Module: Introduction

Page: Introduction

CC0.1

Introduction
Please give a general description and introduction to your organization.

Comerica Incorporated (NYSE: CMA) is a financial services company headquartered in Dallas, Texas, and strategically aligned into three business segments: The Business Bank, The Retail Bank, and Wealth Management. The Business Bank provides companies of all sizes with an array of credit and non-credit financial products and services. The Retail Bank delivers personalized small business banking and financial products and services to consumers. Wealth Management serves the needs of high net worth clients and institutions. At 12/31/2015, Comerica had total assets of approximately $US 71.9 billion, total loans (net of unearned income) of approximately $US 49.1 billion, total deposits of approximately $US 59.9 billion, and 8,800 employees on a full time equivalents (FTE) basis. In addition to Texas, Comerica Bank is also located in Arizona, California, Florida and Michigan, with select businesses operating in several other states, as well as in Canada and Mexico. As of 12/31/2015, Comerica had 476 U.S. banking centers, with 214 in Michigan, 133 in Texas, 103 in California, 19 in Arizona, and 7 in Florida. To view additional information about Comerica, please visit our company website at www.comerica.com.

CC0.2

Reporting Year
Please state the start and end date of the year for which you are reporting data.
The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.
We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.
Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

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

CC0.3

Country list configuration

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

Select country

CC0.4

Currency selection

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

USD($)

CC0.6

Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.
If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

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

Further Information

Module: Management

Page: CC1. Governance

CC1.1

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

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

CC1.1a

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

The Enterprise Risk Committee (ERC) of the Board of Directors oversees the company's sustainability and climate change programs. This sub-set of the company's Board of Directors provides oversight of policies, procedures, and practices relating to enterprise-wide risk and compliance with bank regulatory requirements.

CC1.2

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

Yes

CC1.2a

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

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Energy managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Efficiency project Behaviour change related indicator	Meeting energy and emission reduction goals and targets. Comerica's 2015 sustainability action plan included a range of projects and initiatives designed to carry out our climate change and emissions reduction strategy, including efforts to improve our energy efficiency, enhance our carbon accounting system, optimize our use of technology, and communicate progress to our stakeholders. Key managers in all areas to which these projects were assigned – including our corporate energy manager and managers in our Service Company (responsible for real estate, operations, and IT) had goals and objectives related to these initiatives in their annual performance management plans. The annual performance review process considers performance in these areas among other factors in awarding merit increases and bonuses for the year.
Facility managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Efficiency project Behaviour change related indicator	Meeting energy and emission reduction goals and targets. Comerica's 2015 sustainability action plan included a range of projects and initiatives designed to carry out our climate change and emissions reduction strategy, including efforts to improve our energy efficiency, enhance our carbon accounting system, optimize our use of technology, and communicate progress to our stakeholders. Key managers in all areas to which these projects were assigned – including our facility managers, chief engineers, and Director of Operations – had goals and objectives related to these initiatives in their annual performance management plans. The annual performance review process considers performance in these areas among other factors in awarding merit increases and bonuses for the year.
Other: Environment/sustainability managers	Monetary reward	Emissions reduction target Efficiency target Behaviour change related indicator	Meeting energy and emission reduction goals and targets. Comerica's 2015 sustainability action plan included a range of projects and initiatives designed to carry out our climate change and emissions reduction strategy, including efforts to improve our energy efficiency, enhance our carbon accounting system, optimize our use of technology, and communicate progress to our stakeholders. Key sustainability colleagues – including our Corporate Sustainability Director and Senior Sustainability Officer, had goals and objectives related to these initiatives in their annual performance management plans. The annual performance review process considers performance in these areas among other factors in awarding merit increases and bonuses for the year.
Business unit managers	Monetary reward	Other: Environmental lending goals	Managers of our Environmental Services business units have goals for developing business with biogas, recycling, and other environmental services industries. Other business units are also encouraged to support green lending in the 12 environmentally-beneficial lending categories that we track as they meet all the financial needs of these customers. The annual performance review process for select business unit managers

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
			considers performance in these areas among other factors in awarding merit increases and bonuses for the year.
Other: Capital Projects Managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Efficiency project	Meeting energy and emission reduction goals and targets. Comerica's 2015 sustainability action plan included a range of projects and initiatives designed to carry out our climate change and emissions reduction strategy, including efforts to improve our energy efficiency, enhance our carbon accounting system, optimize our use of technology, and communicate progress to our stakeholders. Key Project Management Team members for all areas to which these capital projects were assigned had goals and objectives related to these initiatives in their annual performance management plans. The annual performance review process considers performance in these areas among other factors in awarding merit increases and bonuses for the year.
All employees	Monetary reward	Other: Living Comerica's core value of Involvement	Sustainability is a priority area under Comerica's core value of Involvement. Actions taken by colleagues that showcase Comerica's core values are considered in colleague performance plans. The annual review process considers performance on the company's core values among other factors in awarding merit increases and bonuses for the year. There are numerous ways that colleagues can showcase their involvement at Comerica, including participation in Comerica green office teams, diversity teams, and community volunteerism events (including environmentally-focused events), to name a few.

Further Information

Page: CC2. Strategy

CC2.1

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

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

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

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	Risks and opportunities are evaluated across North America, with a focus on the United States as this is the primary location for the majority of our business operations. For example, we carefully identify the specific regional vulnerabilities to climate change to which our key operating assets are exposed across our geography in order to ensure that risk mitigation and adaptation strategies are appropriately matched to the risks we expect to face.	> 6 years	Climate change risks, opportunities, and developments (i.e., legal, regulatory, scientific, etc.) are monitored continuously by the Corporate Sustainability Office. Climate change strategy is reviewed at least annually during company's corporate sustainability program review by the Management Policy Committee (MPC) and by the Enterprise Risk Committee of the Board. Progress and challenges are reported and discussed at least quarterly with the Sustainability Council, a group of senior managers from across the organization under the leadership of the Chief Financial Officer (executive sponsor). Our climate change risk and opportunity management process is intended to serve the needs of our primary governance bodies as well as other internal and external stakeholders (e.g., senior managers on company's Sustainability Council including colleague representative from Enterprise Risk department, other managers and employees, investors, customers, suppliers, host communities, NGOs, etc).

CC2.1b

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

The Corporate Sustainability Office (CSO) is assigned the lead role in identifying, monitoring, and communicating climate change risks/ opportunities to the company's executive management team and to the Enterprise Risk Committee of the Board of Directors. The CSO is assisted by cross-functional work groups comprised of managers from relevant company departments (e.g., Finance, Corporate Real Estate, Procurement, Human Resources) and by the Comerica Sustainability Council (comprised of senior managers from across the organization). Physical risks to the company's assets are identified and managed primarily by

the Corporate Real Estate and Corporate Continuity and Recovery Management (CCRM) teams. Since 2014, our CCRM operations report to our Office of Enterprise Risk.

Members of these work groups/teams are involved in making determinations about the significance of climate change risks/ opportunities and for helping to define and execute our climate change strategy and initiatives. Our process for assessing how climate change risks/opportunities may affect the company as a whole as well as specific business units, operations, geographies, or assets is based on reading the available scientific and policy literature; monitoring regulatory developments at the international, national, state, and local levels; participating in conferences where climate change issues are addressed by a broad range of experts; acquainting ourselves through research/dialogue with the concerns of NGOs, investors, and other stakeholders working on climate change issues; and monitoring the climate change risk management practices of other companies both within and outside of our own financial services industry. We then apply the lessons learned and the insights gained - as appropriate - to both the company as a whole and to its specific assets, lines of business, and geographical footprint.

CC2.1c

How do you prioritize the risks and opportunities identified?

The Corporate Sustainability Office (CSO) works with the Comerica Sustainability Council (comprised of senior managers from across the organization) to prioritize our actions and strategy. Comerica's climate change risk management process is designed to identify, communicate, and - where necessary - to mitigate regulatory, physical (including weather-related), and other risks and opportunities (e.g., reputation, supply chain, changing customer preferences, emerging business opportunities, etc.) that have the potential to significantly impact the successful execution of our business strategy. We conduct an ongoing review of potential climate change risks and opportunities associated with our business, and work to understand how these risks and opportunities may affect our assets, operations, financial position, cash flows, and competitive position. The identified risks and opportunities are communicated to our directors, executive management team, business unit managers, Sustainability Council members, employees, and other key stakeholders through our sustainability governance and communication processes.

The annual process for setting climate change and other sustainability priorities considers: (1) the financial significance, if any, of identified risks and opportunities (i.e., whether they are likely to have a notable effect on our financial position, earnings, competitive position, reputation/brand value, and/or ability to execute our business strategy), (2) the costs, benefits, and expected returns of various potential projects and initiatives, (3) stakeholder views on our climate change and other sustainability priorities, (4) industry norms and accepted good practices within the financial services industry, and (5) organizational resources and capacity.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

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

(i) How strategy is influenced: Comerica continues to integrate the management of climate change risks/opportunities into its business strategy. In 2008, we developed a formal sustainability strategy (including climate change) that is reviewed & updated on an annual basis. 2015 brought no significant changes to the strategy. We implement annual sustainability action plans to drive our progress & communicate our priorities to stakeholders. To date, we have implemented many projects to reduce energy use, emissions, and associated operating costs and initiatives to reduce long-term supply chain risks, & develop new revenue streams from lending to green companies & projects (e.g. LEED/green construction, energy efficiency upgrades, recycling companies, etc). Since 2008, we have created new policies, procedures, operating practices, governance structures, accountabilities, & training programs to support this strategy & ensure progress. The annual action plans are developed by Sustainability Council with input from business units & approved by our top Management Policy Committee. Results are reviewed annually by MPC & Enterprise Risk Committee of the Board. KPIs are tracked quarterly, and measurable performance targets (such as our 20% by 2020 GHG emissions reduction goal) are put in place. We have also established green office teams at our larger office campuses to drive sustainability awareness efforts & behavioral changes. Since 2014, Sustainability has been communicated to colleagues as a priority area under our company's core value of Involvement. (ii) Climate change influence: Our strategy has been influenced by regulatory, physical, and other risks & opportunities associated with climate change (e.g. impacts on reputation & brand, changing consumer preferences, CSR expectations of stakeholders, future physical and regulatory risks) and by opportunities for innovation and potential competitive advantage (e.g. environmentally beneficial lending). We use a Sustainable Value Creation Road Map to illustrate to key internal and external stakeholders how we see our climate change and other sustainability objectives being integrated into and contributing to our overall business strategy. The Map includes four clusters of initiatives- grouped according to how they contribute to value creation- including initiatives that: a) Support our license to operate, responsible citizenship, good corporate governance, enhanced reputation & brand b) Drive cost & risk reduction & support climate protection c) Support new competencies, markets, products & services d) Help to develop new green/low carbon economy revenue opportunities.(iii) Short-term strategy: Since the true costs of natural resource scarcity & climate change are not fully reflected in market prices through natural capital assessments, & regulatory responses thus far have not created robust demand for sustainable products and services, we do not see U.S. demand for clean energy technologies, energy efficiency, and other green products & services as a significant driver of our business strategy in the short-term (next 1-2 years). Our short-term strategy, therefore, continues to focus on pursuing opportunities for improved energy and resource efficiency in our own operations; setting additional goals and targets; and implementing initiatives that reduce costs and risks. Nevertheless, we seek to act as a trusted advisor to our customers in short-term on issues that support a greening economy in longer term.

We continue to expand internal education efforts to prepare our staff for future revenue opportunities - expected to emerge in the medium term (next 3 to 5years) and, on a larger scale, in the long term. Examples of short-term strategy include our previous 15% real estate GHG emissions reduction target, achieved in 2013 via a variety of energy efficiency, technology and space optimization projects, which helped us to realize costs savings of over $10MM and our current 20% by 2020 real estate GHG emissions reduction target. Our medium-term strategy is to capitalize on knowledge that we have gained regarding operational efficiencies & share it with customers. We have begun to engage with customers through educational opportunities (e.g., energy efficiency webinar, customer-focused newsletters) and one-on-one conversations. (iv) Long-term strategy: The long-term strategy (5 or more years out) is to proactively identify and pursue additional energy & resource efficiency opportunities inside the company and in our supply chain and to seek promising business opportunities consistent with our business model as these develop in response to economic and regulatory forces that increasingly reflect the growing scarcity of resources and the accelerating impacts of climate change. We expect there will be internal and external opportunities to improve long-term performance and generate value though innovation in the areas of energy and water conservation, climate protection and adaptation, operational and resource efficiency, supply chain management, and the provision of business solutions to society's growing sustainability challenges. (v) Strategic advantage: Although it is difficult to measure, we have seen evidence to date that our status as 'an early mover' within our tier of the U.S. banking industry may have conferred some strategic advantages over competitors, including enhanced reputation and brand awareness from listings on sustainability indexes (e.g. our 2015 listings on CDP Disclosure Leadership Index, FTSE4Good Index & Thomson Reuters Large Cap ESG Index), access to certain customers and business opportunities because of our sustainability positioning, reduced operating costs, and increased support from key stakeholders to whom climate change and sustainability issues are important. We also believe the integration of climate change strategy into our business contributes to employee engagement and talent attraction. (vi) Substantial business decisions: The most significant business decisions of 2015 influenced by climate change aspects of our strategy included the continuation of our real estate rationalization initiative, projects to improve the energy efficiency of our facilities (including around building energy management systems & LED lighting projects), work of our Mission Control Team to develop/implement a long-term data center management strategy, implementation of water saving technologies, additional paperless processes, ongoing refinement of our energy & carbon management system, and introduction of a Masters of Sustainability Awareness program to Service Company colleagues to provide them with the knowledge needed to help further incorporate sustainability into their business operations and personal life. Our strategy is a response to regulatory aspects of climate change (i.e. future higher energy costs & risks) & a desire to proactively manage our citizenship obligations and long-term competitiveness.

CC2.2b

Please explain why climate change is not integrated into your business strategy

CC2.2c

Does your company use an internal price of carbon?

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

CC2.2d

Please provide details and examples of how your company uses an internal price of carbon

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

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution

CC2.3b

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

CC2.3c

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

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

CC2.3e

Please provide details of the other engagement activities that you undertake

We believe that responsible businesses should work to reduce their energy use and emissions, provide products and services to support the development of a lower carbon economy, and help their value chains prepare for those impacts of climate change that are unavoidable. In past years, colleagues representing our Corporate Sustainability Office have contributed our perspective as a financial services company to the search for solutions that promote climate protection and adaptation. We have engaged with concerned stakeholders as an individual company – primarily by participating as speakers and panelists at public forums, conferences, meetings, and symposia on climate change policy and legislative issues as well as on products and technologies designed to mitigate climate risk. Our contribution to such dialogues has typically focused on sharing information about our own approach to climate change and on helping public sector and NGO policy experts to understand how various policy frameworks may affect the efforts of commercial lenders to increase their lending in support of low carbon solutions and technologies. We have spoken about our own emission reduction initiatives and about efforts to develop new products and services, such as loans for energy efficiency projects and clean technology companies.

Consistent with our company's Environmental Policy Statement, adopted in late 2008, Comerica has encouraged climate change mitigation via the adoption of cost-effective market-based mechanisms. While we have not lobbied or advocated against command-and-control approaches, we believe that market-based approaches are significantly more likely to promote innovation and contain mitigation costs. We believe that policy frameworks which establish price signals for carbon should encourage investments in both energy efficiency and in the types of technologies needed to drive the transition to a low carbon future.

