

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

The PNC Financial Services Group, Inc. is one of the largest diversified financial services institutions in the United States, organized around its customers and communities for strong relationships and local delivery of retail and business banking, including a full range of lending products; specialized services for corporations and government entities, including corporate banking, real estate finance and asset-based lending; wealth management and asset management.

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	Select the number of past reporting years you will be providing emissions data for
Row 1	January 1 2018	December 31 2018	No	<Not Applicable>

C0.3

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

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
Director on board	In 2017, in an effort to further institutionalize and formalize sustainability throughout PNC's business, PNC's corporate governance guidelines were expanded to include a provision that the entire board, as a whole, is responsible for overseeing PNC's CSR policies, programs and strategies. This includes our environmental sustainability strategy and approach to climate change. The decision was made to assign this responsibility to the Board in its entirety (rather than to a committee of the Board) because the effective management of ESG issues is seen as essential to all aspects of company strategy and operations. While the entire Board has received an ESG/Corporate Social Responsibility update at least once a year, for the first time in 2018 the Board heard directly from the CSR team, rather than from a corporate executive acting as proxy, and had the opportunity to question the team directly. PNC's corporate governance guidelines can be found at www.pnc.com/corporategovernance .

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 risk management policies Reviewing and guiding business plans Setting performance objectives 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	At least once each year, PNC's corporate executives and Corporate Social Responsibility team formally present our CSR progress and results to date to the Board of Directors. An example of how the Board monitors and oversees progress against goals and targets for addressing climate-related issues: In April 2018, as part of the 2017 CSR Report, PNC published its first CSR Scorecard, a one-page overview of the ESG metrics, goals and targets that PNC considers most material and impactful to its business. This set of metrics includes our environmental targets for carbon emissions, energy use, water use, renewable energy transition, paper use, the number of clients undergoing enhanced environmental risk due diligence, and our sustainable finance commitments. This set of metrics was vetted and approved by the Board, and they were provided with a historical snapshot of PNC's progress against these metrics over three years' time. Over time, the Board will monitor the company's progress and make adjustments and course corrections as necessary.

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 Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Other C-Suite Officer, please specify (EVP and Head of Corp & Instl Banking)	Both assessing and managing climate-related risks and opportunities	Half-yearly
Other, please specify (EVP and Corporate Real Estate Executive)	Both assessing and managing climate-related risks and opportunities	Annually
Other, please specify (Corporate Social Responsibility Manager)	Assessing climate-related risks and opportunities	Annually

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).

Responsibility for climate change mitigation rests with the entire PNC Board, as defined by our governance charter. The Board receives regular and ongoing updates on all risk assessments, including climate-related risk, as part of every scheduled Board meeting. As a member of the Board of Directors, PNC's Chairman, President and Chief Executive Officer is the most frequent facilitator of these discussions. He updates the Board on high-level climate-related risks stemming from such things as activist challenges and lending portfolio exposures to high-impact environmental industries, as well as on sustainable finance opportunities, such as our strategy around renewables.

Climate-related risks and opportunities increasingly inform and shape our approach to risk management, particularly in our Corporate and Institutional Banking (C&IB) business. The Executive Vice President and Head of C&IB reports directly to the CEO, and takes a leadership role in defining the strategic approach to climate change from a lending perspective, and communicating this to the Board. At least twice annually, the EVP and Head of C&IB addresses the Board on activist groups challenging PNC on:

- Environmental issues and the actions the company is taking to mitigate those risks
- Our evolving exposure to higher-risk industries
- Strategies to proactively invest in sustainable finance opportunities
- New climate-related opportunities, such as our research into issuing our first green bond

At least once per year, representatives from PNC's Corporate Social Responsibility (CSR) team are invited to directly address the Board of Directors on sustainability issues. Included in this briefing are more detailed assessments of PNC's strategies and programs to address climate change from both an operations perspective (working closely with PNC's Corporate Real Estate Executive and Energy Manager) and a lending perspective (working closely with risk management, sustainable finance, and other core functions at the bank). The CSR team also provides information from a policy perspective, including internal governance mechanisms that have been designed or refined to better manage risk or execute on opportunities (such as our recently formed Sustainable Finance Working Group), as well as on external partnerships, best practices and benchmarking opportunities (such as our recent acceptance as a member of the Ceres Company Network and our 2019 decision to join RE100 and commit to 100% renewable energy by 2025).

C1.3

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

Yes

(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?

Executive officer

Types of incentives

Monetary reward

Activity incentivized

Efficiency target

Comment

The Corporate Real Estate Executive oversees PNC's building portfolio, which accounts for more than 95 percent of our Scope 1 and 2 emissions. In this role, he has management and oversight of the Innovation and Performance group and PNC's ability to reduce greenhouse gas emissions. Under this person's leadership, the Innovation & Performance team has set a 2035 goal of reducing energy use by 75% (using 2009 as a baseline), and is currently managing a 4% energy use reduction plan year-over-year. These efforts significantly contribute to PNC's greenhouse gas reduction efforts, and the Corporate Real Estate Executive's annual bonuses, merit increases, and corporate recognitions are tied to the overall success in these areas.

Who is entitled to benefit from these incentives?

Other, please specify (Chief Operating Officer of Realty Services)

Types of incentives

Monetary reward

Activity incentivized

Efficiency target

Comment

The Chief Operating Officer of Realty Services has direct management and oversight of the Energy Manager and the Innovation and Performance group. The COO is closely involved in the day-to-day decisions of this team and their ability to set and achieve meaningful emissions, energy and water targets. Compensation is linked to the team's success in these areas.

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Monetary reward

Activity incentivized

Other, please specify (Sustainability initiatives as a whole)

Comment

All PNC employees have the opportunity to acknowledge each other's achievements by sending Spotlight recognitions, which have a monetary value. The Innovation and Performance Group uses the Spotlight program to recognize employees who participate in sustainability initiatives and contests.

Who is entitled to benefit from these incentives?

Energy manager

Types of incentives

Monetary reward

Activity incentivized

Efficiency target

Comment

PNC's Energy Manager is the head of the company's Innovation and Performance Group, which is charged with developing and executing on the company's operational sustainability strategy. This person is directly responsible for PNC's energy reduction targets, energy use strategy and management of the processes, systems and vendors in place as related to energy use. These efforts significantly contribute to PNC's greenhouse gas reduction efforts, and the Energy Manager's annual bonuses, merit increases, and corporate recognitions are tied to the team's success in these areas.

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	We leverage Moody's definition of Immediate risk, for industries that are experiencing or are likely to experience material credit implications within the next three years as a result of environmental risk, absent substantial counter-balancing initiatives. Examples of such industries include coal mining and unregulated utilities and power companies.
Medium-term	3	5	We leverage Moody's definition of Emerging risk, for industries with clear exposure to environmental risks that, could be material to credit quality over 3 to 5 years, but are less likely in the next 3 years. Companies within these sectors face elevated potential for rating pressure to develop in the future. Examples of such industries include oil and gas exploration, production and refining, automobile manufacturers, transportation and shipping.
Long-term	5	100	PNC considers risks and opportunities more than five years out to be long-term. These industries have exposure to environmental risk that is broadly manageable, or that could be material to credit quality five or more years out. Examples of such industries include property and casualty insurance.

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	PNC's governance and approach to risk management help ensure that risks are effectively identified, monitored and managed. Risk committees established within our governance structure provide oversight for risk management activities at the Board, corporate and business levels. Committee composition is designed to provide effective oversight, with the risk organization having sufficient authority to influence material decisions. The Board oversees enterprise risk management for any material changes to the risk profile and periodically reviews core elements of enterprise risk, including the Risk Appetite Statement and Risk Capacity, Appetite and Strategy. Operational risks related to the regulatory and physical impacts of climate change are assessed and managed by PNC Business Resiliency and Realty Services.

C2.2b

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

PNC has developed a framework to assess, mitigate and manage climate related risks at both the individual transaction and portfolio levels. This framework includes robust and regular screening, portfolio analysis, stress testing, and the establishment of policies and procedures governing our underwriting and portfolio management practices. This framework is regularly reviewed by senior management, and, consistent with our broader CSR governance process, is overseen by the company's Board of Directors (PNC's Board has a Risk Committee, which holds in-person meetings at least quarterly).

PNC's CSR team helps coordinate and oversee the Corporate & Institutional Banking environmental and social risk management efforts and facilitates regular communication between business partners as it pertains to environmental assessments, materiality assessments, renewable energy financing and socially responsible investing.

At a transaction level:

PNC utilizes an Environmental and Social Risk Management (ESRM) Rapid Risk Screen for use across all of Corporate & Institutional Banking. This environmental and human rights risk screening process has expanded environmental and social risk screening across the bank's entire corporate lending portfolio and helps us identify and mitigate risk early in the life-cycle of a transaction and across the company's entire wholesale lending activities. Transactions that are identified through this Rapid Risk Screen are escalated to leaders in the business and our underwriting group, who determine whether to proceed as requested, conduct enhanced due diligence alongside the company's CSR team, or pass on the transaction. For example, as a result of the ESRM screen, PNC exited a relationship where a customer was found to have dumped coal into the Caribbean. We also declined an opportunity with an oil producer, due to potential adverse salt

water disposal regulations and the potential negative impact of earthquakes as a result of water injection wells.

At a portfolio level:

PNC's credit portfolio management team, using an internally developed environmental framework, conducts portfolio analysis, including scenario analysis and stress assessments, to help us better understand how certain credit risks could potentially impact the wholesale credit portfolio. The process involves groups of business and risk employees working to understand the secular and cyclical nature of the risk and assess the risks according to our environmental framework. Once designated, appropriate scenarios are developed using regulatory stress testing methodologies and models to assess the magnitude of stress risk exposure in the target credit population(s). PNC's designation of environmental risks and the associated stress scenario loss results are presented to PNC's Credit Portfolio Strategy Committee, which manages the overall risk/return balance of PNC's loan portfolio. Based on materiality, outcomes from this review may include but are not limited to incorporation of stress results into capital forecasts, enhanced due diligence, changes in origination requirements, or caps and limits on credit exposure. We define substantive financial impact as one that meets a materiality threshold over 9 quarters that would require it to be formally layered onto the capital plan. To date, we have assessed the risks related to the impact of potential carbon emissions regulations on the portfolio (in the coal, coal power generation, auto and transportation markets); the ongoing volatility in the oil & gas industry; the impacts on the portfolio from secular shifts resulting from the growing use of electric vehicles; and the impact of carbon transition from fossil fuels to renewable energy on the electric power generation industry.

Our aim is to ensure that PNC's annual environmental stress assessment is relevant to our business and valuable to internal and external stakeholders. As such, we are constantly re-evaluating our existing policies and procedures and identifying opportunities for improvement. For example, we have gradually reduced our lending to coal mining companies and prohibit new lending to coal producers with anything more than a de minimis exposure to mountaintop removal mining. In addition, we have further refined our due diligence policies related to energy companies, by prohibiting construction financing of all single-site coal-fired power plants. These changes reflect our stakeholders' interests and concerns, as well as environmental risks, which if left unaddressed could translate into risks for our business.

