Welcome to your CDP Climate Change Questionnaire 2019

C0. Introduction

C0.1

(C0.1) 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 major 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 financial products and services to consumers. Wealth Management serves the needs of high net worth clients and institutions. At 12/31/2018, Comerica had total assets of approximately $US 70.8 billion, total loans (net of unearned income) of approximately $US 50.2 billion, total deposits of approximately $US 55.6 billion, and 7,865 employees on a full time equivalents (FTE) basis (source: Comerica's 2018 Annual Report). 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 12/31/2018, Comerica had 435 U.S. banking centers (193 in Michigan, 122 in Texas, 96 in California, 17 in Arizona, and 7 in Florida) and one banking center in Canada. To view additional information about Comerica, please visit our company website at www.comerica.com.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Row 1	January 1, 2018	December 31, 2018	No

C0.3

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

Canada
Mexico
United States of America

C0.4

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

USD

C0.5

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

Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

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

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action	The Enterprise Risk Committee (ERC) of the Board of Directors is responsible for climate-related issues. Comerica's chief sustainability officer (CSO) prepares presentations to the ERC for some of their meetings. Annually, the Sustainability Council prepares an annual action plan. The CSO presents the Sustainability Action Plan for the upcoming year to the

	Reviewing and guiding risk management policies Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	ERC for review and approval. The CSO also has the ability to advise the ERC if particular sustainability or climate-related issues arise that require board-level input or action. In 2018, the ERC was briefed on our progress against our 2020 environmental sustainability goals, our new 2025, 2030 and 2050 greenhouse gas emissions goals, our progress on our 2018 Sustainability Action Plan, and our priorities for 2019. The ERC was also briefed in 2018 on developments with respect to increased investor interest in ESG issues as well as the evolution of the TCFD recommendations.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Financial Officer (CFO)	Both assessing and managing climate-related risks and opportunities	Quarterly
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	Annually
Sustainability committee	Both assessing and managing climate-related risks and opportunities	Not reported to the board
Safety, Health, Environment and Quality committee	Managing climate-related risks and opportunities	Not reported to the board
Energy manager	Both assessing and managing climate-related risks and opportunities	Not reported to the board
Corporate responsibility committee	Managing climate-related risks and opportunities	Not reported to the board

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The CFO reports directly to the CEO and is the executive sponsor of the corporate sustainability program. As executive sponsor, the CFO is responsible for broadly assessing and managing all sustainability issues, including climate change. As such, climate-related issues falls within the CFO's responsibilities. The CFO is advised of important climate-related matters on a case-by-case basis by the CSO and others and can in turn report that to the Board of Directors quarterly or as appropriate.

The CSO leads all sustainability and climate-related topics and is charged with assessing and managing all aspects of Comerica's climate-related risks and opportunities. As such, the CSO is the engaged in climate-related matters on a day-to-day basis. The CSO reports to the Director of Investor Relations, who in turn reports to the CFO. The CSO provides an annual briefing to the Enterprise Risk Committee of the Board of Directors and has the ability to provide more frequent updates as appropriate. The Director of Investor Relations also advises the CFO and CSO on climate-related topics of interest to investors.

The Sustainability Committee is led by the CSO and includes the CFO, Director of Investor Relations, and senior business leaders from all areas of the company. The Sustainability Committee is responsible for developing and implementing the annual sustainability action plan and as such is the vehicle through which climate-related topics are addressed throughout our company.

The Safety, Health, Environment and Quality committee includes representatives from human resources, sustainability, real estate, and business units. The CSO briefs this committee on climate-related matters which may present safety, health or environmental issues.

The Energy Manger reports to the Corporate Real Estate team and leads the company's efforts with respect to minimizing our impacts from real estate-based GHG emissions. As such, the Energy Manager and his colleagues have the lead in implementing our strategy to reduce our climate-altering GHG emissions.

The Corporate Responsibility Committee includes representatives from sustainability, diversity, philanthropy, volunteerism, communications and CRA. The CSO briefs this group on climate-related issues so they can seek out climate-related opportunities. Examples include integration of climate strategies into other corporate responsibility programs such as volunteer activities or environmental justice.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

Yes

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Who is entitled to benefit from these incentives?

Energy manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

Meeting energy and emission reduction goals and targets. Comerica's 2018 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 energy efficiency, enhance our carbon accounting system, optimize our use of technology, and communicate progress to stakeholders. Key managers in all areas to which these projects were assigned – including our outsourced (CBRE) Energy & Sustainability projects team and Director of Energy & Sustainability – 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.

Who is entitled to benefit from these incentives?

Facilities manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Meeting energy and emission reduction goals and targets. Comerica's 2018 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 energy efficiency, enhance our carbon accounting system, optimize our use of technology, and communicate progress to stakeholders. Key managers in all areas to which these projects were assigned – including our outsourced (CBRE) 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.

Who is entitled to benefit from these incentives?

Other, please specify

Capital Projects Managers

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Meeting energy and emission reduction goals and targets. Comerica's 2018 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 energy efficiency, enhance our carbon accounting system, optimize our use of technology, and communicate progress to stakeholders. Key managers in all areas to which these projects were assigned – including our outsourced (CBRE) Energy & Sustainability projects team and Comerica real estate team members – 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.

Who is entitled to benefit from these incentives?

Chief Sustainability Officer (CSO)

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

Meeting energy and emission reduction goals and targets. Comerica's 2018 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, engage colleagues on sustainability, 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.

Who is entitled to benefit from these incentives?

Business unit manager

Types of incentives

Monetary reward

Activity incentivized

Other, please specify

Environmental Lending Goals

Comment

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 14 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 considers performance in these areas among other factors in awarding merit increases and bonuses for the year.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Monetary reward

Activity incentivized

Other, please specify

Living Comerica's Involvement Core Value

Comment

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), our Master of Diversity Awareness Program, and our Master of Sustainability Awareness Program, to name a few.

Who is entitled to benefit from these incentives?

Executive officer

Types of incentives

Monetary reward

Activity incentivized

Other, please specify

Sustainability Performance Goals

Comment

Individual incentives for senior and executive officers are impacted by the achievement of performance goals which may include the attainment of specified levels of one or more of the following measures: sustainability measures (including, but not limited to, the measures set forth in Comerica's Sustainability report, such as percentage reduction in paper consumption, water use, greenhouse gas emissions and/or landfill waste).

Who is entitled to benefit from these incentives?

Chief Financial Officer (CFO)

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction target

Comment

As the executive sponsor of Comerica's sustainability program, the CFO has accountability in her annual performance plan for progress on our sustainability efforts. This includes our 2020, 2025, 2030, and 2050 GHG reductions goals.

C2. Risks and opportunities

C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

	From (years)	To (years)	Comment
Short-term	0	3	Short-term horizons are critical in that they determine the strategy and lay the groundwork for mitigating future impacts and harnessing future opportunities.
Medium-term	3	6	Medium-term horizons are near-term enough to predict with some level of certainty while being far enough out to adjust should new trends or developments occur.

Long-term	6	32	Long-term horizons allow for long-term goals which can be used to guide strategic initiatives that are geared toward a future that may be materially different from the status quo. While longer term developments are more difficult to forecast, they are useful for setting the policies that will drive progress in the short and near-term, such as Comerica's 100% GHG reduction goal by 2050.

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization's frequency and time horizon for identifying and assessing climate-related risks.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	Risk monitoring is conducted on an ongoing basis, led by the Corporate Sustainability Office. Risks can be short, medium, or long-term and we consider long-term risks to extend at least 6 years into the future.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

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, Purchasing, 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. 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 and specific business units, operations, geographies, or assets is based on reading available scientific and policy literature; monitoring regulatory developments at 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. Risk are managed through the respective business unit(s) to which the risk applies. For example, potential regulatory impacts that could impact certain industry sectors may be managed by those business units whose customers make up those industry types. Broadly, we 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. At this time, we do not specifically define "substantive financial impact" with a specific dollar figure but rather view all such risks on a case-by-case basis and elevate the mitigation measures based on a broad variety of financial and non-financial metrics. This helps account for issues such as reputation which can be difficult to quantify in traditional financial terms.

C2.2c

(C2.2c) Which of the following risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	For our existing U.S. operations and U.S.-based footprint, we monitor for proposed climate-related laws or regulations that would be relevant. However, we are not aware of any significant adverse climate-related regulatory risks associated with existing U.S. federal, state or local regulations that apply to our value chain at this time. We continue to monitor developments through our leadership of a bank sustainability roundtable, members of which include over 20 banks with a large presence in North America.
Emerging regulation	Relevant, sometimes included	Emerging regulations may potentially apply to our value chain in the future. For example, regulatory requirements for certain disclosures that currently apply outside of our markets (e.g., EU) may signal a possible future regulatory requirement in the U.S. At Comerica, an example of how we track regulatory developments and their potential impacts to our business is with an online, subscription-based sustainability benchmarking and evaluation service. This helps us not only track emerging regulations in the US, but existing and emerging regulations in other geographies which may influence policy and regulation in the US.
Technology	Relevant, sometimes included	Technology risks could include transitions to lower carbon technology alternatives. For example, this could include shifting a company's computing from its own facilities/servers to cloud-based solutions, which would convert relevant emissions from Scope 2 to Scope 3. As

		an example, Comerica moved over 100 applications to the cloud in 2018, helping reduce our energy consumption at our data centers.
Legal	Relevant, always included	Legal risks can include issues such as exposure to litigation or increased costs from fines/judgments associated with business practices. For example, a financial services company could be subject to claims by parties impacted by climate change based on their business relationships with customers in higher carbon intensity industries. At Comerica, we evaluate our customer relationships on a case-by-case basis to identify risks.
Market	Relevant, always included	Market risks could include changing customer/consumer behavior or uncertainty in market signals and prices. For a financial services company with exposure to energy customers, such risks may affect valuations of assets or reserves. In recent years, Comerica has reduced our overall exposure to the oil and gas industry 46% from our previous highs (YE2018 vs. 2015).
Reputation	Relevant, always included	Reputational risks can arise from shifts in consumer preferences or industry stigmas and can also increase stakeholder concerns. For examples, high concentrations of businesses in carbon intensive industries or lack of relationships with companies in green sectors may have negative reputational impacts. Comerica works to maintain and enhance our reputation as part of our Sustainable Value Creation Matrix, our approach which guides our actions with respect to sustainability and climate change. An example includes our Environmental Services business unit which provides financial services to companies in the biogas and recycling industries, among others. Our work from this group includes leadership in non-profit organizations like the Environmental Research and Education Foundation (EREF) and our sponsorship of their project to reduce food waste (and the associated emissions) from our waste streams.
Acute physical	Relevant, always included	Acute physical risks can manifest as increased frequency and/or severity of extreme weather events. Our footprint includes some areas which are more susceptible to impacts from such storms. At Comerica, we evaluate these risks during the course of our business continuity and disaster recovery process.
Chronic physical	Relevant, sometimes included	Chronic physical risks such as changes to weather patterns, have the ability to impact our business and our customers. For example, we may experience increased utility consumption in areas with warmer than historical average conditions, increasing our operating costs. In response, Comerica has implemented a number of projects and initiatives to help reduce our energy consumption and associated emissions. This includes our LED and Building Management System projects across our footprint and the utilization of unified temperature standards in our buildings.

Upstream	Relevant, sometimes included	Upstream risks include those risks to our value chain such as supply chain or policy impacts which may impact our business. For example, our Green Procurement Workgroup evaluates potential supply chain impacts that may result from a variety of physical or regulatory climate risks. Comerica's sustainability office engages directly with our purchasing team to include requirements in our requests for proposals where we identify product or service attributes that can help limit our emissions. For example, we requested suppliers provide Energy Star certified options for certain business equipment in order to reduce our energy use and associated GHG emissions.
Downstream	Relevant, sometimes included	Downstream risks include those to our stakeholders as a result of our business operations and can include our customers, investors, and communities. By reviewing and understanding how various climate risks may impact these stakeholders, we are able to address these downstream risks. For example, through transparent discussions of climate risks and opportunities through CDP disclosure and our GRI-based reporting, we are able to provide investors specific details on Comerica's approach to climate change.

C2.2d

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

The Corporate Sustainability Office (CSO) works with the Comerica Sustainability Council (comprised of internal operations-focused and external customer/community-focused 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 - 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.

Comerica's 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.