Comerica engaged with various industry and non-profit organizations whose work supports climate change policy and sustainability initiatives. Specifically in 2014, Comerica volunteered for and participated in the UNEP-FI financed emissions initiative to help develop financial services industry guidance on how to assess and mitigate risks associated with greenhouse gas emissions in a company's loan portfolio. We also continue to lead and participate in monthly informal bank Sustainability Director roundtable calls to help drive the financial service industry's focus on climate change and to make progress on sustainable business practices at Comerica. As part of our 2014-2015 Relevancy Assessment work, we also reached out to our stakeholders including environmental non-profits, community partners, impact investors, suppliers, customers, employees, etc. to get their feedback on our company's most important environmental, social and governance focus areas. This engagement included interviews with an environmental non-profit and several impact investors who provide public policy advocacy on climate and energy in the U.S.

Comerica was represented again in 2015 on the Executive Committee and Board of Governors of the Environmental Banker's Association (EBA). The EBA represents a forum for banks and practitioners to share best practices around a multitude of environmental issues, including environmental risk management, climate change, and general sustainability issues. In 2015, Comerica continued its membership to the Sustainability Council of Orange County (California), which provides support through sustainability education and mentoring to Orange County communities and businesses after being a founding member of the organization in 2014. Comerica was one of the first public companies in Michigan to support the Detroit 2030 District, which focuses on reducing emissions, water, and transportation impacts within Detroit, Michigan. Comerica was also represented as a board member on the Michigan Saves organization, which assists with financing of energy efficiency projects in commercial and residential applications. Comerica serves on the External Advisory Board of the Erb Institute for Global Sustainable Enterprise at the University of Michigan's Ross School of Business and works to help harness the power of business to address global sustainability issues.

CC2.3f

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

While we currently do not have a specific policy to ensure all of our direct and indirect activities are consistent with our climate change and sustainability strategy, our Corporate Sustainability Director reviews our employee board participation database. We review organizations on which employees sit in a board-level role annually. Organizations whose policies and positions would appear to be in conflict with our climate and sustainability strategy are identified and follow-up discussions with specific board members held, if necessary. In 2015, no board level participation by employees in organizations whose climate change policies were in conflict with our own was identified.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

Page: CC3. Targets and Initiatives

CC3.1

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

Absolute target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 1+2 (location-based)	98.6%	20%	2012	80533	2020	Yes	Having achieved our first GHG emissions reduction target a year ahead of schedule in 2013, Comerica set a new absolute target in 2014. The new GHG emissions reduction target combines the 'Legacy Comerica' and 'Legacy Sterling' portfolios and sets a new combined portfolio emissions base year of 2012. The new base year is 2012 as it is the earliest year where the 'Legacy Sterling' activities data is available, since Comerica acquired Sterling Bancshares in July 2011. The new GHG emissions reduction target is: "Comerica will reduce the total Scope 1 and Scope 2 GHG emissions associated with its occupied real estate by 20% below the 2012 base year emissions total of 80,533 by 2020, removing 16,107 MtCO2e from its carbon footprint". Comerica plans to achieve this more aggressive GHG emissions reduction target through a combination of mitigation activities, rationalization and consolidation of real estate, and engagement with building occupants on energy efficiency best practices. While we are unable to have our goal verified as science-based (as a financial services company), we believe this goal is generally consistent with a science-based target with annual reductions of 2.5% over our goal period.

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment

CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment

CC3.1e

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

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	37.50%	80.07%	As of 12/31/15, Comerica had reduced its 2012 base year Real Estate GHG emissions of 80,533 MtCO2e by 12,897.34 MtCO2e (or 16.0%). Now three years into our new 8-year target period, we are at approximately 80% complete on goal achievement. GHG emission reductions this year are primarily due to the following: (1) real estate rationalization and consolidation initiatives, (2) energy efficiency and conservation measures, (3) energy efficiency awareness engagement with building occupants, and (4) milder weather conditions. A major initiative to consolidate office space and improve operational efficiency (RaCC) was initiated in 2009 and continued through 2015. This initiative has trimmed 375,688 square feet of operating space from the combined portfolio since 2012, with 106,613 square feet of reductions taking place in 2015. Since the majority of Comerica's GHG emissions are related to the consumption of energy in our facilities, our ability to reduce GHG emissions is largely dependent upon reducing the energy used by our facilities. In 2012, we began a systematic approach to identifying energy improvement opportunities and reviewing operational practices for enhanced energy efficiency. This process started with six of our larger multi-tenant campus facilities, and during 2015 we expanded the approach to 19 additional multi-tenant and retail locations. ASHRAE-level energy audits were completed and specific opportunities for "quick wins" or immediate energy savings were identified and implemented. For those opportunities requiring capital funding, complete financial analysis and technology recommendations were developed for the 2016 budget planning process. This effort kick-started our strategic planning for energy efficiency improvement projects, focusing on key concepts (lighting, facility environmental controls) for Comerica facilities. In addition, reviews were performed for 17 Retail locations slated for 2015 Refurbish/Transformation projects. The reviews identified opportunities to improve energy and water conservation while the projects were still in the design phase. Many of these recommendations were incorporated in the project scope, including upgrading to programmable thermostats and LED lighting.

CC3.1f

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

CC3.2

Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?

Yes

CC3.2a

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

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Company-wide	As part of our commercial lending operations, we make loans and commitments to various companies that are engaged in environmentally beneficial projects and activities. These "green loans" are tracked in 13 different categories, such as renewable energy, green buildings, and vehicle electrification. Our green lending categories are generally consistent with the Climate Bonds taxonomy.	Avoided emissions	Climate Bonds Taxonomy	2%	Less than or equal to 10%	% revenue is estimated based on the size of the green loan portfolio in relation to our overall loan portfolio, as we do not currently track and report this metric as stated.

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	299	3944
To be implemented*	67	1590
Implementation commenced*	0	0
Implemented*	92	4546
Not to be implemented	0	0

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	In addition to its major facilities consolidation initiative, the company also implemented a number of projects to improve the energy efficiency of various facilities it operates. These projects were primarily comprised of interior and exterior lighting upgrades (LED), HVAC upgrades, VAV replacement projects, and building operational setting modifications. In 2015, we began investigating an Enterprise-wide Building Management System project and implemented improvements to the program settings at our larger campus buildings with existing BMS. We also continued auditing our facilities to identify further improvements, completing a total of 19 ASHRAE Energy Audits and 17 Walk-throughs as part of Retail Refurb/Transformation Projects. Many smaller energy efficiency projects resulted from the audits. New LED interior lighting was implemented at several of our larger facilities. Energy reductions from these projects primarily affect the Scope 2 electricity and steam emissions and Scope 1 natural gas emissions, which are included in the	2365.62	Scope 1 Scope 2 (location-based) Scope 2 (market-based) Scope 3	Voluntary	499456	2836636	4-10 years	11-15 years	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	company's emission reduction target. (Voluntary, active in 2015).								
Energy efficiency: Processes	Server rationalization and virtualization initiatives continued in 2015. We have also continued the conversion of our older technology servers to the “Next Generation” configuration. The “Next Generation” servers increase operational efficiency and reduce the space needed for server racks and resultant room cooling. The project has enabled decommissioning of unneeded servers, reducing wasted energy. CO2e savings associated with our data center improvement initiatives are not currently estimated. In 2015, our Mission Control Team continued work on the Comprehensive Management Plan for our data centers. The team expanded upon the 5-Year Vision Plan, further defining standards and protocols for efficient management of the Data Center. The plan sets the roadmap for consolidation and optimization of our data center space and associated operating equipment and infrastructure. The team also began planning for a metering project to enable sub-metering of the data		Scope 2 (location-based) Scope 2 (market-based)	Voluntary					

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
	center power usage and quality, which will allow trending of energy usage in the data center and quantification of energy used by data center IS equipment separate from cooling and lighting energy usage. These projects help to reduce Scope 2 electricity emissions which are included in our corporate emissions reduction target. (Voluntary, active in 2015).								
Transportation: use	Throughout 2015, Comerica continued efforts to reduce emissions from corporate business travel by promoting the use of videoconferencing. Corporate Jet usage was slightly higher in 2015 as compared to 2014, but expenses associated with Corporate Jet usage declined due to lower fuel costs. Corporate Fleet usage decreased as compared to 2014. (Voluntary, active in 2015)	435.79	Scope 1	Voluntary	3678311		<1 year	Ongoing	
Other	One of company's more significant emission reduction initiatives during the year was the continuation of its rationalization, consolidation and closure (RaCC) program, designed to reduce the amount of real estate required for the company's long-term operations by closing certain facilities	1718.70	Scope 1 Scope 2 (location-based) Scope 2 (market-based) Scope 3	Voluntary	302782		<1 year	>30 years	Cost to implement this initiative is not available.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	and consolidating employees and functions into others. During 2015, the company implemented or commenced implementation of various RaCC and space consolidation projects, with 2015 projects reducing space owned or leased for 30 locations. The projects enabled the reduction in our annual averaged portfolio square footage by 106,613 SF. The estimated avoided emissions associated with this consolidation and closure effort total 1718.70 MtCO2e. This initiative reduces Scope 1 and Scope 2 real estate emissions which are included in the company's emission reduction target. The savings shown in the adjoining table only reflect the energy savings realized during 2015 (as compared to 2014 spend), and do not include other operational savings derived from the initiative. (Voluntary, active in 2015).								

CC3.3c

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

Method	Comment
Employee engagement	Internal communications to educate employees on corporate sustainability initiatives and policies.
Other	Development of best practices and lessons learned that are shared between facilities management, building engineering, and energy & sustainability personnel. Comerica also implemented programs at its larger campus facilities to schedule lighting and HVAC operation with building user occupancy by zones within the facilities, realizing immediate energy savings. These best practices were rolled out to a broader group within our organization.
Other	Deployment of a robust electronic energy & carbon management system to identify energy and emission reduction opportunities and track performance. During 2015, building-level energy usage intensities were benchmarked using this database system, to identify higher usage intensity facilities to target for energy auditing and efficiency improvement measures. This system serves as the single system of data records management for all of the Company's Scope 1, Scope 2, and Scope 3 activities.
Other	Continuing work of our Mission Control Team to integrate facility management, energy management, corporate real estate, corporate information services, and capital project management groups to heighten awareness of energy efficiency and operational best practices for the data centers. This cross-functional team made significant progress on the development of a comprehensive Data Center Management Plan in 2014, and created the first-ever 5-Year Vision Plan, which sets the roadmap for consolidation and optimization of our data center space and associated operating equipment and infrastructure. The plan is expected to build efficiency, reliability, and sustainability processes into current-day and future operation of the company's data centers. The Mission Control Team (MCT) is a "special forces" team, reporting to executive-level representatives of the company's Mission Critical Facilities Group (MCFG). The MCFG's and MCT's efforts are the first major step towards coordinating Information Services, Corporate Real Estate, Facilities Management, Critical Environments Engineering, Project Management, and Energy & Sustainability activities around the company's Mission Critical Facilities.
Dedicated budget for energy efficiency	During annual budget planning for implementation of energy efficiency initiatives, we separately highlight those capital projects expected to have a positive energy reduction impact (and subsequent GHG emissions reduction) to help drive approval for those expenditures. These analyses are utilized by Comerica's executive leadership when determining funding approval. Our 2015 spend was approximately $2.8MM.
Compliance with regulatory requirements/standards	Corporate review and participation in State-mandated building Energy Efficiency programs, such as Assembly Bill 802 and Title 24 Energy Use Requirements rules for California sites.
Other	Upgrade of our utility bill-pay vendor software platform to one that utilizes Optical Character Recognition (OCR) technology for all processed billing statements, providing a high level of data accuracy (>99%) and improved records management. The upgraded platform also provides improved site-level, utility-level, regional-level, and portfolio-wide tracking and trending for consumption as well as cost information. Site data can easily be downloaded with detailed reporting, bill image confirmation, and site-specific Heating Degree Day and Cooling Degree Day data for weather normalization analysis.
Lower return on investment (ROI) specification	Comerica's executive leadership supported a lower return on investment (ROI) for energy and sustainability improvement projects in late 2012, expanding the expected pay-back period for sustainability improvement projects from less than typically 3 years up to 8-10 years (on a case-by-case basis). This leadership initiative significantly lowered the ROI threshold and increased the potential to consider additional future capital improvement projects with a sustainability component.

Method	Comment
Partnering with governments on technology development	During 2015, Comerica expanded the program for uploading site energy and water consumption information into the US EPA Energy Star Portfolio Manager database. The information is helping our team to benchmark our Comerica facilities, track usage and performance, and set targets on a facility-specific level for performance improvements. The data was utilized for the company's participation in the 2015 USGBC/USEPA Battle of the Buildings Challenge.
Employee engagement	In 2015, Comerica entered the USEPA/USGBC Battle of the Buildings (BOTB) Challenge, with a total of 9 sites participating in the National BOTB Competition and a total of 5 sites participating in the Regional (Michigan) Competition. 2015 marked the first year of "Comerica's Carbon Crushers" participation in the competition to cut energy usage and build energy conservation awareness for not only the building occupants but the Facility Management and Engineering staff as well. As part of the challenge, energy audits were completed for the competition sites, and "Quick Wins" for energy conservation were identified and immediately implemented. Larger, capital budget type projects were also identified and recommended for the 2016 budget process. Regular communications to building occupants, Green Office Teams, and the Facility Management teams were provided, which identified standard best practices that could be implemented at the sites and kept the teams informed of their standing in the competition and progress on energy reductions. The program was a great success, and Comerica was announced the 1st Place Winner in the "Office Category" in the Michigan Regional BOTB Challenge, with the Stadium-Pauline site reducing their energy usage by 21% from 2014.