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	As part of the underwriting process, PNC Corporate & Institutional banking engages with companies in the coal mining, electric power generation, oil and gas industries to complete an enhanced environmental due diligence questionnaire. The questionnaire focuses on the borrower's past and present environmental compliance with laws and regulations; the borrower's financial resources, needed to adhere to environmental mandates; the borrower's internal policies, procedures and resources related to environmental risk management; and the transaction's compliance with PNC's credit and underwriting policies related to environmental risk. These reviews facilitate greater client engagement, allow us to identify potential concerns with prospective and existing transactions, help clients better mitigate risks and provide an opportunity for PNC to take action to mitigate the risk. For example, after extensive due diligence assessing environmental and social risks (including the project's compliance with all applicable U.S. federal and state laws and regulations, conformance with the Equator Principles, alignment with the IFC Performance Standards on Environmental Health and Safety Guidelines), PNC decided to move forward with funding an underground natural gas pipeline that did not run through any federally or state recognized Native American reservations. The pipeline's natural gas will be used to displace existing coal derived energy in one of the state's served by the pipeline (coal burn expected to decline from 19.2 million tons in 2014 to 7.1 million tons in 2022).
Emerging regulation	Relevant, sometimes included	Emerging environmental regulations that could have a meaningful impact on PNC's credit quality are identified and assessed by PNC Corporate & Institutional Banking underwriters for impact on the portfolio. The Credit Portfolio Management team also looks for potential opportunities and risks centered around significant new regulations and then recommends actions based on the scenario and time constraints, to position the portfolio for optimal overall performance. For example, PNC passed on a transaction where an oil producer was operating in a state where produced oil and wastewater volumes had increased considerably due to fracking technologies. Although the wastewater byproduct was being disposed of underground via EPA/UIC permitted injection wells, earthquake activity had increased considerably in the period that the water injection volume had increased. Although existing regulations did not address any potential correlation between the two factors, our screening identified a material risk and we decided to decline the opportunity due to potential adverse future saltwater disposal regulations.
Technology	Relevant, sometimes included	As a part of its portfolio management practice, PNC periodically conducts stress assessments and scenario analysis to better understand how credit risks from technological improvements or innovations could potentially impact the wholesale credit portfolio. For example, previous reviews have focused on developing initial assessments of carbon transition risk for gasoline-fueled vehicles as a result of secular shifts resulting from the growing use of electric vehicles. We have also examined the impact of carbon transition risk on coal, natural gas and electric power generation related industries, from the shift to renewable energy. As a result of these assessments, recommendations were made to continue to reduce exposure to coal lending and increase lending to utility scale solar power projects.
Legal	Relevant, sometimes included	PNC conducts Commercial Background Research Automation (COBRA) reviews of select new clients for derogatory legal issues. Environmental risk screening is a component of these reviews. The Corporate & Institutional Banking Business Risk Office helps reduce/mitigate losses and minimize reputational and compliance risk to the bank, by enabling decisions to be made on whether to move forward with the relationship, move with caution or discontinue the prospect altogether. For example PNC passed on a transaction where there were pending, unresolved legal charges of a serious nature against an owner of the company under consideration.
Market	Relevant, sometimes included	As a part of its portfolio management practice, PNC periodically conducts stress assessments and scenario analysis to better understand how credit risks from changes in market conditions for commodities or supply and demand dynamics for other products and services could potentially impact its wholesale credit portfolio. For example, a previous review focused on understanding the risks related to the ongoing price volatility in the oil & gas industry, which are in part caused by environmental considerations due to likely demand fluctuations. As a result, we added an overlay to our loss modeling designed to accommodate environmental risk, which results in incremental losses in our forecasts, and thus, incremental reserve and/or capital requirements.
Reputation	Relevant, sometimes included	PNC identifies potential reputational risks by utilizing its environmental, social and reputational Rapid Risk Screen tool. The company is also transparent about its carbon management program and communicating its environmental commitment. For example, PNC exited a relationship with a large-scale mining company after there were reports that the company dumped coal into the Caribbean Sea. This decision came about as part of ongoing enhanced due diligence, that determined the relationship did not meet PNC's reputational standards. From an overall portfolio perspective, consideration of reputation has resulted in PNC gradually reducing our lending to coal mining companies and prohibiting new lending to coal producers who have anything more than a de minimis exposure to mountaintop removal mining. We have also refined our due diligence policies related to energy companies by prohibiting construction financing of all single-site coal-fired power plants. These changes reflect our stakeholders' interests and concerns, as well as environmental risks, which, if left unaddressed, could translate into reputational risks for our business.
Acute physical	Relevant, sometimes included	Acute physical events impacting PNC credit portfolios and lending clients are inevitable and often occur with little to no forewarning (we have operations in regions that are vulnerable to climate related disasters such as tropical storms, wildfires and floods). Such events may significantly affect PNC loan portfolios by impeding the timely closing of loans, damaging assets associated with loans in the pipeline, damaging assets pledged as collateral on existing loans or impairing the ability of certain borrowers to repay their loans. In situations where acute physical risks are causing material credit implications, PNC has developed a Procedure to assess the impact to loan portfolios due to the event; provide a standard approach for quickly assessing the impacts to credit portfolios, borrowers and reserves; facilitate the aggregation of data necessary to inform executive management of evolving impacts; and identify any immediate or future actions to consider. For example, for Hurricane Irma, PNC conducted a quick and robust assessment of exposure and risk to companies in the afflicted areas. The assessment results were reported to business units who then worked on remediating the risk or escalating the risk for senior management review.
Chronic physical	Relevant, not included	Not currently an included part of analysis process.

	Relevance & inclusion	Please explain
Upstream	Relevant, sometimes included	This risk is evaluated and included in some aspects, however as a bank, PNC's upstream supply chain is not very complex. While most upstream risks haven't been formally evaluated, upstream risks as a whole could be included in future (medium to long-term horizon) risk evaluations as our environmental and social risk management processes evolve, and as more information on upstream impacts are made available and communicated by thought leaders in the space. An example of an upstream risk that hasn't been evaluated, are those related to the IT sector, most notably in the semiconductor and tech hardware industries, due to our procurement of IT related products and services. Many companies in these sectors have listed risks such as carbon taxes, sea level rise and increased flooding as occurring in the medium term, and likely to have a high impact. One company stated in a public disclosure that carbon trading programs had the potential to increase costs 100 fold, and many see increased water risks in Southeast Asia – where many manufacturing facilities are located – as having the potential to disrupt supply chain operations – upstream and downstream. These impacts could cause the costs of these products and services to increase, which in turn could be passed on to end consumers such as PNC, or those products and services could be temporarily unavailable when needed. An upstream risk (and related opportunity) that has been evaluated, by PNC's Innovation and Performance team, are the rising costs of energy and water supply. To that affect, PNC evaluated committing to RE100 in 2018, has set a 100% renewable electricity goal to be achieved by 2025, and continually seeks to make improvements to its water management processes within its offices and branches. PNC's Innovation and Performance team is currently pursuing RECs and onsite generation, and under discussion are Power Purchase Agreements (PPAs).
Downstream	Not evaluated	Alongside the evaluation of reputational risks to PNC through its Rapid Risk Screen tool, the company also identifies potential legal and reputational risks to its customers – as a result of current or potential environmental and climate-related actions and impacts – as a part of due diligence during the lending process that might severely affect the customers' solvency during the lifetime of the loan. This is so far a by-product of the identification of reputational risk to PNC, however, supplemental due diligence is also applied to companies in the coal mining, oil, gas and coal-fired power generation sectors. When potential issues are identified and escalated up through the organization, the COBRA reviews described in the legal risks row above are also included in our due diligence along with further research into the company. PNC's Corporate & Institutional Banking business maintains an increasing focus on environmental risk during the underwriting process. Examples of this kind of risk could include higher flood insurance premiums for our customers which could affect their ability to make on-time payments, or, risks to automobile manufacturers due to shifts in supply due to markets shifting from internal combustion engine vehicles to electric vehicles or more stringent emissions standards increasing production costs.

C2.2d

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

PNC is focused on helping customers realize their financial goals while diligently managing risks. Our philosophy is to never take unnecessary risks or trade long-term value for short-term gains. We have designed our risk management policies and initiatives with this philosophy in mind, providing the experience, expertise and innovative products our customers need to be successful, while diligently managing ESG risks. PNC recognizes that environmental issues, including climate change, are affecting our business, our clients and the communities in which we operate.

PNC has developed a framework to assess, mitigate and manage climate related risks at both the individual transaction and portfolio levels. This framework includes robust and regular screening to identify risk; portfolio analysis and stress-testing to estimate exposure, assess risks and opportunities and determine materiality; the establishment of policies and procedures to govern our underwriting and portfolio management practices; and review by senior management or the appropriate governance body to ensure that recommendations are acted on either through risk mitigation or the pursuit of opportunities. The framework is regularly reviewed by senior management and, consistent with our broader CSR governance process, overseen by the company's Board of Directors (PNC's Board has a Risk Committee, which holds in-person meetings at least quarterly).

At a transaction level, PNC utilizes an Environmental and Social Risk Management (ESRM) Rapid Risk Screen for use across all of Corporate & Institutional Banking. This environmental and human rights risk screening process has expanded environmental and social risk screening across the bank's entire corporate lending portfolio and helps us identify and mitigate risk early in the life-cycle of a transaction and across the company's entire wholesale lending activities. Transactions that are identified through this Rapid Risk Screen are escalated to leaders in the business and our underwriting group, who determine whether to proceed as requested, conduct enhanced due diligence alongside the company's CSR team, or pass on the transaction.

At a portfolio level, PNC's credit portfolio management team, using an internally developed environmental framework, conducts portfolio analysis, including scenario analysis and stress assessments, to help us better understand how certain credit risks could potentially impact the wholesale credit portfolio. The process involves groups of business and risk employees working to understand the secular and cyclical nature of the risk and assess the risks according to our environmental framework. Once designated, appropriate scenarios are developed using regulatory stress testing methodologies and models to assess the magnitude of stress risk exposure in the target credit population(s). PNC's designation of environmental risks and the associated stress scenario loss results are presented to PNC's Credit Portfolio Strategy Committee, which manages the overall risk/return balance of PNC's loan portfolio. Based on materiality, outcomes from this review may include but are not limited to incorporation of stress results into capital forecasts, enhanced due diligence, changes in origination requirements, or caps and limits on credit exposure. To date, we have assessed the risks related to the impact of potential carbon emissions regulations on the portfolio (in the coal, coal power generation, auto and transportation markets); the ongoing volatility in the oil & gas industry; the impacts on the portfolio from secular shifts resulting from the growing use of electric vehicles; and the impact of carbon transition from fossil fuels to renewable energy on the electric power generation industry.

Transition Risk example: PNC identified the carbon transition from fossil fuels to renewable energy as a potential risk to the portfolio. We identified and estimated exposure to industries that would be impacted by this transition, both positively and negatively. Based on the time horizon we looked at and the stress we estimated the transition would have on the industries impacted, we calculated impact and made recommendations to senior management on action that could be taken in the portfolio to reduce risk and take advantage of opportunities.

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

Physical risk

Primary climate-related risk driver

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

Type of financial impact

Write-offs and early retirement of existing assets (e.g., damage to property and assets in "high-risk" locations)

Company- specific description

PNC occupies hundreds of buildings in the Southeastern US. Natural disasters, such as hurricanes, could impact hundreds of properties at one time. In 2018, PNC Realty Services conducted a scenario analysis on the case of a significant natural disaster resulting in damage to PNC property. The scenario assumptions involved a Category 4 or 5 hurricane landing in Jacksonville, Florida and damaging property in Florida and as far north as the Carolinas. Other assumptions are that a hurricane of this type would cause understaffing at branches and both major and minor property damage. The scenario analysis used past weather events to inform future risk, including the damage caused by Hurricane Sandy and 2012 flooding in the Chesapeake area. The analysis found that this scenario would impact both employees and customers, in addition to causing physical asset damage. This risk identification quantified potential financial losses and identified risk control actions. In 2018, this analysis informed the response to Hurricane Florence, which impacted almost all of PNC's back office and retail buildings in the Carolinas. When this happened, the most important goal was to make sure the employees and their families were safe. Since employees were dealing with their own homes being impacted, PNC had an out of region team of six Realty Services Operations employees on standby to travel to the affected area to address damage and resume business as usual. PNC prioritizes re-establishing utilities for climate control of the buildings and ATM access. During this time, PNC engaged mobile banking teams to travel the areas in need. PNC has a generator program that has fuel trucks on standby to take fuel from a large tanker truck to smaller trucks to fill generators in the buildings.

