPA identifies that its main opportunity arising from climate change regulations is available through the institutionalization of the Carbon Market and other environmental asset-related markets/instruments, which in the long term can bring financial gains to the institution if Brazil and Brazilian companies	New products/business services	3 to 6 years	Direct	About as likely as not	Medium	These are opportunities whose potential financial implications are difficult to measure, since they are related to an intangible value, namely Cap and trade schemes. To make a	Within the Carbon Market institutionalization process, in 2010, BM&FBOV ESPA, in partnership with the World Bank and FINEP - Brazilian Studies and Projects Financing Agency, organized a program involving studies on the carbon market as well as training	The methods identified to make use of the opportunities arising from climate change regulations do lead to an increase in the internal costs to the company, but it is very difficult to quantify.

Opportunity driver	Description	Potential impact	Time frame	Direct/indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>set some kind of target for GHG emissions reduction. On a national scale, a trend is observed towards carbon pricing through various mechanisms, with a clearer interest in market pricing mechanisms either on a state or national level. These markets are necessarily tied to a binding target, as stipulated in São Paulo State laws and in the National Policy on Climate Change (PNMC), although a mandatory national target is still under debate.</p>						<p>quantitative estimate, the adoption of several assumptions would be required and it would not necessarily reflect the reality.</p>	<p>seminars for market agents and dissemination of the carbon market. In 2011, BM&amp;FBO VESPA partnered with Interamerican Bank (IDB) in order to coordinate a study related to pre-compliance market in Brazil. Another initiative undertaken by BM&amp;FBO VESPA is the creation of a carbon auction platform, which also includes the so-called voluntary or non-regulated market, in which the regulated market framework can be used to create and structure the market for buying and selling emission</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								reduction certifications outside the Kyoto Protocol protocols.	

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	BM&FBO VESPA identifies that another opportunity related to climate change stems from its reputation, especially as regards its position and engagement role in the dissemination of concepts related to the climate change issue, involving companies and consequently the market.	New products/business services	3 to 6 years	Direct	About as likely as not	Medium	These are opportunities whose potential financial implications are difficult to measure, since they are related to an intangible value, namely, social behaviour and a corporation's reputation. To make a quantitative estimate, the	BM&FBOVESPA believes that an opportunity to address climate change comes with its role of a sustainability booster, as it was the 1st exchange in the world to be a Global Compact signatory and the 1st in emerging markets to sign up to the Principles for Responsible Investment (PRI), a UN initiative covering large asset managers and other financial agents. In addition of inspiring investors to join the PRI, the exchange also suggests that listed companies on its equity segments report on socio-environmental issues.	The methods identified to make use of those opportunities do lead to an increase in the internal costs to the company, but it is very difficult to quantify.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>adoption of several assumptions would be required and it would not necessarily reflect the reality</p>	<p>BM&amp;FBOVESPA also belongs as a founding member to the Sustainable Stock Exchanges (SSE), which fosters a sustainability agenda among exchanges and listed companies worldwide and is a member of the Sustainable Working Group (SWG) at the World Federation of Exchanges, which aims to address ESG concerns and tries and to build consensus among its members. Furthermore, BM &amp;FBOVESPA launches its Annual Report according to GRI guidelines covering both financial and non-financial data in one report, encouraging listed companies to do as well and analysts and investors to include ESG issues when assessing share prices. In line with the integrating reporting international trend, in 2014 the "Report or Explain" previously focused on Sustainability Reports, had its scope expanded</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								to Integrated Reports. BM&FBOVEPA fosters the International Integrated Reporting Council (IIRC) with support dating back to the trend's start, when BM&FBOVESPA hosted a visit of its board to Brazil, in 2011.	
Changing consumer behaviour	This opportunity arises from the influence of climate change impacts on the cultural transformation of citizens and society. This perspective is reaffirmed through surveys and by popular demand from those participating in the last three COP Meetings (COP-15, COP-16, COP-17 and COP-18). Therefore, there are opportunities associated with	Increased demand for existing products/ services	Unknown	Direct	About as likely as not	Medium-high	These are opportunities whose potential financial implications are difficult to measure, since they are related to an intangible value, namely, social behaviour and a corporation's reputation. To make a quantitative estimate, the adoption of several assumptions	BM&FBOVESPA identifies that an opportunity to address climate change stems from its position and engaging role in the dissemination of sustainable concepts involving companies and consequently the market. The environmental indexes created by BM&FBOVESPA are: Corporate Sustainability Index – ISE and Carbon Efficient Index - ICO2. Besides that, the BM&FBOVESPA Institute of Education (IE), created in 1987, offers courses and trainings for the stakeholders – specially the investors and professionals that work at the financial and capital market, which includes sustainably modules in some of them. The IE	The methods identified to make use of those opportunities do lead to an increase in the internal costs to the company, but it is very difficult to quantify.



Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	certain aspects of the market through socially and environmentally responsible choices and attitudes of institutions.						would be required and it would not necessarily reflect the reality.	major more than 50 thousand of students directly and attended more than 4 million on its programs of financial education for the capital market, which makes the Institute a reference in the financial segment. Also, the IE offers professional certificates solutions and in company programs, elaborated in a personalized way in accordance with the need of the client.	

#### CC6.1e

**Please explain why you do not consider your company to be exposed to inherent opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure**

Climate events such as fluctuations in temperature, heavy rains and droughts are some of the factors that can affect the harvesting each year and consequently the market price of agricultural commodities. The main agricultural commodities traded on BM&FBOVESPA are Coffee, Corn, Soybean, Live Cattle and Ethanol. It should be noted that these commodities are from the agricultural sector, which is very likely to be affected by physical events of climate change. Therefore, the negative impacts may influence the price of such commodities and eventually increase the demand for the risk management instruments traded on the Exchange. Furthermore, the Exchange launched the trading of hydrated ethanol and soybean contracts with cash settlement in May 2010 and January 2011 respectively.

BM&FBOVESPA do recognise that opportunities can also exist, since the expected changes in the climate could lead to an increase in productivity but they're estimated to be minor for the mentioned commodities.

Among the tools that the agribusiness sector adopts to prevent risks related to price fluctuation, the hedging transactions (i.e. price setting) is an important one, through the derivatives contracts. In this respect, BM&FBOVESPA offers agribusiness market participants the possibility to trade futures and options contracts. This is not considered as an opportunity, but as a risk to be managed.

#### Further Information

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

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	155.57
Scope 2	Wed 01 Jan 2014 - Wed 31 Dec 2014	1024.1

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
Brazil GHG Protocol Programme
Defra Voluntary Reporting Guidelines
IPCC Guidelines for National Greenhouse Gas Inventories, 2006
ISO 14064-1
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
Other
Other

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

Brazilian Energy Balance - Year 2013 – published by the Energy & Mining Ministry and Energy Research Company;  
MCTI – Science, Technology and Innovation Ministry

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)
HFCs	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

## Attachments

[https://www.cdp.net/sites/2015/35/22735/Climate\\_Change\\_2015/Shared\\_Documents/Attachments/ClimateChange2015/CC7.EmissionsMethodology/CC7.4.pdf](https://www.cdp.net/sites/2015/35/22735/Climate_Change_2015/Shared_Documents/Attachments/ClimateChange2015/CC7.EmissionsMethodology/CC7.4.pdf)

**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**

221.64

### CC8.3

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

3280.94

### 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**

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	Less than or equal to 2%	Assumptions	Most activity data were obtained from accurate sources.
Scope 2	More than 2% but less than or equal to 5%	Data Gaps Extrapolation	Most activity data were obtained from accurate sources. There is no available data for the electricity consumption at the international offices. Therefore, the energy consumption was estimated.