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

Page: CC4. Communication

CC4.1

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

Publication	Status	Page/Section reference	Attach the document	Comment
In voluntary communications	Underway - previous year attached	Pages 12, 30, 53-57, 71, 74-75, 90-91	https://www.cdp.net/sites/2016/40/3640/Climate Change 2016/Shared Documents/Attachments/CC4.1/2014_Comerica_Sustainability_Report.pdf	The 2014 Comerica Sustainability Report (attached) was published in July 2015. Our 2015 Comerica Sustainability Progress Report is anticipated to be published in July 2016.
In mainstream reports (including an integrated report) but have not used the CDSB Framework	Complete	Page 7	https://www.cdp.net/sites/2016/40/3640/Climate Change 2016/Shared Documents/Attachments/CC4.1/2015 Comerica Incorporated Annual Report_FINAL.pdf	

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

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

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

CC5.1a

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Air pollution limits	Regulations designed to limit greenhouse gas emissions via command and control approaches such as the U.S. EPA's GHG regulations under the Clean Air Act could potentially have a negative impact on the company's costs for energy and other goods and services which it purchases from its supply chain. Companies which become subject to such regulations -- for example, electric utility companies -- could incorporate increased regulatory compliance costs into their prices, causing price-inflating ripple effects in their downstream value chains. Such regulations could also negatively impact	Increased operational cost	1 to 3 years	Indirect (Supply chain)	Very likely	Low	Many of the risk drivers in CC5.1a have the potential to impact the cost of energy. A 10-20% increase in the cost of energy could have an impact on the order of $1MM to $2MM annually. Other operational impacts are expected to be less than $1MM annually. It should be noted this risk driver overlaps with others listed in CC5.1a. It is unlikely for all risk drivers to be realized simultaneously; therefore estimated	Comerica's real estate and energy management teams works to implement a yearly action plan designed to decrease our energy and water consumption, thereby reducing our exposure to price fluctuations. Projects have included a variety of energy efficiency & conservation initiatives at our facilities. In 2014 after realizing our previous GHG emission reduction	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range. Budgets for projects that enhance the

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	some of the company's more energy- and emissions-intensive commercial/industrial clients (borrowers to whom we provide commercial loans), and diminish their profits, cash flow, and creditworthiness. This could potentially result in increased credit costs for Comerica. U.S. EPA is beginning to regulate (under the Clean Air Act) some major sources of GHG emissions in the United States, where a very high percentage of Comerica's business is conducted. This type of risk would therefore apply to all of the key geographical markets in the U.S. where Comerica does business, although the impacts on any particular supplier or client affected by such regulation would						financial implications cannot be aggregated across multiple risk drivers.	target, we set a goal to reduce our real estate GHG emissions by 20% by 2020 from a 2012 baseline year. On the procurement side, we evaluate sustainability risks in our supply chain by scoring environmental performance data from our largest vendors that represent over 30% of spend. With respect to our customers, we actively manage our risks by: controlling our aggregate exposure to companies and sectors which are ‘higher risk’ for significant regulatory	energy efficiency of our corporate facilities are tracked separately and our 2015 spend was approximately $2.8MM.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	vary greatly according to such company-specific factors as location (eGRID region), fuel mix, degree of energy efficiency, or degree of preparedness for regulation. Comerica is not a significant emitter of GHGs itself and does not therefore expect to be subject to significant air pollution control limits in the foreseeable future.							impacts from climate change; broad diversification by sector, geography, and individual customers of Comerica's loan portfolio; and credit monitoring practices and loan structures which are designed to mitigate credit risk (e.g., periodic loan reviews, loan terms and conditions, collateral support for many loans, average term maturities under 5 years, etc.) Changes in the regulatory climate are communicated to affected business units primarily	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								through the Sustainability Council.	
Cap and trade schemes	Regulations designed to limit greenhouse gas emissions via cap-and-trade approaches such as the former Waxman-Markey and Kerry-Lieberman bills, or California's Global Warming Solutions Act (AB 32) could potentially have a negative impact on the company's costs for energy as well as other goods and services which it purchases from its supply chain. Companies which become subject to an emissions cap could incorporate increased regulatory compliance costs into their prices, causing price-inflating ripple effects in their downstream value chains. Such regulations could also negatively impact some of the	Increased operational cost	3 to 6 years	Indirect (Supply chain)	Very likely	Low	Many of the risk drivers in CC5.1a have the potential to impact the cost of energy. A 10-20% increase in the cost of energy could have an impact on the order of $1MM to $2MM annually. Other operational impacts are expected to be less than $1MM annually. It should be noted this risk driver overlaps with others listed in CC5.1a. It is unlikely for all risk drivers to be realized simultaneously; therefore estimated financial implications	Comerica's real estate and energy management teams works to implement a yearly action plan designed to decrease our energy and water consumption, thereby reducing our exposure to price fluctuations. Projects have included a variety of energy efficiency & conservation initiatives at our facilities. In 2014 after realizing our previous GHG emission reduction target, we set a goal to reduce	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range. Budgets for projects that enhance the energy efficiency of our

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	company's more energy- and emissions-intensive commercial/industrial clients (commercial borrowers to whom we provide loans), and diminish their profits, cash flow, and creditworthiness. This could potentially result in increased credit costs for Comerica. California, one of the five key market states in which Comerica operates, launched a cap-and-trade program under AB 32 in 2012 with compliance obligations for power generators and heavy industry GHG emitters beginning with 2013 GHG emissions. We do not believe that it is likely that other key market states in which we operate will adopt cap-and-trade systems in the next five years. Comerica is not a significant						cannot be aggregated across multiple risk drivers.	our real estate GHG emissions by 20% by 2020 from a 2012 baseline year. On the procurement side, we evaluate sustainability risks in our supply chain by scoring environmental performance data from our largest vendors that represent over 30% of spend. With respect to our customers, we actively manage our risks by: controlling our aggregate exposure to companies and sectors which are ‘higher risk’ for significant regulatory impacts from climate	corporate facilities are tracked separately and our 2015 spend was approximately $2.8MM.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	emitter of GHGs itself and does not therefore expect to be subject to cap-and-trade regulations in the foreseeable future.							change; broad diversification by sector, geography, and individual customers of Comerica's loan portfolio; and credit monitoring practices and loan structures which are designed to mitigate credit risk (e.g., periodic loan reviews, loan terms and conditions, collateral support for many loans, average term maturities under 5 years, etc.) Changes in the regulatory climate are communicated to affected business units primarily through the Sustainability	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Council.	
Fuel/energy taxes and regulations	Regulations designed to reduce greenhouse gas emissions indirectly by imposing (higher) taxes on (and increasing the cost of) energy sources -- with the goal of reducing demand and spurring efficiency - could affect the company either directly or indirectly, depending upon whether the tax is levied directly on the company (the end consumer) or the supplier of the energy -- or indeed, on any other supplier which is forced to raise the prices of its goods and service to recover increased energy costs. Price inflation in many different parts of the supply chain could result, including, for example, for purchases of natural gas, jet fuel, motor fuels, electricity, water, paper goods,	Increased operational cost	3 to 6 years	Indirect (Supply chain)	More likely than not	Low-medium	Many of the risk drivers in CC5.1a have the potential to impact the cost of energy. A 10-20% increase in the cost of energy could have an impact on the order of $1MM to $2MM annually. Other operational impacts are expected to be less than $1MM annually. It should be noted this risk driver overlaps with others listed in CC5.1a. It is unlikely for all risk drivers to be realized simultaneously; therefore estimated financial implications cannot be aggregated	Comerica's real estate and energy management teams works to implement a yearly action plan designed to decrease our energy and water consumption, thereby reducing our exposure to price fluctuations. Projects have included a variety of energy efficiency & conservation initiatives at our facilities. In 2014 after realizing our previous GHG emission reduction target, we set a goal to reduce our real estate GHG	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range. Budgets for projects that enhance the energy efficiency of our corporate facilities are

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	commercial air travel, ground transport services, courier services, food, IT equipment, fleet vehicles, etc. The broad imposition of higher energy taxes could also negatively impact the company's more energy- and emissions-intensive commercial/industrial clients (borrowers), and diminish their profits, cash flow, and creditworthiness. This could potentially result in increased credit costs for Comerica.						across multiple risk drivers.	emissions by 20% by 2020 from a 2012 baseline year. On the procurement side, we evaluate sustainability risks in our supply chain by scoring environmental performance data from our largest vendors that represent over 30% of spend. With respect to our customers, we actively manage our risks by: controlling our aggregate exposure to companies and sectors which are ‘higher risk’ for significant regulatory impacts from climate change; broad diversification	tracked separately and our 2015 spend was approximately $2.8MM.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								by sector, geography, and individual customers of Comerica's loan portfolio; and credit monitoring practices and loan structures which are designed to mitigate credit risk (e.g., periodic loan reviews, loan terms and conditions, collateral support for many loans, average term maturities under 5 years, etc.) Changes in the regulatory climate are communicated to affected business units primarily through the Sustainability Council.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Carbon taxes	Regulations designed to reduce greenhouse gas emissions indirectly by imposing taxes on (and increasing the cost of) carbon-containing energy sources according to their level of carbon content or relative contribution to climate change could affect the company either directly or indirectly, depending upon whether the tax is levied directly on the company (the end consumer) or the supplier of the energy -- or indeed, on any other supplier which is forced to raise the prices of its goods and service to recover increased energy costs. Price inflation in many different parts of the supply chain could result, including, for example, for purchases of natural gas, jet fuel, motor fuels, electricity,	Increased operational cost	>6 years	Indirect (Supply chain)	About as likely as not	Low-medium	Many of the risk drivers in CC5.1a have the potential to impact the cost of energy. A 10-20% increase in the cost of energy could have an impact on the order of $1MM to $2MM annually. Other operational impacts are expected to be less than $1MM annually. It should be noted this risk driver overlaps with others listed in CC5.1a. It is unlikely for all risk drivers to be realized simultaneously; therefore estimated financial implications cannot be aggregated across multiple risk drivers.	Comerica's real estate and energy management teams works to implement a yearly action plan designed to decrease our energy and water consumption, thereby reducing our exposure to price fluctuations. Projects have included a variety of energy efficiency & conservation initiatives at our facilities. In 2014 after realizing our previous GHG emission reduction target, we set a goal to reduce our real estate GHG emissions by 20% by 2020	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	water, paper goods, commercial air travel, ground transport services, courier services, food, IT equipment, fleet vehicles, etc. Legislation such as U.S. Senate bill 332- The Climate Protection Act (which died in Congress) proposed to establish a carbon tax on CO2 emissions and methane from major emitters. The broad imposition of carbon taxes could also negatively impact the company's more energy- and emissions-intensive commercial/industrial clients (borrowers), and diminish their profits, cash flow, and creditworthiness. This could potentially result in increased credit costs for Comerica.							from a 2012 baseline year. On the procurement side, we evaluate sustainability risks in our supply chain by scoring environmental performance data from our largest vendors that represent over 30% of spend. With respect to our customers, we actively manage our risks by: controlling our aggregate exposure to companies and sectors which are ‘higher risk’ for significant regulatory impacts from climate change; broad diversification by sector, geography, and	our 2015 spend was approximately $2.8MM.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								individual customers of Comerica's loan portfolio; and credit monitoring practices and loan structures which are designed to mitigate credit risk (e.g., periodic loan reviews, loan terms and conditions, collateral support for many loans, average term maturities under 5 years, etc.) Changes in the regulatory climate are communicated to affected business units primarily through the Sustainability Council.	
Product efficiency	Regulations designed to reduce greenhouse	Increased operational	1 to 3 years	Indirect (Supply	Very likely	Low	Many of the risk drivers in	Comerica's real estate and	Costs are dispersed

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
regulations and standards	gas emissions indirectly by imposing energy-efficiency requirements on product design and performance could negatively affect the company by increasing its operating or transaction costs in places and/or under circumstances where product suppliers (e.g., landlords of buildings in which the company rents space, manufacturers of IT equipment or vehicles purchased by the company, etc.) become subject to regulatory directives to improve the energy efficiency of their products. To the extent that this increases their costs, it could have price-inflating impacts on their downstream value chains. For example, some municipalities in various parts of the key Comerica	cost		chain)			CC5.1a have the potential to impact the cost of energy. A 10-20% increase in the cost of energy could have an impact on the order of $1MM to $2MM annually. Other operational impacts are expected to be less than $1MM annually. It should be noted this risk driver overlaps with others listed in CC5.1a. It is unlikely for all risk drivers to be realized simultaneously; therefore estimated financial implications cannot be aggregated across multiple risk drivers.	energy management teams works to implement a yearly action plan designed to decrease our energy and water consumption, thereby reducing our exposure to price fluctuations. Projects have included a variety of energy efficiency & conservation initiatives at our facilities. In 2014 after realizing our previous GHG emission reduction target, we set a goal to reduce our real estate GHG emissions by 20% by 2020 from a 2012 baseline year.	across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and our 2015 spend was

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	markets of California and Texas (e.g. San Francisco, Berkeley, Phoenix, Austin, Dallas) have passed local ordinances and changes to building codes (e.g., the State of California implemented a mandatory green building code in 2011) that requires certain new or existing buildings to meet new and higher energy efficiency standards over time. Thus the company could be affected by such directives directly when it constructs new facilities or indirectly via impacts on its supply chain. The company's clients and their properties could also become subject to such regulations, with resulting impacts on their profits, cash flow, and asset values(for example, if the costs of mandated energy efficiency							Additionally, we have entered 105 properties into Energy Star Portfolio Manager to help with benchmarking and reporting of our energy consumption. On the procurement side, we evaluate sustainability risks in our supply chain by scoring environmental performance data from our largest vendors that represent over 30% of spend. With respect to our customers, we actively manage our risks by: controlling our aggregate exposure to companies and sectors which	approximately $2.8MM.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	improvement cannot be recovered from tenants in the form of higher rents). This could potentially result in increased credit costs for Comerica.							are 'higher risk' for significant regulatory impacts from climate change; broad diversification by sector, geography, and individual customers of Comerica's loan portfolio; and credit monitoring practices and loan structures which are designed to mitigate credit risk (e.g., periodic loan reviews, loan terms and conditions, collateral support for many loans, average term maturities under 5 years, etc.) Changes in the regulatory climate are communicated	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								to affected business units primarily through the Sustainability Council.	
Product labelling regulations and standards	Regulations designed to reduce greenhouse gas emissions indirectly by requiring product labeling which discloses product energy, emissions, or other environmental performance factors -- in an attempt to influence the choices and purchasing decisions of consumers and businesses -- could negatively affect the company by increasing its operating and transaction costs in places where it or its suppliers (e.g., landlords of properties which we rent) find themselves holding less energy-efficient assets compared to similar	Increased operational cost	1 to 3 years	Indirect (Supply chain)	Very likely	Low	Many of the risk drivers in CC5.1a have the potential impact the cost of energy. A 10-20% increase in the cost of energy could have an impact on the order of $1MM to $2MM annually. Other operational impacts are expected to be less than $1MM annually. It should be noted this risk driver overlaps with others listed in CC5.1a. It is unlikely for all risk drivers to be realized simultaneously; therefore	Comerica's real estate & energy management teams works to implement a yearly action plan designed to decrease our energy & water use, thereby reducing exposure to price fluctuations. Projects included a variety of energy efficiency & conservation initiatives. We have entered approx. 71.5% of 2015 (ave.) metered property square footage into Energy	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range. Budgets for projects that

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	assets in their location and class. Some of these assets would likely trade at lower fair market values upon disclosure of sub-standard energy performance. In addition, some of the company's clients (e.g., certain commercial real estate borrowers) could also potentially experience the need to choose between diverting cash flow to energy efficiency improvements or accepting asset value declines as disclosure laws take hold. Such diversions of cash flow (if not recoverable through higher rents) or asset value declines could result in reduced debt service capacity or reduced collateral coverage for the company's loans and could increase our credit costs. Two examples of such						estimated financial implications cannot be aggregated across multiple risk drivers.	Star Portfolio Manager. Of the 105 sites, 22 qualify for Energy Star Certification (scores > 75). These certifiable sites are 38.2% of 2015 (ave.) metered property square footage. In 2014 after realizing our previous GHG emission reduction target, we set a goal to reduce our real estate emissions by 20% by 2020 from 2012 baseline year. On procurement side, we evaluate sustainability risks in our supply chain by scoring environmental performance	enhance the energy efficiency of our corporate facilities are tracked separately and our 2015 spend was approximately $2.8MM.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	building energy performance disclosure laws are in California and Texas, two of Comerica's key market states. As of June 1, 2014, the City of Austin, Texas requires energy benchmarking and disclosure for buildings of at least 10,000 square feet. California's former AB 1103 required energy benchmarking and disclosure of buildings of at least 10,000 square feet. While AB1103 is no longer valid, the CA Energy Commission is working to develop regulations for a new state-wide benchmarking program mandated by Assembly Bill 802 (new rules anticipated by 2017).							data from our largest vendors that represent over 30% of spend. For customers, we actively manage our risks by: controlling our aggregate exposure to companies & sectors which are ‘higher risk’ for significant regulatory impacts from climate change; broad diversification by sector, geography, and individual customers of Comerica’s loan portfolio; and credit monitoring practices & loan structures designed to mitigate credit risk (e.g., periodic loan reviews, loan	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								terms & conditions, collateral support for many loans, average term maturities under 5 years, etc.) Changes in the regulatory climate are communicated to affected business units primarily through Sustainability Council.	
Uncertainty surrounding new regulation	The U.S. Congress is divided on whether and how to deal with climate change risks through legislation. According to the Center for Climate and Energy Solutions, there were over 100 climate change-related bills introduced in the 114th Congress (2015-2016), 70% of which support climate action in some form	Reduced demand for goods/services	1 to 3 years	Indirect (Client)	About as likely as not	Low	Based on a number of factors, we judge the likely financial impacts on credit costs (i.e., incremental loan losses) due to regulatory impacts on our clients to be small in the foreseeable future. Operational	Comerica's real estate & energy management teams works to implement a yearly action plan designed to decrease our energy & water consumption, thereby reducing our exposure to price fluctuations.	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	(down from 131 in the 113th Congress). This continuing uncertainty about how businesses may be impacted by climate change and energy regulation in the future has slowed momentum among our customers for embracing some lower carbon and energy efficiency solutions, which may, in turn, reduce our ability to expand lending for clean technology and energy efficiency projects. In addition, media attention associated with some failed renewable energy companies has increased risk and reduced demand for some types of renewable energy lending.						impacts are expected to be less than $1MM annually. It should be noted this risk driver overlaps with others listed in CC5.1a. It is unlikely for all risk drivers to be realized simultaneously; therefore estimated financial implications cannot be aggregated across multiple risk drivers.	Projects have included a variety of energy efficiency & conservation initiatives at our facilities. In 2014 after realizing our previous GHG emission reduction target, we set a goal to reduce our real estate GHG emissions by 20% by 2020 from a 2012 baseline year. On the procurement side, we evaluate sustainability risks in our supply chain by scoring environmental performance data from our largest vendors that represent over 30% of spend. With	annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and our 2015 spend was approximately $2.8MM.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								respect to our customers, we actively manage our risks by: controlling our aggregate exposure to companies and sectors which are ‘higher risk’ for significant regulatory impacts from climate change; broad diversification by sector, geography, and individual customers of Comerica’s loan portfolio; and credit monitoring practices and loan structures which are designed to mitigate credit risk (e.g., periodic loan reviews, loan terms and conditions, collateral	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								support for many loans, average term maturities under 5 years, etc.) Changes in the regulatory climate are communicated to affected business units primarily through the Sustainability Council.	