Time horizon

Current

Likelihood

Likely

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)

280000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The scenario included direct, immediate costs to PNC to make the customer whole, repair physical damage, settle legal and compliance claims, address human capital benefits and operational costs. Not included are insurance benefits, reputational costs or opportunity costs. In 2018 PNC incurred \$4.5 million in losses due to Hurricane Florence. There were costs associated with deployment of the generator vendor. For this vendor, there are sunk costs that PNC pays each year in order to plan for worst case scenarios and ensure readiness. In addition, there are true costs associated with restoring all of the buildings impacted. This includes costs for first responder team to patch roofs, then roofer completes work. The scenario analysis quantified anticipated costs in the exercise. Analysis found this hurricane scenario would cause significant damage to two branches at \$40,000 per branch. Restoration costs for 10 branches with minor damage are \$20,000 per branch.

Management method

Controls identified in the scenario analysis are monitoring of work request responsiveness, regular property inspections,

management and monitoring of system maintenance contracts, master services agreements related to property, and regular safety inspections. These controls ensure quick responses, reliable documentation of contracts and building conditions, preventative maintenance, and seamless coordination. The cost of managing hurricane risk in the Southeastern US hurricane-impacted areas is not broken out from the overall costs associated with maintaining buildings. MSAs with our vendors and third parties are comprehensive. PNC can plan for hurricanes by tracking and projecting storms and focusing on a 5 day projection. This allows us to assess the probability of which branches and buildings could be affected. Crisis management teams and vendors are on standby. PNC conducts property inspections. Remote teams assessed every building, and worked with local managers to complete documentation, take pictures, and physically inspect the buildings. A team dedicated to environmental testing ensures that buildings are safe to reoccupy. The management method described above is applicable to PNC's entire portfolio. With approximately 3,000 facilities in the building portfolio, PNC allocates significant resources to strengthen building resilience. The building operations group has strong policies and procedures in place to help mitigate climate-related physical risk.

Cost of management

20000000

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Supply chain

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Other

Type of financial impact

Reduced revenue from negative impacts on workforce management and planning (e.g., employee attraction and retention)

Company- specific description

We recognize that how we do or do not address climate change can impact our reputation, and subsequently our business. As our stakeholders' awareness of and sensitivity to the risks of climate change continue to grow, it becomes increasingly important for us to respond in a thoughtful and deliberate manner. Specifically, we must understand and address the potential impacts of climate change to our clients and our business, be more transparent in our ESG practices, examine our third parties' sustainable business practices, and determine which national and global principles, compacts and other agreements we should support. We must also stay abreast of our stakeholders' diverse and constantly evolving interests and concerns as they pertain to climate change and other environmental issues so that we can be more proactive and strategic in our communications and actions. Also, unlike many of its competitors, PNC does not offer investment banking and other higher risk and return products. While it's this approach to risk management that has allowed our company to succeed when others have struggled, we depend on revenue from our four main lines of business, including Corporate & Institutional Banking. Recognizing that environmental issues, including climate change, could impact our clients and subsequently the health of our business, we have adopted a framework to assess, mitigate and manage related risks at both the portfolio and individual transaction levels.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

We would not attempt to quantify any potential financial impact associated with reputational risks.

Management method

PNC has taken numerous steps to manage potential reputational risks by being transparent about its carbon management program and by proactively communicating its environmental commitment. Since 2010, for example, we have shared information about our sustainability programs and environmental commitment on our website and in our annual Corporate Social Responsibility (CSR) report, among other internal and external communications channels. Furthermore, we regularly present on and interview about PNC's green buildings, energy efficiency initiatives and environmental performance. Finally, we regularly meet and engage with our key stakeholders to ensure that our sustainability programs align with their interests and address their concerns. From a performance standpoint, we have significantly reduced our energy and water consumption and carbon emissions since 2009, when we established various environmental goals. Most importantly, we recognize the risk of carbon emissions and are constantly re-evaluating our risk management processes and procedures to ensure that our business can withstand changes in both our industry and natural environment. The cost to manage this risk is embedded in the department budget.

Cost of management

0

Comment

Identifier

Risk 3

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

Write-offs, asset impairment, and early retirement of existing assets due to policy changes

Company- specific description

To the extent that our customers are impacted by legislative and regulatory initiatives related to climate change, our business could be negatively impacted by adverse changes in our customers' creditworthiness and demand for PNC products and services. Examples of legislative and regulatory initiatives that could affect our customers include: CAFE standards with higher targets and larger penalties, the implementation of carbon taxes on select industries, companies, or products, and large shifts in water policy. For example, PNC holds a significant amount of shares of a company in the apparel industry. Like most companies in that industry, water is a vital part of operations. Drastic changes in water policy in regions where key manufacturing facilities are located could increase the costs of goods sold, which in turn could impact revenues and ultimately dividends paid out to shareholders, in addition to a company's ability to pay back loans on time.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Potential financial impact evaluated on a transaction-by-transaction basis, as well as across PNC's entire lending portfolio.

Management method

PNC's Corporate & Institutional Banking (C&IB) business maintains an increasing focus on environmental risk during the underwriting process. In addition to considering environmental risk before finalizing any credit transaction, we now apply supplemental due diligence criteria to companies in the coal mining, oil, gas and coal-fired power generation sectors. C&IB also incorporated this environmental pre-screening process for prospective clients across all industries which occurs prior to PNC's presentation of a term sheet and before underwriting. As part of this process, the underwriter of a transaction may elevate a transaction where the customer could be exposed to policy or legal related risks. Typically this is first elevated to members within Strategy and Planning, and where there is continued elevation needed, up through Corporate Social Responsibility (CSR), and finally to C&IB leadership. Here, decisions are made to pass on the transaction, or the decision is left to the underwriter and other individuals a part of the transaction. For example, PNC declined an opportunity with an oil producer after a potential risk was elevated up through CSR and C&IB leadership. Due to potential adverse saltwater disposal regulations and the potential negative impact of earthquakes as a result of water injection wells, PNC choose to no longer pursue the opportunity. There are no additional costs to manage this risk beyond department budgets.

Cost of management

0

Comment

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?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Move to more efficient buildings

Type of financial impact

Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company-specific description

Building and operating green has emerged as an enormous opportunity for PNC, especially in light of the potential impacts of climate change and other environmental issues. Fortunately, we have been able to serve as a leader in green building, reducing our material and resource consumption, waste generation and operating costs while creating a healthy workplace for thousands of employees.

Time horizon

Short-term

Likelihood

Very likely

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)

10000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Through our energy management program, we have reduced our utility energy costs by 15 percent since 2012 and expect to further decrease these costs by at least 20 percent by 2020 (compared to 2012). Over the next several years, we estimate the utility savings to be more than \$10 million.

Strategy to realize opportunity

Our key method for managing this opportunity is constructing and operating a high-performing building portfolio. For example, since 2010 we have invested over \$50 million in lighting retrofit initiatives which have a payback period of less than four years. Furthermore, in 2018, we invested \$3 million across more than 55 buildings to replace T12 and T8 bulbs with LEDs in high-traffic areas and to replace T12 bulbs with T8 bulbs and magnetic with electronic ballasts in low-traffic areas. We will continue to invest in energy efficiency to reduce this risk and ensure that we can achieve our 2035 energy reduction goal of 75 percent (based on 2009 use).

Cost to realize opportunity

52000000

Comment

At the end of 2018, PNC had 294 LEED-certified projects and 205 ENERGY STAR-certified buildings. We continued to reduce the environmental impact of the extraction, transport and disposal of virgin materials by selecting environmentally-friendly interior products such as LED lights, furniture that is 100% Greenguard certified, and carpeting that is more than 65 percent recycled. Furthermore, in 2018 PNC purchased 152,607 square yards of Interface's Cool Carpet, enabling the company to retire 1,391 metric tons of verified GHG emissions through reduction credits (certificate number US01172019-1327, issued 01/17/19). PNC has expanded its green building program to focus more on innovation and intelligent buildings, which use automation, advanced data processing and cutting edge technology to increase efficiency. In order to identify and address building system issues and to achieve peak building performance, PNC continues to conduct audits and visited more than 100 buildings in 2018.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Customer

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

As our stakeholders' awareness of and sensitivity to the risks of climate change continue to grow, it becomes increasingly important for us to respond in a thoughtful and deliberate manner. Furthermore, as our stakeholders, including our employees, shareholders and customers, become more discerning in terms of where they want to work, invest and do business, we must speak and act in accordance with our commitment to corporate sustainability. Specifically, stakeholders often care about ESG issues, so how PNC addresses and invests in these issues can be critical to our business. Fortunately, PNC has a strong CSR program in which climate change and other environmental issues play a major role and receive significant attention. Furthermore, PNC is transparent in communicating this program to its stakeholders through its annual CSR report, its CSR website and through internal and external communications channels, including but not limited to the company's social media channels.

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)

7000000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

In 2018, PNC's sustainable financing, including that for renewable and energy-efficient projects, totaled more than \$7 billion. As consumer demand rapidly grows, PNC expects its lending in this space to continue to increase.

Strategy to realize opportunity

To manage changing consumer behavior, PNC's Asset Management Group (AMG) manages a Responsible Investing (RI) platform focused on investment strategies that consider financial returns, as well as ESG impacts. At the end of 2018, PNC AMG's dedicated RI products, active and passive overlays, and other RI strategies totaled approximately \$2.42 billion in assets under management spread across the business units of Hawthorn, Wealth Management, Institutional Asset Management and PNC Capital Advisors (PCA). This represents a 15% increase from 2017. The Investment Advisor Research team this year approved the introduction of two mutual funds, two separately managed accounts, eight passive exchange-traded funds and an Impact Investing Private Equity offering. Also in 2018, PCA's Municipal Fixed Income team developed a proprietary process for scoring tax-exempt bonds and their issuers for custom Environmental and Social Impact managed accounts. Supporting financial advisors with responsible investing resources and training was a top priority in 2018. The Responsible Investing team assisted advisors and stakeholders across PNC's footprint in a variety of ways, including providing portfolio or investment-level ESG analysis and recommendations, participating in educational market visits, and sharing industry trends and thought leadership. There are no additional costs to manage this opportunity beyond the department budget.

Cost to realize opportunity

0

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Type of financial impact

Other, please specify (Monetary savings is not a driver of this opportunity)

Company-specific description

In 2018, PNC evaluated procuring 100% renewable energy and making a public commitment by signing on to the RE100. After research and internal approvals took place in 2018, PNC joined the RE100 in 2019. PNC is committed to reducing greenhouse gas emissions by 75% by 2035 and using renewable energy as a key strategy for goal attainment.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Procurement of renewable energy is driven by PNC's GHG reduction goal and our commitment to being a socially responsible company. PNC's Innovation and Performance group is in the initial phase of determining allocation of resources and budget to achieve 100 percent renewable energy by 2025 and is looking into different projects to achieve this goal.

Strategy to realize opportunity

PNC is committed to attaining 100% renewable energy status by 2025. The Innovation and Performance team is currently pursuing RECs and onsite generation. Power Purchase Agreements are also under discussion. This is an estimated annual cost, using the assumption that PNC will start by procuring RECs, while simultaneously pursuing onsite generation and PPAs.