As an example of how our risk management process is applied to physical risks, we implemented mitigation plans during intense weather events including large rain events in Texas and wildfires in California. As an example of how our risk management process is applied to transitional opportunities, our progress against our 2020 GHG reduction goal continues to provide positive reputation impacts and was a factor in our listing on the Barron's 100 Most Sustainable Companies in the US. Our new 2025, 2030, and 2050 GHG reduction goals helped us earn a Climate Leadership Award for excellence in greenhouse gas emissions management.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact

Reduced demand for products and services

Company- specific description

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 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. Comerica proactively discloses our sustainability and climate change performance annually in our Corporate Responsibility (CR) Reports and CR Progress Reports. By publishing our results, including strategies, progress and challenges, we transparently communicate on these topics. In addition, we conduct a formal stakeholder engagement process on ESG issues and disclose the results of those engagements in Comerica's ESG Impact Assessment report. All of these documents, along with our annual CDP responses, are published on Comerica.com/sustainability.

Time horizon

Medium-term

Likelihood

Very unlikely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,600,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Reputation risks related to stakeholders may present a risk to our stock price. A 0.1% negative impact on market capitalization would equate to roughly $10.6 million (based on a market capitalization of approximately $10.6 billion at year-end 2018). Costs associated with reduced revenues, while certainly possible, are difficult to estimate in this circumstance and could be significantly lower than potential negative impacts on stock price. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

Consistent with our commitment to help our value chain prepare for the challenges of climate change, 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. Our engagement process includes biennial consultations with external stakeholders which have been facilitated by a third-party consultant and which cover all aspects of our sustainability program, including climate change and emissions management

issues. Our recent stakeholder consultations in 2014-2015, 2016-2017 and 2018-2019 confirmed that our progress is in line with stakeholder expectations.

Cost of management

300,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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 $200,000 to $400,000 range.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

Chronic: Other

Type of financial impact

Increased credit risk (e.g., increased probability of default and/or loss given default)

Company- specific description

Our customers have the potential to be impacted by a variety of chronic physical risks associated with climate change, including changes in precipitation patterns, extreme variability in weather patterns, rising mean temperatures, rising sea levels and other risks. 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). Comerica operates in some drought-prone and water-stressed areas of the western and southwestern United States, including portions of CA, TX, and AZ, which are already experiencing some of these challenges. These risks could cause issues such as: reduced revenues from decreased production, reduced revenues from negative workforce impacts, increased operating costs, increased capital costs, and reduced revenues from lower sales. These risks individually and collectively have the ability to negatively impact a customer's cash flow, profits, and creditworthiness which could in turn impact our income.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,100,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Disruptions to business from increased frequency or severity of storm events could impact net income. A potential range of impact to net income related to credit issues may be on the order of 10 to 50 basis points. Based on our 2018 net income of $1,235 million, this level of potential impact could be roughly $1.2 to 6.2 million. It is also possible credit issues may not materialize; therefore, the range could be from $0 to $6.2MM, with a midpoint of $3.1MM. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

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; and requiring insurance coverage for clients whose properties we finance. These methods help limit the impacts to our customers as a result of business disruptions associated with severe storm events.

Cost of management

300,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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 $200,000 to $400,000 range.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Physical risk

Primary climate-related risk driver

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

Type of financial impact

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Increased severity of extreme weather events can lead to business interruptions for both our operations and those of our customers. In such cases, both of these factors could cause us to experience temporarily lower revenues. Comerica key markets include Arizona, California, Florida, Michigan and Texas. Each of these states have particular vulnerabilities to extreme weather events. Recent examples include hurricane impacts to Florida and Texas and wildfires in California. Examples cited in the management method below address how Comerica has put programs in place which mitigate these risks and some of these programs also serve to decrease our current expenses.

Time horizon

Current

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,100,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Disruptions to business from increased frequency or severity of storm events could impact net income. A potential range of impact to net income related to these issues may be on the order of 10 to 50 basis points. Based on our 2018 net income of $1,235 million this level of potential impact could be roughly $1.2 to 6.2 million. It is also possible credit issues may not materialize; therefore, the range could be from $0 to $6.2MM, with a midpoint of $3.1MM. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

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 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. These management methods were effective in mitigating impacts from the 2018 storms in our Texas and Florida markets and wildfires in our California market.

Cost of management

300,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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 $200,000 to $400,000 range.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Market: Changing customer behavior

Type of financial impact

Reduced demand for goods and/or services due to shift in consumer preferences

Company- specific description

As a result of climate change risks and a greening economy, certain industries or sectors may become favored, while other industries may experience stresses which make them less creditworthy. As a financial services company, if we fail to identify opportunities to develop relationships with companies that are well positioned to benefit from a greening economy or fail to identify the risks of industries under stress, it may in-turn affect our financial performance.

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Given the wide-ranging scenarios that are possible under this risk driver, we have not undertaken an evaluation of the potential financial impact. However, given the company's strong credit management approach and characterization of this risk as 'unlikely,' we do not believe there is a significant financial impact for this issue.

Management method

Comerica manages credit risk through underwriting and periodically reviewing and approving its credit exposures using credit policies and guidelines. Additionally, Comerica manages credit risk through loan portfolio diversification, limiting exposure to any single industry, customer or guarantor, and selling participations and/or syndicating credit exposures above those levels it deems prudent to third parties. Such prudent credit management allows Comerica to recognize, manage and mitigate credit risks, such as these.

Additionally, 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-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 capture and report environmentally-beneficial loans and commitments from across the portfolio. As of 12/31/2018, we had identified approximately $772MM of total loans and commitments to green companies and projects.

Cost of management

0

Comment

Management costs are dispersed across many cost centers and a considerable portion of our expenditure would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. In this case, the management of these expenses are not expected to incur significant additional expenses outside of our normal operating costs; therefore, the additional cost is indicated to be $0.

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Customer

Risk type

Physical risk

Primary climate-related risk driver

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

Type of financial impact

Increased credit risk (e.g., increased probability of default and/or loss given default)

Company- specific description

As we may be impacted by the physical risks of climate change, so may our customers. For some of our customers, the increased severity or frequency of extreme weather events have the potential to disrupt their business operations resulting in impacts such as: reduced revenues from decreased production, reduced revenues from negative workforce impacts, property damage, increased operating costs, increased capital costs, reduced revenues from lower sales and increased operational costs such as those related to insurance coverage. These risks individually and collectively have the ability to negatively impact a customer's cash flow, profits, and creditworthiness which could in turn impact our income.

Time horizon

Current

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,100,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Disruptions to business from increased frequency or severity of storm events could impact net income. A potential range of impact to net income related to credit issues may be on the order of 10 to 50 basis points. Based on our 2018 net income of $1,235 million, this level of potential impact could be roughly $1.2 to 6.2 million. It is also possible credit issues may not materialize; therefore, the range could be from $0 to $6.2MM, with a midpoint of $3.1MM. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

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; and requiring insurance coverage for clients whose properties we finance. These methods help limit the impacts to our customers as a result of business disruptions associated with severe storm events.

Cost of management

300,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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 $200,000 to $400,000 range.

Identifier
Risk 6

Where in the value chain does the risk driver occur?
Direct operations

Risk type
Transition risk

Primary climate-related risk driver
Market: Uncertainty in market signals

Type of financial impact
Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatement)

Company- specific description
As both a direct consumer of energy and a financial services company with customers who consume energy, abrupt and unexpected shifts in energy costs can impact our business. Similarly, such risk drivers can impact our supply chain as well. With respect to our own operations and our supply chain, energy price shifts can drive up our operating costs and the costs of the goods and services we procure. (Impacts to our customers are discussed separately.)

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
2,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

A 10-20% increase in the cost of energy could have an operational impact on the order of $1MM to $2MM annually. Other operational impacts, if any, are expected to be less than $1MM annually. Therefore, the combined midpoints of these ranges would be $2MM. It should be noted the financial impacts of this risk driver overlaps with others listed in C2.3a. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

Comerica's real estate and energy management teams work 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 and 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 (which was exceeded 3 years early by year-end 2016). In 2018, we set three additional goals to reduce real estate GHG emissions by 50% by 2025, 65% by 2030, and 100% by 2050. These GHG reduction goals also have a direct impact of reducing energy use. With respect to supply chain, we evaluate sustainability risks in our supply chain by scoring environmental performance data from our largest vendors that represent over 30% of spend. We also score new sourcing initiatives based on potential of the products and/or services to have sustainability-related risks or opportunities.

Cost of management

300,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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 $200,000 to $400,000 range. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and our 2018 spend was approximately $4.5 million.

Identifier

Risk 7

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Enhanced emissions-reporting obligations

Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

Enhanced emissions-reporting obligations, such as government regulation or significantly more-detailed voluntary disclosures could increase operating costs. For example, a future requirement to provide more detailed Scope 3 emissions disclosure, particularly Category 15 "Investments" which include financed emissions associated with our lending operations, could increase costs. Currently, there are no consensus-based approaches to calculating financed emissions. Should such approaches be developed, they may require additional resources and costs to meet the disclosure in a meaningful way.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

800,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Enhanced emissions reporting obligations would require additional internal and possibly external resources to comply with the obligations. Such resources may include additional Comerica staff time and time across more departments (credit, risk, etc.), external consulting support, new technology systems and/or additional third-party verification costs. In this case the potential financial impact is the additional cost of management, as indicated below. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

The Comerica Sustainability Office actively monitors current and emerging regulations to understand potential impacts. With respect to additional emissions reporting obligations, Comerica currently works to engage with stakeholders such as CDP, NGOs,

and voluntary standard organizations to understand disclosure preferences. When possible, we work to anticipate stakeholder needs and build procedures/systems in advance of potential new requirements. We also lead a group of bank sustainability professionals in North America which works to address challenges we face as an industry, particularly in the North American market. By being active in the space, we are better able to understand and influence GHG disclosure approaches that affect our sector.

Cost of management

800,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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 $200,000 to $400,000 range. Increased emissions reporting obligations could significantly increase the amount of time dedicated to these efforts and increase those costs on the order of two to three times, bringing the total costs into the $400,000 to $1,200,000 range, with the midpoint being $800,000.

Identifier

Risk 8

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Other

Type of financial impact

Increased credit risk (e.g., increased probability of default and/or loss given default)

Company- specific description

Our customers could be negatively impacted by a broad variety of climate-related legal and policy risks, including increased costs of GHG emissions, additional reporting obligations, mandates on and regulation of existing products and services, and/or exposure to litigation. Such increased costs could negatively impact some of our 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. For example, a company in a high carbon intensity sector could face increased energy costs as a result of increased GHG pricing at the utility level.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,100,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Although it is expected that most credit issues would be managed without impact to net income, if increased GHG emissions costs had a material impact on our customers, it could possibly reduce our net income. A potential range of impact to net income related to credit issues may be on the order of 10 to 50 basis points. Based on our 2019 net income of $1,235 million, this level of potential impact could be roughly $1.2 to 6.2 million. It is also possible credit issues may not materialize; therefore, the range could be from $0 to $6.2MM, with a midpoint of $3.1MM. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

The company's Enterprise-Wide Risk Management Committee, a management committee that reports to the Enterprise Risk Committee of the Board, is responsible for governance over the risk management framework, providing management-level 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 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. Comerica manages credit risk through underwriting and periodically reviewing and approving its credit exposures using credit policies and guidelines. Additionally, the Corporation manages credit risk through loan portfolio diversification, limiting exposure to any single industry, customer or guarantor, and selling participations and/or syndicating credit exposures above those levels it deems prudent to third parties. Such prudent credit management allows Comerica to recognize, manage and mitigate credit risks, such as those that could be attributable to increases in GHG emissions prices.

Cost of management

0

Comment

Management costs are dispersed across many cost centers and a considerable portion of our expenditure would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. In this case, the management of these expenses are not expected to incur significant additional expenses outside of our normal operating costs; therefore, the additional cost is indicated to be $0.

Identifier

Risk 9

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Market: Changing customer behavior

Type of financial impact

Increased credit risk (e.g., increased probability of default and/or loss given default)

Company- specific description

As a result of climate change risks and a greening economy, certain industries or sectors may become favored by consumers, while other industries may experience stresses which make them less creditworthy. As a financial services company, if we fail to identify opportunities to develop relationships with companies that are well positioned to benefit from a greening economy or fail to identify the risks of industries under stress, it may in-turn affect our financial performance.