CC5.1b

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in temperature extremes	The company could experience negative impacts on its business and operations --	Increased operational cost	1 to 3 years	Indirect (Supply chain)	Very likely	Low	Comerica is exposed to a number of risks related to the physical impacts	Our current methods for managing our exposures to these risks include	Costs are dispersed across many cost centers and a considerable

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	including increased operating costs -- from more frequent or prolonged periods of high temperatures ("heat waves") in a variety of areas in which it operates, especially in summer. These may be associated with increased cooling costs, occasional power challenges as the grid struggles to accommodate rising levels of peak demand, as well as with an increase in heat-related morbidity and mortality (including heat stroke and asthma) which could affect company employees and contractors, increase healthcare costs,						of climate change but does not believe at this time those risks are reasonably likely to have a significant effect on our financial condition or results of operations in the foreseeable future (i.e., within the next 10 years). However, these risks, in the longer term, could increase our costs of operating in the affected geographical regions, either directly or indirectly via impacts on our supply chain, clients, or host communities. For example, increases to heating and cooling costs of 5% to 10% could have an impact on the order of $500K to $1MM	researching, identifying, and monitoring possible physical risks linked to climate change (by region) in areas in which we operate; not unduly concentrating our operating assets in any one location that is 'high risk' for the physical effects of climate change; operating a robust business continuity management program which includes alternative processing strategies; maintaining appropriate geographical and business/sector diversification in our loan portfolio; maintaining insurance coverage for our properties and requiring the same of loan clients whose properties we finance; increasing efforts	portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and decrease worker productivity.						annually. Additionally, disruptions to business from increased frequency or severity of storm events could impact net income. A 0.5% decrease in net income could have an impact of approximately $2.6MM (based on 2015 figures).	to better understand and mitigate climate change risks in our supply chain; and implementing initiatives to reduce the company's consumption of natural resources (including energy, paper products, water, and land/real estate) which could be negatively affected (in terms of cost or availability) by climate change over time.	
Change in precipitation pattern	Projected changes in the amount, distribution, patterns, and extremes of precipitation - which vary considerably by region across the company's footprint - have the potential to increase operating challenges and	Increased operational cost	1 to 3 years	Indirect (Supply chain)	Very likely	Low	Comerica is exposed to a number of risks related to the physical impacts of climate change but does not believe at this time those risks are reasonably likely to have a significant effect on our financial condition or results of operations in the	Our current methods for managing our exposures to these risks include researching, identifying, and monitoring possible physical risks linked to climate change (by region) in areas in which we operate; not unduly concentrating our operating assets in	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	costs for the company, its suppliers, and clients. Examples of areas that could be affected include business continuity; the availability, quality, and cost of water; the productivity of agriculture (and the resultant cost of food); the risk of flooding (as a result of heavy rain events, including flash floods); and the risk of droughts (which can affect the frequency and severity of wildfires as well as water availability, agricultural productivity, and the spread of pests). The company operates in some drought-prone and water-stressed areas of						foreseeable future (ie, within the next 10 years). However, these risks, in the longer term, could increase our costs of operating in the affected geographical regions, either directly or indirectly via impacts on our supply chain, clients, or host communities. For example, increases to heating and cooling costs of 5% to 10% could have an impact on the order of $500K to $1MM annually. Additionally, disruptions to business from increased frequency or severity of storm events could impact net income. A 0.5% decrease in net	any one location that is 'high risk' for the physical effects of climate change; operating a robust business continuity management program which includes alternative processing strategies; maintaining appropriate geographical and business/sector diversification in our loan portfolio; maintaining insurance coverage for our properties and requiring the same of loan clients whose properties we finance; increasing efforts to better understand and mitigate climate change risks in our supply chain; and implementing initiatives to reduce the company's consumption of natural resources (including energy,	dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the western and southwestern United States, including portions of CA, TX, and AZ, which are already experiencing some of these challenges.						income could have an impact of approximately $2.6MM (based on 2015 figures).	paper products, water, and land/real estate) which could be negatively affected (in terms of cost or availability) by climate change over time.	
Sea level rise	Projected increases in sea level rise in certain areas in which the company operates, including parts of coastal FL, TX, and, to a lesser extent, CA, could negatively affect the company, its suppliers, and clients and create increased operating costs for all by causing damage to coastal infrastructure and real estate, beaches and other recreational areas, and more frequent or	Increased operational cost	>6 years	Indirect (Client)	Very likely	Low	Comerica is exposed to a number of risks related to the physical impacts of climate change but does not believe at this time those risks are reasonably likely to have a significant effect on our financial condition or results of operations in the foreseeable future (ie, within the next 10 years). However, these risks, in the longer term, could increase our costs of operating in the affected	Our current methods for managing our exposures to these risks include researching, identifying, and monitoring possible physical risks linked to climate change (by region) in areas in which we operate; not unduly concentrating our operating assets in any one location that is 'high risk' for the physical effects of climate change; operating a robust business continuity management program which includes alternative processing	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	severe coastal flooding due to storm surge events. Damages to coastal real estate could, for example, result in increased costs for maintenance, re-construction, re-location, or insurance (to the extent coverage is available). Salt water intrusion into coastal drinking water aquifers in places such as Florida and California could affect the availability and cost of water for the company, its suppliers, and clients.						geographical regions, either directly or indirectly via impacts on our supply chain, clients, or host communities. For example, increases to heating and cooling costs of 5% to 10% could have an impact on the order of $500K to $1MM annually. Additionally, disruptions to business from increased frequency or severity of storm events could impact net income. A 0.5% decrease in net income could have an impact of approximately $2.6MM (based on 2015 figures).	strategies; maintaining appropriate geographical and business/sector diversification in our loan portfolio; maintaining insurance coverage for our properties and requiring the same of loan clients whose properties we finance; increasing efforts to better understand and mitigate climate change risks in our supply chain; and implementing initiatives to reduce the company's consumption of natural resources (including energy, paper products, water, and land/real estate) which could be negatively affected (in terms of cost or availability) by climate change over time.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Tropical cyclones (hurricanes and typhoons)	North America has been hard hit by extreme weather events within recent decades. Comerica Bank operates solely within North America, primarily within our key markets of TX, CA, MI, AZ and FL. Projected future increases in peak wind intensities and near storm precipitation in connection with tropical hurricanes (cyclones) could have a range of negative impacts on the company and its value chain in certain areas in which the company operates, including parts of coastal FL and TX. Damage to real estate and infrastructure from coastal	Increased operational cost	3 to 6 years	Indirect (Client)	Very likely	Low	Comerica is exposed to a number of risks related to the physical impacts of climate change but does not believe at this time those risks are reasonably likely to have a significant effect on our financial condition or results of operations in the foreseeable future (ie, within the next 10 years). However, these risks, in the longer term, could increase our costs of operating in the affected geographical regions, either directly or indirectly via impacts on our supply chain, clients, or host communities. For example, increases to heating and	Our current methods for managing our exposures to these risks include researching, identifying, and monitoring possible physical risks linked to climate change (by region) in areas in which we operate; not unduly concentrating our operating assets in any one location that is 'high risk' for the physical effects of climate change; operating a robust business continuity management program which includes alternative processing strategies; maintaining appropriate geographical and business/sector diversification in our loan portfolio; maintaining insurance coverage for our properties and	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	flooding, storm surge, and high-intensity winds (coastal and inland) could result in higher operating costs in the affected regions, including, for example, increased construction costs for more robust facilities, higher insurance costs, reconstruction costs after hurricane events, and business interruption expenses. The company's own business and facilities as well as those of clients in the affected regions could be negatively affected by tropical hurricanes. In some cases, there could be negative impacts						cooling costs of 5% to 10% could have an impact on the order of $500K to $1MM annually. Additionally, disruptions to business from increased frequency or severity of storm events could impact net income. A 0.5% decrease in net income could have an impact of approximately $2.6MM (based on 2015 figures).	requiring the same of loan clients whose properties we finance; increasing efforts to better understand and mitigate climate change risks in our supply chain; and implementing initiatives to reduce the company's consumption of natural resources (including energy, paper products, water, and land/real estate) which could be negatively affected (in terms of cost or availability) by climate change over time.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	on the ability of clients to repay loans.								
Induced changes in natural resources	The potential physical effects of climate change associated with changes in temperature and precipitation patterns (and their extremes) -- as outlined above -- could also induce natural resource changes affecting food crops, forestry ecosystems, water availability, species distribution, biodiversity, and other natural resources on which the company, its supply chain, and clients depend. Any scarcity or disruption of uses of these natural resources could contribute to increased operational and	Increased operational cost	>6 years	Indirect (Supply chain)	Very likely	Low	Comerica is exposed to a number of risks related to the physical impacts of climate change but does not believe at this time those risks are reasonably likely to have a significant effect on our financial condition or results of operations in the foreseeable future (ie, within the next 10 years). However, these risks, in the longer term, could increase our costs of operating in the affected geographical regions, either directly or indirectly via impacts on our supply chain, clients, or host	Our current methods for managing our exposures to these risks include researching, identifying, and monitoring possible physical risks linked to climate change (by region) in areas in which we operate; not unduly concentrating our operating assets in any one location that is 'high risk' for the physical effects of climate change; operating a robust business continuity management program which includes alternative processing strategies; maintaining appropriate geographical and business/sector diversification in our loan portfolio;	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	logistical costs and challenges for the company, its suppliers, and clients.						communities. For example, increases to heating and cooling costs of 5% to 10% could have an impact on the order of $500K to $1MM annually. Additionally, disruptions to business from increased frequency or severity of storm events could impact net income. A 0.5% decrease in net income could have an impact of approximately $2.6MM (based on 2015 figures).	maintaining insurance coverage for our properties and requiring the same of loan clients whose properties we finance; increasing efforts to better understand and mitigate climate change risks in our supply chain; and implementing initiatives to reduce the company's consumption of natural resources (including energy, paper products, water, and land/real estate) which could be negatively affected (in terms of cost or availability) by climate change over time.	

CC5.1c

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Many stakeholders, including a growing number of institutional investors, view a company's sustainability and climate change performance as a proxy for the overall quality of its risk and opportunity management systems. Recent studies also indicate that stakeholders have rising expectations for companies in the areas of corporate social responsibility and citizenship and expect those companies to be proactive in providing solutions to society's sustainability challenges. Failure to successfully execute a	Reduced stock price (market valuation)	Up to 1 year	Direct	Very likely	Low-medium	There are additional risks associated with climate change which are neither regulatory nor physical in nature. For example, reputation risks that could have a 0.5% negative impact on market capitalization would equate to roughly $38MM (based on a market capitalization of approximately $7.35B at year-end 2015). While acknowledging these risks, we do not at this time believe that they are likely to have a significant effect on our financial condition or results of operations in the foreseeable future (i.e., within 10 years) due to the risks not yet being a more important market	Growing numbers of individuals, companies, and investors will likely recognize the need to respond to climate change risks and opportunities and are expected to show a preference for doing business with financial institutions which are committed to working with them to solve the world's sustainability challenges. To manage this issue, we established an enterprise-wide corporate sustainability program and adopted a climate change strategy. Annually, we implement a sustainability action plan, which includes initiatives to manage climate change risks and to identify	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	credible, transparent, and responsible sustainability and climate change strategy could thus have negative consequences for the company's reputation, potentially causing it to lose (or not attract) investors, customers, employees, or a range of business opportunities that might otherwise be available.						determinant and due to our existing approach to anticipate the risks and address the expectations of stakeholders.	opportunities both inside the company and within our value chain. These have included a variety of energy efficiency & conservation initiatives in company-owned and controlled buildings; server virtualization initiatives; and the incorporation of higher energy-efficiency standards into the design of our new banking centers. We also significantly reduced the number of printers in use across our footprint and greatly expanded our videoconferencing capabilities to reduce corporate business travel. We have continued to aggressively rationalize the	separately and our 2015 spend was approximately $2.8MM.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								amount of space the company utilizes for its operations, and continued to dedicate resources to projects to improve the energy performance of our data centers.	
Changing consumer behaviour	As the values, expectations, and needs of consumers and customers change over time in response to sustainability drivers in the global economy, including climate change, companies which do not respond to these fundamental changes with appropriate products, services, and customer experiences can risk losing these customers to	Reduced demand for goods/services	3 to 6 years	Direct	Very likely	Medium	There are additional risks associated with climate change which are neither regulatory nor physical in nature. For example, consumer demand risks that could have a 0.5% negative impact on market capitalization would equate to roughly $38MM (based on a market capitalization of approximately $7.35B at year-end 2015). While acknowledging these risks, we do	Consumer preferences are actively studied via internal and external surveys to understand our client's expectations for desirable products, services, and experiences. To inform our customers on sustainability issues, we have developed customer communications on energy efficiency and greenwashing as well as have conducted one-	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	more responsive, innovative, or attractive competitors. Failure by Comerica to anticipate how and when the needs of our customers may translate into demand for new products and services could leave us without the business strategy we need to maintain and grow the business.						not at this time believe that they are likely to have a significant effect on our financial condition or results of operations in the foreseeable future (i.e., within 10 years) due to the risks not yet being a more important market determinant and due to our existing approach to anticipate the risks and address the expectations of stakeholders.	on-one conversations with customers. On the lending side, we continue to evaluate carbon regulatory risks associated with higher risk sectors within the loan portfolio. We also use a green loan tracking system to enable us to capture and report environmentally beneficial loans and commitments from across the portfolio. As of 12/31/2015, we had identified approximately $919MM of total loans and commitments to green companies and projects.	emissions management likely falls into the $200K to $400K range. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and our 2015 spend was approximately $2.8MM.
Fluctuating socio-economic conditions	Suboptimal performance of the company's value chain (e.g., customers, employees, suppliers, alliance partners, and host	Reduced stock price (market valuation)	>6 years	Indirect (Client)	Very likely	Low-medium	There are additional risks associated with climate change which are neither regulatory nor physical in nature. For example,	Consistent with our commitment to help our value chain prepare for the challenges of climate change, we have engaged with a variety of	Costs are dispersed across many cost centers and a considerable portion of our expenditures