Cost to realize opportunity

400000

Comment

Identifier

Opp4

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Type of financial impact

Returns on investment in low-emission technology

Company-specific description

Renewable energy, including solar and wind power, has become an increasingly important contributor to our power supply. For example, in the last decade, the U.S. solar industry has experienced a compound annual growth rate of more than 60 percent. National and regional renewable energy policy targets or other policies that support renewable energy would drive greater demand for alternative energy sources. This increased demand would be a business opportunity for PNC's Renewable Energy Finance Group to provide debt financing and risk management solutions for its core clients in the renewables sector, focused on three asset classes: solar power, on and off-shore wind power and battery storage capacity.

Time horizon

Short-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

In addition to monitoring our internal operations, we support the transition to a low-carbon economy by helping our clients finance energy efficient and renewable energy projects, among other environmentally beneficial activities. With the growth of the renewable energy industry, PNC expects its lending in this space to continue to increase.

Strategy to realize opportunity

PNC supports the continued adoption of renewable energy and encourages innovation in the deployment of alternative energy sources by helping customers implement economically viable, renewable energy solutions. In 2017, PNC's Renewable Energy Finance Group provided financing to the City of Holyoke's Gas and Electric, a municipal-owned power company, for a 5.8MWdc ground-mounted photovoltaic project located at a former coal-burning power plant site in Holyoke, Massachusetts. This project was expanded in 2018 to include a 3MWac battery storage system on the same site as the solar project, specifically to enhance operational efficiency, optimize intermittent solar energy and improve power reliability to customers. The project is one of the largest utility-scale energy storage installations in Massachusetts. Another example of PNC's support of renewable energy solutions was PNC Renewable Energy Finance Group, alongside two other banks's financing of a \$104.1 million senior secured term loan to help finance a portfolio of solar distributed generation ("DG") projects for a leading global renewable power company with over 3,700 MW of high quality wind and solar assets in North America and Western Europe. The portfolio consists of 117 individual project sites in 14 states with a total generation capacity of 138 MWdc. There are no additional costs to manage this opportunity beyond the department budget.

Cost to realize opportunity

0

Comment

Identifier

Opp5

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Markets

Primary climate-related opportunity driver

Access to new markets

Type of financial impact

Increased revenues through access to new and emerging markets (e.g., partnerships with governments, development banks)

Company-specific description

Green bonds could be a future revenue generator for PNC as the market continues to grow. Issuing a green bond out of PNC Financial Services Group would generate a pool of funds that could be allocated to loans for environmental projects. Examples of environmental projects include green buildings, energy efficient projects, clean water, and clean transportation. By issuing a green bond, PNC Financial Services would be an industry leader as the first US regional bank to issue. PNC Capital Markets would benefit from underwriting the transaction and marketing the transaction to other customers in hopes of soliciting future green financing business.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

50000

Potential financial impact figure – maximum (currency)

1000000

Explanation of financial impact figure

As one of the first underwriters of US Bank green bond, PNC Capital Markets would have the opportunity to market the transaction to future customers. The green bond market reached \$167 billion in 2018 and is expected to top \$200 billion of volume in 2019. As the market continues to grow, PNC's revenue opportunity and the potential environmental benefits of our customers will grow.

Strategy to realize opportunity

The strategy to realize this opportunity began with the creation of a Sustainable Finance Steering Committee at PNC. This group was tasked with identifying and tracking eligible green loans to PNC customers. The group is currently exploring what a green bond framework could look like for PNC, how the proceeds would be spent, and what third party verification would entail for any green bond PNC were to issue.

Cost to realize opportunity

25000

Comment

C2.5

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

	Impact	Description
Products and services	Impacted for some suppliers, facilities, or product lines	PNC recognizes that environmental issues, including climate change, are impacting our business, our clients and the communities in which we operate. We have developed a framework to assess, mitigate and manage climate related risks and opportunities at both the individual transaction and portfolio levels. Risks and opportunities identified by the framework are presented to senior management along with recommendations for action that leverage our full set of portfolio management tools. Based on these recommendations, and analysis conducted by the business lines into products that fit our customers needs, PNC's products and services continue to evolve with the changing environment. A recent initiative coming out of this evolution in our products and services is the creation of a Renewable Energy Finance Group that allows us to capitalize on service related opportunities by providing debt financing and risk management solutions for clients in the renewables sector, focusing on solar power, on and off-shore wind power and battery storage capacity. The magnitude of this opportunity will have a moderate impact to the revenues generated by these initiatives and businesses, a will work to position PNC to continually benefit as these markets continue to grow.
Supply chain and/or value chain	Impacted for some suppliers, facilities, or product lines	Some suppliers in our supply chain, such as those related to the IT sector, and semiconductor and tech hardware industries, may face risks related to more stringent environmental regulation, carbon pricing, or physical impacts to their facilities. The have the potential to occurring in the medium term (as defined by those companies), and likely to have a high impact. These impacts could cause the costs of these products and services to increase, which in turn could be passed on to the end consumer (PNC), or those products and services could be temporarily unavailable when needed. Currently, those risks that are unknown or not fully evaluated are managed primarily through PNC's efforts to enhance its enterprise third-party management system. This platform helps the company identify, manage and mitigate third-party risk and comply with regulatory requirements related to managing key suppliers. Our supply chain organization successfully deployed a procure-to-pay model to facilitate the end-to-end management of the third-party life cycle. This enhancement will better position PNC to deliver on its commitment to creating a sustainable supply chain by fostering a heightened ability to track supplier performance. PNC has started down the path towards mitigating the known supply chain risk of rising energy costs, by committing to RE100 and setting a 100% renewable electricity goal for 2025. PNC is currently considering and/or discussing RECs, onsite generation, and Power Purchases Agreements as potential strategies to achieve that goal. These actions could have a low to moderate impact in the long term, while other potential supply chain risks not fully evaluated are expected to have a low to no impact.
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	As we transition to a low-carbon economy, PNC has developed a framework to assess, mitigate and manage climate related risks and opportunities at both the individual transaction and portfolio levels. Risks and opportunities identified by the framework are presented to senior management along with recommendations for action that leverage our full set of portfolio management tools. An example of environmental risk, applied through this framework that resulted in active portfolio management decisions and had an impact on our business, was the identification of an immediate threat to the reputation of PNC by lending to coal companies involved in mountaintop removal mining. Mountaintop removal mining is a form of surface mining at the summit of a mountain. The practice of mountaintop removal has been found to have serious environmental impacts that mitigation practices cannot successfully address. Identification of this risk led to PNC exiting relationships that were involved in mountaintop removal coal mining, and eventually further analysis led to enhanced due diligence, tightening of structure, reduced growth appetite and finally a decision that PNC would be taking on no new coal relationships that had more than a de minimus exposure to the practice. These recommendations had a high impact on our lending and led to a fall in exposure to the coal industry. Future actions to mitigate risk such as those could have a high impact as well.
Investment in R&D	Impacted for some suppliers, facilities, or product lines	Within our Operations: To further enhance the performance of its buildings, PNC has expanded its green building program to focus more on innovation and intelligent buildings, which use automation, advanced data processing and cutting edge technology to increase efficiency. We recognize the value of partnering with universities, start-ups, community organizations and industry associations, all of which help us drive innovation, reach our ambitious environmental goals and gain exposure to new opportunities. In our products and services: Our investment into R&D also extends to the provision of financing and underwriting of debt (such as green bonds) where there will be an environmentally sustainable use of proceeds. The areas of focus include but are not limited to renewable energy, pollution control, and sustainable transportation. In 2018 we committed more than \$7 billion from 9 lines of business including, equipment finance, capital markets, and community development banking. As PNC matures in this space, within our operations and our products and services, these opportunities could have a low impact.
Operations	Impacted	Buildings consume energy, among other resources, to create safe, healthy and productive spaces. At the same time, however, they often account for a significant percentage of a company's expenses. In an effort to manage these expenses and meet the company's environmental goals, PNC is focused on enhancing operational efficiencies to reduce its total energy consumption and carbon emissions. To ensure that its actions align with science, as well as its commitment to innovation, PNC met our 2020 goal ahead of schedule and set new ambitious emissions, energy and water reduction targets for 2035. Specifically, we aim to reduce our emissions and energy consumption by 75 percent, using 2009 as a baseline, and to reduce our water consumption by 50 percent, using 2012 as a baseline. These targets, along with our governance structure and oversight and commitment to managing environmental risks in our lending portfolio, reflect the degree to which climate change influences PNC's business strategy. Furthermore, we will continue to manage our direct impact on climate change by further reducing our energy and water consumption, as well as our carbon emissions. PNC was an early adopter of green building and has made sustainable design and construction a key ingredient in its long-term climate change strategy.
Other, please specify	Please select	

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 for some suppliers, facilities, or product lines	As we transition to a low-carbon economy, PNC has developed a framework to assess, mitigate and manage climate related risks and opportunities at both the individual transaction and portfolio levels. Risks and opportunities identified by the framework are presented to senior management along with recommendations for action that leverage our full set of portfolio management tools. An example of an opportunity, applied through this framework that resulted in active portfolio management decisions is the transition from gas-powered vehicles to electric vehicles (EV). The global automotive sector is preparing for disruptive changes ahead that will have wide-ranging impacts on several end markets. Although the EV industry is at its early stages, it is being helped by costs coming down, new regulations in Europe and Asia, and the fact it is a cleaner and more sustainable technology. An assessment of the auto industry led to additional risk being layered onto the risk ratings of select automotive suppliers and a recommendation being made to monitor and build expertise in the electric vehicle industry for future strategy prioritization and growth. These revenue related opportunities have the potential to moderately impact our exposure to these industries in the long-term going forward and encourage future growth in areas that have been identified as opportunities, while reducing exposure in areas identified as risks.
Operating costs	Impacted	Through our energy management program, we have reduced our utility energy costs by 15 percent since 2012 and expect to further decrease these utility costs by at least 20 percent by 2020 (compared to 2012). Over the next few years, we estimate the savings to be more than \$10 million.
Capital expenditures / capital allocation	Impacted	PNC focuses on constructing and operating a high-performing building portfolio. PNC was an early adopter of green building and has made sustainable design and construction a key ingredient in its long-term climate change strategy. To further enhance the performance of its buildings, PNC has expanded its green building program to focus more on innovation and intelligent buildings, which use automation, advanced data processing and cutting edge technology to increase efficiency.
Acquisitions and divestments	Not yet impacted	Acquisitions are not a part of PNC's climate-related strategy, so they don't factor into any climate-related financial planning. However as the transition to a low-carbon economy progresses, our clients may divest from companies in carbon-intensive industries or acquire more sustainable companies, and in the process, could solicit M&A services from PNC. While PNC hasn't made any acquisitions as part of a climate-related strategy, Solebury Trout, a PNC Financial Services Group Inc. subsidiary (formed from the acquisitions of Solesbury and The Trout Group LLC), has recently launched a new Environmental, Social and Governance (ESG) practice. The new area will help clients build, improve and promote ESG strategies that create long-term value and drive investor engagement.
Access to capital	Impacted for some suppliers, facilities, or product lines	Underwriting bonds that finance environmentally beneficial projects is an important part of our sustainable finance program. This includes both traditional and "green" bonds, which are underwritten and issued under the best practice guidelines of the International Capital Markets Association's Green Bond Principles, to which PNC is a signatory. While active in underwriting green bonds, PNC has not yet issued its own. However, PNC made the decision to explore issuing its first green bond in 2019. Green bonds represent an opportunity for PNC to access new sources of debt financing which would enable us to further finance additional renewable energy and low-carbon projects and initiatives. These opportunities could have a low impact on PNC's access to capital.
Assets	Impacted for some suppliers, facilities, or product lines	At the end of 2018, PNC AMG's dedicated RI products, active and passive overlays, and other RI strategies totaled approximately \$2.42 billion in assets under management spread across the business units of Hawthorn, Wealth Management, Institutional Asset Management and PNC Capital Advisors (PCA). This represents a 15 percent increase from 2017, and three times the 5 percent increase seen from 2016 to 2017. In September 2016, PNC began working with a third-party investment manager that provides responsible investing overlays on multiple domestic and international passively managed indices. They also offer two specialty indices, one focused on companies with positive ESG characteristics and another aligned with Catholic values. In addition to passive overlays, PNC continues to offer various dedicated solutions, including mutual funds, separately managed accounts and exchange traded funds. In 2017, PNC became a subscriber to MSCI's ESG Issuer and Fund Metrics, which allows us to screen companies, mutual funds and ETFs against various ESG categories. This allows us to better identify investment options that reflect our clients' goals and values. In addition, PNC's Asset Management Group revised its proxy guidelines so that PNC investors can vote on corporate proposals according to the U.S. Conference of Catholic Bishops' socially responsible guidelines, or along general ESG guidelines. Education and training are core components of PNC's approach to responsible investing. Our advisors are regularly briefed on industry trends, trained to lead existing and prospective clients through productive discovery conversations and continuously provided with information to improve their understanding of our dynamic responsible investing capabilities. We also provide resources and information directly to our clients and other interested parties on PNC's Responsible Investing website.
Liabilities	Impacted for some suppliers, facilities, or product lines	PNC is focused on helping customers realize their financial goals while diligently managing risks. Our philosophy is to never take unnecessary risks or trade long-term value for short-term gains. We've designed our risk management policies and initiatives with this philosophy in mind, providing the experience, expertise and innovative products our customers need to be successful, while diligently managing ESG risks. PNC recognizes that environmental issues, including climate change, are impacting our business, our clients and the communities in which we operate. We have adopted a framework to assess, mitigate and manage related risks at both the portfolio and individual transaction levels. This framework includes robust and regular portfolio analyses, stress testing, and the established procedures governing our underwriting and portfolio management practices. This framework is regularly reviewed by senior management and, consistent with our broader CSR governance process, overseen by the company's Board of Directors. PNC's CSR team helps coordinate and oversee Corporate & Institutional Banking's environmental and social risk management efforts and facilitates regular communication between business partners as it pertains to materiality, renewable energy financing, environmental assessments and socially responsible investing. In early 2018, an Environmental and Social Risk Management Rapid Risk Screen was introduced with the intent to help PNC better identify and mitigate environmental risk early in the lifecycle of a transaction. It expands our focus on environmental risk across all of the company's wholesale lending activities. Transactions that are identified through this Rapid Risk Screen are escalated to leaders in the business and our underwriting group, who determine whether to pass on the transaction, conduct enhanced due diligence alongside the company's CSR team, or proceed as requested.
Other	Please select	