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,100,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

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 operations in the near term 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. A potential range of impact to net income related to these issues may be on the order of 10 to 50 basis points. Based on our 2018 net income of $1,235 million, this level of potential impact could be roughly $1.2 to 6.2 million. It is also possible there could be no impact on net income, giving a range of $0 to $6.2MM, with a midpoint of $3.1MM. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

Growing numbers of individuals, companies, and investors are recognizing 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 opportunities both inside the company and within our value chain. Comerica manages credit risk through underwriting and periodically reviewing and approving its credit exposures using approved credit policies and guidelines. Additionally, Comerica manages credit risk through loan portfolio diversification, limiting exposure to any single industry, customer or guarantor, and selling participations and/or syndicating credit exposures above those levels it deems prudent to third parties. Such prudent credit management allows Comerica to recognize, manage and mitigate credit risks, such as these. As of 12/31/2018, we had identified approximately $772 million of total loans and commitments to green companies and projects.

Cost of management

300,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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 $200,000 to $400,000 range.

Identifier

Risk 10

Where in the value chain does the risk driver occur?

Supply chain

Risk type

Transition risk

Primary climate-related risk driver

Market: Other

Type of financial impact

Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatement)

Company- specific description

Climate risk drivers such as increased cost for GHG emissions, increased cost in raw materials or other inputs, changing consumer behavior, and uncertainty in market signals have the potential to negatively impact our supply chain. Under such circumstances, it is reasonable to assume such drivers could increase costs, which would be passed onto downstream users such as Comerica.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

310,000

Potential financial impact figure – maximum (currency)

6,200,000

Explanation of financial impact figure

In 2018, we had supplier spend of approximately $620MM. Under a set of climate risk drivers as listed above, it could be assumed between 5 and 10% of our supply base could pass along increased costs of 1% to 10%. Above these costs levels it is assumed Comerica would take alternate sourcing measures to limit further cost increases. Therefore, we'd face a range of potential costs of approximately $310,000 to $6,200,000, with a range midpoint of $3,255,000. Please note, it is unlikely for all risk

drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

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. We also review new sourcing initiatives based on potential of the products and/or services to have sustainability related risks or opportunities. These initiatives help limit the potential impacts of climate change in the supply chain, particularly as they relate to the market risk drivers referenced here.

Cost of management

0

Comment

Management costs are dispersed across many cost centers and a considerable portion of our expenditure would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. In this case, the management of these expenses are not expected to incur significant additional expenses outside of our normal operating costs; therefore, the additional cost is indicated to be $0.

Identifier

Risk 11

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Market: Other

Type of financial impact

Increased credit risk (e.g., increased probability of default and/or loss given default)

Company- specific description

Our customers could be exposed to a variety of market risks including changing customer behavior, uncertainty in market signals, increased cost of raw materials, impaired reputation and other issues. Such factors could negatively impact 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.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,100,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

If the market factors identified above had a material impact on our customers, it could possibly reduce our net income. A potential range of impact to net income related to credit issues may be on the order of 10 to 50 basis points. Based on our 2018 net income of $1,235 million, this level of potential impact could be roughly $1.2 to 6.2 million. However, it is expected that most credit issues would be managed without reductions to net income; therefore, the range could be from $0 to $6.2MM, with a midpoint of $3.1MM. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

Comerica manages credit risk through underwriting and periodically reviewing and approving its credit exposures using credit policies and guidelines. Additionally, Comerica manages credit risk through loan portfolio diversification, limiting exposure to any single industry, customer or guarantor, and selling participations and/or syndicating credit exposures above those levels it deems prudent to third parties. Such prudent credit management allows Comerica to recognize, manage and mitigate credit risks, such as those that could be attributable to these kinds of market risks.

Cost of management

0

Comment

Management costs are dispersed across many cost centers and a considerable portion of our expenditure would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. In this case, the management of these expenses are not expected to incur significant additional expenses outside of our normal operating costs; therefore, the additional cost is indicated to be $0.

Identifier

Risk 12

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Technology: Other

Type of financial impact

Increased credit risk (e.g., increased probability of default and/or loss given default)

Company- specific description

Our customers could face multiple types of technology-related transitional climate risks, including: modifications of existing products and services to lower emissions options, costs to transition to lower emissions technology, unsuccessful investment in new technologies, or other technology-related risks. These risks could cause our customers to experience reduced demand for products or services, increased expenditures in areas such as research and development, capital investments in technology and development, and other costs to adopt and deploy new lower emissions technologies. These risks individually and collectively have the ability to negatively impact a customer's cash flow, profits, and creditworthiness which could in turn impact our income.

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,100,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

These technology-related impacts to our customers could possibly decrease our net income. A potential range of impact to net income related to credit issues may be on the order of 10 to 50 basis points. Based on our 2018 net income of $1,235 million, this level of potential impact could be roughly $1.2 to 6.2 million. It is also possible credit

issues may not materialize; therefore, the range could be from $0 to $6.2MM, with a midpoint of $3.1MM. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

Comerica manages credit risk through underwriting and periodically reviewing and approving its credit exposures using approved credit policies and guidelines. Additionally, the Corporation manages credit risk through loan portfolio diversification, limiting exposure to any single industry, customer or guarantor, and selling participations and/or syndicating credit exposures above those levels it deems prudent to third parties. Such prudent credit management allows Comerica to recognize and manage and mitigate credit risks, such as those that could be attributable to these kinds of technology-related climate risks.

Cost of management

0

Comment

Management costs are dispersed across many cost centers and a considerable portion of our expenditure would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. In this case, the management of these expenses are not expected to incur significant additional expenses outside of our normal operating costs; therefore, the additional cost is indicated to be $0.

Identifier

Risk 13

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Stigmatization of sector

Type of financial impact

Reduced demand for products and services

Company- specific description

For financial services companies, there are some climate risk drivers that could impact the reputation of the entire sector. One such example might be the financing of traditional energy sources or the involvement in a controversial project such as a pipeline. In addition to potentially impact market capitalization, it may be more difficult to attract and retain workers in the financial services industry. Broad stigmatization of an

entire sector (other than financial services) could impact customers that we finance which could impact the creditworthiness of those customers.

Time horizon

Short-term

Likelihood

Unlikely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,600,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Reputation risks such as stigmatization of our sector could present a risk to our stock price. It is very difficult to determine the potential financial impact of a reputational event. However, a 0.1% negative impact on market capitalization would equate to roughly $10.6 million (based on Comerica's market capitalization of approximately $10.6 billion at year-end 2018). Costs associated with reduced revenues or difficulty attracting and retaining workers are more difficult to estimate and are not included in the above figure. Please note, it is unlikely for all risk drivers to be realized simultaneously; therefore, estimated financial implications cannot be aggregated across multiple risk drivers.

Management method

The company’s Enterprise-Wide Risk Management Committee, a management-level committee that reports to the Enterprise Risk Committee of the Board, is responsible for governance over the risk management framework, providing management-level 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 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 industry concentrations and to anticipate the risks and address the expectations of stakeholders.

Cost of management

0

Comment

Management costs are dispersed across many cost centers and a considerable portion of our expenditure would be on staff time which is not separately tracked or easily segregated from other staff responsibilities. In this case, the management of these expenses are not expected to incur significant additional expenses outside of our normal operating costs; therefore, the additional cost is indicated to be $0.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Type of financial impact

Increased revenue through demand for lower emissions products and services

Company-specific description

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 associated with a variety of 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 carbon sinks such as forests. Comerica has already observed demand from 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 things such as loans for energy-efficiency and green retrofits of existing buildings across our key markets, although demand so far has been slower 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 and storage, bio-materials, and advanced battery and fuel cell technologies. Service companies which provide a range of energy and green design consulting as well as other climate change mitigation and adaptation services may represent another source of opportunity for Comerica in the years ahead. As an illustration of the size of our opportunity for increased support of green lending to small and medium sized businesses, in 2018 Comerica had loans of $11.8 billion to our general middle market customers and $3.7 billion in small business loans.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

1,158,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

It is difficult to forecast both the speed and magnitude of market demand and changes and to predict how financially significant it could be for our company. We do anticipate demand for ‘green’ and 'low carbon' finance to evolve slowly and gradually among small and medium-size companies which comprise Comerica's core customer base. Over the medium 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 by $386MM to approximately $1.158B (based on year end 2018 figure of $772MM).

Strategy to realize opportunity

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 $772MM of environmentally beneficial loans and commitments as of 12/31/18, including loans for green buildings, energy efficiency projects, solar, wind, biogas, vehicle electrification, and other purposes which support mitigation and climate protection. We have provided information on 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 additional resources on this potential opportunity.

Cost to realize opportunity

375,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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 $250,000 to $500,000 range.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Other

Type of financial impact

Reputational benefits resulting in increased demand for goods/services

Company-specific description

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 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. In addition, we believe that we have an opportunity to enhance our company's reputation and brand among key constituencies (such as investors, customers, employees, civil society, and host communities) and thus enhance long-term value for our owners. Examples of recognition that can drive reputation benefits include Comerica's 2018 listing as one of the 100 most sustainable companies in the U.S. by Barrons, a Climate Leadership Award for Excellence in Greenhouse Gas Management, and inclusion on Corporate Knights listing of the 100 most sustainable companies globally.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,600,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

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. We believe there is some evidence that our movement on these issues has improved relationships with stakeholders to whom these issues are important. For example, impacts on reputation that could have a 0.1% positive impact on market capitalization would equate to roughly $10.6MM (based on a market capitalization of approximately $10.6B at year-end 2018).

Strategy to realize opportunity

Growing numbers of stakeholders 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 opportunities, Comerica established an enterprise-wide corporate sustainability program and adopted a climate change strategy. We publicized our efforts to create a more sustainable company in our annual Corporate Responsibility reports and have begun to integrate sustainability into our brand identity and core values. We have implemented an annual sustainability action plan to manage climate change risks and opportunities inside the company and within our value chain. These efforts have included a variety of energy efficiency and conservation initiatives in our buildings. After achieving our first and second generation GHG emissions reduction targets, we set three additional goals to reduce real estate GHG emissions by 50% by 2030, 65% by 2035, and 100% by 2050. We also work with our suppliers to identify opportunities to improve our sustainability performance through measures such as reducing our energy consumption and associated GHG emissions. We also evaluate the sustainability performance of our largest vendors (representing over 30% of spend) in terms of their individual sustainability performance and their ability to help improve our sustainability performance.

Cost to realize opportunity

50,000

Comment

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 in this area would be approximately $50K per year. Budgets for projects that enhance the energy efficiency of our corporate facilities are tracked separately and our 2018 spend was approximately $4.5MM.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Resilience

Primary climate-related opportunity driver

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

Type of financial impact

Increased revenue through new products and services related to ensuring resiliency

Company-specific description

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. We would expect our future opportunities related to the need for adaptation to 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 and services which add resiliency or otherwise respond or 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 and safety challenges, water and resource scarcity issues, changes in the productivity of agriculture and forestry, and many other possible events and occurrences, all of which may present opportunities to meet the financial needs of these businesses. As an illustration of the size of our opportunity for increased support of green lending to small and medium sized businesses, in 2018 Comerica had loans of $11.8 billion to our general middle market customers and $3.7 billion in small business loans.

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,700,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We expect future opportunities associated with providing financial products and services to those involved in preventing, mitigating, and adapting to the physical effects of climate change. While there are uncertainties associated with estimating the timing and magnitude of potential physical changes, we may have the ability to grow our relationships with existing customers and/or establish new customer relationships which can drive increased net income. A potential range of increased net income may be on the order of 10 to 50 basis points. Based on our 2018 net income of $1,235 million, this level of potential impact could be roughly $1.2 to 6.2 million, with a midpoint of $3.7MM.

Strategy to realize opportunity

Comerica's approach to managing these potential opportunities at this time is to conduct on-going monitoring and 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. Comerica responds to demand for commercial loans from viable, creditworthy businesses whose own products and services meet society's many needs and that now includes lending to meet needs of those customers who are working to prevent, mitigate, and adapt to the effects of climate change.

Cost to realize opportunity

25,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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 $25K per year in the near term.

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Type of financial impact

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company-specific description

Comerica is aware that the sentiments, values, and expectations of many consumers are evolving in response to growing concerns about the environment and climate change. We believe that these 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 important, we believe we have an opportunity to strengthen their loyalty or to make a case for doing business with Comerica.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

3,700,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

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. We believe there is some evidence that our movement on these issues has improved relationships with stakeholders to whom these issues are important. For example, we may have the ability to grow our relationships with existing customers and/or establish new customer relationships which can drive increased net income. A potential range of increased net income may be on the order of 10 to 50 basis points. Based on our 2018 net income of $1,235 million this level of potential impact could be roughly $1.2 to 6.2 million, with a midpoint of $3.7MM.