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	communities in which we do business) in preparing to manage the risks and find new opportunities which are associated with climate change could cause communities and markets which are key to the company's success to experience a decline in economic and social prosperity. If a region's citizens, businesses, and communities are not taking the steps necessary to prepare and position themselves well for a climate-challenged, low carbon, and resource-constrained future, then that region and its people and						value chain risks that could have a 0.5% negative impact on market capitalization would equate to roughly $38MM (based on a market capitalization of approximately $7.35B at year-end 2015). While acknowledging these risks, we do not at this time believe that they are likely to have a significant effect on our financial condition or results of operations in the foreseeable future (i.e., within 10 years) due to the risks not yet being a more important market determinant and due to our existing approach to anticipate the risks and address the expectations of stakeholders.	stakeholders on energy, climate change, and other sustainability issues - including our suppliers, customers, employees, NGOs, policy makers, and representatives of host communities in which we operate. Our engagement process includes biennial consultations with external stakeholders which are facilitated by a third-party consultant and which cover all aspects of our sustainability program, including climate change and emissions management issues. Our most recent stakeholder consultations in 2014-2015 confirmed that our progress is in line	would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to $400K range. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and our 2015 spend was approximately $2.8MM.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	businesses could find themselves at a competitive disadvantage when compared to better prepared and more adaptive regions.							with stakeholder expectations.	
Uncertainty in market signals	Our commercial banking relationships exist in numerous industries and business types. Climate change and associated policies and regulations may change the dynamics within certain industry types. For example, shifts to renewable energy may impact traditional oil and gas companies which may become less profitable and/or operate with periods of increased volatility and decreased certainty. Our	Reduced stock price (market valuation)	3 to 6 years	Indirect (Client)	Likely	Low-medium	There are additional risks associated with climate change which are neither regulatory nor physical in nature. Concentrated involvement with higher carbon risk industries that perform below expectations present a risk to our stock price. Similarly, significant underperformance of renewable energy businesses could impact business operations. A 0.5% negative impact on market capitalization would equate to roughly $38MM	The corporations Enterprise-Wide Risk Management Committee, established by the Enterprise Risk Committee of the Board, is responsible for governance over the risk management framework, providing oversight in managing the Corporation's aggregate risk position and reporting on the comprehensive portfolio of risks as well as the potential impact these risks can have on the Corporation's risk profile and	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate annual staff time dedicated to climate change strategy, energy, and emissions management likely falls into the $200K to

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	exposure to industry concentrations disproportionately affected by climate change may present additional risks to our business performance. Similarly, uncertainty around incentives for some forms of renewable industries may also affect the performance of those businesses.						(based on a market capitalization of approximately $7.35B at year-end 2015).	resulting capital level. These include, but are not limited to, existing and emerging risk matters related to credit, market, liquidity, operational, compliance and strategic conditions. We work to actively manage market concentrations and to anticipate the risks and address the expectations of stakeholders. For example, loans to the energy industry (primarily oil & gas) decreased 14% in 2015.	$400K range. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and our 2015 spend was approximately $2.8MM.

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

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

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Page: CC6. Climate Change Opportunities

CC6.1

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

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

CC6.1a

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other regulatory drivers	Comerica is a provider of financial products and services, with small and medium-size businesses (SMEs) representing our core customer base. The company responds to demand for commercial loans from viable, creditworthy businesses whose own products and services meet society's many needs. The opportunities we have identified are not associated	Increased demand for existing products/services	>6 years	Indirect (Client)	Likely	Unknown	The level of regulatory and policy uncertainty at the state and federal levels makes it difficult to forecast both the speed and magnitude of regulatory changes and to predict that they could be financially significant for the company. These factors are more likely than not to cause demand for ‘green’ and 'low carbon' finance to evolve slowly and gradually among small and medium-size companies which comprise Comerica's	We continue to position our company for the opportunities which are beginning to emerge. To capture information (for future planning purposes) about the current state of 'green lending' at Comerica, we implemented a 'green loan' tracking system in 2012 and identified over $919MM of environmentally beneficial loans and commitments as of 12/31/15, including loans for green buildings, energy	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate that annual staff time dedicated to the management of climate change opportunities would likely fall into the $250K to $500K range.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	with any single regulatory driver listed in the CDP's standard drop-down menu. Rather they are beginning to emerge -- or could emerge in the future -- from a variety of regulatory drivers that seek to mitigate climate change and reduce GHG emissions by significantly improving energy efficiency and conservation, electrifying transportation, de-carbonizing electricity, deploying carbon capture and storage, and preserving						core customer base. Over the longer term, if we were to have increases in 'green' loans of roughly 50% it could potentially increase the size of our environmentally beneficial loan portfolio to approximately $1.4B (based on year end 2015 figure of $919MM).	efficiency projects, solar, wind, biogas, vehicle electrification, and other purposes which support mitigation and climate protection. In 2015, we communicated sustainability topics to customers through one-on-one interactions. Educated customers should be in a better position to understand mitigation options as climate change risks become more significant to their business operations. We are continuing to evaluate the overall business case for deploying	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	carbon sinks such as forests. Thus air pollution limits, cap and trade schemes, emission reporting obligations, energy or carbon taxes, building and product efficiency regulations as well as product labeling requirements can all play a role in influencing the ways in which our customers across our key U.S. markets conduct business in the future, identify opportunities for growth, and the purposes for							additional resources on this potential opportunity.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	which they seek loans from Comerica. Comerica has already observed some increase in the demand of our customers for clean tech and alternative energy finance (e.g., wind, solar, biofuels, and landfill gas to energy projects) in recent years. We believe that there may be increased demand in the future for loans for energy-efficiency and green retrofits of existing buildings across our key markets, although demand so far								

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	has been slow to develop. Other areas in which there could be opportunities for our customers -- and, by extension, for us -- include smart grid technologies, green chemistry, energy-efficient industrial automation and equipment, electric/hybrid power trains, carbon capture & storage, bio-materials, and advanced battery & fuel cell technologies. Service companies which provide a range of energy and green design								

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	consulting as well as other climate change mitigation and adaptation services may represent another source of opportunity for Comerica in the years ahead.								

CC6.1b

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	Comerica is a provider of financial products and services, with small and medium-size businesses (SMEs)	Increased demand for existing products/services	>6 years	Indirect (Client)	More likely than not	Unknown	We expect future opportunities associated with providing financial products & services to those involved in preventing, mitigating, &	Comerica's approach to managing these potential opportunities at this time is to conduct on-going monitoring and	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	representing our core customer base. The company responds to demand for commercial loans from viable, creditworthy businesses whose own products and services meet society's many needs. The opportunities we have identified are not associated with any single physical risk driver listed in the CDP's standard drop-down menu. Rather they are likely to emerge over time from a variety of physical risk drivers that are projected to become more visible and impactful as the 21st century						adapting to the physical effects of climate change. Given the uncertainties associated with estimating the timing and magnitude of potential physical changes, we are currently unable to quantify the overall financial implications. Over the longer term, if we were to have increases in 'green' loans of roughly 50% it could potentially increase the size of our environmentally beneficial loan portfolio to approximately $1.4B (based on year end 2015 figure of $919MM).	research into public and private sector efforts to understand and improve general forecasting capabilities with regard to the likely physical impacts of climate change in the key areas of the United States in which we conduct business. We are still primarily in the information-gathering stage with regard to this aspect of climate change opportunity and have not as yet tried to forecast or position ourselves to exploit future demand for financial products and services that could materialize as a	separately tracked or easily segregated from other staff responsibilities. We estimate that annual staff time dedicated to the management of climate change opportunities in this area would not exceed $10K per year in the near term.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	progresses. We would expect our future opportunities related to the physical effects of climate change - including changes in temperature patterns and extremes, precipitation patterns and extremes, sea level rise, storm surge, flash floods, drought events, and induced changes in natural resources -- to arise from opportunities our customers in our key U.S. markets may have to provide goods & services which prevent, mitigate, or otherwise respond or							result of the physical effects of climate change.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	adapt to the physical effects of climate change (e.g. real estate and infrastructure maintenance and repair, water resources management, emergency response and management services; etc.). A wide variety of potential issues could influence such demand, including severe weather events, risk of property or infrastructure damage, evolving public health & safety challenges, water and resource scarcity issues, changes in the productivity of agriculture and forestry, and many other								

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	possible events and occurrences.								

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	Comerica is aware that the sentiments, values, and expectations of many stakeholders are evolving in response to growing concerns about the environment and climate change. In particular, investor and NGO interest in this area appears to be	Increased stock price (market valuation)	1 to 3 years	Direct	Very likely	Unknown	Strategic management of climate change and sustainability carries with it the opportunity to differentiate and enhance our reputation and brand and to strengthen relationships with key stakeholders on whom we are dependent for our long-term success. While we are not	Growing numbers of individuals, companies, and investors are expected to recognize the need to respond to climate change risks and opportunities and show a preference for doing business with financial institutions which are committed to working with them to solve the world's sustainability challenges. To manage these	Costs are dispersed across many cost centers and a considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate that annual staff time dedicated

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	growing and deepening -- as is the pressure for greater corporate social responsibility and leadership in this area. Successful execution of a credible sustainability and climate change strategy can both improve a company's operating performance (e.g., by reducing costs) and increase stakeholder trust in the company's governance and brand. We believe that we have an opportunity to enhance the company's reputation and brand among						currently able to quantify the overall financial implications, we believe there is some evidence that our movement on these issues over the past seven years has improved relationships with stakeholders to whom these issues are important. For example, impacts on reputation that could have a 0.5% positive impact on market capitalization would equate to roughly $38MM (based on a market capitalization of approximately $7.35B at year-end 2015.	opportunities, Comerica established an enterprise-wide corporate sustainability program and adopted a climate change strategy. We have publicized our efforts to create a more sustainable company in our annual sustainability reports and have begun to integrate sustainability into our brand identity and core values. We have implemented an annual sustainability action plan, which has included initiatives to manage climate change risks and opportunities inside the company and within our value chain. Internally, these efforts have included a variety of energy efficiency & conservation initiatives in our	to the management of climate change opportunities in this area would not exceed $50K per year. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and our 2015 spend was approximately $2.8MM.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	key constituencies (such as investors, customers, employees, civil society, and host communities) and thus to create greater long-term value for our owners.							buildings. We also reduced the number of stand-alone printers in use across our footprint and expanded our videoconferencing capabilities to reduce corporate business travel. In 2014, after realizing our previous GHG emissions reduction target, we set a goal to reduce our real estate GHG emissions by 20% by 2020 from a 2012 baseline year. On the procurement side, we evaluate the sustainability risks in our supply chain by scoring environmental performance data from our largest vendors that represent over 30% of spend.	
Changing consumer behaviour	Comerica is aware that the sentiments, values, and expectations	Increased demand for existing products/services	3 to 6 years	Direct	More likely than not	Unknown	Strategic management of climate change and sustainability	We have noticed in recent years a growing number of local governments are asking banks	Costs are dispersed across many cost centers and a

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	of many consumers are evolving in response to growing concerns about the environment and climate change. Although the urgency of responding to climate change risks has diminished somewhat for some American consumers during the recent deep recession, we believe that a growing number of individuals and businesses are likely to be persuaded - over time - of the wisdom of confronting this issue. We believe that these						carries with it the opportunity to differentiate and enhance our reputation and brand and to strengthen relationships with key stakeholders on whom we are dependent for our long-term success. While we are not currently able to quantify the overall financial implications, we believe there is some evidence that our movement on these issues over the past six years has improved relationships with stakeholders to whom these issues are important. Over the longer term, if we were to have increases in 'green' loans	which compete for their relationships to provide detailed information on their environmental & sustainability performance. Some asset managers preferentially target their investments to companies which are committed to improving their ESG performance; other investors are beginning to view companies with a climate change and sustainability strategy as better long-term managers of risk & opportunity and therefore as better investment choices. We continue to monitor carbon regulatory risk in higher risk sectors within the loan portfolio. We have implemented a green loan tracking system to enable us to capture and report environmentally	considerable portion of our expenditures would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. We estimate that annual staff time dedicated to the management of climate change opportunities in this area would not exceed $50K per year. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and our 2015 spend was approximately $2.8MM.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	consumers can also show a preference for doing business with companies and brands that have been responsible and credible leaders on these issues. For those existing or prospective customers for whom these issues are already important, we believe we have an opportunity to strengthen their loyalty or to make a case for doing business with Comerica.						of roughly 50% it could potentially increase the size of our environmentally beneficial loan portfolio to approximately $1.4B (based on year end 2015 figure of $919MM).	beneficial loans and commitments from across the portfolio (approximately $919MM of total loans/commitments to green companies/projects as of 12/31/2015). We continue to explore the demand among our commercial and industrial customers for energy-efficiency finance for building retrofits. In 2015, we communicated sustainability topics to customers through one-on-one interactions. We have engaged with a variety of stakeholders on energy, climate change, and other sustainability issues - including our suppliers, customers, employees, NGOs, policy makers, and representatives of host communities in which we operate.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Our most recent stakeholder consultations in 2014-2015 confirmed that our progress is in line with stakeholder expectations.	

CC6.1d

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

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

CC6.1f

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

Further Information

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

Page: CC7. Emissions Methodology

CC7.1

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

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Sun 01 Jan 2012 - Mon 31 Dec 2012	6949.81
Scope 2 (location-based)	Sun 01 Jan 2012 - Mon 31 Dec 2012	74784.25
Scope 2 (market-based)		

CC7.2

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

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

CC7.2a

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

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CO2	IPCC Fifth Assessment Report (AR5 - 100 year)
CH4	IPCC Fifth Assessment Report (AR5 - 100 year)
N2O	IPCC Fifth Assessment Report (AR5 - 100 year)
Other: R-22	IPCC Fifth Assessment Report (AR5 - 100 year)
Other: R-134a	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: R-404a	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: R-407c	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: R-410a	IPCC Fourth Assessment Report (AR4 - 100 year)
Other: R-438a	Other: ISCEON MO00 Refrigerant Brochure, Linde
Other: R-12	IPCC Fifth Assessment Report (AR5 - 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/2016/40/3640/Climate Change 2016/Shared Documents/Attachments/ClimateChange2016/CC7.EmissionsMethodology/Emission Factors for CDP Response 7.4.xlsx

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

CC8.1

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

Operational control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e

7638

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

Yes

CC8.3a

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

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
60965	60965	2015 is the first year for Comerica reporting on Market-Based Electricity Emissions, as well as Location-Based Electricity Emissions. Comerica has signed contractual instruments for Electricity (Texas locations) and for natural gas (Michigan locations). Comerica contacted the Texas contract issuer, Reliant Energy, for site-specific emission factors to utilize in the calculation of Market-Based emissions. Reliant Energy has not instituted processes to determine the site-specific emissions and is currently not able to provide an emission factor for our reporting purposes. Since we are not able to obtain an emission factor from the contract agent, we are following the WRI Guidance on Hierarchy for selection of market-based emission factors. Our 2015 data utilizes the 2012 eGRID Emissions Rates. We continue to pursue PPA-provided emissions rates and will incorporate them as they become available.