### 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 (%)
Reasonable assurance	<a href="https://www.cdp.net/sites/2015/35/22735/Climate%20Change%202015/Shared%20Documents/Attachments/CC8.6a/CC8.6%20-%20CC8.7%20-%20CC14.2.zip">https://www.cdp.net/sites/2015/35/22735/Climate Change 2015/Shared Documents/Attachments/CC8.6a/CC8.6 - CC8.7 - CC14.2.zip</a>	Whole document	Other: ABNT NBR ISO14064-3:2007 / Brazilian GHG Protocol Programme Specifications Verification - 2011 Edition / Brazilian GHG Protocol Programme Specifications - 2nd Edition	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 (%)
Reasonable assurance	<a href="https://www.cdp.net/sites/2015/35/22735/Climate%20Change%202015/Shared%20Documents/Attachments/CC8.7a/CC8.6%20-%20CC8.7%20-%20CC14.2.zip">https://www.cdp.net/sites/2015/35/22735/Climate Change 2015/Shared Documents/Attachments/CC8.7a/CC8.6 - CC8.7 - CC14.2.zip</a>	Whole document	Other: ABNT NBR ISO14064-3:2007 / Brazil GHG Protocol Programme Specifications Verification - 2011 Edition / Brazil GHG Protocol Programme	100

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
			Specifications – 2nd Edition.	

**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?

Yes

**CC8.9a**

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

435.40

**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?

No

**CC9.2**

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By GHG type

**CC9.2c**

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	43.34
CH4	0.16
N2O	0.30
HFCs	177.85

**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)
Brazil	3263.61	23904.72	0
China	7.47	9.78	0
United Kingdom	4.83	9.78	0
United States of America	4.92	9.78	0

**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	414.46
Electricity	23706.76
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
Motor gasoline	13.52
Natural gas	31.87
Biodiesels	17.96
Diesel/Gas oil	320.06
Liquefied petroleum gas (LPG)	18.79
Other: Ethanol	12.26

### 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	None

### 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			
Divestment			

Reason	Emissions value (percentage)	Direction of change	Comment
Acquisitions			
Mergers			
Change in output			
Change in methodology			
Change in boundary			
Change in physical operating conditions	21	Decrease	Decrease in scope1. Comparing the year 2014 to 2013, there was a significant decrease of scope 1 emissions. This is a result of lower fugitive emissions due to refrigerants replacement reduction in 2014. Since the recharge of air conditioning and other cooling equipment is not constant over time, it can vary between years, depending on usage demand of the equipment.
Unidentified			
Other	35	Increase	Scope 2 increase. This significant increase in BM&FBOVESPA Scope 2 emissions was not a result of higher energy consumption, which in fact had a 4 % of reduction. It is actually related to the increase of the power CO2e emission factor of the Brazilian Grid (National Interconnected System) due to higher thermal power usage. When hydro plants are not sufficient to meet the demand, more thermal power plants need to be activated. This was intensified in 2014 because of the water crisis that took place in some of Brazilian states where water reservoirs for power generation are located.

## 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
0.001559	metric tonnes CO2e	unit total revenue	36	Increase	This upward trend is mainly related to higher Scope 2 emissions. They represent almost 95% of the total "scope 1 plus scope 2" and impacted on approximately a 30% increase of this group of emissions. Although the company achieved a 4 % reduction on its power consumption, the CO2 emission factor of the Brazilian Grid (National Interconnected System - SIN) increased in 41 % due to a higher use of thermoelectric power during the year. When hydro plants are not sufficient to meet the demand, more thermal power plants are activated. This was intensified in 2014 because of the water crisis that took place in some of Brazilian



Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
					states where water reservoirs for power generation are located. A minor driver for the figure increase was the revenue's decrease of 5%. When the denominator is lower, the result of the fraction will get higher. Important to mention that when scope 3 is accounted the total emissions remained almost stable (1% upward) and a 35% decrease on scope 3 itself was calculated.