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?

Yes, qualitative and quantitative

C3.1c

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

Climate change's influence on PNC's business strategy is reflected in our governance structure and oversight, commitment to manage environmental risk in our lending portfolio, and efforts to reduce our carbon footprint. As for our governance structure and oversight, PNC's Board of Directors oversees the company's corporate CSR program. The Board regularly discusses related initiatives, as well as risks and opportunities, and receives annual environmental, social and governance (ESG) updates, including those on the PNC Foundation, talent and diversity, cyber security, political contributions, environmental lending practices and the Community Reinvestment Act. Also, in 2017, PNC named a Vice President of Corporate Social Responsibility to manage the company's corporate sustainability program, including all reporting and communications, and added an additional CSR headcount to support this work. In 2019, PNC continued investing in this space by hiring a communications lead with a dedicated focus on CSR and sustainability.

PNC continues to invest in hiring staff in both operational sustainability, climate-focused risk management, and corporate social responsibility departments, and is also more formally leveraging existing internal talent to work on climate-related risks and opportunities as part of working groups such as the recently formed Sustainable Finance Working Group. The Sustainable Finance Working Group is a cross-functional team comprised of representatives from business segments key to the success of PNC's sustainable finance, green lending and environmental sustainability programs. The Working Group is responsible for defining PNC's sustainable financing commitments and influencing strategies to ensure that PNC's sustainable finance goals and objectives are met. PNC has invested \$23 billion in sustainable finance initiatives since 2016.

In the lending portfolio, PNC has introduced tools such as its Environmental and Social Risk Management (ESRM) Rapid Risk Screen for use across all of Corporate & Institutional Banking. This environmental and human rights risk screening process requires underwriters to consider environmental and social risk within every transaction across the bank's entire corporate lending portfolio and helps us identify and mitigate risk early in the life-cycle of a transaction and across the company's entire wholesale lending activities. Transactions that are identified through this Rapid Risk Screen are escalated to leaders in the business and our underwriting group, who determine whether to proceed as requested, conduct enhanced due diligence alongside the company's CSR team, or pass on the transaction. For example, as a result of the ESRM screen, PNC declined an opportunity with an oil producer, due to potential adverse salt water disposal regulations and the potential negative impact of earthquakes as a result of water injection wells.

Additionally, under the guidance and leadership of four co-executive champions - the Chief Operating Officer of our Corporate & Institutional Banking business; the EVP and Corporate Real Estate Executive; the EVP of Debt Capital Markets, Equipment Finance and Credit Products Group; and the EVP of Community Affairs and Corporate Social Responsibility - the group finalized a PNC sustainable finance definition in late 2018, consisting of eight pillars:

- Renewable energy
- Energy efficiency
- Green building
- Brownfield remediation
- Sustainable transportation
- Waste management and pollution control
- Water quality and conservation
- Air quality

As a first major project of this governance initiative, PNC made the decision to explore issuing its first green bond in 2019. While this is still a work in progress, significant progress has been made in scoping this opportunity.

PNC also formalized the Board of Director's oversight of Corporate Social Responsibility, including environmental sustainability issues.

At an operational level, PNC has set ambitious emissions, energy use and water reduction goals. We met our 2020 emissions, energy and water reduction goals of 30 percent early. Therefore, we have set even more ambitious goals for 2035 - reducing emissions by 75 percent; energy by 75 percent; and water by 50 percent (using 2009 as a baseline for energy and emissions, and 2012 as a baseline for water).

C3.1d

(C3.1d) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios	Details
Please select	<p>As part of its portfolio management practice, PNC periodically conducts scenario analysis and stress assessments to better understand how environmental and carbon transition related credit risks could potentially impact its wholesale credit portfolio. This process involves working groups of business and risk employees who use internal and external research to identify industries that merit analysis from an environmental risk perspective. These industries are then examined through the lens of our environmental risk assessment framework to target areas that have exposure to elevated risk or present opportunity and fall into the immediate and emerging risk horizons. Appropriate scenarios are developed in conjunction with credit, line of business and PNC economics experts, to forecast the evolution of the risk from a credit perspective. The magnitude of stress risk exposure in the target credit population is assessed using regulatory stress testing methodologies and models. PNC's designation of environmental risks and the associated stress scenario loss results are presented to PNC's Credit Portfolio Strategy Committee, which manages the overall risk/return balance of PNC's loan portfolio. Outcomes from this review may include but are not limited to incorporation of stress results into capital forecasts, enhanced due diligence, changes in origination requirements, or caps and limits on credit exposure. To date, we have assessed the risks related to the impact of potential carbon emissions regulations on the portfolio (in the coal, coal power generation, auto and transportation markets); the ongoing volatility in the oil & gas industry; the impacts on the portfolio from secular shifts resulting from the growing use of electric vehicles (EV); and the impact of carbon transition from fossil fuels to renewable energy on the electric power generation industry. PNC has been an early adopter of incorporating an analysis of active opportunities as well as risk into our process. We believe that from a business strategy perspective, focusing on both the threats and opportunities allows us to make better strategic decisions. An example of analysis applied through this framework, that informed a business objective and strategy, is the transition from gas powered vehicles to electric vehicles. The global automotive sector is preparing for disruptive changes ahead that will have a wide ranging impact on several end markets. Although the EV industry is at its early stages, it is being helped by costs coming down, new regulations in Europe and Asia, and the fact it is a cleaner and more sustainable technology. An assessment of the auto industry led to additional risk being layered onto the risk ratings of select automotive suppliers and a recommendation being made to monitor and build expertise in the electric vehicle industry for future strategy prioritization and growth. These recommendations have the potential to moderately impact our exposure to these industries going forward and encourage future growth in areas that have been identified as opportunities, while reducing exposure to areas identified as risks.</p>

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

100

Targeted % reduction from base year

30

Base year

2009

Start year

2010

Base year emissions covered by target (metric tons CO2e)

480206

Target year

2020

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% of target achieved

100

Target status

Replaced

Please explain

Original base year emissions were reported to be 451,970 metric tons CO2e. In March 2012, PNC acquired the U.S. branches of the Royal Bank of Canada, which increased the company's baseline by 6.3 percent. We have readjusted the baseline to reflect the 28,236 metric tons of CO2 associated with the acquisition. We used the absolute methodology of science-based targets to cut our scope one and two emissions by 30 percent and achieve our goal before 2020. We anticipate setting a science-based target in the next 2 years assuming the methodology is established in this sector by this time.

Target reference number

Abs 2

Scope

Scope 1+2 (location-based)

% emissions in Scope

100

Targeted % reduction from base year

75

Base year

2009

Start year

2017

Base year emissions covered by target (metric tons CO2e)

480206

Target year

2035

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% of target achieved

64

Target status

Underway

Please explain

Original base year emissions were reported to be 451,970 metric tons CO2e. In March 2012, PNC acquired the U.S. branches of the Royal Bank of Canada, which increased the company's baseline by 6.3 percent. We have readjusted the baseline to reflect the 28,236 metric tons of CO2 associated with the acquisition. In 2016, PNC met its 2020 carbon emissions reduction goal of 30 percent. To ensure transformation actions in line with science and our tradition of innovation and responsibility, the team set ambitious scope one and two emissions reduction targets of 75 percent by 2035 using a 2009 baseline based on absolute methodology of science-based targets as a means of verification. We have reduced our carbon emissions by 48% from a 2009 baseline. We anticipate setting a science-based target in the next 2 years assuming the methodology is established in this sector by this time.

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

Target

Renewable electricity consumption

KPI – Metric numerator

measured in MWh

KPI – Metric denominator (intensity targets only)

Base year

2015

Start year

2016

Target year

2035

KPI in baseline year

17883

KPI in target year

179500

% achieved in reporting year

1

Target Status

Underway

Please explain

In 2018, PNC evaluated procuring 100% renewable energy and making a public commitment by signing on to the RE100. After research and internal approvals took place in 2018, PNC joined the RE100 in 2019. Although we had previously committed to 50% renewable energy by 2035, discussions in 2018 made us reevaluate this goal to set a more ambitious goal of 100% renewable by 2025. For 2018, the 50% goal was still in place and will be measured differently moving forward.

Part of emissions target

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Target

Other, please specify (Paper Reduction)

KPI – Metric numerator

Measured in 8.5x11 sheets (thousands)

KPI – Metric denominator (intensity targets only)

Base year

2009

Start year

2010

Target year

2020

KPI in baseline year

680000

KPI in target year

213403

% achieved in reporting year

100

Target Status

Underway

Please explain

PNC launched several multi-year "paperless" projects that will reduce the company's paper consumption and save millions of dollars while also enhancing efficiency and security. The goal is to reduce our paper usage by 10% annually. We met and exceeded this annual goal in 2018 by reducing our paper consumption by 11%. We will continue to measure our goal by the 10% annual decrease until 2020 at which time we will determine if a year-over-year goal is still best for PNC or not. One component of the company's paperless efforts is managing print devices, including printers, copiers, scanners and fax machines.