CC8.4

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

No

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded

CC8.5

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

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Data Gaps Assumptions Data Management	Data gaps include the following: (1) lack of actual fuel consumption data and precise vehicle weight data for the company's fleet vehicles; (2) lack of precise data on volumes of diesel fuel actually combusted by company-owned back-up generators. Assumptions made to work around these gaps included the following: (1) Total fleet vehicle emissions are estimated on the basis of vehicle mileage data (i.e., odometer readings) reported by fleet vehicle drivers at the beginning and at the end of the reporting year, using the DEFRA emission factors appropriate for the known engine size of each vehicle; (2) Diesel fuel quantities purchased during the year are used as a reasonable estimate of diesel fuel consumed via combustion by each back-up generator. All diesel fuel purchases are assumed to have been consumed and are applied to the emissions factor. The accuracy of our Scope 1 natural gas emissions depends on the reliability of a number of our vendors' data management systems, including: (1) those of utility companies which generate consumption activity data, (2) our

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
			automated bill payment system, from which all activity data is then extracted for purposes of calculating our GHG emissions, and (3) our automated energy & carbon management (ECM) system, which performs the CO2e calculations. We assume that utility companies are accurately capturing and reporting our consumption data; that our bill payment software is properly capturing and reporting the activity data reflected in the underlying utility bills; and that our energy & carbon management software solution is correctly calculating the resulting emissions. We do perform a range of QA/QC checks on the data and investigate any apparent anomalies. We have further attempted to ensure the accuracy of this data via both internal and external verification checking of our systems and calculations.
Scope 2 (location-based)	More than 2% but less than or equal to 5%	Extrapolation Metering/ Measurement Constraints Data Management	The accuracy of our Scope 2 emissions estimates depends on the reliability of a number of our vendors' data management systems, including:(1) those of utility companies which generate consumption activity data for purchased steam, chilled water, and electricity at our metered facilities, (2) our automated bill payment system, from which all activity data is then extracted for purposes of calculating our GHG emissions, and (3) our automated energy & carbon management (ECM) system, which performs the CO2e calculations. We assume that utility companies are accurately capturing and reporting our consumption data; that our bill payment software is properly capturing and reporting the activity data reflected in the underlying utility bills; and that our energy & carbon management software solution is correctly calculating the resulting emissions. We do perform a range of QA/QC checks on the data and investigate any apparent anomalies. For those of our leased facilities which are not metered, we estimate electricity emissions by extrapolating the average electricity consumption per square foot from like-kind or similar Comerica facilities in the same region which are metered. In those relatively few instances where we do not have like-kind metered facilities in the same region, we use an all-office average consumption rate to estimate electricity consumption. We have further attempted to ensure the accuracy of this data via both internal checking and external verification of our data management systems and calculations.
Scope 2 (market-based)	More than 2% but less than or equal to 5%	Assumptions Extrapolation Metering/ Measurement Constraints Data Management	The accuracy of our Scope 2 emissions estimates depends on the reliability of a number of our vendors' data management systems, including:(1) those of utility companies which generate consumption activity data for purchased steam, chilled water, and electricity at our metered facilities, (2) our automated bill payment system, from which all activity data is then extracted for purposes of calculating our GHG emissions, and (3) our automated energy & carbon management (ECM) system, which performs the CO2e calculations. We assume that utility companies are accurately capturing and reporting our consumption data; that our bill payment software is properly capturing and reporting the activity data reflected in the underlying utility bills; and that our energy & carbon management software solution is correctly calculating the resulting emissions. We do perform a range of QA/QC checks on the data and investigate any apparent anomalies. For those of our leased facilities which are not metered, we estimate electricity emissions by extrapolating the average electricity consumption per

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
			square foot from like-kind or similar Comerica facilities in the same region which are metered. In those relatively few instances where we do not have like-kind metered facilities in the same region, we use an all-office average consumption rate to estimate electricity consumption. We have further attempted to ensure the accuracy of this data via both internal checking and external verification of our data management systems and calculations. Additionally, the Power Purchase Agreement vendor for our Texas Electricity PPA contracts (Reliant Energy) was not able to provide site-specific emission factors for our market-based emissions. The 2012 eGRID Emission Factors were utilized in their place.

CC8.6

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

Third party verification or assurance process in place

CC8.6a

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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual	Complete	Limited	https://www.cdp.net/sites/2016/40/3640/Climate Change	Pages 1-3	ISO14064-	100

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
process		assurance	2016/Shared Documents/Attachments/CC8.6a/Comerica 2015 GHG emissions Verification Statement FINAL.pdf		3	

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

CC8.7

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

Third party verification or assurance process in place

CC8.7a

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

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2016/40/3640/Climate Change 2016/Shared Documents/Attachments/CC8.7a/Comerica 2015 GHG emissions Verification Statement FINAL.pdf	Pages 1-3	ISO14064-3	100
Market-based	Annual process	First year it has taken place	Limited assurance	https://www.cdp.net/sites/2016/40/3640/Climate Change 2016/Shared Documents/Attachments/CC8.7a/Comerica 2015 GHG emissions Verification Statement FINAL.pdf	Pages 1-3	ISO14064-3	100

CC8.8

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

Additional data points verified	Comment
Year on year change in emissions (Scope 1 and 2)	According to Lisa Barnes at Bureau Veritas, since Bureau Veritas has conducted Comerica's greenhouse gas emissions verification for at least two consecutive years, they have verified year on year changes in Scope 1 and 2 emissions (2015 vs. 2014) as part of their verification work.
Year on year change in emissions (Scope 3)	According to Lisa Barnes at Bureau Veritas, since Bureau Veritas has conducted Comerica's greenhouse gas emissions verification for at least two consecutive years, they have verified year on year changes in Scope 3 emissions (2015 vs. 2014) as part of their verification work.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

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

Further Information

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

CC9.1

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

No

CC9.1a

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

Country/Region	Scope 1 metric tonnes CO2e

CC9.2

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

By GHG type
By activity

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude

CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	7623
CH4	4.02
N2O	10.52

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Mobile Combustion (transport)	967.3
Stationary Combustion (heating and emergency generators)	6202.3
Fugitive Emissions (refrigerants)	468.2

Further Information

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

CC10.1

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

Yes

CC10.1a

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

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
United States of America	60931.76	60931.76	105580	0
Canada	9.15	9.15	98	0
Mexico	24.29	24.29	53	0

CC10.2

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

By activity

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Electricity consumption (metered space)	48362.22	48362.22
Purchased steam consumption (i.e., heating)	122.56	122.56
Chilled water consumption (i.e., cooling)	4.24	4.24
Electricity consumption (unmetered space, estimated)	11574.47	11574.47
Estimated Natural Gas - Heat	900.32	900.32
Estimated Propane - Heat	1.39	1.39

Further Information

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

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

CC11.2

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

Energy type	Energy purchased and consumed (MWh)
Heat	37500
Steam	541
Cooling	24

CC11.3

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

5154

CC11.3a

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

Fuels	MWh
Jet kerosene	3329
Distillate fuel oil No 2	1163
Motor gasoline	662

CC11.4

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

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	Comerica has executed a PPA with Reliant Energy to provide electricity for all Comerica properties located in Texas. The total electricity consumption (metered and estimated) in 2015 for the Texas facilities was 33,577 MWh. Comerica requested site-specific emission factors from Reliant Energy for the market-based reporting purposes. At this time, Reliant Energy is not able to provide the emissions data, so eGRID emission factors were utilized in the calculation of emissions for market-based reporting in 2015. Comerica will continue to request the site-specific data from Reliant Energy for future CDP reporting, as the PPAs will run through 2020.

CC11.5

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

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
100177	100177	0	0	0	In 2015, Comerica did not operate any renewable energy generation sources. Except for low carbon electricity, heat, steam or cooling that may offered as part of the regional mix of energy sources provided by local utility providers, Comerica did not purchase or generate low carbon energy sources. The company continues to evaluate the feasibility of implementing new solar PV or wind energy generation projects at its corporate facilities. Recent advances in renewable energy generation equipment are encouraging and improve the business case and risk evaluation analyses, improving the potential for future implementation.

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?

Decreased

CC12.1a

Please identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	6.21	Decrease	A number of different projects were implemented during 2015 to improve the operational efficiency of our real estate portfolio and reduce associated GHG emissions. In addition, several of the projects commissioned during 2014 realized their full year energy savings in 2015. These projects included conversion of interior and exterior lighting to LED; installation and continuous commissioning improvements of Building Management Systems; conducting ASHRAE Energy Audits and implementing Energy Conservation Measure projects at 19 properties; completing E&S audits for 17 Retail locations slated for 2015 Refurb/Transformation projects and implementing "Quick Win" energy and water conservation measures; and implementing standardized temperature and lighting setpoints and setbacks to trim energy usage during occupied and unoccupied times. A Dormant Space Policy was also developed and implemented in 2015, which identified longer-term unoccupied areas within facilities and set protocols for HVAC operation, plug load disconnection, IS equipment removal, and window treatments to reduce solar load. These projects totalled over 2,366 MtCO2e in avoided emissions and represent approximately 3.23% of the 2014 Scope 1 and Scope 2 emissions. Additionally, Comerica reduced space owned or leased for 30 locations in 2015 by 106,613 SF to achieve increased operational efficiency. The estimated avoided emissions associated with this consolidation and closure effort total 1,719 MtCO2e and represent approximately 2.35% of the 2014 Scope 1 and Scope 2 emissions. Reductions in the use of fleet vehicles and travel emissions avoided through videoconferencing totaled 452 MtCO2e, which help to offset a 16 MtCO2e increase in corporate jet emissions. The total for travel reduction and video conferencing amounted to 436 MtCO2e, representing 0.62% of 2014 Scope 1 and Scope 2 emissions. Improvements to refrigerant management and HVAC maintenance practices resulted in a reduction of 25.90 MtCO2e (0.04% of 2014 Scope 1 and 2 emissions). Together these emissions reduction activities removed 4,546 MtCO2e from the 2014 Scope 1 and Scope 2 emissions (6.21% reduction).
Divestment			
Acquisitions			
Mergers			
Change in output			
Change in methodology	1.23	Increase	A new reporting activity or GHG accounting methodology for 2015 was the estimation of heat at facilities where the heat source is not directly metered by Comerica. The estimation process began with an audit of all facilities lacking a metered heat source to determine the type of heating provided at the facility. Two Scope 2 Estimated Heat sources were identified and quantified for 2015, "Estimated Heat - Natural Gas" and "Estimated Heat - Propane". The addition of these new reporting activities increased the Scope 2 emissions total for 2015 by 902 MtCO2e (1.23% of 2014 Scope 1 & 2 total).
Change in boundary			
Change in physical operating	1.72	Decrease	Weather patterns influenced energy usage in our facilities during 2015, with a significant decrease in natural gas usage occurring primarily in our Michigan and Texas facilities. The reduced consumption continued

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
conditions			through all quarters of the year, with Michigan's usage down 17% (6,237 MWh) and Texas's usage down 24% (282 MWh) as compared to 2014. With milder weather patterns prevailing across the portfolio, the metered electricity usage was down 2,064 MWh (2.6%). The Michigan facilities electricity usage was down 1,143 MWh (2.3%) for the year, noting lower electricity usage for cooling purposes.
Unidentified			
Other	0.42	Increase	Diesel fuel-related emissions increased during 2015 by 309 MtCO2e (0.42% of 2014 Scope 1 & 2 totals) due to the increased usage of the stand-by electricity generators. The increase in diesel fuel occurred at one of Comerica's data center locations, which needed to run on stand-by electricity generator power for two weeks to carry critical load at the facility during system maintenance activities. No extended use of the stand-by generators was needed in 2014.

CC12.1b

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

Location-based

CC12.2

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

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
.000024207	metric tonnes CO2e	2834000000	Location-based	13.42	Decrease	Reduced emissions were a result of emission reduction initiatives to rationalize and consolidate our occupied space, improve energy efficiency in the facilities where we maintain operational control, and reduce travel in the corporate airplane and commercial travel. Energy consumption in 2015 was also lower due to less severe weather conditions for the year in our key markets. Although our 2015 gross revenues were up 8% from 2014, our Scope 1 and 2 emissions were down 6.28%. Total Scope 1 and 2 emissions in 2015 were 68,603 MtCO2e.

CC12.3

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

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
7.73	metric tonnes CO2e	full time equivalent (FTE) employee	8880	Location-based	6.32	Decrease	Reduced emissions were a result of emission reduction initiatives to rationalize and consolidate our occupied space, improve energy efficiency in the facilities where we maintain operational control, and reduce travel in the corporate airplane and commercial travel. These activities, in combination with less

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
							severe weather for a portion of the year in our key markets, contributed to the reduced Scope 2 emissions. There was a 0.05% increase (4 FTE) in Comerica FTE count at year-end 2015 vs. 2014. However, our combined Scope 1 and 2 GHG emissions decreased by 4,597 MtCO2 or 6.28%, indicating that the Scope 1 & 2 emissions reductions outweighed the impact from increased FTEs for 2015.
0.013	metric tonnes CO2e	square foot	5291828	Location-based	4.39	Decrease	In 2015, we reduced our Real Estate and Corporate Travel emissions through a variety of emission reduction initiatives, including trimming our occupied space, implementing energy efficiency projects, and reducing commercial travel. These direct activities, in combination with more moderate weather conditions during the year in our key markets, resulted in a decrease of 4,597 MtCO2e (or 6.28%) of our Scope 1 and Scope 2 GHG emissions. We reduced our Comerica portfolio of real estate by 106,613 square feet from 2014's average four quarters square foot total, a decrease of 1.97%, indicating that the emissions reduction significantly outpaced the square footage reduction.