### CC12.3

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO<sub>2</sub>e 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
1.444315	metric tonnes CO <sub>2</sub> e	FTE employee	41	Increase	This increase is mainly related to higher Scope 2 emissions. They represent almost 95% of the total "scope 1 plus scope 2" and impacted on approximately a 30% increase of this group of emissions. Although the company achieved a 4 % reduction on its power consumption, the CO <sub>2</sub> emission factor of the Brazilian Grid (National Interconnected System - SIN) increased in 41 % due to a higher use of thermoelectric power during the year. When hydro plants are not sufficient to meet the demand, more thermal power plants are activated. This was intensified in 2014 because of the water crisis that took place in some of Brazilian states where water reservoirs for power generation are located. Another minor driver was a 9% decrease on the total employee number. A lower denominator interferes on a higher fraction result. Important to mention that when scope 3 is accounted the total emissions remained almost stable (1% upward) and a 35% decrease on scope 3 itself was calculated.

### 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
0.001937	metric tonnes CO2e	Other: Traded amount in R\$ million - BRL (Bovespa segment)	32	Increase	This increase is mainly related to higher Scope 2 emissions. They represent almost 95% of the total "scope 1 plus scope 2" and impacted on approximately a 30% increase of this group of emissions. Although the company achieved a 4 % reduction on its power consumption, the CO2 emission factor of the Brazilian Grid (National Interconnected System - SIN) increased in 41 % due to a higher use of thermoelectric power during the year. When hydro plants are not sufficient to meet the demand, more thermal power plants are activated. This was intensified in 2014 because of the water crisis that took place in some of Brazilian states where water reservoirs for power generation are located. The average daily traded amount remained stable with only a 2% decrease, what doesn't significantly affect this indicator. Important to mention that when scope 3 is accounted the total emissions remained almost stable (1% upward) and a 35% decrease on scope 3 itself was calculated.
0.005468	metric tonnes CO2e	Other: Traded amount in thousand number of contracts (BM&F segment)	42	Increase	This increase is mainly related to higher Scope 2 emissions. They represent almost 95% of the total "scope 1 plus scope 2" and impacted on approximately a 30% increase of this group of emissions. Although the company achieved a 4 % reduction on its power consumption, the CO2 emission factor of the Brazilian Grid (National Interconnected System - SIN) increased in 41 % due to a higher use of thermoelectric power during the year. When hydro plants are not sufficient to meet the demand, more thermal power plants are activated. This was intensified in 2014 because of the water crisis that took place in some of Brazilian states where water reservoirs for power generation are located. Another minor driver was a 9% decrease on the daily average of traded

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
					contracts traded in the segment BM&F. A lower denominator interferes on a higher fraction result. Important to mention that when scope 3 is accounted the total emissions remained almost stable (1% upward) and a 35% decrease on scope 3 itself was calculated.

#### 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?

Yes

#### CC13.2a

##### Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit Purchase	Hydro	Celtins and Cemmat Grid Connection of Isolated Systems	CDM (Clean Development Mechanism)	4727	4727	Not relevant	Voluntary Offsetting
Credit Purchase	Hydro	Garganta da Jararaca Small - Hydroelectric Power Plant	CDM (Clean Development Mechanism)	131	131	Not relevant	Voluntary Offsetting

Credit originatio n or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit Purchase	Biomass energy	Santa Adélia Thermoelectric plant - Cogeneration Project	CDM (Clean Development Mechanism)	1	1	Not relevant	Voluntary Offsetting

#### 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	Not relevant, calculated	3.72	Emission factors according to IPCC.	100.00%	Emissions related to the motorcycle services purchased for document transportation
Capital goods	Not relevant, explanation provided				BM&FBOVESPA did not purchase or acquire any relevant capital goods in 2014.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not evaluated				
Upstream transportation and distribution	Not relevant, explanation provided				BM&FBOVESPA does not produce material goods. Therefore, the company doesn't purchase relevant raw materials quantities as an industry does, neither sells finished products to consumers.
Waste generated in operations	Not relevant, calculated	53.61	Emission factors according to IPCC.	100.00%	Emissions from the solid waste disposal in third party landfill.