Part of emissions target**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

Target

Other, please specify (Water Reduction)

KPI – Metric numerator

Purchased water (gallons, thousands)

KPI – Metric denominator (intensity targets only)**Base year**

2012

Start year

2013

Target year

2020

KPI in baseline year

450283

KPI in target year

315176

% achieved in reporting year

100

Target Status

Replaced

Please explain

We set a goal to reduce our water consumption by 30% by 2020 using a 2012 baseline. In 2018, we fully met the 2020 goal ahead of schedule so are now focusing on our even more ambitious 2035 water goal.

Part of emissions target**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

Target

Other, please specify (Water Reduction)

KPI – Metric numerator

Purchased water (gallons, thousands)

KPI – Metric denominator (intensity targets only)**Base year**

2012

Start year

2013

Target year

2035

KPI in baseline year

450283

KPI in target year

225000

% achieved in reporting year

68

Target Status

Underway

Please explain

In 2017, we increased our 2020 water goal to reduce our water consumption by at least 50% by 2035 using a 2012 baseline. To date, we have reduced our water consumption by 34%.

Part of emissions target**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

Target

Energy usage

KPI – Metric numerator

Total building energy consumption (MWh)

KPI – Metric denominator (intensity targets only)**Base year**

2009

Start year

2010

Target year

2020

KPI in baseline year

888353

KPI in target year

622000

% achieved in reporting year

100

Target Status

Replaced

Please explain

In 2010, we set a goal to reduce energy consumption by 30 percent by 2020 using a 2009 baseline. We were able to meet this goal in 2017.

Part of emissions target**Is this target part of an overarching initiative?**

No, it's not part of an overarching initiative

Target

Energy usage

KPI – Metric numerator

Total building energy consumption (MWh)

KPI – Metric denominator (intensity targets only)**Base year**

2009

Start year

2017

Target year

2035

KPI in baseline year

888353

KPI in target year

266000

% achieved in reporting year

48

Target Status

Underway

Please explain

Since we were able to meet our 2020 goal ahead of schedule, we set a more ambitious goal to reduce our energy consumption by 75 percent by 2035 using 2009 as a baseline. So far, we have reduced our energy consumption by 36% using 2009 as a baseline.

Part of emissions target**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	417	
To be implemented*	346	5536
Implementation commenced*	71	1065
Implemented*	594	11674
Not to be implemented	58	

C4.3b

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

Initiative type

Other, please specify (Data Center Consolidation)

Description of initiative

<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)

1821

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

17150000

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

46290000

Payback period

1-3 years

Estimated lifetime of the initiative

16-20 years

Comment

PNC undertook a major data center consolidation initiative throughout 2018. Two aging, inefficient data centers were consolidated into new, energy efficient, co-location data centers. Both energy savings and utility cost savings were drivers of this initiative. This operational change will reduce PNC's energy consumption by an estimated 2,574,452 kWh annually.

Initiative type

Energy efficiency: Building services

Description of initiative

Lighting

Estimated annual CO2e savings (metric tonnes CO2e)

2923

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

433025

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

3031175

Payback period

4 - 10 years

Estimated lifetime of the initiative

16-20 years

Comment

PNC has invested in lighting upgrades over the last several years that have resulted in over \$10 million reductions in annual energy spend. In addition, this effort has provided better light quality in our buildings, which improves employee satisfaction, security and productivity, and has significantly contributed to PNC meeting its annual carbon reduction goals. We have met these goals by conducting lighting audits which lead to voluntary lighting retrofit projects to replace T12 and T8 to LEDs in high traffic areas, and T12 to T8 bulbs and magnetic with electronic ballasts in low traffic areas at more than 55 bank branches to reduce PNC's Scope 2 emissions from purchased electricity.

Initiative type

Energy efficiency: Building services

Description of initiative

Other, please specify (HVAC, Energy Efficiency and Building Controls)

Estimated annual CO2e savings (metric tonnes CO2e)

4979

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

446805

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

11170115

Payback period

>25 years

Estimated lifetime of the initiative

21-30 years

Comment

Voluntary energy and lighting audits as well as HVAC-related projects with energy efficiency impacts, such as equipment and controls upgrades took place in 2018. Also in 2018, we visited over 100 buildings, greatly exceeding our goal of 70 where we prepared and provided regional teams with energy efficiency plans to reduce consumption in their buildings based on problems with HVAC, lighting, controls and other efficiency aspects at the site. Findings included inconsistent thermostat set-points, simultaneous heating and cooling, lighting inefficiencies, single-pane windows and excessive plug load energy use. The voluntary addition and enhancement of lighting and HVAC control equipment and associated programming updates at targeted major buildings to reduce PNC's Scope 1 emissions from natural gas and Scope 2 emissions from purchased electricity.

Initiative type

Energy efficiency: Building fabric

Description of initiative

Other, please specify (LEED Certification)

Estimated annual CO2e savings (metric tonnes CO2e)

57

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

9000

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

36000

Payback period

1-3 years

Estimated lifetime of the initiative

>30 years

Comment

Voluntary design and construction of three new retail projects where all achieved New Construction Retail certification due in part to efficient energy performance to reduce PNC's Scope 1 emissions from natural gas and refrigerants, and Scope 2 emissions from purchased electricity. This is compared against traditional retail building design and construction.

Initiative type

Other, please specify (Green Standards)

Description of initiative

<Not Applicable>

Estimated annual CO2e savings (metric tonnes CO2e)

1393

Scope

Scope 3

Voluntary/Mandatory

Voluntary

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

274097

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

1508795

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

Since November 2016, PNC has worked with Green Standards, a specialized environmental firm that helps corporations reuse their furniture in a number of ways, including donations to schools, offices and non-profit organizations. Green Standards works with corporations and other large organizations to repair and redistribute office furniture, equipment and supplies that are broken, have exceeded their expected lifespan, or no longer address a company's needs. In 2018—and with the help of Green Standards—we donated furniture to 16 charities, diverted more than 660 tons of materials from the landfill and reduced CO2 emissions by approximately 1,393 metric tonnes. PNC chose to work with Green Standards after careful consideration and defers to Green Standards to select the most eligible non-profit recipients.

Initiative type

Energy efficiency: Building services

Description of initiative

Other, please specify (No-Cost Energy Conservation/Efficiency Measures)

Estimated annual CO2e savings (metric tonnes CO2e)

501

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

96000

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

20000

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Based on the 85 energy and lighting audits that were completed in 2018, we implemented no-cost energy conservation measures at more than half of these sites. For example, we corrected any branches that simultaneously heating and cooling, adjusted thermostats to correct set points and ensuring that schedules met PNC policy. We also updated lighting control schedules as necessary and eliminated space heaters based on PNC's policy. In 2018, we also completed 15 water audits across the PNC footprint which has yielded 40% water savings of top water hogs. PNC also conducted measurement and verification at more than 20 branches where we had previously completed lighting retrofits and used these visits to find anything that was not done properly and went back to make those changes in order to get the most energy savings out of our projects.

C4.3c

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

Method	Comment
Dedicated budget for energy efficiency	PNC budgeted \$3 million in 2018 for the Innovation and Performance Group to execute its energy audit and lighting retrofit program. Over the past eight years, PNC has invested more than \$50 million in lighting retrofits.
Employee engagement	In late 2018, PNC launched an effort to offer employees a quarterly Corporate Social Responsibility engagement campaign. While not every opportunity has been climate- or environment-focused, the team has initiated a very successful Bring Your Mug to Work campaign for Earth Day, during which cafeterias across PNC's footprint offered discounted drinks for employees bringing their own drinking cups. Participants submitting their "mug shots" (photos of them with their reusable mugs or cups) were entered into a random drawing to receive a \$50 Global Giving gift card. Six winners were selected - one per week for the approximately six weeks between Earth Day and World Environment Day. PNC also hosted its first CSR Town Hall in June 2018, in which environmental issues were the number one employee concern. As a direct result of this grassroots momentum, PNC expanded its k-cup recycling program to more pilot locations. The company encouraged employees to participate in NWEI's 2018 EcoChallenge by pledging to personal acts of environmental sustainability at work and at home.
Dedicated budget for other emissions reduction activities	PNC building engineers commission all new construction and major renovations to ensure that the company's buildings operate as intended, which ensures maximum energy and water efficiency, as well as minimal refrigerant use. Also, PNC has shifted its focus beyond green buildings to focus more on innovation and intelligent buildings, which use: automation, advanced data processing, and cutting edge technology to increase efficiency
Internal incentives/recognition programs	Beginning in 2018, PNC began executing on a focused employee engagement initiative designed to encourage and incent employee action on CSR issues. As part of this program, \$50 gift cards to Global Giving were raffled off to employees participating in our Bring Your Own Mug campaign, and the company facilitated participation in NWEI's EcoChallenge.
Internal finance mechanisms	As PNC mandates building efficiency in all newly-constructed buildings, LEED and other green building costs are embedded in Realty Services' building costs.
Other (Data Analytics)	The Intelligent Buildings Proof of Concept will involve the installation of an intelligent energy management software and smart technology at 10 branches and 1 major building. This proof of concept will help to drive top-line results by reducing energy costs, increasing equipment up-time and reliability, lowering maintenance costs, and improving employee comfort. The duration of the proof of concept will be approximately 8 months and is expected to result in a payback of 2.8 years
Other (Efficiency Audit Program)	Energy and other efficiency audits are performed on poor-performing buildings to identify and correct building system problems, as well to achieve peak performance in the buildings moving forward. In 2018, we visited more than 100 buildings and provided regional teams with energy efficiency plans to reduce consumption in their buildings based on problems with lighting, HVAC, irrigation and plug loads. Once our recommendations were implemented, measured and verified, we scheduled evaluations to ensure that all necessary changes were made and that there were no additional efficiency problems.
Other (Space Consolidation)	PNC Realty Services' workplace planning group's day-to-day work involves investigating opportunities to drive the most efficient use of space possible. They compare the number of employees at the building level and identify vacant or sparsely populated locations. Where PNC is using its building footprint inefficiently, Realty Services physically consolidates lines of business, relocates employees to nearby buildings, and terminates leases or sells underutilized buildings.

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

Group of products

Description of product/Group of products

Our sustainable finance initiatives provide funding for environmentally beneficial projects, including solar, wind, geo-thermal, water treatment plants, waste-to-energy plants, energy conservation projects, and more. In 2018, PNC's sustainable finance commitment totaled more than \$7 billion, for a total of \$23 billion since 2016. This figure incorporates transactions from our public finance, capital markets, real estate, corporate banking, equipment finance, consumer lending, community development banking and business banking lines of business. The Sustainable Finance Working Group's first task was to address PNC's definition of sustainable finance. Our commitment to enabling our clients' sustainable operations takes the form of providing financing and underwriting debt with an environmentally sustainable use of proceeds. A few areas of focus include, but are not limited to: • Renewable energy • Energy efficiency • Brownfield remediation Secondly, the Sustainable Finance Working Group tackled ways to automate the collection of sustainable finance data, ensuring that the process is replicable, defensible and consistent across time and lines of business. While this process will be iterative and ongoing, the first phase of automated data collection launched in June

2018 and is expected to not only help eliminate potential errors in generating this data manually, but also to raise the level of awareness of the importance of capturing this data internally across business units. Finally, in keeping with its charter to facilitate the ideation and execution of low-carbon financing opportunities for the bank, the Sustainable Finance Working Group was critical to the development of a PNC Green Bond Framework. Historically, one of the largest components of PNC's sustainable finance efforts has been the underwriting of bonds that drive greater environmental benefits. This includes both traditional bonds and designated "green bonds." In 2017, PNC was a co-manager on the MidAmerican Energy \$850 million green bond. This transaction's proceeds were used to finance a portion of MidAmerican Energy's wind farms as the company expands its renewable energy generation. As a Green Bond Principal signer, PNC actively supports the Green Bond market and continues to educate clients and the company regarding the benefits of green bond financing.