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

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

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	Landfill gas	Comerica has contracted to purchase verified emissions reductions associated with the Southex Greenwood Farms project in Tyler, Texas. The project consists of a landfill gas capture project that primarily upgrades LFG for natural gas pipeline injection. The credits are used to offset emissions from business travel in 2015 corresponding to our fleet of owned vehicles and our corporate jet.	CAR (The Climate Action Reserve)	967	967	Yes	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	Relevant, calculated	2631	The lifecycle emissions calculated within this estimate include paper, computer and carpeting emissions. (1) Paper: LCA-based emissions of office/marketing papers (2151.85 MtCO2e) were calculated according to Environmental Paper Network Paper Calculator, Version 3.2.1 using quantities of paper types purchased by Comerica, categorized according to paper type (coated or uncoated free sheet) and percentage of post-consumer recycle content. GWPs provided from the IPCC AR4-100 year (CO2=1, CH4=25, N2O=298). Lifecycle analysis and data quality documentation is provided at: https://s3.amazonaws.com/EPNPaperCalc/documents/Paper_Calculator_Documentation_V4_June+2015.pdf (2) Computers: LCA-based emissions of laptop, desktop, notebook, tablet and mobile workstation computers (192.90 MtCO2e) were calculated based on product-specific information provided by supplier (Dell) and quantities of units purchased by Comerica (610 laptops, 4 desktops, 3 all-in-one units, and 51 mobile workstations). Emission factors: laptop (267 kg CO2e/unit), desktop (624 kg CO2e/unit), all-in-one units (276-480 kg CO2e/unit) and mobile workstation model (408 kg CO2e/unit). Dell published updated lifecycle analysis summary documents from 2013-2015 to provide emission factors for their laptop, desktop, and workstation computer models. For the Dell lifecycle analysis of an all-in-one computer model that Comerica purchased in 2015, please visit:http://i.dell.com/sites/doccontent/corporate/corp-comm/en/Documents/Opti3030AIO-PCF.pdf. (3) Carpeting: The LCA-based emissions of carpet purchases (286.64 MtCO2e) were calculated based on product-specific information provided by suppliers and unit quantities purchased by Comerica (26,897 yd2 carpet tile and 876 yd2 carpet broadloom). Emission factors: carpet tile emission factors range from 7.65 to 14.3 kg CO2e/yd2 based on carpet tile brand and the broadloom carpet emission factor is 7.68 kg CO2e/ yd2. Lifecycle analysis by PE Americas in 2009 conducted for Shaw. Interface Glasbac LCA developed from GaBi 5 (2011) software system and databases. Mohawk LCA Cradle-to-grave life cycle impact assessment results shown for both TRACI 2.0 and CML characterization factors. 100% of 2015 carpet purchases are represented in these emissions.	100.00%	We currently purchase goods and services (predominantly services) from a very large number of suppliers. Many of these suppliers are relatively small in size and do not comprise a significant portion of our annual spend. Since 2012, we have expanded emissions reporting for a number of manufactured products we purchase in larger quantities, including life-cycle emissions associated with office copy paper, other papers, laptop and desktop personal computers, and carpeting. The

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
					LCA emissions associated with those purchases are reported in this row. This figure only captures these specific purchases and does not represent emissions related to all of our purchases of goods and services. For purposes of determining the percentage of emissions calculated here using primary data, we have used actual quantities of paper stocks purchased by the company during the year, but have assumed that the Environmental Paper Network Paper Calculator should be assumed

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
					to yield industry-average emissions data and should thus be classified as a secondary data source. Emissions provided represent 99% of Comerica computer and 100% of paper purchases in 2015.
Capital goods	Relevant, calculated	425	(i) Type and source of data: The lifecycle emissions calculated within this category includes our furniture emissions. Emission factors were provided by Herman Miller, broken down by furniture model. (ii) Methodology: The LCA-based emissions of furniture purchases (425 MT CO2e) were calculated based on product-specific information (tables, chairs, cubicles, and task lights) provided by the suppliers and unit quantities purchased by Comerica (furniture pieces). Herman Miller purchases were reported to account for over 86% of Comerica's furniture purchases in 2015 and over 99% of Herman Miller purchases are included in the emissions estimate. Per an email communication on 3/3/2016 with Becky Hedin, Eco-Inspired Design Coordinator in the Safety and Sustainability department at Herman Miller, Herman Miller continues to calculate the total lifecycle emissions of their products using Life Cycle Assessment (LCA) software called GaBi. They also use TRACi 2.1 methodology for GWP (100 years). TRACI 2.1 uses the 2001 IPCC Second Annual Report global warming potentials (GWP) of 21 for CH4 and 310 for N2O. The Herman Miller chair and several of their system, filing, and storage products have been third party reviewed and verified. Since the same emission calculation methodology is used on all of their products, there is confidence in their other emissions factor calculations. Knoll purchases were reported to	64.00%	We are in the early stages of expanding efforts to identify, quantify, and report significant sources of Scope 3 emissions. We have not yet taken a close look at capital goods - apart from those fixed assets with relatively short lives (e.g., personal computers, etc.) which are included above in our

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
			account for approximately 14% of Comerica's furniture purchases in 2015. Knoll has only conducted an LCA on one of their product lines that Comerica purchased in 2015, so only 13% of Knoll purchases are included in the emissions estimate. This total emissions estimate represents 64% of furniture purchases in 2015.		purchased goods and services number as well as furniture. Our capital goods purchases (i.e., purchases of plant, property, furniture and major equipment) are believed to vary significantly from year to year. The LCA emissions associated with furniture purchases are reported in this row. This figure only captures these specific purchases and does not represent emissions related to all of our purchases of capital goods.
Fuel-and-energy-related	Relevant, calculated	5441	(i) Type and source of data: The emissions calculated within this category includes grid gross loss emissions associated with electricity transmission and distribution line losses for our metered and unmetered (or estimated) purchased electricity within the United States.	80.70%	We believe that our Scope 3 emissions would include

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
activities (not included in Scope 1 or 2)			Line loss emissions were calculated using over 99.9% of our generated Scope 2 electricity emissions (non U.S. based electricity generation was not included in line loss emissions estimate, which represents less than 0.1% of the electricity emissions generated by Comerica). (ii) Methodology: The electricity transmission/ distribution line losses were calculated using Comerica's Scope 2 location-based U.S. metered and unmetered electricity emissions (MtCO2e) and U.S. EPA's Compiled eGRID 2012 (released 10/08/2015) Grid Gross Loss %. The electricity (metered and unmetered) data was first downloaded from the environmental & energy management system, sorted by eGRID and then assembled by eGRID Grid Loss region. The corresponding eGRID Gross Loss Factor (as a decimal) was then applied to the totals calculated for each eGRID region. The U.S. EPA line loss estimate equation, provided in a U.S. EPA slide deck "How to use eGRID for Carbon Footprinting Electricity Purchases in Greenhouse Gas Emission Inventories," was used to estimate the line loss emissions. Comerica used GWPs from IPCC AR5-100 year (CO2=1, CH4=28, N2O=265) to calculate the travel emissions within our Environmental/ Energy Management System.		sources related to extraction, production, and transportation of coal consumed in the generation of the electricity we consume as well as from the generation of electricity that is lost in transmission and distribution. This figure only captures the Scope 2 electricity transmission/distribution line losses and does not represent all Scope 3 fuel-and energy-related activity emissions. Approximately 80.7% of these emissions are associated with our metered electricity locations, the remaining 19.3% of

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
					the emissions are estimated per our methodology for estimated electricity usage.
Upstream transportation and distribution	Relevant, calculated	1141	Emissions in this category currently include our FedEx shipment deliveries and Brinks transport services. (1) FedEx: (i) Type and source of data: These CO2 emissions (501.08MT) account for all FedEx Express and Ground-shipped packages in 2015 (through 12/24/2015). FedEx has increased its carbon efficiency over the last year (3.47 lb CO2 per pound mail shipped vs. 3.51 lb CO2 per pound in 2014). (ii) Methodology: FedEx uses a proprietary and confidential methodology to calculate emissions, which they indicate is reviewed and verified by independent third parties who agree that the methodology is credible and it is consistent with the WRI Greenhouse Gas Protocol. FedEx uses the customer's account number to calculate associated emissions attributable to that account. Documentation on the emissions calculation was provided by FedEx via email. (2) Brinks: (i) Type and source of data: The Brinks CO2 emissions (639.54 MT) account for armored transport/cash vault services. Brinks takes their corporate-wide diesel fuel consumption and estimates the quantity of diesel fuel consumed for their customer accounts based on the revenues of the account. The emission factor used was 22.38 pounds CO2 per gallon of diesel fuel consumed. (ii) Methodology: Comerica's account was less than 1% of Brinks revenues, but Brinks rounded to a 1% revenue level, which resulted in approximately 63,000 gallons of diesel fuel being attributed to the Comerica account. While this methodology over-estimates our transport emissions with Brinks, we recognize that there are still unreported emissions with other transport services within our key markets where data is not currently available. Documentation on the emissions calculation was provided by Brinks via email.	100.00%	We have Scope 3 emissions related to our purchases of transportation and distribution services (including inbound logistics, outbound logistics, and distribution between the company's own facilities). Based on our 2014 upstream transportation-related shipping and courier spend, we estimate that approximately 54% of our total shipping/courier transport emissions and approximately 69% of our total

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
					armored/cash transport emissions are included in these Scope 3 emissions.
Waste generated in operations	Relevant, calculated	765	(i) Type and source of data: Life-cycle emissions of our landfilled solid waste, according to the US EPA's WARM Model, Version 13, updated March 2015. Represents the landfill disposal of approximately 1,583 tons of mixed municipal solid waste (MSW). Emission factor (based on national average scenario) = 0.48 MtCO2e per (short) ton disposed. (ii) Methodology: Roll-off bins at larger owned office buildings/service centers are directly weighed. A waste estimation protocol was developed to estimate waste quantities on the basis of facility/site information, collection schedule, pick-up frequency, container size, and industry average data (standard unit weight per volume of container based on waste type) for the remaining unweighed waste containers. The total landfilled waste was calculated based on direct weighed and estimated waste quantities sent to the landfill. The landfilled waste estimate was then plugged into U.S. EPA's WARM model to estimate lifecycle emissions associated with landfill disposal. Documentation on the emissions calculation methodologies used in the EPA WARM model are provided at https://www3.epa.gov/warm/SWMGHGreport.html	100.00%	This number corresponds to the life-cycle emissions of our landfilled mixed municipal solid waste. All of the company's other waste streams are recycled. We currently divert from the landfill approximately 64.8% of the total solid waste generated. This landfilled emissions estimate encompasses 100% of the waste disposed at a landfill. The national waste

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
					disposal vendor provides monthly reports of all waste collection events, and identifies container size and type of waste (refuse or recycled materials). The vendor provides estimated weights for the waste that is not directly weighed at a landfill facility. Only the roll-off container waste (5.66% of total landfilled waste in 2015) is directly weighed at the receiving landfill.
Business travel	Relevant, calculated	4174	(1) Employee Air Travel in Commercial Airlines: (i) Type and source of data: Calculated using miles supplied by the company's air travel management vendor; Emission Factor:) DEFRA, UK Government conversion factors for Company Reporting, V.2.0, Updated 2015, average short haul flight (no radiative forces included). (ii) Methodology: Current systems do not capture the total air passenger miles for that portion of the total air spend occurring outside the travel vendor's system. Also, lack of flight haul distances associated with the	100.00%	

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
			company's air travel activity data. Total employee passenger miles flown were applied to the emission factor shown below. Emission volumes for CO2, N20, CH4 were calculated and then converted to metric tons of CO2e. Simplified estimation procedure used to account for activity data gaps in the total air travel spend where the annual air travel spend from the corporate manual and automated employee reimbursement exceeds the air mile spend from the corporate air travel vendor system; Assumptions: All flights are assumed to be average short haul in length (i.e., less than 2299 miles). (2) Employee Business Travel in Employee-Owned Cars & Rental Cars: (i) Type and source of data: Calculated using miles supplied by the company's automated and manual travel reimbursement systems and its rental car vendor system; Emission Factor: (Source: DEFRA, UK Government conversion factors for Company Reporting, V.2.0, Updated 2015, broken down by engine size) (ii) Methodology: Current systems do not capture the total vehicle miles for that portion of the total rental car travel spend which occurs outside the travel vendor's system. Also, lack of engine size information associated with the company's travel activity data for both rental cars and personal (employee-owned) vehicles utilized for business travel. Total employee vehicle miles were applied to the emission factor shown above. Emission volumes were calculated for CO2, CH4, and N2O and then converted to metric tons of CO2e. Simplified estimation procedure used to account for activity data gaps in this portion of the total rental car travel spend; Assumptions: All vehicle miles are assumed to be in vehicles with large-sized engines (greater than 2.1 liters in size).		
Employee commuting	Relevant, calculated	33061	(i) Type and source of data: Employee commuting emissions were calculated using the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. The emissions included in this estimate include employee commuting emissions from across our markets. (ii) Methodology: The emissions were calculated using estimates of total annual miles driven per year by personal vehicle, carpooling with or without another employee, bus and train transport and emissions factors from (1) US EPA, Emission Factors for Greenhouse Gas Inventories, Table 8, Last Modified: 11/19/2015 (for light duty truck/large	25.90%	Over 2,300 employees provided complete responses to the questionnaire, a 25.9% employee response rate for 2015.

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
			SUV, bus, and train transport), (2) http://www.ucsusa.org/clean-vehicles/electric-vehicles/ev-emissions-tool (for electric vehicle transport), and (3) DEFRA, UK Government conversion factors for Company Reporting, V.2.0, Updated 2015 (for subcompact to full-size gasoline and diesel, hybrid, CNG, LPG, and motorcycle transport). GWPs provided from the IPCC AR4-100 year (CO2=1, CH4=25, N2O=298). An employee commuting questionnaire was posted on the company intranet for one month in December 2015. The data captured related to estimating commuting emissions included number of days/week worked in the office and from home during the average work week. We also captured the mode of transport taken and the type (fuel and size) of vehicle driven. The primary data from over 2,300 employees who completed the questionnaire was extrapolated to create total emissions for the entire employee base of over 9,100 employees at year-end 2015. Assumptions made for the estimate include: (1) Those employees who responded to the questionnaire have an average of 20 vacation/holiday days/year, (2) When a colleague reported that they carpooled with another Comerica employee, we assumed that this was 1 extra person for our calculations, (3) We used the Defra emission factors for large gasoline engine cars in Europe to represent U.S. medium gasoline cars, emission factors for medium European gasoline-engine cars to represent U.S. small engine cars, and emission factors for small European gasoline-engine cars to represent U.S. sub-compact engine cars since engines are commonly smaller in Europe than in the U.S, (4) When a colleague reported that they worked from home or took alternate transportation occasionally, we assumed that this related to 11 times per year.		
Upstream leased assets	Not relevant, explanation provided				All of our upstream leased assets are included in the company's Scope 1 and Scope 2 emissions

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
Downstream transportation and distribution	Not relevant, explanation provided				The company's business is the provision of financial services. We do not transport any significant amounts of sold goods to end consumers.
Processing of sold products	Not relevant, explanation provided				The company's business is the provision of financial services. We do not process any significant amounts of intermediate products sold by downstream companies (e.g., manufacturers)
Use of sold products	Not relevant, explanation provided				The company's business is the provision of financial services. We do not sell any significant amounts of products which directly consume energy

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
					(fuels or electricity) during use.
End of life treatment of sold products	Not relevant, explanation provided				The company's business is the provision of financial services. We do not sell any significant amounts of products which require waste treatment and disposal at the end of their life.
Downstream leased assets	Relevant, calculated	1688	Subleased Property Energy Usage (i) Type and source of data: Activity volumes are taken from utility bills for metered facilities. Emission factors for electricity based on U.S. EPA's eGRID 2012 for each applicable location; natural gas: 53.06 kg CO2/MMBtu, 1 g CH4/MMBtu and 0.1 g N2O/MMBtu; Steam: 66.33 kg CO2/MMBtu, 1.25 g CH4/MMBtu, 0.125 g N2O/MMBtu; GWPs based on IPCC Fifth Assessment -100 year. (ii) Methodology: For those facilities which are not metered, we estimate electricity emissions by extrapolating the average electricity consumption per square foot from like-kind or similar Comerica facilities in the same region which are metered. In those relatively few instances where we do not have like-kind metered facilities in the same region, we use an all-office average consumption rate to estimate electricity consumption.	33.67%	Emissions from properties that we (as lessor) lease or sub-lease to other companies or tenants; including natural gas, steam, and both metered and unmetered (estimated) electricity. Of these Subleased property energy usage types, Subleased Metered Electricity,

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
					Subleased Natural Gas, and Subleased Steam activity values are based on utility billing statements. Approximately 66.33% of the Downstream Leased Assets emissions are estimated per the Estimated Electricity methodology.
Franchises	Not relevant, explanation provided				The company does not operate franchises.
Investments	Relevant, not yet calculated		Currently, we do not believe that there is a sufficient methodology for reporting emissions with associated financial services products that are implementable in an economically justifiable context.		Our Corporate Sustainability Office previously participated in UNEP-FI working groups, focused on developing financial industry guidance