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
Business travel	Relevant, calculated	735.27	Emission factors according to Defra, based on the number of airline tickets issued and the flight distances. For emissions from taxi, emission factors according to IPCC were used.	100.00%	Emissions from taxi use and air travel of BM&FBOVESPA employees.
Employee commuting	Relevant, calculated	607.61	All employees take the survey periodically to supply data regarding their commuting, such as distance, type of transportation used and frequency.	100.00%	Emissions from transport of employees from home to work.
Upstream leased assets	Not relevant, explanation provided				BM&FBOVESPA has not leased assets that can generate significant emissions.
Downstream transportation and distribution	Not relevant, explanation provided				Once BM&FBOVESPA is not a production unit (the exchange does not produce finished products or goods), there is no relevant emission related to the transportation of products sold.
Processing of sold products	Not relevant, explanation provided				Once BM&FBOVESPA is not a production unit (the exchange does not produce finished products or goods), there is no emission related to the sold products processing.
Use of sold products	Not relevant, explanation provided				Once BM&FBOVESPA is not a production unit (the exchange does not produce finished products or goods), there is no emission related to the use of sold products.
End of life treatment of sold products	Not relevant, explanation provided				Once BM&FBOVESPA is not a production unit (the exchange does not produce finished products or goods),

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
					there is no emission related to the sold products' end of life treatment.
Downstream leased assets	Not relevant, explanation provided				BM&FBOVESPA has not leased assets that can generate significant emissions.
Franchises	Not relevant, explanation provided				BM&FBOVESPA does not have franchise operations.
Investments	Not evaluated				
Other (upstream)	Not relevant, calculated	0	Emission factors according to IPCC.	100.00%	Fugitive emissions from air conditioning not controlled by BM&FBOVESPA. In 2014 there was no exchange of refrigerant gases in scope 3, so the reported value was zero.
Other (downstream)	Not relevant, explanation provided				No other downstream emissions were identified.

#### 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 (%)
Reasonable assurance	<a href="https://www.cdp.net/sites/2015/35/22735/Climate%20Change%202015/Shared%20Documents/Attachments/CC14.2a/CC8.6%20-%20CC8.7%20-%20CC14.2.zip">https://www.cdp.net/sites/2015/35/22735/Climate Change 2015/Shared Documents/Attachments/CC14.2a/CC8.6 - CC8.7 - CC14.2.zip</a>	Whole document	Other: ABNT NBR ISO14064-3:2007 / Brazil GHG Protocol	100

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of Scope 3 emissions verified (%)
			Programme Specifications Verification - 2011 Edition / Brazil GHG Protocol Programme Specifications – 2nd Edition.	

#### 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
Purchased goods & services	Other: Higher demand for services	41	Increase	This addition on category 1 emissions is a result of a growing demand of documents transportation by motorcycle deliveries hired by BM&FBOVESPA. Despite the high percentage, the difference between emission values of 2013 and 2014 is only 1 ton. It isn't relevant comparing with other categories of Scope 3, but low magnitude of the value ends up on a high comparison percentage.
Waste generated in operations	Other: Reduced staff	14	Decrease	The decrease of solid waste emissions was affected mainly because the lower number employees in 2014 than in 2013. This led to a reduction in the production of solid waste in BM&FBOVESPA's operation.
Business travel	Emissions reduction activities	34	Decrease	The reduction of business travel emissions was mainly affected by lower distances travelled on air trips. This is a consequence of BM&FBOVESPA's Sustainability Policy Action Plan of encouraging the use of long distance communication media and optimizing the displacement for international meetings and events. Another driver was the decrease of 9% on the total workforce of the Exchange from 2013 to 2014.

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Employee commuting	Other: Reduced staff	32	Decrease	The decrease of 9% on the total workforce in 2014 resulted in less kilometers travelled on commuting and thus lower emissions for the year.
Other (upstream)	Other: Non-existent equipment maintenance	100	Decrease	Fugitive emissions of scope 3 in 2014 were zero because of non-recharge of refrigerant gases in air conditioning equipment that are not controlled by BM&FBOVESPA. The lack of emissions for the year led to a 100% decrease.