Strategy to realize opportunity

We have noticed in recent years a growing number of local governments are asking banks, which compete for their business, to provide detailed information on their environmental and sustainability performance. Some asset managers preferentially target their investments to companies that 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 and opportunity and therefore as better investment choices. At Comerica, 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 beneficial loans and commitments from across the portfolio (approximately $772MM of total loans/commitments to green companies/projects as of 12/31/2018). We continue to explore the demand among our commercial and industrial customers for energy-efficiency finance for building retrofits. We've communicated sustainability topics to customers through 1-on-1 interactions. We have engaged with a variety of stakeholders on energy, climate change, and other sustainability issues including: our suppliers, customers, employees, NGOs, investors, policy makers, and representatives of host communities in which we operate. Our most recent stakeholder consultations in 2018-2019 confirmed that our progress is in line with stakeholder expectations.

Cost to realize opportunity

375,000

Comment

Costs are dispersed across many cost centers and a considerable portion of our expenditure 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.

C2.5

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

	Impact	Description

Products and services	Impacted	Comerica has business relationships with a broad variety of companies engaged in environmentally beneficial purposes whose products and services limit climate-related impacts. Examples include alternative energy companies, green buildings, and the consulting and service companies that service the 'green' industries. Although our exposure increased in 2018, we have reduced our exposure to companies in the traditional carbon-based energy sector 46% from our highs in 2015 due to a variety of factors (YE2018 vs. 2015). Both our green business relationships and reduced exposure to the traditional energy sector have positively impacted our company in recent years. At year-end 2018, we had approximately $772MM in green loans/commitments.
Supply chain and/or value chain	Impacted	In our value chain, our green lending has positively impacted our customers as well as our company, with approximately $772MM in green loans/commitments at year end 2018. Through our sustainability scoring of key suppliers and new potential suppliers, we are demonstrating the importance of sustainability and climate change to the supply chain; incrementally increasing performance of key suppliers. This in turn enhances our sustainability performance and resilience.
Adaptation and mitigation activities	Impacted	Our efforts to increase our energy efficiency have dramatically reduced our energy consumption, assisting with mitigating climate change. We have decreased our GHG emissions 43.5% since 2012 and our further commitments to reducing our real estate GHG emissions 50% by 2025, 65% by 2030, and 100% by 2050 will continue to drive progress in mitigating the effects of climate change.
Investment in R&D	Not yet impacted	Our organization does not operate a research and development department in a traditional sense, therefore, investment in research and development has not been impacted. Comerica has invested in more digital customers solutions which, along with other industry trends, is likely to decrease the size of our real estate footprint. We also foresee additional resources being dedicated to addressing climate risks from a real estate and business continuity perspective in the future. Additionally, we may elect to dedicate more resources to enhancing our relationships with green businesses through our product and service offerings in each of our lines of business. For example, we may invest in the ability to provide financial services to more companies in the landfill gas to energy or recycling businesses serviced by Comerica's Environmental Services Group.
Operations	Impacted for some suppliers,	Severe weather events, including flooding in our Texas markets and wildfires in our California markets in 2018, impacted our operations. Through successful business continuity practices we

	facilities, or product lines	were able to limit the impacts from these events on our business. With increasing severe weather events, we anticipate these operational impacts could grow in the future. With respect to opportunities, our efforts to reduce our GHG emissions have had a positive impact on our operations by reducing spend on energy and reducing our exposure to fluctuation in energy prices. We have reduced our GHG emissions 43.5% since 2012.
Other, please specify		

C2.6

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

	Relevance	Description
Revenues	Impacted	Our revenues have been positively impacted by our green lending relationships, which totaled approximately $772MM at year end 2018. It is also likely our revenues have been somewhat negatively impacted by the impacts of severe weather events in 2018, including heavy rain events in Texas and wildfires in California. As we plan for the future, we evaluate the financial impacts of these risks and opportunities.
Operating costs	Impacted	Our energy efficiency efforts decrease our energy consumption and corresponding emissions. This is factored into our planning, both from a reduction in energy consumption and in planning for additional energy efficiency projects. As identified in C2.3a, our $4.5MM spend on energy efficiency projects (building management systems at 67 facilities and LED lighting at 23 facilities in 2018) will continue to help decrease our ongoing energy consumption and corresponding emissions. Additionally, our efforts to decrease our consumption of paper and water, as well as the amount of waste we landfill are factored into the planning for operational costs.
Capital expenditures / capital allocation	Impacted	Our investments in energy efficiency are included in our financial planning process. Our $4.5MM spend on energy efficiency projects (building management systems at 67 facilities and LED lighting at 23 facilities in 2018) will continue to help decrease our ongoing energy consumption and corresponding emissions. Additionally, our new workspace approach we call CoWork is included in our planning process as we transition additional facilities to this more efficient workspace that improves our occupancy density and reduces our energy and resource consumption.
Acquisitions and divestments	Not impacted	Acquisitions and divestments have not been notably impacted by climate change at this time. While we did not make acquisitions or divestments in 2018, in the future, situations could arise where a

		particular business being acquired or divested could have significant risks or opportunities tied in part to issues such as climate change.
Access to capital	Not impacted	We do not believe our access to capital has been or will be impacted by climate factors in the near term, as these issues do not yet rise to the level of significance as other business performance factors.
Assets	Impacted	We expect that the investments we have made in the energy efficiency of our buildings have increased the value of these assets to varying extents in line with our level of investment. Our $4.5MM spend on energy efficiency projects (building management systems at 67 facilities and LED lighting at 23 facilities in 2018) will continue to help decrease our ongoing energy consumption and corresponding emissions.
Liabilities	Not impacted	We do not believe our liabilities have been or will be impacted by climate factors in the near term, as these issues do not yet rise to the level of significance as other business performance factors.
Other		

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?

No, but we anticipate doing so in the next two years

C3.1c

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

(i) Our business objectives and strategy has been influenced by climate-related issues since the 2008 adoption of a formal sustainability strategy, which includes climate change. Our strategy is reviewed and updated on an annual basis. Since 2008, we have created and enhanced the policies, procedures, operating practices, governance structures, and training programs to support this strategy and ensure progress. Annual action plans are developed by the Sustainability Council with input from business units and approved by the Enterprise Risk Committee of the Board of Directors (ERC). Results are reviewed annually by the ERC and the Sustainability Council. To date, we have implemented projects to reduce energy use, emissions and associated operating costs, initiatives to reduce long-term supply chain risks, and develop new revenue streams from lending to green companies and projects in 14 different categories.

Our strategy has been influenced by both risks and opportunities. Risks include regulatory, physical, transitional and other risks associated with climate change such as impacts on reputation and brand, higher energy costs, changing consumer preferences, CSR expectations of stakeholders, future physical and regulatory risks. Opportunities include innovation and potential competitive advantage (e.g. environmentally beneficial lending), and a desire to proactively manage our citizenship obligations and long-term competitiveness. We use a Sustainable Value Creation Matrix to illustrate how we see our climate change and other sustainability objectives being integrated into and contributing to our overall business strategy. The Matrix includes initiatives that: a) support our license to operate, responsible citizenship, good corporate governance, enhanced reputation and brand b) drive cost and risk reduction & support climate protection c) support new competencies, markets, products & services d) help to develop new green/low carbon economy revenue opportunities.

(ii) Comerica integrates the management of climate change risks/opportunities into its business strategy and are linked with KPIs measured against performance targets. Goals, such as our 50% by 2025, 65% by 2030, and 100% by 2050 GHG emissions reduction goals help drive our strategy.

(iii) Business decisions during 2018 that were influenced by climate change aspects of our strategy include our reimagined workplace initiative (CoWork) to use real estate space more efficiently, projects to improve the energy efficiency of our facilities (including building energy management systems & LED lighting), ongoing application of water saving technologies, additional paperless processes, ongoing management of our energy and carbon management system, and our Master of Sustainability Awareness Program for colleagues to drive sustainability awareness and behavioral changes both at work and at home. Each of these business decisions touch on a multiple transitional and physical climate risks as well as help us address climate-related business opportunities. The most substantial climate-related business decision relevant to this reporting year was setting of a 100% reduction target which will drive us to adopt new and more aggressive GHG emissions reduction projects which relates most closely to the physical risk aspects of climate change.

(iv) Multiple aspects of climate change have influenced our strategy, as indicated in section 2. We work to address risks, such as the impacts of transition and physical risks on our operations, our supply chain, and our customers. Additionally, we look to capitalize on climate-related business opportunities by improving our own operations and supporting those customers active in the green economy and we had over $772 million in green loans and commitments in 2018.

(v) While demand for sustainable products and services have increased, we do not yet see U.S. demand for clean energy technologies, energy efficiency, and other green products and services as a transformative driver of our business strategy in the short-term (next 0-3 years). Our strategy, therefore, continues to focus on pursuing opportunities for improved energy and resource efficiency in our own operations; setting additional goals and targets; implementing initiatives that reduce costs and risks; and acting as a trusted advisor to our customers, including those supporting a greening economy. 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 6 years) and on a larger scale in the long term. Examples of short-term strategy include our two previously achieved GHG reduction goals, which helped us to realize costs savings of over $10MM. Our medium-term strategy is to capitalize on knowledge that we have gained regarding operational efficiencies and share it with customers. We have engaged with customers through educational opportunities (e.g., energy efficiency webinar, customer-focused newsletters) and one-on-one conversations. We also set new medium-term real estate GHG emission reduction goals (50% by 2025, 65% by 2030).

(vi) The long-term strategy (> than 6 years out) is to proactively identify and pursue additional energy and 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. We also set new long-term real estate GHG emission reduction goal of 100% reduction by 2050. 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.

(vii) Although it is difficult to measure, we have seen evidence to date that our status as a leader on climate within our tier of the U.S. banking industry may have provided strategic advantages over some competitors, including enhanced reputation and brand awareness from listings on sustainability indices (CDP, FTSE, Thomson Reuters, etc.) access to certain customers and business opportunities, reduced operating costs, improved efficiency and increased support from key stakeholders to whom climate change & sustainability issues are important.

(viii) Our current short and long-term strategic initiatives are in line with the goals of the Paris Agreement and did not change in the last year. Comerica uses forward-looking analyses currently required by federal banking regulations but has not yet conducted a 1.5 or 2 degrees C forward-looking scenario analysis, although we expect to do so in the next few years.

C3.1g

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

Comerica recognizes a tool for addressing the range of uncertainties associated with climate change over the medium to long term is climate-related scenario analysis. Our different primary lines of business (Business Bank, Retail Bank & Wealth Management) each have unique climate-related risks and opportunities. At this time, we do not use such scenario analysis for evaluating these climate-related risks. In part, this is due to the relative recency of climate-related scenario analysis and a lack of clear consensus regarding which scenarios (referenced in CDP, TCFD, and by others) would be best representative for a company like ours within the financial services industry and lack of developed specific impacts of the scenarios on our primary lines of business.

Also, we feel our existing approach to climate risks allows us to adequately manage issues in the short term. For example, given the medium- to long-term risks presented by climate change combined with the shorter term nature of many of Comerica's commercial lending relationships (which have an average duration of less than 3 years), we feel we have the ability to proactively move in and out of business relationships as the effects of climate change play out in the marketplace, somewhat limiting our exposure to this type of climate risk. Additionally, the market continues to offer additional products and services to address investing needs of our customers with the expansion of ESG-related products which have positive climate benefits. Because we do anticipate scenario analysis for climate change issues to be a fast evolving and potentially useful tool, we do anticipate evaluating its use over the next 6 months and anticipate using it within the next two years. We expect our implementation of scenario analysis will be an effort by several areas of our organization including sustainability, risk and credit.

C4. Targets and performance

C4.1

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

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Scope

Scope 1+2 (location-based)

% emissions in Scope

98.53

Targeted % reduction from base year

20

Base year

2012

Start year

2014

Base year emissions covered by target (metric tons CO2e)

80,533

Target year

2020

Is this a science-based target?