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
					on how to account for emissions associated with financial services loans and investments. In addition, we sponsored a masters-level research project at a major university to evaluate financed emissions methodologies and associated sustainability metrics.
Other (upstream)	Not relevant, explanation provided				Not applicable
Other (downstream)	Relevant, calculated	499	Subleased Corporate Jet: We confirmed that a portion of corporate jet emissions are not attributable to Comerica employees or for Comerica business. We separated this from our Scope 1 travel emissions. (i) Type/source of data: We use the same GHG emission factors for Corporate Jet: 9.51538965036085 kg CO2 per US Gallon/0.00518601417074208 kg CH4 per US Gallon/0.0900170926863115 kg N2O per US Gallon(Source: DEFRA, UK Gov't	100.00%	Jet fuel-related emissions related to third-party use of the corporate jet (not used by

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
			conversion factors for Company Reporting, V.2.0, Updated 2015). Comerica used GWPs from IPCC AR5-100 year (CO2=1, CH4=28, N2O=265) to calculate the travel emissions within our Environmental/Energy Management System. (ii) Methodology: The aircraft flight log identifies whether jet was used for Comerica business purposes (Scope 1) or subleased to non-Comerica business entities (Scope 3). The non-Comerica jet fuel usage is tallied and reported as a Scope 3 Subleased Corporate Jet activity). Activity volumes are taken from jet logs that detail dates of use, user name, quantity of fuel used, & cost for fuel. The data is collected in pounds of jet fuel used and converted to U.S. Gallons (lbs. x .14793 = U.S. Gallon) prior to applying emissions factor. CBRE Travel (1) CBRE Employee Business Travel in Fleet Vehicles, Employee-Owned Cars & Rental Cars related to Comerica account: (i) Type and source of data: Calculated using miles supplied by CBRE's travel reimbursement systems; Emission Factors: Large: 0.467063816 kg CO2/mile, 0.000209215 kg CH4/mile, 0.000627644 kg N20/mile; Medium: 0.319921494 kg CO2/mile,0.000209215 kg CH4/mile, 0.000627644 kg N20/mile (Source: DEFRA, UK Gov't conversion factors for Company Reporting, V.2.0, Updated 2015, broken down by engine size) (ii) Methodology: For CBRE Fleet Vehicle mileage, the odometer readings are collected by Facility Managers to whom the fleet vehicles are assigned. Assumed large engine size for all personal (employee-owned) & rental car vehicle travel due to lack of engine data. CBRE Fleet vehicle engine size is known, so activity is identified as CBRE Large Fleet (large engine) and CBRE Medium Fleet (medium engine). Total CBRE employee vehicle miles applied to the emission factors for CO2, CH4, and N2O & then converted to metric tons of CO2e. Assumptions: All rental car & personal vehicle miles are assumed to be vehicles with large-sized engines (greater than 2.1 liters in size).		Comerica employees or for Comerica-related projects). All Other (downstream) CBRE travel data is provided by CBRE.

CC14.2

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

Third party verification or assurance process in place

CC14.2a

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

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2016/40/3640/Climate Change 2016/Shared Documents/Attachments/CC14.2a/Comerica 2015 GHG emissions Verification Statement FINAL.pdf	Pages 1-3	ISO14064-3	99

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	Emissions reduction activities	7.27	Decrease	This emission reduction resulted primarily from reduced purchases of our office and marketing papers in 2015. We anticipate emissions within this Scope 3 category will fluctuate over time due to the cyclical nature of product purchases. There was a 14% decrease in overall paper emissions. 95% of our office copy paper contained 30% post-consumer recycled content and 98% of office copy and marketing papers were FSC-certified. In 2015, 100% of our laptop, desktop, and workstation computer purchases met the IEEE EPEAT® Gold Rating. 98% of our carpet purchases in 2015 contained recycled content.
Capital goods	Other: Cyclical nature of furniture purchases	186.78	Increase	We captured 100% of our furniture purchases in this emissions estimate, which was an increase over our 2014 estimate. Additionally, we purchased furniture associated with the move and update of our Arizona market headquarters. We anticipate emissions within this Scope 3 category will fluctuate over time due to the cyclical nature of furniture purchases. When we do purchase furniture, we look for energy efficient and environmentally-certified options. In 2015, 92% of our furniture purchases carried the BIFMA level® certification, a 4% increase in furniture products that carried the certification over 2014.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Emissions reduction activities	6.80	Decrease	Electricity Line Loss emissions increased overall by 1,140 MtCO2e. After considering the emission increase due to change in emission factors (1,432 MtCO2e), the remaining emissions variance is due to the reduced energy consumption (292.53 MtCO2e of reduction, representing a 6.80% reduction from the 2014 total). Electricity usage decreased in 2015 due to energy efficiency projects, less severe weather, and square footage reductions within our real estate portfolio. The reduction in electricity has a direct impact on the emissions related to electricity transmission/distribution line losses.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Change in methodology	33.29	Increase	Electricity Line Loss emission increased overall by 1,140 MtCO2e. After considering the emission increase due to change in emission factors (1,432 MtCO2e), the remaining emissions variance is due to the reduced energy consumption (292.53 MtCO2e of reduction). Electricity line loss emissions increased by 1,432 MtCO2e in 2015 due to the change in methodology in emission factors employed in the emission calculations. The eGRID gross electricity line loss emission factors were updated in 2015. Several of these emission factors were greater than the 2014 emission factors, resulting in the 1,432MtCO2e increase in emissions (33.29%) compared to 2014 figures.
Upstream	Change in output	9.76	Increase	We anticipate emissions within this Scope 3 category will fluctuate over time due to the

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
transportation & distribution				cyclical nature of services purchased. There was an increase in our FedEx shipping for 2015, but FedEx has increased the carbon efficiency of its shipping services over the last year (3.47 lb CO2 per pound mail shipped in 2015 vs. 3.51 lb CO2 per pound in 2014). Also, we likely over-reported our armored vehicle/cash vault services-related emissions since this calculation is based on Comerica representing 1% of Brinks revenues (the lowest % that Brinks will use for their emissions estimation), but we have been told that Comerica likely represents much less than 1%.
Waste generated in operations	Emissions reduction activities	8.53	Decrease	The total amount of waste generated by our facilities decreased by 147 US tons in 2015, primarily due to the Waste Optimization Program which reduced the frequency of container collection and size for our Retail facilities. This optimization program reduced the amount of waste disposed of at landfills by 149 US tons (down 8.6%) and decreased our recycled employee waste by 1.6 tons (down 1%). Electronic waste increased in 2015, by 10.6 tons (up 16%), due to increased change-out of our computer equipment and conversion to more energy-efficient models. We also updated the emission factor used to calculate the landfilled waste emissions from the 2014 WARM Model (0.53 MtCO2e per (short) ton disposed at a landfill) to the 2015 WARM Model emission factor (0.48 MtCO2e per (short) ton disposed at a landfill). After considering the emission reduction due to change in emission factor (71 MtCO2e decrease), the remaining emissions reduction is due to the reduction activities or Waste Optimization Program (78 MtCO2e). The change in emissions due to emission reduction activities is 8.53% of the 2014 total for Landfilled Waste emissions.
Waste generated in operations	Change in methodology	7.77	Decrease	The amount of waste disposed of at landfills decreased by 149 US Tons in 2015, which resulted in an overall decrease in emissions calculated through the WARM model of 149 MtCO2e. However, we updated the emission factor for waste in 2015, per the most recent US EPA WARM Model, Version 13, March 2015, with the new emission factor of 0.48 MtCO2e per (short) ton of waste disposed at a landfill. 2014 data utilized the 2014 WARM Model with an emission factor of 0.53 MtCO2e per (short) ton disposed at a landfill. Therefore, the reduction in emissions due to change in methodology is the difference between the amount which would have been calculated using the 2014 emission factor (836 MtCO2e) and the amount calculated for 2015 using the 2015 emission factor (765 MtCO2e). This amount is 71 MtCO2e and represents 7.77% reduction from the 2014 emission total for waste generated in operations.
Business travel	Change in output	0.64	Increase	The very slight increase in Scope 3 employee business travel emissions was related to

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
				an increase customer-based business travel. Air travel-related emissions increased by 1.9% compared to 2014 (still down 15.2% since 2012). Personal vehicle ground travel-related emissions increased by 1% compared to 2014 (still down 1.7% since 2012). Our car rental-related emissions decreased by 6.9%. Employee business travel emissions would have likely been higher, if not for the use of our videoconferencing systems, which helped avoid approximately 1,899 business trips equating to approximately 450 MtCO2e.
Employee commuting	Emissions reduction activities	0.42	Decrease	Comerica's employee commuting emissions would have been slightly higher if not for some of our some employees working from home, riding their bike to work or walking to work. These activities resulted in a 411 MtCO2e emissions avoidance based on survey respondents, which represents a 1.2% decrease from what emissions would have been if all colleagues had used a vehicle to commute. There is uncertainty in the emissions estimate since our emissions are based on responses from approximately 26% of the employee population.
Downstream leased assets	Emissions reduction activities	9.66	Decrease	Energy use in our downstream leased assets (Subleased Metered Electricity, Subleased Estimated Electricity, Subleased Natural Gas, and Subleased Steam) collectively decreased in 2015 as compared to 2014, with Subleased Metered Electricity making up the majority of the emission reduction (down 144 MtCo2e or 23%). Subleased Estimated Electricity was the only downstream leased asset activity to increase in 2015 (by 12.8 MtCO2e or 1.2%). The reductions in the Subleased energy activity totals are due to energy conservation projects implemented at the Metered locations and RaCC activities that helped to shed a total of 180.5 MtCO2e and 11,898 square feet of subleased space from the portfolio. The Downstream Leased Assets reduction represents a reduction of 9.66% from the 2014 Subleased Energy activities total.
Other (downstream)	Other: Change in third party usage	9.55	Decrease	Subleased Corporate Jet usage decreased in 2015 by 2,628 US gallons of fuel or 26.02 MtCO2e in calculated emissions. The decrease in Scope 3 emissions for Subleased Corporate Jet was due to a decrease in usage and represents a 9.55% decrease from the 2014 Subleased Corporate Jet emissions total.
Other (downstream)				Reporting of CBRE Travel activities conducted on behalf of Comerica is a new Scope 3 activity for 2015. CBRE Travel includes CBRE Fleet mileage (Large Fleet and Medium Fleet Vehicles), Rental Car miles, and Personal Reimbursed Vehicle mileage. Since it is a new activity for 2015, the combined CBRE Travel activities accounted for an increase in GHG emissions of 253.07 MtCO2e.

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 suppliers

CC14.4a

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

We currently engage with our largest suppliers on their environmental performance, including on climate change and emissions issues. Since late 2010, we have focused our attention on better understanding the environmental practices and performance of our most significant suppliers in order to establish a baseline against which to measure future progress and set targets for improvement. With a large number of suppliers, our spend (primarily on services) is highly dispersed below this first tier, and our engagement is tailored to this reality and to those suppliers whom we can influence and who are most likely to have the most significant impacts. Based on the use of a company-developed environmental questionnaire and scoring tool, we have assessed and rated our most significant suppliers (34 companies representing 37% of spend as of 12/31/15) and have begun to set goals for improving the performance of the group as a whole and the weaker performers in particular. Active engagement is being preferentially targeted at those suppliers assigned to lower performance bands (D, E, or F). Environmental Sustainability Questionnaires are re-administered every three years as part of the contract renewal cycle, and progress is discussed with significant suppliers in regularly scheduled performance reviews. Success over time can be measured by the percentage of total spend with that is placed with suppliers in performance bands A, B, and C. We have set a goal to increase the percentage we spend with suppliers in the target range by 5 percent each survey cycle. During 2014-2015, we went back to the suppliers in the first wave of sustainability questionnaires and conducted a second round to gauge progress. As of 2015, we increased our percentage of total spend with suppliers scored in Waves 1-4 by 1% over the last 3 years, while the spend dollars with suppliers within the target range increased by 14% compared to Round 1 (2012). In addition, the average score of the supplier scoring waves (Waves 1-4) increased by 7% (Round 2 vs. Round 1). We discuss with our key suppliers during their regularly scheduled reviews how we view their environmental sustainability performance and where we see opportunities for improvement. In 2015, we met with some suppliers that scored below a C rating in the survey and discussed areas for improvement. We also shared Comerica's commitment to sustainable practices and best practices in areas where we have made significant environmental improvements ourselves. New potential suppliers of significant goods and services are evaluated and scored as part of our RFP process. Placement of the company's business considers environmental performance in addition to quality, pricing, supplier diversity, and delivery needs. Based on our perceived level of influence and leverage, the value of our contract, and the type of product or service being provided to Comerica, we plan to broaden our engagement with other suppliers over time in ways that are appropriate to the nature of the relationship, our level of spend, and the resources at our disposal.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend (direct and indirect)	Comment
34	37%	Because we have a large number of suppliers, many of whom are smaller service providers with whom our spend is also relatively small, our Green Procurement Work Group's initial attention has been focused on larger suppliers of goods & service (i.e., spend of $4 million or more) or on certain smaller suppliers to the extent that they provide significant quantities of physical (manufactured) goods that have an environmental footprint (e.g., paper products, computers and electronic equipment, office furniture, etc.) that could potentially be given preference on the basis of product environmental attributes. Information provided by the suppliers in response to Comerica's Environmental Sustainability Questionnaire is then used to score and assign these suppliers to performance bands (A through F). Those suppliers scoring a D rating or below are provided with an initial sustainability performance review and are asked to provide sustainability progress updates during their business reviews with Comerica. We re-survey and update the scores of the significant suppliers approximately every 36 months before contract renewal to ensure that they are either maintaining or improving their environmental performance. With regard to products (rather than services) which we purchase in significant quantities and where we believe we have an opportunity to select environmentally preferable products (e.g., paper, electronics, furniture, carpets, etc.), we also evaluate the key environmental attributes of the product in addition to the overall environmental performance of the supplier. To date, we have used publicly available information (for example, from third-party eco-labeling programs, where available) to understand the environmental attributes of various products that might make them 'preferred' purchases for us. In 2015, 100% of our laptop, desktop, and workstation computer purchases met the IEEE EPEAT® Gold Rating, 98% of our carpet purchases contained recycled content, and 92% of our furniture purchases carried the BIFMA level® certification.

CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Use in supplier scorecards	The environmental performance of suppliers is measured on the basis of answers to a series of over 40 questions included in Comerica's Environmental Questionnaire & Scorecard for Suppliers. The questions ask for information on supplier performance and initiatives (including quantified data) in the following areas and for documentation to support all answers provided: 1) Environmental impact assessments conducted by the supplier 2) Environmental management systems and compliance practices 3) Environmental sustainability policies and practices 4) Environmental sustainability reporting 5) Energy and fuel consumption 6) Greenhouse gas emissions and reduction plans 7) Water consumption 8) Solid waste management and resource recycling or recovery 9) Paper consumption and commitment to sustainable

How you make use of the data	Please give details
	forestry products 10) Consumption of other raw materials, and 11) Green procurement policies and practices. Points are awarded on a 100 point scale - with more points awarded to those responses which indicate that a supplier has mature and effective programs in place to measure, publicly report, manage, and reduce impacts - including its energy use, GHG emissions, and other impact areas (e.g., commitments to use sustainable forest products) that can affect climate change. Placement of the company's business considers environmental performance scores in addition to quality, pricing, and delivery needs.

CC14.4d

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

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

Name	Job title	Corresponding job category
David E. Duprey	Executive Vice President and Chief Financial Officer	Chief Financial Officer (CFO)

Further Information

CDP 2016 Climate Change 2016 Information Request