#### 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

Yes, other partners in the value chain

#### CC14.4a

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

BM&FBOVESPA maintains mechanisms not only to ensure sustainability in its own business but also to foster corporate governance among market participants and other stakeholders, such as shareholders, brokerage houses, listed companies, government, investors, analysts and suppliers. Most of its initiatives are focused on listed companies, shareholders and investors due to their significant impact on social, environmental and economic issues and also to the Exchange's potential to influence their management practices. The company's stakeholder engagement include the use of the AA1000 corporate responsibility management standard, focusing on accounting, auditing and social/ethical reporting; educational campaigns; participations in associations; encouraging participation in socio-environmental initiatives such as the Environmental & Social Investment Exchange (BVSA); and regular meetings of its Advisory Committees, which was set up to build closer ties with the markets and formed by industry representatives.

More details of value chain-oriented initiatives are presented below:

-Report or Explain initiative - In 2012 BM&FBOVESPA launched this guidance recommending that listed companies should state in item 7.8 of the Reference Form report for CVM (Brazilian Securities and Exchange Commission) whether they publish a regular sustainability report, its location, or explain why they don't. After 4 years of inducing ESG transparency, "Report or Explain" has gained strength and as from 2016, listed companies will be required to inform if they publish socio-environmental information by the Regulator CVM.

-Sustainable Stock Exchanges (SSE) initiative: As a founding signatory of the UN's Sustainable Stock Exchanges (SSE) initiative, BM&FBOVESPA is strategically committed to the promotion of responsible long-term investment and non-financial reporting by listed companies. One highlight of 2014 was the development of a Model Guidance aimed to unify several sustainability guides around the world. Moreover, BM&FBOVESPA is also involved in the SSE initiative called "Communication to Stakeholders", which aims to engage capital market participants in a dialogue on responsible investment with the objective to communicate and explain each exchange's sustainability approach to encourage investors and companies on the theme, including their disclosure of climate change strategies and GHG emissions management.

-Carbon Efficient Index (ICO2) – Tracks the stocks of IBRX-50 companies that agree to participate and undertake to submit greenhouse gas inventory data for publication on the "In Good Company" website ([www.bmfbovespa.com.br/emboacompanhia](http://www.bmfbovespa.com.br/emboacompanhia)).

-Corporate Sustainability Index (ISE) – Tracks the return on a portfolio of stocks issued by companies with a recognized commitment to sustainability. Launched in 2005, the ISE has become a benchmark for sustainable management practices in Brazil and worldwide. To get into the portfolio, Companies must



complete a questionnaire split in 7 sustainability dimensions, including a climate change part.

-BM&FBOVESPA actively participates in the AMCHAM Sustainability Committee, an organization whose mission is to influence public policy in Brazil and in the United States, promoting trade, investment and corporate citizenship. The Exchange is also on the Sustainability Committee of FIESP - Federation of Industries from São Paulo and on the Social Responsibility & Sustainability Committee of FEBRABAN. Through the FEBRABAN Committee, BM&FBOVESPA supported a UNEP study called "Inquiry into the Design of a Sustainable Financial System: Policy Innovations for a Green Economy".

-PGOVE – State-owned Companies Corporate Governance Program: The Exchange is working on an initiative to improve corporate governance of state owned and mixed-capital (hybrid) enterprises. It will consider 3 main lines of action: greater transparency of information released to shareholders, implementation/improvement of internal controls and better mechanisms for selection, nomination and evaluation of directors. In terms of transparency, one of the proposals will be the disclosure of a sustainability report that includes information of the company's response to environmental risks such as climate change and is aligned with best corporate governance practices of long-term value and sustainability of business.

-The BM&FBOVESPA website (<http://www.bmfbovespa.com.br/pt-br/a-bmfbovespa/sustentabilidade.aspx?idioma=pt-br>): offers information on the Exchange's sustainability and social investment indicators and projects, engaging with investors, companies and brokerage houses to promote the sustainable development of the capital markets.

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#### Further Information

### Module: Sign Off

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#### Page: CC15. Sign Off

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#### 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
Sonia Aparecida Consiglio Favaretto	Sustainability Officer	Other: Sustainability Officer