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

% of target achieved

100

Target status

Achieved

Please explain

Having achieved our first GHG emissions reduction target a year ahead of schedule in 2013, Comerica set a new absolute target in 2014. The second generation GHG emissions reduction target combined the ‘Legacy Comerica’ and ‘Legacy Sterling’ portfolios and set a new combined portfolio emissions base year of 2012 (the earliest year where the ‘Legacy Sterling’ data is available). The 2020 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 achieved this more aggressive GHG emissions reduction target three years early (in 2016) 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, and our achievement of an average reduction of 7.3% annually during the goal period likely exceeds the reductions need to achieve a 2 degree C trajectory. As of December 31, 2018, we have achieved 218 percent of the 2020 goal. The target did not include Comerica's Scope 1 emissions from Comerica-owned vehicles, which accounts for 1.5% of Comerica's total Scope 1 and 2 base-year GHG emissions. However, we purchased carbon credits to offset our Scope 1 travel emissions in 2018 and intend to do so during this goal period.

Target reference number

Abs 2

Scope

Scope 1+2 (location-based)

% emissions in Scope

98.53

Targeted % reduction from base year

50

Base year

2012

Start year

2018

Base year emissions covered by target (metric tons CO2e)

80,533

Target year

2025

Is this a science-based target?

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

% of target achieved

87

Target status

Underway

Please explain

We achieved our second-generation 2020 GHG emissions reduction target in 2016. Comerica set three additional GHG emissions reduction targets in 2018 as part of our third generation goals (short, medium, and long-term targets). The base year remains at 2012 since our organizational structure has remained relatively unchanged. The current short-term GHG emissions reduction target is: “Comerica will reduce the total Scope 1 and Scope 2 GHG emissions associated with its occupied real estate by 50% below the 2012 base year emissions total of 80,533 by 2025, removing 40,267 MtCO2e from its carbon footprint”. We plan to achieve this goal through a combination of mitigation activities, rationalization and consolidation of real estate, and greening of the grid. 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 an average estimated reduction of 4.2% annually during the goal period likely exceeds the reductions need to achieve a 2 degree C trajectory. As of December 31, 2018, we have achieved 87 percent of the 2025 goal. The target does not include Comerica's Scope 1 emissions from Comerica-owned vehicles, which accounts for 1.5% of Comerica's total Scope 1 and 2 base-year GHG emissions. However, we purchased carbon credits to offset our Scope 1 travel emissions in 2018 and intend to do so during this goal period.

Target reference number

Abs 3

Scope

Scope 1+2 (location-based)

% emissions in Scope

98.53

Targeted % reduction from base year

65

Base year

2012

Start year

2018

Base year emissions covered by target (metric tons CO2e)

80,533

Target year

2030

Is this a science-based target?

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

% of target achieved

67

Target status

Underway

Please explain

We achieved our second-generation 2020 GHG emissions reduction target in 2016. Comerica set three additional GHG emissions reduction targets in 2018 as part of our third generation goals (short, medium, and long-term targets). The base year remains at 2012 since our organizational structure has remained relatively unchanged. The current medium-term GHG emissions reduction target is: “Comerica will reduce the total Scope 1 and Scope 2 GHG emissions associated with its occupied real estate by 65% below the 2012 base year emissions total of 80,533 by 2030, removing 52,346 MtCO2e from its carbon footprint”. We plan to achieve this goal through a combination of mitigation activities, rationalization and consolidation of real estate, greening of the grid, and possible renewable purchases. 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 an average estimated reduction of 3.8% annually during the goal period likely exceeds the reductions need to achieve a 2 degree C trajectory. As of December 31, 2018, we have achieved 67 percent of the 2030 goal. The target does not include Comerica's Scope 1 emissions from Comerica-owned vehicles, which accounts for 1.5% of Comerica's total Scope 1 and 2 base-year GHG emissions. However, we purchased carbon credits to offset our Scope 1 travel emissions in 2018 and intend to do so during this goal period.

Target reference number

Abs 4

Scope

Scope 1+2 (location-based)

% emissions in Scope

98.53

Targeted % reduction from base year

100

Base year

2012

Start year

2018

Base year emissions covered by target (metric tons CO2e)

80,533

Target year

2050

Is this a science-based target?

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

% of target achieved

44

Target status

Underway

Please explain

We achieved our second-generation 2020 GHG emissions reduction target in 2016. Comerica set three additional GHG emissions reduction targets in 2018 as part of our third generation goals (short, medium, and long-term targets). The base year remains at 2012 since our organizational structure has remained relatively unchanged. The current long-term GHG emissions reduction target is: “Comerica will reduce the total Scope 1 and Scope 2 GHG emissions associated with its occupied real estate by 100% below the 2012 base year emissions total of 80,533 by 2050, removing 80,533 MtCO2e from its carbon footprint”. We plan to achieve this goal through a combination of more aggressive mitigation activities, rationalization and consolidation of real estate, greening of the grid, and possible renewable purchases. 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 an average estimated reduction of 2.7% annually during the goal period likely exceeds the reductions need to achieve a 2 degree C trajectory. As of December 31, 2018, we have achieved 44 percent of the 2050 goal. The target does not include Comerica's Scope 1 emissions from Comerica-

owned vehicles, which accounts for 1.5% of Comerica's total Scope 1 and 2 base-year GHG emissions. However, we purchased carbon credits to offset our Scope 1 travel emissions in 2018 and intend to do so during this goal period.

C4.2

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

Target

Waste

KPI – Metric numerator

U.S. short tons of waste landfilled

KPI – Metric denominator (intensity targets only)

NA

Base year

2012

Start year

2014

Target year

2020

KPI in baseline year

2,086

KPI in target year

1,669

% achieved in reporting year

100

Target Status

Achieved

Please explain

Comerica set a goal to reduce the amount of waste that we send to landfills by 20% by 2020 over our 2012 baseline. Our waste reduction goal is focused on general office waste sent to the landfill (such as non-recyclable packaging and operational wastes that are collected from office trash cans). We met our waste reduction goal in 2015, four years early. As of year-end 2018, we have reduced our waste to landfill generation by 606.5 tons, representing a 29 percent decrease over our 2012 waste to landfill generation (145% of goal).

Part of emissions target

NA

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Target

Other, please specify

Water

KPI – Metric numerator

Cubic Meters

KPI – Metric denominator (intensity targets only)

NA

Base year

2012

Start year

2014

Target year

2020

KPI in baseline year

451,532

KPI in target year

316,072

% achieved in reporting year

92

Target Status

Underway

Please explain

Comerica set a goal to reduce the amount of water consumed by 30% by 2020 over our 2012 baseline. Our water reduction goal is focused on those facilities where we have metered water consumption data. As of year-end 2018, we have reduced our metered water consumption by 124,531 cubic meters of water, representing a 27.6 percent decrease over our 2012 water consumption.

Part of emissions target

NA

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Target

Other, please specify

Paper

KPI – Metric numerator

U.S. short tons of office copy paper purchased

KPI – Metric denominator (intensity targets only)

NA

Base year

2012

Start year

2014

Target year

2020

KPI in baseline year

560

KPI in target year

280

% achieved in reporting year

97

Target Status

Underway

Please explain

Comerica set a goal to reduce the amount of office copy paper consumed by 50% by 2020 over our 2012 baseline. Our paper reduction goal is focused on the amount of office copy paper purchased as a proxy for paper consumption. As of year-end 2018, we are at 97% of our goal to reduce office copy paper consumed compared to our 2012 paper consumption.

Part of emissions target

NA

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	25	
To be implemented*	0	0
Implementation commenced*	0	0
Implemented*	120	5,002
Not to be implemented	0	

C4.3b

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

Initiative type

Energy efficiency: Building services

Description of initiative

Building controls

Estimated annual CO2e savings (metric tonnes CO2e)

2,001

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

630,677

Investment required (unit currency – as specified in C0.4)

1,918,510

Payback period

4 - 10 years

Estimated lifetime of the initiative

16-20 years

Comment

Comerica completed a two-year program to install an enterprise-wide system of connected building management systems and smart thermostats to provide remote diagnosis, monitoring, and programming controls for HVAC systems at 311 Comerica locations where we maintain operational control. 67 of those projects were completed in 2018.

Initiative type

Energy efficiency: Building services

Description of initiative

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

1,651

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

410,797

Investment required (unit currency – as specified in C0.4)

2,559,543

Payback period

4 - 10 years

Estimated lifetime of the initiative

16-20 years

Comment

Comerica completed a two-year investment in lighting technology upgrades, replacing existing lighting with energy efficient LED options at 51 locations. 23 buildings had lighting upgrades completed in 2018.

Initiative type

Energy efficiency: Processes

Description of initiative

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

1,351

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

Enhanced hands-on management of mechanical systems, facilitated by upgraded building management systems, provided speedier response to mechanical problems, which reduced the amount of time that systems were in energy-wasting mode. Also, facilities teams began a site-by-site evaluation of mechanical systems in the fourth quarter, which analyzed and corrected site-specific issues such as poorly-placed thermostats and outdated runtime schedules. Included in this activity type is a slight emissions reduction due to "greening of the grid."

C4.3c

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

Method	Comment
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. In 2016, we approved a series of projects, implemented through 2017 and 2018, to update certain

	Building Management Systems, thermostats, and lighting to more efficient systems and technologies. As of the end of 2018, when all projects were completed, we saw noticeable reductions in energy use and real estate-related greenhouse gas emissions.
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 the typical less than 3 years, to 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.
Employee engagement	Internal communications and development of the Master of Sustainability Awareness Program to educate and engage employees on corporate sustainability initiatives and policies and sustainable action.
Other	Development of best practices and lessons learned that are shared between facilities management, building engineering, and energy and sustainability personnel.
Other	Deployment of a robust electronic energy and carbon management system to identify energy and emission reduction opportunities and track performance. 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. In 2018, this information was (and continues to be) used by our energy team to target buildings with higher-than-expected energy usage, with the goal of identifying and executing energy-saving measures.
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. The team has already implemented a five-year plan on efficiency, and is expected to build efficiency, reliability, and sustainability processes into current-day and future operation of the company's data centers. Our energy management team worked closely with the Operations department in 2018 to execute a "deep dive" into building controls efficiency by all facilities managers. The teams also get together once per quarter to review energy consumption trends, and to discuss findings and solutions so knowledge can be shared throughout the portfolio.

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; and mandated recycling in California, Texas, and Florida.
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 be downloaded with detailed reporting, bill image confirmation, and site-specific Heating Degree Day and Cooling Degree Day data for weather normalization analysis.
Partnering with governments on technology development	In 2018, Comerica continued its 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 Comerica facilities, track usage and performance, and set targets on a facility-specific level for performance improvements.
Other	Comerica developed a Dormant Space Policy, which set protocols for HVAC operation, plug load disconnection, IT equipment removal, and window treatments to help reduce solar load. Comerica also has a policy restricting the use of personal heaters and other high-energy-use devices, as they contribute to energy inefficiency.
Other	Comerica's teams have developed lighting standards that emphasize efficiency, and standard thermostats that provide much greater efficiency.
Other	Comerica continues its Rationalization, Consolidation, and Closure (RaCC) program for owned or leased facilities to increase operational efficiency by reducing overall square footage. In 2018, we had 30 RaCC projects to help with our operational efficiency. We also implemented our reimagined office layout program (CoWork) at four locations in 2018. CoWork is a shared work environment initiative, which helps us to reduce our square footage while incorporating more ergonomic features, updated computers, and other technology to allow for mobility within the workspace.
Other	Comerica 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.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) 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

Company-wide

Description of product/Group of products

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 14 different categories, such as renewable energy, green buildings, and vehicle electrification. Our green lending categories are generally consistent with the Climate Bonds taxonomy.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Climate Bonds Taxonomy

% revenue from low carbon product(s) in the reporting year

1.5

Comment

% 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.