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

11

Comment

We do not calculate this in terms of revenue - this is the amount of sustainable financing within Corporate & Institutional Banking, compared to overall C&IB financing

Level of aggregation

Company-wide

Description of product/Group of products

Customers can take advantage of our online and mobile banking tools, which eliminate Scope 1 emissions associated with transportation and Scope 2 emissions associated with statement printing and check processing. In 2018, approximately 67 percent of our retail banking customers used non-teller channels for the majority of their transactions, compared to 63 percent in 2017 and 60 percent in 2016.

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

Other, please specify (We do not calculate this)

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

67

Comment

This is not a calculation of revenue. 67% of PNC's customers used non-branch channels for the majority of their transactions in 2018, as compared to 63% in 2017 and 60% in 2016.

Level of aggregation

Company-wide

Description of product/Group of products

As technology and science create new business and investment opportunities, they also create new responsibilities, which include considering our collective impact on future generations. At PNC, we view Responsible Investing (RI) as an implementation strategy, rather than as an investment philosophy or a separate asset class. It's a lens we can use to implement a portfolio that aligns with an investor's unique goals, intentions, values or mission, and we have developed several proprietary investment strategies that take ESG factors into consideration. In 2018, the Investment Advisor Research team approved the introduction of two mutual funds, two separately managed accounts, eight passive exchange-traded funds and an Impact Investing Private Equity Offering. Additionally, PNC Capital Advisors' Municipal Fixed Income team developed a proprietary process for scoring tax-exempt bonds and their issuers for custom environmental and social impact managed accounts. PNC has \$2.42 billion in RI assets under management across PNC Capital Advisors, Hawthorn, Wealth Management and Institutional Asset Management, as of December 31, 2018. This represents a 15 percent increase over 2017.

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

Other, please specify (We do not calculate this)

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

1.6

Comment

This is not a % of revenue. This is the percent of our overall investment assets under management (including PNC Capital Advisors) that are managed via our Responsible Investing platform.

Level of aggregation

Product

Description of product/Group of products

PNC has also reorganized its renewable energy business to form a new Renewable Energy Finance Group, focused on three asset classes: solar power, on and off-shore wind power and battery storage capacity. In 2017, PNC's Renewable Energy Finance Group (then our Energy Capital business) provided financing to the City of Holyoke's Gas and Electric, a municipal-owned power company, for a 5.8MWdc ground-mounted photovoltaic project located at a former coal-burning power plant site in Holyoke, Massachusetts. This project was expanded in 2018 to include a 3MWac battery storage system on the same site as the solar project, specifically to enhance operational efficiency, optimize intermittent solar energy and improve power reliability to customers. The project is one of the largest utility-scale energy storage installations in Massachusetts. Another example of PNC's support of renewable energy solutions was PNC Renewable Energy Finance Group, alongside two other banks's financing of a \$104.1 million senior secured term loan to help finance a portfolio of solar distributed generation ("DG") projects for a leading global renewable power company with over 3,700 MW of high quality wind and solar assets in North America and Western Europe. The portfolio consists of 117 individual project sites in 14 states with a total generation capacity of 138 MWdc.

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

Please select

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

Comment

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 2009

Base year end

December 31 2009

Base year emissions (metric tons CO2e)

48962

Comment

Scope 2 (location-based)

Base year start

January 1 2009

Base year end

December 31 2009

Base year emissions (metric tons CO2e)

431243

Comment

Scope 2 (market-based)

Base year start

January 1 2009

Base year end

December 31 2009

Base year emissions (metric tons CO2e)

431243

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.

The Climate Registry: General Reporting Protocol

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

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)

35299

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

C6.3

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

Reporting year

Scope 2, location-based

214097

Scope 2, market-based (if applicable)

211209

Start date

January 1 2018

End date

December 31 2018

Comment

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

3361

Emissions calculation methodology

The carbon fund calculator was used <https://carbonfund.org/business-calculator/> as well as our paper purchase information from our third party vendor.

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

100

Explanation

While we have focused our attention on larger emission sources, we are starting to incorporate estimates for purchased goods and services. The amount provided here covers all the paper-based office supplies we purchased. We aim to add other purchased goods and services in future reports.

Capital goods

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

At this time, this emissions source is considered outside our operational control to exert influence in a meaningful way. We have focused our attention first on PNC's more significant emission sources, and will continue to evaluate other potential sources.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

21128

Emissions calculation methodology

Transmission and distribution losses from electricity: https://ghgprotocol.org/sites/default/files/standards_supporting/Chapter3.pdf (Category 3, table 3.1)

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

100

Explanation

This figure was not verified by Bureau Veritas this year, but we plan to have it verified moving forward.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

283

Emissions calculation methodology

This calculation includes emissions from hired black cars and shuttle buses that we receive from our third party vendors. Hired vehicles: CO2 emission Factor: The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 13.1 (see table below) CH4 & N2O emission Factor: The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 13.4 (see table below)

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

100

Explanation

Waste generated in operations

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1203

Emissions calculation methodology

This figure encompasses emissions associated with waste that PNC disposes of through recycling and composting. The data around the waste type, quantity and disposal method comes from our third party vendors who conduct daily pickups of compost throughout some of our major buildings and Shred-it who provides us with the data around how much paper we are able to shred and recycle each year. Used U.S. EPA's WARM tool based on data from our confidential document destruction vendor. <https://www.epa.gov/warm>

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

100

Explanation

At this time, PNC does not have a specific waste goal or a way to estimate all of our waste generated in operations for all of our buildings. This is something we are looking into and gathering more information on to hopefully come up with a goal and methodology to set and achieve an all encompassing waste goal in the future. PNC has started working on a smaller scale compost pilot program that has allowed us to divert thousands of pounds of food waste from landfill. In addition to the compost pilot, PNC currently has reliable data on the paper waste generated during operations, which was shredded and recycled. Over the past few years, PNC has worked to maximize efficiency and increase recycling rates, to drive down the waste the company sends to landfills.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

16995

Emissions calculation methodology

The emissions were provided by the rental car, and air/rail travel suppliers. Rental: Emission Calculation Sources: The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Tables 13.1, 13.4 Air/Rail: Calculated by outside travel agency vendor, CWT, updated emissions using DEFRA's GHG Conversion Factors.

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

80

Explanation

Employee commuting

Evaluation status

Relevant, calculated

Metric tonnes CO2e

84666

Emissions calculation methodology

PNC conducted a survey on employee commuting practices in 2018. PNC used the survey results for mode of transportation and distance traveled during the commute with the following emissions factors. The calculations are based on the survey results and not actual emissions. Bus and Light Rail CO2, CH4, N2O emissions factors: EPA climate leaders - Optional Emissions from Commuting, Business Travel and Product Transport, Tables 2 (commuter rail) & Table 3 - http://www.epa.gov/climateleadership/documents/resources/commute_travel_product.pdf Passenger Car, CO2 emission Factor: The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 13.1 Passenger Car, CH4 & N2O emission Factor: The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 13.4

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

0

Explanation

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Under the operational control approach, emissions from this category are covered under our Scope 1 and 2 emissions.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

4211

Emissions calculation methodology

This includes emissions associated with daily client travel to our retail branches and ATMs. The assumptions made about the percentage of clients who will drive and how far they will travel have been verified by the customer proximity research conducted by PNC.

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

0

Explanation

This figure was not verified by Bureau Veritas this year, but we plan to have it verified moving forward.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

As a financial institution and service based organization, we have extremely minimal emissions from the processing of sold products.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

As a financial institution and service based organization, we have extremely minimal emissions from use of sold products.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

As a service based organization, we have very minimal emissions from end of life of things such as client debit and credit cards, and have little control over how they are disposed of at the end of life stage.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Under the operational control approach, emissions from this category are covered under our Scope 1 and 2 emissions.

Franchises

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

PNC does not have any franchises, so this scope is not applicable.

Investments

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

There is currently no standard methodology for calculating this category in our industry. The World Resources Institute (WRI) and the U.N. Environment Programme Finance Initiative (UNEP FI) are working to develop a standard methodology for accounting financed GHG emissions.

Other (upstream)

Evaluation status

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Other (downstream)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

1066

Emissions calculation methodology

Water consumption data comes directly from utility bills and the energy use for water supply comes from: Emission Effects of Water Supply, JENNIFER. STOKES AND ARPAD HORVATH Energy Use to supply one cu.m of water kWh/m3 kWh/gallon Supply 1.7 0.006439394 Treatment 0.17 0.000643939 Distribution 0.22 0.000833333 Total 2.09 0.007916667

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

100

Explanation

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

0.0000145573

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

249396

Metric denominator

unit total revenue

Metric denominator: Unit total

1713200000

Scope 2 figure used

Location-based

% change from previous year

14

Direction of change

Decreased

Reason for change

Change is due to a 4.9 percent increase in total revenue and a 9.8 percent decrease in Scope 1 and 2 absolute emissions, which is attributed to our emissions reduction activities. Overall change from previous year is calculated as follows: $[1 - ((1 - 0.098) / (1 + 0.049))] \times 100 = 14.02$ percent decrease. We were able to reduce our Scope 1 and 2 emissions by conducting lighting and energy audits within regions where utility bills were high and made changes accordingly. For instance, we completed lighting retrofits and replaced/upgraded HVAC systems in certain regions where we saw very high usage.

Intensity figure

4.699

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

249396

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

53063

Scope 2 figure used

Location-based

% change from previous year

10

Direction of change

Decreased

Reason for change

Change is due to a 0.3 percent increase in number of FTE and a 9.8 percent decrease in Scope 1 + Scope 2 absolute emissions, which is attributed to our emissions reduction activities. Overall change from previous year is calculated as follows: $[1 - ((1 - 0.098) / (1 + 0.003))] \times 100 = 10$ percent decrease. We were able to reduce our Scope 1 and 2 emissions by conducting lighting and energy audits within regions where utility bills were high and made changes accordingly. For instance, we completed lighting retrofits and replaced/upgraded HVAC systems in certain regions where we saw very high usage.

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	30316	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	2.8	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	0.25	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	4836	IPCC Fifth Assessment Report (AR5 – 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
US, Latin America and Caribbean (USLAC)	35299

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)
Natural Gas	23859
Heating Oil	53
Propane	19
Diesel	502
Jet Fuel	4418
Leased Vehicles	1612
Refrigerants	4836

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	214097	211209	439322	5374

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	210274	207386
Steam	3355	3355
Chilled Water	468	468

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	9518	Decreased	3	The change in emissions came from taking the difference between the location and market based emissions for 2018 and subtracting them from the difference between the location and market based emissions from 2017. The percentage was calculated by taking the change in emissions number and dividing that by the Scope 1 & 2 emissions from last year and multiplying that number by 100 to arrive at the percentage for 2018. $(9,518 / 276,544) \times 100$
Other emissions reduction activities	27148	Decreased	10	Due to emission reduction activities implemented during the year, PNC lowered its annual emissions. The activities implemented during the reporting period include building renovations, such as upgrades to energy consuming systems (lighting, HVAC, plumbing) in more than 100 buildings. In total, 27,148 metric tons of CO2e were reduced by our emissions reduction projects, and our total Scope 1 and 2 emissions in 2018 were 249,396 metric tons of CO2e (therefore, we arrived at 10 percent by dividing 276,544 ((2017's emissions number)) into 27,148 and multiplying that number by 100).
Divestment	0	No change	0	No change in emissions due to divestment of any aspects of the business.
Acquisitions	0	No change	0	No change in emissions value due to acquisitions.
Mergers	0	No change	0	No change in emissions value due to mergers.
Change in output	0	No change	0	No change in emissions value due to changes in business output.
Change in methodology	0	No change	0	No changes were made to methodology protocol or emissions factors.
Change in boundary	0	No change	0	No changes were made to the boundary used for the inventory calculation.
Change in physical operating conditions	0	No change	0	No changes were made to the physical operating conditions for the inventory calculation.
Unidentified	0	No change	0	No unidentified factors.
Other	0	No change	0	

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	Yes
Consumption of purchased or acquired cooling	Yes
Generation of electricity, heat, steam, or cooling	Yes

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)	HHV (higher heating value)	0	133577	133577
Consumption of purchased or acquired electricity	<Not Applicable>	5374	422562	427936
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	0	14809	14809
Consumption of purchased or acquired cooling	<Not Applicable>	0	1951	1951
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	52	<Not Applicable>	52
Total energy consumption	<Not Applicable>	5426	572898	578324

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	Yes
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)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

131403

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Propane Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

88

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

1950

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Fuel Oil Number 2

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

136

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

0

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

C8.2d

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

Diesel

Emission factor

10.41

Unit

kg CO2e per gallon

Emission factor source

Heat content of Diesel (Distillate Fuel No:2) - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1 CO2 Emission Factor (Distillate Fuel No:2) - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1 CH4, N2O emission sources (commercial petroleum products) - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.9.2

Comment

This factor includes mostly CO2 emissions as well as smaller amounts of greenhouse gasses CH4 (Methane) and N2O (Nitrogen dioxide) also being emitted.