C5. Emissions methodology

C5.1

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

Scope 1

Base year start

January 1, 2012

Base year end

December 31, 2012

Base year emissions (metric tons CO2e)

6,949.81

Comment

Scope 2 (location-based)

Base year start

January 1, 2012

Base year end

December 31, 2012

Base year emissions (metric tons CO2e)

74,784.25

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

Defra Voluntary 2017 Reporting Guidelines
The Climate Registry: General Reporting Protocol
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Climate Leaders: Direct Emissions from Stationary Combustion
US EPA Climate Leaders: Direct Emissions from Mobile Combustion Sources

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

6,371

Start date

January 1, 2018

End date

December 31, 2018

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

We are reporting our Scope 2 Location-Based emissions and Scope 2 Market-Based emission for 2018 activities. At this time, the only electricity supplier for our locations with a known published emission factor is Pacific Gas and Electric. Our market-based emission factors are therefore calculated using the Pacific Gas and Electric emission factor for the metered and estimated (unmetered) sites within the Pacific Gas and Electric service territory combined with the eGRID emission factors for the sites not in the Pacific Gas and Electric service territory.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

39,916

Scope 2, market-based (if applicable)

39,851

Start date

January 1, 2018

End date

December 31, 2018

Comment

Comerica reports both Market-Based Electricity Emissions and Location-Based Electricity Emissions. At this time, the only electricity supplier for our locations with a known published emission factor is Pacific Gas and Electric. Comerica contacted the supplier of contract energy in Texas (Reliant Energy) via our energy broker (Engie), for site-specific emission factors to utilize in the calculation of Market-Based emissions. As of this request, 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. Similarly, we reached out to the major utility providers in our largest market, Michigan (DTE and Consumers), and they do not provide market-based emissions factors. Pacific Gas and Electric (California locations) does have a published emission factor for the electricity they provide to customers within their service territory. Using the WRI Guidance on Hierarchy for selection of market-based emission factors, our 2018 data utilizes the Pacific Gas and Electric published emission factor for all locations within the Pacific Gas and Electric service territory and the 2016 eGRID Emissions factors for the sites not in the Pacific Gas and Electric service territory. We continue to pursue PPA-provided emissions rates and will incorporate them as they become available.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

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

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

8,578

Emissions calculation methodology

The lifecycle emissions calculated within this estimate include paper, computer and carpeting emissions. (1) Paper: LCA-based emissions of office/marketing papers (5257.36 MtCO2e) were calculated according to Environmental Paper Network Paper Calculator, Version 4.0 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 AR5-20 year (CO2=1, CH4=012, N2O=264). Lifecycle analysis and data quality documentation is provided at: https://c.environmentalpaper.org/pdf/SCS-EPN-PC-Methods.pdf (2) Computers: LCA-based emissions of desktops, notebooks, tablets, all-in-one computers and displays (3031.47 MtCO2e) were calculated based on product-specific information provided by suppliers (Dell and Apple) and quantities of units purchased by Comerica (3,583 notebooks, 152 desktops, 3 tablets, 500 all-in-one units, and 3,303 displays). Emission factors: notebook (229-386 kg CO2e/unit), desktop (368 kg CO2e/unit), tablet (113-136 kg CO2e/unit), all-in-one units (551 kg CO2e/unit) and displays (441-508 kg CO2e/unit). For Dell LCA estimations, please refer to https://www.dell.com/learn/us/en/uscorp1/corp-comm/environment_carbon_footprint_products. For Apple lifecycle analysis estimations, please refer to https://images.apple.com/environment/reports/ (3) Carpeting: The LCA-based emissions of carpet purchases (289.280 MtCO2e) were calculated based on product-specific information provided by suppliers and unit quantities purchased by Comerica (15,504 yd2 carpet tile and 460 yd2 carpet broadloom). Emission factors: carpet tile emission factor (18.04 kg CO2e/yd2) for carpet tile brands and broadloom carpet emission factors (16.25 to 21.16 kg CO2e/ yd2). Lifecycle analysis tests were performed by Shaw/Patcraft (using CML 2001/TRACI 2.1, GaBi 6-2014).

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

100

Explanation

We currently purchase goods and services (predominantly services) from a 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 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 to yield industry-average emissions data and should thus be classified as a secondary data source.

Emissions provided represent 100% of Comerica computer, carpet and paper purchases in 2018.

Capital goods

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1,283

Emissions calculation methodology

(i) Type and source of data: The lifecycle emissions calculated within this category includes our furniture emissions. Emission factors were provided by Herman Miller and Knoll broken down by furniture model. (ii) Methodology: The LCA-based emissions of furniture purchases (1282.80 MtCO2e) were calculated based on product-specific information (tables, desks, chairs, cubicles, file cabinets, and task lights) provided by the suppliers and unit quantities purchased by Comerica (furniture pieces). Per an email communication on 3/18/2019 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 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. Knoll product life cycle impacts was calculated using the Global Warming Potential over 100 years per IPCC AR5 (Intergovernmental Panel on Climate Change) fifth assessment report. This emissions estimate covers 88% of the total 2018 furniture purchases.

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

100

Explanation

Our capital goods purchases (i.e., purchases of plant, property, furniture and major equipment) can 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 activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1,868

Emissions calculation methodology

(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. 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 location-based Scope 2 U.S. metered and unmetered electricity emissions (MtCO2e) and US EPA Compiled eGRID 2016 (released 02/15/18), eGRID Grid Gross Loss (%) year 2016 data. US EPA's eGrid 2016 uses the "Fifth Assessment Report (AR5 - 100 yr)" for GWP. 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 eGgrid 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.

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

79

Explanation

We believe that our Scope 3 emissions would include 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. 79% of calculated transmission/distribution line loss emissions are based directly on data from utilities for our metered facilities through our utility billing supplier (Engie). The remaining emissions are estimated for leased facilites based on like-kind metered facilities.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

192

Emissions calculation methodology

Emissions in this category currently include our FedEx shipment deliveries and Loomis transport services. (1) FedEx: (i) Type and source of data: These CO2 emissions (133 MT) account for all FedEx Express and Ground-shipped packages in 2018 (through 12/31/2018). (ii) Methodology: FedEx uses a proprietary and confidential methodology to calculate emissions, which they indicate is consistent with the WRI

Greenhouse Gas Protocol. FedEx uses the customer's FedEx account number to calculate associated emissions attributable to that account. Their methodology changed in 2016 resulting in more accurate data (now FedEx reportedly calculates package emissions based on route distances from origin to destination, instead of the previous calculation tool that used zone averages to estimate emissions). Documentation on the emissions calculation was provided by FedEx via email. FedEx represented 57% of all shipping and courier spend in 2018. (2) Loomis Armored Services: (i) Type and source of data: The Loomis CO2e emissions (59.4 MT) account for armored transport services. The emission factor used was 10.2204695 kg CO2e per gallon of diesel fuel consumed based on EPA Emission Factors for Greenhouse Gas Inventories, modified 3/8/18 and based on an average Loomis diesel delivery vehicle of 7.4 mpg and including the addition of AR5 GWPs for CH4 and N2O. (ii) Methodology: Loomis calculated the amount of diesel fuel consumed associated with the Comerica Account (5,810 gallons for 2018). Based on the information, Comerica calculates the amount of diesel fuel attributed to the Comerica account by taking the total gallons consumed associated with the Comerica account and multiplying by the supplier specific emission factor. Loomis represented 19% of armored transport spend in 2018. The vendor who represents our highest percentage of spend (81%) did not provide a response to our request for fuel consumption data associated with the Comerica account in a timely manner for reporting.

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

100

Explanation

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 2018 upstream transportation-related shipping and courier spend, we estimate that approximately 57% of our total shipping/courier transport spend and approximately 19% of our total armored/cash transport spend are included in these Scope 3 emissions.

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

514

Emissions calculation methodology

(i) Type and source of data: Life-cycle emissions of our landfilled solid waste, according to the US EPA's WARM Model, Version 14, updated March 2016. WARM model uses GWPs from the IPCC AR4-100 year (CO2=1, CH4=25, N2O=298). Represents the landfill disposal of approximately 1,479.54 tons of mixed municipal solid waste (MSW). Emission factor (based on national average scenario) = 0.34712 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://www.epa.gov/warm/documentation-waste-reduction-model-warm#documentation.

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

100

Explanation

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 61.6% of the total solid waste generated. This landfilled emissions estimate encompasses 100% of Comerica's disposed landfill waste, but only the roll-off container waste (4.8% of total landfilled waste in 2018 is directly weighed at the receiving landfill). The remainder of the emissions are estimated based on container size, pick up frequency, and industry average data.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

Emissions calculation methodology

(1) Employee Air Travel in Commercial Airlines: (i) Type and source of data: Calculated using miles supplied by company's air travel management vendor; Emission Factors: 0.2250111 KgCO2e/passenger mile (short haul), 0.01360049 KgCO2e/passenger mile (medium haul), and 0,1660059 KgCo2e/passenger mile (long haul). (Source: USEPA Emission Factors for Greenhouse Gas Inventories, modified 3/9/18. (ii) Methodology: We calculate emissions by flight by taking the distance flown and multiplying by the appropriate emission factor (short, medium or long-haul) based on distance. Current systems do not capture total air passenger miles for that portion of total air spend occurring outside the travel vendor's system. We developed a simplified estimation procedure to account for activity data gaps in total air travel spend where annual air travel spend from the corporate manual & automated employee reimbursement exceeds the air mile spend from corporate air travel vendor system. 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. (2) Employee Business Travel in Employee-Owned Cars & Rental Cars: (i) Type and source of data: Calculated using

miles supplied by company's automated & manual travel reimbursement systems and rental car vendor system; Emission Factors: 0.45928 kg CO2e/mile (Source:DEFRA, UK Government Conversion Factors for greenhouse gas (GHG) reporting, v1.0, Aug 2017, Passenger Vehicle - Large Petrol, broken down by engine size) (ii) Methodology: Current systems do not capture total vehicle miles for that portion of total rental car travel spend which occurs outside travel vendor's system or engine size for both rental cars and personal (employee-owned) vehicles utilized for business travel. Total employee vehicle miles were applied to the emission factors. Emission volumes were 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). 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.

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

100

Explanation

100% of calculated business travel emissions are based directly on data provided by suppliers and employees.

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

25,544

Emissions calculation methodology

(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, Last Modified: 3/9/18 (for light duty truck/large SUV, bus, and train transport), (2) Union for Concerned Scientists https://www.ucsusa.org/clean-vehicles/electric-vehicles/ev-emissions-tool# (for electric/hybrid vehicle transport), and (3) DEFRA, UK Government Conversion Factors for greenhouse gas (GHG) reporting, V.1.0, Aug 2017 (for subcompact to full-size gasoline and diesel, hybrid, CNG, LPG, and motorcycle transport). GWPs provided from the IPCC AR4-100 year (DEFRA) and AR5-100 year (EPA). An employee commuting questionnaire was posted on the company intranet for the month of December 2018. The data captured related to estimating commuting emissions included the 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 1,890 employees who completed the questionnaire was extrapolated to create total emissions for the entire employee base of 8,051 employees at year-end 2018. Assumptions made for the estimate include: (1) Those employees who responded to the questionnaire have an average of 20 vacation/holiday days/year, (2) 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, (3) When a colleague reported that they worked from home or took alternate transportation occasionally, we assumed that this related to 15 times per year.

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

24

Explanation

Over 1,890 employees provided complete responses to the questionnaire, a 23.5% employee response rate for 2018.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Explanation

All of our upstream leased assets are included in the company's Scope 1 and Scope 2 emissions

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Explanation

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

Evaluation status

Not relevant, explanation provided

Explanation

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

Evaluation status

Not relevant, explanation provided

Explanation

The company's business is the provision of financial services. We do not sell any significant amounts of products which directly consume energy (fuels or electricity) during use.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Explanation

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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1,027

Emissions calculation methodology

(1) Subleased Corporate Jet: A portion of our corporate jet emissions are not attributable to Comerica employees or for Comerica business. We have separated this out from our Scope 1 travel emissions. (i) Type/source of data: We use the same GHG emission factors for Corporate Jet: 9.51539136 kg CO2 per US Gallon/0.00529966 kg CH4 per US Gallon/ 0.09002815 kg N2O per US Gallon (Source: DEFRA, UK Government Conversion Factors for GHG reporting, V.1.0, Aug 2017, Passenger Vehicle - Aviation Turbine Fuel, converted from liters). (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 & 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 of 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. (2) Real Estate Assets (i) Type and source of data: Activity volumes are taken from utility bills for metered facilities that are transferred to Scope 3 from Comerica's location-based Scope 2 based on the subleased nature of the assets. Emission factors for electricity based on US EPA Compiled eGRID 2016 (released 02/15/18) for each applicable location; Natural Gas (Source: USEPA Emission Factors for Greenhouse Gas Inventories, modified 3/9/18). 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: 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 same region which are metered. In those relatively few instances where we do not have like-kind metered facilities in same region, we use an all-office average consumption rate to estimate electricity consumption.

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

45

Explanation

100% of calculated subleased Corporate Jet emissions are based directly on data provided by our jet management company. 34% of calculated subleased real estate emissions (subleased metered electricity and subleased natural gas) are based directly on data provided by utilities through our utility billing supplier (Engie). The remainder of the data is estimated based on like-kind metered facilities within the same region.

Franchises

Evaluation status

Not relevant, explanation provided

Explanation

The company does not operate franchises.

Investments

Evaluation status

Relevant, not yet calculated

Explanation

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.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Explanation

Not applicable

Other (downstream)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

181

Emissions calculation methodology

Employee Business Travel in CBRE Fleet vehicles related to the Comerica account: (i) Type and source of data: Emission Factors: Large engine 0.45796 kg CO2 per mile, 0.00057 kg CH4 per mile, 0.00075 kg N20 per mile; Medium engine 0.31233 kg CO2 per mile, 0.00057 kg CH4 per mile, 0.00075 kg N20 per mile; (Source: DEFRA, UK Government Conversion Factors for greenhouse gas (GHG) reporting, V.1.0, Aug 2017, Passenger Vehicle, broken down by engine size) (ii) Methodology: For CBRE Fleet Vehicle mileage, the odometer readings are collected by the Facility Managers to whom the fleet vehicles are assigned and are tracked in a fleet vehicle mileage worksheet. Total vehicle miles are applied to the emission factors to get vehicle emissions by category. 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.

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

100

Explanation

100% of calculated CBRE business travel emissions are based directly on data provided by CBRE.

C6.7

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

No

C6.10

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

Intensity figure

0.000013908

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

46,287

Metric denominator

unit total revenue

Metric denominator: Unit total

3,328,000,000

Scope 2 figure used

Location-based

% change from previous year

24.2

Direction of change

Decreased

Reason for change

We saw a significant decrease in our intensity metric due to a significant reduction in Scope 1 and 2 emissions, which were primarily a result of Emission Reduction Activities to improve energy efficiency in the facilities where we maintain operational control and rationalize and consolidate our occupied space. These direct activities resulted in our Scope 1 and Scope 2 GHG emissions decreasing by 11,834 MtCO2 or 20% (vs. 2017) even while our 2018 gross revenues increased by 5% over 2017. Total Scope 1 and 2 emissions in 2018 were 46,287 MtCO2e.

Intensity figure

0.0102

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

46,287

Metric denominator

square foot

Metric denominator: Unit total

4,547,160

Scope 2 figure used

Location-based

% change from previous year

14.5

Direction of change

Decreased

Reason for change

We saw a significant decrease in our intensity metric primarily due to our Scope 1 and 2 Emission Reduction Activities (rationalizing/consolidating our occupied space, implementing energy efficiency projects). These direct activities resulted in our Scope 1 and Scope 2 GHG emissions decreasing by 11,834 MtCO2 vs. 2017. We reduced our Comerica portfolio of real estate by over 333,834 square feet from 2017's average square foot total. Our emissions reduction (20%) exceeded our square footage reduction (7%). Total Scope 1 and 2 emissions in 2018 were 46,287 MtCO2e.

Intensity figure

5.94

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

46,287

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

7,787

Scope 2 figure used

Location-based

% change from previous year

18.4

Direction of change

Decreased

Reason for change

We saw a significant decrease in our intensity metric due to a significant reduction in Scope 1 and 2 emissions, which were primarily a result of Emission Reduction Activities to rationalize and consolidate our occupied space and improve energy efficiency in the facilities where we maintain operational control. These direct activities resulted in our Scope 1 and Scope 2 GHG emissions decreasing by 11,384 MtCO2 or 20% (vs. 2017). Our emissions reduction (20%) exceeded our FTE reduction (2.5%). Total Scope 1 and 2 emissions in 2018 were 46,287 MtCO2e.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	5,982	IPCC Fifth Assessment Report (AR5 – 100 year)

CH4	3	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	9	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify R-22	199	IPCC Fifth Assessment Report (AR5 – 100 year)
Other, please specify R-401a	5	Other, please specify Calculated emission factor based on National Refrigerants, Inc. stated composition blend of R-22, R-152a, and R-124 (based on IPCC AR5 GWPs).
Other, please specify R-404a	9	Other, please specify Calculated emission factor based on National Refrigerants, Inc. stated composition blend of R-125, R-143a, and R-134a (based on IPCC AR5 GWPs).
Other, please specify R-410a	164	Other, please specify Calculated emission factor based on National Refrigerants, Inc. stated composition blend of R-32 and R-125 (based on IPCC AR5 GWPs).
SF6	0	
PFCs	0	

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	6,371

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Mobile Combustion (transport)	810
Stationary Combustion (heating and emergency generators)	5,184
Fugitive Emissions (refrigerants)	377

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
United States of America	39,889	39,825	82,802	0
Canada	4	4	92	0
Mexico	23	23	50	0

C7.6

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

By activity

C7.6c

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

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Electricity consumption (metered space)	32,032	31,973
Electricity consumption (unmetered space, estimated)	6,885	6,879
Estimated Natural Gas - Heat	995	995
Estimated Propane - Heat	4	4

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined) and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	Comerica has not directly purchased renewable energy as of 2018 but we continue to explore opportunities to begin this type of contractual arrangement for energy supply in the future.
Other emissions reduction activities	6,905		11.88	Comerica continued incorporating energy efficiency into real estate planning and operations with multiple enterprise-level projects. The projects helped to improve the operational efficiency of our real estate portfolio and reduce GHG emissions. In a continuation of the program begun in 2017, operational capabilities of 68 buildings were upgraded with Enterprise Building Controls projects (some buildings with multiple projects), enabling on-line access to HVAC and lighting equipment that not only shows operating conditions but allows modifications to deliver improved building comfort while reducing energy use. Lighting upgrades were completed at 25 additional facilities in 2018, converting interior and exterior lighting to LED. The LED projects provide improved lighting quality for customer experience and security while reducing electricity consumption and maintenance. Projects accounted for 3652 MtCO2e of Comerica's overall Scope 1 and Scope 2 emissions reductions, or 8.6%. Corporate Temperature Standards are in place that standardize temperature and lighting setpoints and setbacks to trim energy usage during occupied and unoccupied times. We continued our Dormant Space Policy, which sets protocols for HVAC operation, plug load

				disconnection, IT equipment removal, and window treatments to reduce solar load. Enhanced hands-on management of mechanical systems, facilitated by upgraded building management systems, provided speedier response to mechanical problems and reduced the amount of time that systems were in energy-wasting mode. Also, facilities teams began a site-by-site evaluation of mechanical systems in the fourth quarter, which analyzed and corrected site-specific issues such as poorly-placed thermostats and outdated runtime schedules. These non-project activities accounted for an additional 1351 MtCO2e reduction in emissions in company buildings. Comerica also continued our Rationalization, Consoidation, and Closure (RACC) and Gear Up programs for owned and leased facilities during 2018 to increase operational efficiency and bring further modernization to the office configuration and workplace operation. These space reductions reduced emissions by 1821 MtCO2e. Some reductions in travel contributed an additional 82 MtCO2e in emission reductions. Combined, these projects contributed approximately 6905 MtCO2e of the company's emissions vs. 2017.
Divestment	0	No change	0	No divestment occurred in 2018.
Acquisitions	0	No change	0	No acquisitions occurred in 2018.
Mergers	0	No change	0	No mergers occurred in 2018.
Change in output	0	No change	0	No changes in output occurred in 2018.
Change in methodology	6,419	Decreased	11.04	Following our internal guidance and annual process, changes in third-party emission factors were introduced in 2018. Notably in 2018, this included eGRID and refrigerant emission factors. This change amounted to a 6418 MtCO2e reduction in reported

				emissions, versus using the same factors as in the previous year. Emissions for metered and estimated electricity were affected positively (reducing the reported emssions by over 6600 MtCO2e), but refrigerant emissions were impacted negatively (reported emissions were higher by 217 MtCo2e than if using the 2017 emission factors).
Change in boundary	519	Increased	0.89	Comerica further reduced leases to sub-tenants during 2018. This resulted in reassignment of energy-related emissions from the "Downstream Assests" Scope 3 category to the Scope 2 energy category. Overall, the subleased space energy emissions decreased by 518.48 MtCO2e (0.89%) when compared to 2017.
Change in physical operating conditions	983.63	Increased	1.69	Weather patterns influenced energy usage in our facilities during 2018, with cold temperature conditions extending farther into the Spring in Comerica's largest markets - Texas and Michigan - which created demand for heating, primarily heating with natural gas, for more months than usual. Weather played less a role in increased (or decreased) energy use in the remainder of the year. The increased energy usage is estimated based upon the difference between the total emission reduction from 2017 to 2018, and factors in the energy savings from projects implemented during 2018.
Unidentified	0		0	There were no unidentified reasons for global emissions changes in 2018
Other	12	Decreased	0.02	There were no other reasons for global emissions changes in 2018

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

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

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertakes this energy-related activity
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	37,428	37,428

Consumption of purchased or acquired electricity		0	77,394	77,394
Total energy consumption		0	114,822	114,822

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Jet Kerosene

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

2,578

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Comment

Fuel used in our corporate jet

Fuels (excluding feedstocks)
Diesel

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
170

MWh fuel consumed for self-generation of electricity
170

MWh fuel consumed for self-generation of heat
0

Comment
Fuel used in building emergency generators

Fuels (excluding feedstocks)
Motor Gasoline

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
775

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

Comment
Fuel used for company fleet vehicles

Fuels (excluding feedstocks)
Propane Gas

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
59

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat

59

Comment

Fuel used for heat

Fuels (excluding feedstocks)

Natural Gas

Heating value

LHV (lower heating value)

Total fuel MWh consumed by the organization

28,355

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

28,355

Comment

Fuel used for heat

C8.2d

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

Diesel

Emission factor

10.21049

Unit

kg CO2e per gallon

Emission factor source

USEPA Emission Factors for Greenhouse Gas Inventories, modified 3/9/18; Distillate Fuel Oil No. 2

Comment

Jet Kerosene

Emission factor

9.61072

Unit

kg CO2e per gallon

Emission factor source

DEFRA, UK Government Conversion Factors for greenhouse gas (GHG) reporting, v1.0, Aug 2017, Aviation Turbine Fuel.

Comment

Motor Gasoline

Emission factor

0.45928

Unit

kg CO2e per gallon

Emission factor source

DEFRA, UK Government Conversion Factors for greenhouse gas (GHG) reporting, v1.0, Aug 2017, Passenger vehicle-large car

Comment

Natural Gas

Emission factor

53.0611

Unit

kg CO2e per million Btu

Emission factor source

USEPA Emission Factors for Greenhouse Gas Inventories, modified 3/9/18; Natural Gas

Comment

Propane Gas

Emission factor

61.4636

Unit

kg CO2e per million Btu

Emission factor source

USEPA Emission Factors for Greenhouse Gas Inventories, modified 3/9/18; Propane

Comment

C8.2f

(C8.2f) Provide details on the electricity, heat, steam and/or cooling amounts that were accounted for at a low-carbon emission factor in the market-based Scope 2 figure reported in C6.3.

Basis for applying a low-carbon emission factor

No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

Low-carbon technology type

Region of consumption of low-carbon electricity, heat, steam or cooling

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

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

Comment

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Energy usage

Metric value

111,469

Metric numerator

Megawatt-hours

Metric denominator (intensity metric only)

N/A

% change from previous year

6

Direction of change

Decreased

Please explain

Our total energy consumption from real estate and transport decreased by 7172 MWh over 2017, primarily resulting from energy efficiency projects and portfolio reductions. Energy projects included installation of new building management system (BMS) controls, smart thermostats, and/or new LED lighting projects at 68 locations.

Description

Waste

Metric value

3,855

Metric numerator

U.S. tons

Metric denominator (intensity metric only)

N/A

% change from previous year

1

Direction of change

Decreased

Please explain

Our total waste consumption decreased by 1.0 percent in 2018 vs. 2017. Our landfilled waste generation decreased by 10.3 percent primarily related to less extra pickups that we saw in 2017 due to space consolidations. Our recycled wastes increased by 6% percent primarily due to an increase in paper sent for recycling and electronic waste sent for recycling or reuse.

Description

Other, please specify

Water Consumption

Metric value

327,001

Metric numerator

Cubic Meters

Metric denominator (intensity metric only)

N/A

% change from previous year

0.4

Direction of change

Decreased

Please explain

Our 2020 goal is to reduce our total water consumption in our metered facilities (irrigation and building usage) by 30%. We have achieved a 27.6% reduction from our 2012 baseline in 2018.