Fuel Oil Number 2

Emission factor

10.41

Unit

kg CO2e per gallon

Emission factor source

Heat content of Distillate Fuel - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1 Carbon content of Distillate Fuel - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1 CO2 Emission Factor (Distillate Fuel No:2) - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1 CH4, N2O emission sources (petroleum products)- The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.9.2

Comment

This factor includes mostly CO2 emissions as well as smaller amounts of greenhouse gasses CH4 (Methane) and N2O (Nitrogen dioxide) also being emitted.

Natural Gas

Emission factor

1.93

Unit

kg CO2e per m3

Emission factor source

Heat content of NG - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1 Carbon content of NG - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1 CH4, N2O emission sources - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.9.2 CO2 Emission Factor- The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1

Comment

This factor includes mostly CO2 emissions as well as smaller amounts of greenhouse gasses CH4 (Methane) and N2O (Nitrogen dioxide) also being emitted.

Propane Gas

Emission factor

5.72

Unit

kg CO2e per gallon

Emission factor source

Heat content of Propane - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1 Carbon content of Propane - The Climate Registry, General Reporting Protocol, Version 2.1 Updated (2018) Table 12.1 CH4, N2O emission sources (petroleum products) - The Climate Registry, General Reporting Protocol, Version 2.1 Updated(2018) Table 12.9.2

Comment

This factor includes mostly CO2 emissions as well as smaller amounts of greenhouse gasses CH4 (Methane) and N2O (Nitrogen dioxide) also being emitted.

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	52	52	52	52
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

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

Energy attribute certificates, Renewable Energy Certificates (RECs)

Low-carbon technology type

Wind

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

North America

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

5374

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

0

Comment

PNC's purchased RECs are Green-e Energy Certified New Renewables that are part of a National Any Technology Renewable Energy Program that is made up of 100% wind from Texas.

C9. Additional metrics

C9.1

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

Description

Please select

Metric value

Metric numerator

Metric denominator (intensity metric only)

% change from previous year

Direction of change

<Not Applicable>

Please explain

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

VerificationStatementLimited_BVNA_PNC - 2018 RY_Final 6.27.2019.pdf

Page/ section reference

1

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

VerificationStatementLimited_BVNA_PNC - 2018 RY_Final 6.27.2019.pdf

Page/ section reference

1

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

VerificationStatementLimited_BVNA_PNC - 2018 RY_Final 6.27.2019.pdf

Page/ section reference

1

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- at least one applicable category

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Attach the statement

VerificationStatementLimited_BVNA_PNC - 2018 RY_Final 6.27.2019.pdf

Page/section reference

1

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?

No, but we are actively considering verifying within the next two years

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?

No

C11.3

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

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

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

C12.1a

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

Type of engagement

Compliance & onboarding

Details of engagement

Other, please specify (Code of conduct featuring expectations for identifying & mitigating environmental impacts, laws and regulations, and informing PNC of environmentally-friendly products or services.)

% of suppliers by number

5

% total procurement spend (direct and indirect)

% Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

PNC's supplier code of conduct is introduced through the RFP process. The supplier is to attest that they have read the document, which includes PNC's expectations regarding ethical business practices, humans rights within the workplace, environmental stewardship, and community investment. Implemented within the past year, only those new suppliers that have participated in the RFP process would have been introduced to this measure. As a result of this, there are a low percentage (5-10%) of our total suppliers that have formally attested that they have read and acknowledged the supplier code of conduct.

Impact of engagement, including measures of success

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number

% Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

PNC build communications campaigns around its sustainability messaging, specifically as relates to the data in its annual Corporate Social Responsibility Report. We use a variety of methods and vehicles for doing so. We reach a general customer audience - retail and corporate - via year-round social media strategies. We engage with specific corporate customers on a targeted basis throughout the year, participating in sector-specific or topic-specific briefings and presentations. We craft messaging for specific audiences via partnerships with our corporate communications and marketing teams, as well as our Out Of Branch team, which creates customers "experiences" at community events, on university campuses, in workplaces and other locations.

Impact of engagement, including measures of success

PNC leverages LinkedIn and Twitter primarily to share content related to our sustainability efforts and have seen engagement rates and click-through rates well above platform benchmarks in our longest running messaging campaign. • LinkedIn saw an engagement rate of 66% above the platform benchmark. • LinkedIn click-through rate was 35% above the platform benchmark. • Twitter engagement rate outperformed the platform benchmark by 28%. • Twitter click-through rate was 32% above benchmark.

C12.1c

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

PNC actively engages with its investors and select activists to understand what issues our stakeholders find most material for our business. A successful example of this is our relationship with Boston Common Asset Management. When BCAM first engaged PNC, it was to challenge us on our coal lending policies, specifically around mountaintop removal mining. With BCAM's guidance, along with open dialogue with the Rainforest Action Network, PNC made some changes to its coal lending policies and now prohibits anything with more than a de minimis amount of mountaintop removal mining. We now connect with BCAM at least annually to discuss trends in the sustainability space, PNC's alignment with various sustainability frameworks, and future planning.

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?

- Direct engagement with policy makers
- Funding research organizations
- Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Energy efficiency	Support	PNC was an early adopter of green building strategies and LEED certification, and public officials have often had questions for our policy team on our approach. They have specifically been interested in our investment in the space and our experience with executing.	None.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

No

C12.3e

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

Memberships: In 2019, PNC became a member of the Ceres Company Network, with the press release citing our leadership in LEED building; our carbon emissions, energy use and water use reduction targets; our commitment to sustainable finance; and our governance frameworks, including the fact that our Board charter identifies CSR as a responsibility of the entire Board and our executive CSR steering committee, which meets once per quarter. Additionally in 2019, PNC signed on to RE100, committing to source 100% of its energy needs from renewable sources by 2025.

University Collaborations: The energy space has become more complex over the past two decades. Data and powerful analytics have the potential to transform the way companies manage energy across their real estate portfolio. Recognizing this savings opportunity, PNC's Innovation and Performance Group collaborated with Carnegie Mellon University (CMU) on portfolio-wide energy dashboards, executive reporting, and building fault detection diagnostics for 25 large energy consuming buildings. This project provided key data insights and effective reporting to enable decision and policy making based on real-time building portfolio data. Based on the success of this collaboration, PNC created a new strategy around Intelligent Buildings and started pilot projects of a real-time energy management software.

Strategic Partnerships: Occupant behavior is recognized as a major contributing factor to the success of building performance, particularly in the area of achieving energy efficiency. In 2016, PNC's Innovation and Performance Group worked with a major engineering firm to redefine occupancy behavior through comfort analytics. This project was based on the premise that while data and analytics are important tools for designing a building, analyzing equipment use is equally important. The study's results showed that by investing a modest amount of time in collecting and analyzing data, PNC can reduce energy consumption and enhance human efficiency, which results in both cost savings and increased employee satisfaction.

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?

One example of how PNC ensures alignment between our direct and indirect activities and our efforts to influence policy can be found in our signatory governance process. Like all large businesses, PNC is frequently asked to sign on to initiatives promoting a variety of environmental, social and governance (ESG) causes, and we have implemented a thoughtful, deliberate process to evaluate and decision these requests.

The signatory governance process was designed to move the organization seamlessly from discussion to decision to declaration to delivery. When evaluating opportunities for engagement, including those around climate change and other environmental issues, the drivers we use to determine overall fit for PNC include:

- Alignment with PNC corporate values, material ESG issues and Corporate Social Responsibility goals
- Ability to work collaboratively and cross-functionally to coordinate a response
- Ability to leverage our exiting non-profit and advocacy relationships
- Opportunity to establish new non-profit and advocacy relationships aligned with our values and goals
- Capacity to coordinate, advocate for, and/or drive new programming to ensure compliance and progress on the issues represented by the signatory opportunity

From a structural perspective, we leverage a DACI model to evaluate opportunities:

The Driver (D) of a signatory opportunity is typically either the Corporate Social Responsibility team or subject matter expert within the bank. The Driver engages an appropriate group of cross-functional Contributors (C) to examine the issue and organization in question, engage in discussion around pros and cons of PNC joining/lending its name to an initiative, and ensuring alignment with ESG, CSR and business strategies. After deliberation, the Contributors present any recommendations for specific signatories to the Approver (A) – this is typically a member of our Executive Committee, and depending on the issue, can be our CEO, General Counsel, Chief HR Officer or other appropriate executive. Finally, the Driver ensures that anyone needing to be Informed (I) about the decision to join initiatives receives a briefing.

An example of where we have applied this process to an environmental initiative is our decision to join RE100:

The Corporate Social Responsibility team (D) convened a team to discuss the pros and cons of elevating our commitment to sourcing renewable energy for our operations, consisting of our building performance and innovation team, design and construction, realty services operations, legal, and corporate communications (C). Together, this team determined that membership in RE100 presented strong alignment with our ESG commitments, targets and goals, as well as our underlying strategy around environmental sustainability. A recommendation was made to our Chief Financial Officer (who oversees our Realty Services function) that we sign on to RE100. We then ensures that the necessary people at the bank were informed about this decision, so that it becomes an included talking point when discussion our ESG commitments moving forward.

Leveraging this process ensures consistency amongst teams internally, consistent messaging externally, and most importantly, ensures that decisions are tied strongly to our values, messaging platform and overall strategic commitments and strategies.

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 mainstream reports

Status

Complete

Attach the document

Page/Section reference

Page 39 of Annual Report

Content elements

Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

PNC_2017_CSR_Report.pdf

Page/Section reference

The whole 2017 CSR Report contains information related to and supporting PNC's CDP disclosure.

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

PNC CSR Newsletter_September 2018.pdf
PNC CSR Newsletter_December 2018.pdf

Page/Section reference

Quarterly newsletter

Content elements

Strategy
Emissions figures
Emission targets
Other, please specify (Our quarterly newsletter is designed to bring our sustainability goals to life through storytelling, spotlighting partners, and highlighting information for stakeholders in an engaging way)

Comment

PNC's past four quarterly newsletters can be found on our CSR website: <https://www.pnc.com/en/about-pnc/corporate-responsibility/corporate-social-responsibility.html?>

C14. Signoff

(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	Chairman, President & Chief Executive Officer	Chief Executive Officer (CEO)

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