Description

Other, please specify

Total Paper Consumption

Metric value

695

Metric numerator

U.S. tons

Metric denominator (intensity metric only)

N/A

% change from previous year

1.7

Direction of change

Decreased

Please explain

Our total paper consumption declined by 1.7% in 2018 (vs. 2017). The reduction in paper consumption was primarily related to a 3.6% decrease (10.7 tons) in office copy paper consumption and a 2.7% decrease (10.0 tons) in other office paper consumption, which was slightly offset by a 23.5% increase (8.5 tons) in marketing paper consumption.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 and/or Scope 2 emissions and attach the relevant statements.

Scope

Scope 1

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Comerica 2018 GHG emissions Verification Statement_Final_6.3.2019.pdf

Page/ section reference

Pages 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Comerica 2018 GHG emissions Verification Statement_Final_6.3.2019.pdf

Page/ section reference

Pages 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

Scope

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

Comerica 2018 GHG emissions Verification Statement_Final_6.3.2019.pdf

Page/ section reference

Pages 1-3

Relevant standard

ISO14064-3

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope

Scope 3- all relevant categories

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Attach the statement

Comerica 2018 GHG emissions Verification Statement_Final_6.3.2019.pdf

Page/section reference

Pages 1-3

Relevant standard

ISO14064-3

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Year on year change in emissions (Scope 1 and 2)	ISO 14064-3	Bureau Veritas has conducted Comerica's greenhouse gas emissions verification for more than two consecutive years and have verified year on year changes in Scope 1 and 2 emissions (2018 vs. 2017) as part of their verification work.
C6. Emissions data	Year on year change in emissions (Scope 3)	ISO 14064-3	Bureau Veritas has conducted Comerica's greenhouse gas emissions verification for more than two consecutive years and have verified year on year changes in Scope 3 emissions (2018 vs. 2017) as part of their verification work.

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

C11.2a

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

Credit origination or credit purchase

Credit purchase

Project type

Landfill gas

Project identification

Comerica purchased verified emissions reduction credits associated with the American Environmental Landfill project in Sand Springs, Oklahoma. The credits are used to offset emissions from business travel in 2018 corresponding to our fleet of owned vehicles and our corporate jet.

Verified to which standard

CAR (The Climate Action Reserve)

Number of credits (metric tonnes CO2e)

850

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

850

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Stakeholder expectations
Change internal behavior
Drive energy efficiency
Drive low-carbon investment

GHG Scope

Scope 1
Scope 2

Application

With the setting of our 100% GHG reduction goal by 2050, we need to look at ways to drive greater GHG reductions in our own operations. This can include managing risks, identifying opportunities, and transitioning to low-carbon activities. To assist in cost/benefit analysis, particularly beyond the 2025 or 2030 goal time horizons, we have begun to use carbon pricing in our evaluation of certain capital projects and operational costs (e.g., renewable energy projects and purchases) where we expect it will have a modest effect on business decisions.

Actual price(s) used (Currency /metric ton)

25

Variance of price(s) used

A range of shadow prices are used to inform our analysis and range from $0 to $50 per metric ton to reflect an evolutionary pricing approach.

Type of internal carbon price

Shadow price

Impact & implication

As we are still early in our evaluation of certain capital and operational projects, the impacts of the shadow pricing approach has not been fully determined at this time. Over time, we expect the use of carbon pricing will shift investment to lower carbon options and support the achievement of our GHG reduction goals.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers

Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

0.8

% total procurement spend (direct and indirect)

34

% Scope 3 emissions as reported in C6.5

6

Rationale for the coverage of your engagement

Comerica engages with only 0.8% of our total supply base (by number), as these represent our largest suppliers and those from which we purchase significant manufactured goods. For 2018, these suppliers comprised 34 percent of total spend in 2018. We use a 40-question Environmental Sustainability Questionnaire to collect information about the climate change, carbon emissions, and sustainability policies and performance of our existing suppliers. We focus on our largest suppliers (previous year's top 30 percent of spend). Beyond the top 30 percent of spend, the number of suppliers increases considerably and therefore limits our availability to provide meaningful engagement on environmental sustainability. We collect climate change and carbon emissions information from a portion of our supply base annually.

Impact of engagement, including measures of success

We have grouped our suppliers into five groups to score. Our goal is to see at least a 5% increase in spend with suppliers that fall within the acceptable sustainability scoring range of A, B, or C during each scoring round. After the most recent full round of scoring, we saw a 14% increase in spend dollars with suppliers within our acceptable scoring range and saw an increase in the average score of suppliers scored. We began scoring suppliers in 2011, with Round 1 scoring (Groups 1 through 5) conducted from

2011 to mid-2014, and Round 2 scoring (Groups 1 through 5) conducted from mid-2014 through 2017. Round 3 scoring started in 2017 (Group 1) and will continue through 2020 (Groups 2-3 scored in 2018, Group 4 will be scored in 2019 and Group 5 will be scored in 2020 since scoring is conducted every 3 years. We monitor progress in sustainability and climate change performance. After the first round of scoring, the Green Procurement Group Lead and the Corporate Sustainability team conducted performance reviews with the suppliers that fell short of an acceptable sustainability score and suggested potential improvements. In 2018, our Green Purchasing Work Group targeted suppliers who scored below our acceptable scoring range in Round 2 to inform them of a low-cost training conducted by the International Society of Sustainability Professionals that covered the following topics in educational webinars on making the sustainable business case for your organization, creating a sustainability vision and impacts assessment, developing metrics, reports, and long-term goals, and implementing sustainable management systems.

Comment

N/A

Type of engagement

Compliance & onboarding

Details of engagement

Climate change is integrated into supplier evaluation processes

% of suppliers by number

1

% total procurement spend (direct and indirect)

27

% Scope 3 emissions as reported in C6.5

24

Rationale for the coverage of your engagement

Our Sustainability Office participates in the standard bi-weekly sourcing initiative review. This allows the Sustainability Office to review Purchasing initiatives early in the process and to determine which initiatives will need to be scored for sustainability based on potential project sustainability impacts. In some instances, we request sustainability attributes be considered within the sourcing project regardless of whether the project is being scored for sustainability. This process improvement broadens the opportunity to assess new sourcing projects for sustainability rather than reviewing Request for Proposals (RFPs) exclusively. If we determine that RFP scoring is required for a specific sourcing project, then we ask suppliers to respond to questions about the sustainability impacts of the services that they will be offering and potential information about the sustainability of their operations. When RFP sustainability scoring is deemed necessary, the Sustainability section of the RFP accounts for 5% of the overall RFP score.

Impact of engagement, including measures of success

In 2018, we evaluated 101 sourcing projects for sustainability impacts, which included nine projects which required some level of Sustainability follow-up (scoring or additional sustainability input into the sourcing process). Our annual goal is to review all non-real estate sourcing projects for potential sustainability impacts that are discussed in Purchasing's bi-weekly sourcing project status reviews (100% of those projects were reviewed to determine potential sustainability impacts in 2018). While we review large-scale real estate-related projects for potential sustainability impacts, we do not score real estate RFPs for sustainability given the significant number of small projects and suppliers. Instead, sustainability-related criteria are embedded in the real estate projects, and when feasible, sustainable product attributes are incorporated into real estate RFPs. Additionally, our Corporate Real Estate Department asks our key real estate suppliers to discuss their sustainability progress during regularly scheduled business reviews to help drive performance and that progress is shared with the real estate sustainability working group on a monthly basis.

Comment

N/A

C12.1c

(C12.1c) Give details of your climate-related engagement strategy with other partners in the value chain.

Since 2008, we have had several engagements with stakeholder groups to gain feedback on Comerica's climate change and sustainability program and strategy. Our most recent 2019 stakeholder engagement included representatives from environmental, social, and governance (ESG) analysts, socially responsible investors, and thought leaders. The goal of this engagement was to update and validate Comerica's impact matrix and impact topics (Climate Change Impacts and Energy and Emissions are two of Comerica's impact topics); refine Comerica's future sustainability strategy and communications; and develop and enhance external relationships and open doors to further stakeholder engagement and thought leadership. One of the key takeaways from this 2019 engagement was that climate change is increasingly important to stakeholders. Using the results of this engagement, Comerica is currently updating its bienniel GRI Standards-based report to reflect the progress on the impact topics most important to the bank and our stakeholders. We also engage with our employees through our Master of Sustainability Awareness Program, which helps employees to learn about climate change impacts and how they can take action to reduce their own carbon footprints. We have also developed a Commute Share intranet site to help employees find other employees with which to carpool to work, thus reducing their commute emissions.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Other

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

We believe that responsible businesses should work to reduce energy use and emissions, provide products and services to support development of a lower carbon economy, and help their value chains prepare for impacts of climate change that are unavoidable. Our Corporate Sustainability Office has 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, by participating as speakers and panellists at public forums, conferences, meetings, and symposia on climate change policy and legislative issues and on products & technologies designed to mitigate climate risk. Our contribution 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 commercial lenders' efforts to increase 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 & clean technology companies. Consistent with our 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. We continued to lead and participate in monthly Bank Sustainability Roundtable calls to help drive the financial service industry's focus on climate change and to make progress on sustainable business practices at Comerica. This group also engaged with organizations such as The Task Force on Climate-related Financial Disclosures (TCFD) to understand and respond to emerging trends that impact our industry. As part of our 2018 and 2019 internal/external ESG Impact Assessment work, we also reached out to our stakeholders to get feedback on our company's environmental, social and governance focus areas. The external engagements included input from ESG analysts, socially responsible investors, and thought leaders. The internal engagement included input from Comerica senior leadership and Comerica Sustainability Council members. Comerica was represented again in 2018 on the Board of Governors of the Environmental Banker's Association (EBA), a forum for banks and practitioners to share best practices around environmental issues (e.g., environmental risk management, climate change, and general sustainability issues). 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, and continues to serve on the District's Advisory Board. As an example of our work with Detroit 2030, we provided feedback to a university student-let project to establish a framework for estimating and reducing transportation-based emissions within a defined geographic boundary, the results of which may be shared with other 2030 districts. Comerica was also represented as

a board member on the Michigan Saves organization, which assists with energy efficiency project financing in commercial/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. Comerica chairs the Environmental Affairs Committee of the Michigan Banker's Association, which has provided recommendations to state and federal legislators on the impacts of banking and environmental legislation on issues including climate change.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

External engagement on climate change led by our Corporate Sustainability Office that may influence climate policy are reviewed by the Director of Corporate Sustainability for consistency with our overall climate change strategy. In 2018, no instances of conflicts were identified. Also, our Corporate Sustainability Office annually reviews our employee board participation lists, which include organizations on which employees sit in a board-level role, to ensure that all of our direct and indirect activities are consistent with our climate change and sustainability strategy. 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 2018, no organizations whose climate change policies were in conflict with our own were identified in our employee board participation lists.

C12.4

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

Publication

In voluntary sustainability report

Status

Underway – previous year attached

Attach the document

2017_Comerica_Corporate_Responsibility_Progress_Report_v1.pdf

Page/Section reference

Pages 4, 5, 26-50

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

The Corporate Responsibility Progress Report covers our overall environmental sustainability progress, including details on our emissions figures and targets, strategy and governance and climate change risks and opportunities.

Publication

In other regulatory filings

Status

Complete

Attach the document

Comerica-2018-Annual-Report.pdf

Page/Section reference

Page 6

Content elements

Other, please specify

Environmentally beneficial lending dollars; sustainability recognition

Comment

The Annual Report covers information on how we support the greening economy through publishing our environmentally beneficial loans and commitments.

Publication

In other regulatory filings

Status

Complete

Attach the document

Comerica-2019-Proxy-Statement.pdf

Page/Section reference

Page 5/ Corporate Responsibility Highlights

Content elements

Strategy
Emission targets

Comment

The Proxy Statement includes information on our 2020 Environmental Sustainability Goals, how often our sustainability strategy is reviewed by the Board of Directors, and individual performance factors related to sustainability that are utilized in determining executive awards.

C14. Signoff

C-FI

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

C14.1

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

	Job title	Corresponding job category
Row 1	Executive Vice President and Chief Financial Officer	Chief Financial Officer (CFO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	Public or Non-Public Submission	I am submitting to
I am submitting my response	Public	Investors

Please confirm below

I have read and accept the applicable Terms