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 companies in the United States, with $381 billion in assets and $265 billion in deposits as of December 31, 2017. For 166 years, PNC has been a strong competitor, innovator and engaged corporate citizen. Headquartered in Pittsburgh, Pennsylvania, we have businesses engaged in retail banking, including residential mortgage, corporate and institutional banking and asset management, providing many of our products and services nationally. Our primary geographic markets are located in 19 states in the Mid-Atlantic, Midwest and Southeast, and we also provide certain products and services internationally. PNC bankers and financial consultants bring savvy, local knowledge and truly personal service to all of their banking relationships.

C0.2

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

<table>
<thead>
<tr>
<th>Row</th>
<th>Start date</th>
<th>End date</th>
<th>Indicate if you are providing emissions data for past reporting years</th>
<th>Select the number of past reporting years you will be providing emissions data for</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 1 2017</td>
<td>December 31 2017</td>
<td>No</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>2</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>3</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>4</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
</tbody>
</table>

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) of the individual(s) on the board with responsibility for climate-related issues.

<table>
<thead>
<tr>
<th>Position of individual(s)</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board/Executive board</td>
<td>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 board, as a whole, is responsible for overseeing PNC’s most important CSR policies, programs and strategies. This includes our environmental sustainability strategy and approach to climate change. PNC’s corporate governance guidelines can be found at <a href="http://www.pnc.com/corporategovernance">www.pnc.com/corporategovernance</a>.</td>
</tr>
</tbody>
</table>

C1.1b

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

<table>
<thead>
<tr>
<th>Frequency with which climate-related issues are a scheduled agenda item</th>
<th>Governance mechanisms into which climate-related issues are integrated</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled – some meetings</td>
<td>Reviewing and guiding strategy</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>Reviewing and guiding risk management policies</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Setting performance objectives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monitoring implementation and performance of objectives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overseeing major capital expenditures, acquisitions and divestitures</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Monitoring and overseeing progress against goals and targets for addressing climate-related issues</td>
<td></td>
</tr>
</tbody>
</table>
Below board-level, provide the highest-level management position(s) or committee(s) with responsibility for climate-related issues.

<table>
<thead>
<tr>
<th>Name of the position(s) and/or committee(s)</th>
<th>Responsibility</th>
<th>Frequency of reporting to the board on climate-related issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Executive Officer (CEO)</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>More frequently than quarterly</td>
</tr>
<tr>
<td>Other C-Suite Officer, please specify (EVP and Head of Corp &amp; Instl Banking)</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>Half-yearly</td>
</tr>
<tr>
<td>Business unit manager</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>Annually</td>
</tr>
<tr>
<td>Energy manager</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>Annually</td>
</tr>
<tr>
<td>Other, please specify (Corporate Social Responsibility Manager)</td>
<td>Assessing climate-related risks and opportunities</td>
<td>Annually</td>
</tr>
</tbody>
</table>

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.

The Chairman, President and Chief Executive Officer leads the company, helps inform our environmental commitment and advises on how PNC can mitigate the impacts of climate change.

Climate change-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.

As more than 95 percent of PNC's scope 1 and 2 greenhouse gas (GHG) emissions can be attributed to the company's building portfolio, PNC's Director of Corporate Real Estate oversees the company's environmental strategy. In light of the emissions attributed to the company's building portfolio, PNC has made a long-term commitment to the development and operation of sustainable and high-performing real estate. PNC's Innovation and Performance Group, which lives in Realty Services and reports up to the Director of Corporate Real Estate, manages PNC's carbon footprint on a day-to-day basis. Leading this group is PNC's Energy Manager, who develops and executes on the company's impact and responsibility strategy, which aims to lower our direct environmental impacts and educate stakeholders on sustainability. The Energy Manager also oversees both the demand and supply sides of PNC's energy consumption, seeking cost-effective ways to enhance building operational efficiencies and reduce total energy consumption and associated carbon emissions. Furthermore, and through coordination with various departments, including Realty Services, Supply Chain Management, Technology and Travel, the Energy Manager tracks the company's total GHG emissions and reduction efforts and helps find new ways to further decrease PNC's carbon footprint. Finally, the Energy Manager provides the Director of Corporate Real Estate, among other senior leaders, with regular updates on our environmental efforts.

PNC Corporate Social Responsibility (CSR) also is involved in the company's environmental commitment, specifically as it pertains to Corporate & Institutional Banking's environmental and social due diligence, which is conducted for new and existing clients in select industries. CSR works with Corporate & Institutional Banking, as well as PNC's portfolio management and credit risk management teams, to facilitate and manage the development and implementation of environmental and social due diligence policies and procedures, including but not limited to stress tests and portfolio reviews.

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

Yes

C1.3a
(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives?
Business unit manager

Types of incentives
Monetary reward

Activity incentivized
Other, please specify (Energy and emissions targets)

Comment
The Director of Corporate Real Estate oversees PNC's building portfolio, which accounts for more than 95 percent of our Scope 1 and 2 emissions. Reflecting this, the head of PNC's Realty Services team's annual bonus, merit increases, and recognition are directly tied to his team's ability to set and achieve meaningful environmental performance targets.

Who is entitled to benefit from these incentives?
Energy manager

Types of incentives
Monetary reward

Activity incentivized
Other, please specify (Energy and emissions projects, targets)

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 sustainability strategy. The team sets public emissions, energy and other sustainability targets, and designs and drives the strategies and tactics to meet those targets. These efforts significantly contribute to PNC's greenhouse gas reduction efforts, and the team's annual bonuses, merit increases, and corporate recognitions are tied to their 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 has 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?
Board/Executive board

Types of incentives
Other non-monetary reward

Activity incentivized
Other, please specify (Oversight and management)

Comment
In 2017, PNC's corporate governance guidelines were expanded to include a provision that the board is responsible for overseeing PNC's most important CSR policies, programs and strategies. PNC's corporate governance guidelines can be found at www.pnc.com/corporategovernance.

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

<table>
<thead>
<tr>
<th>From (years)</th>
<th>To (years)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Medium-term</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Long-term</td>
<td>5</td>
<td>100</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Frequency of monitoring</th>
<th>How far into the future are risks considered?</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six-monthly or more frequently</td>
<td>3 to 6 years</td>
<td>PNC’s governance and approach to risk management help ensure that risks are effectively identified, monitored and managed. Risk committees established within PNC’s 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.</td>
</tr>
</tbody>
</table>

(C2.2b)
PNC has 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 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, 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 2017, PNC began developing an Environmental and Social Risk Management (ESRM) Rapid Risk Screen for use across all of Corporate & Institutional Banking. This Rapid Risk Screen, which was introduced in early 2018, will help us better identify and mitigate risk early in the lifecycle of a transaction. It encompasses environmental risk and human rights risk, and expands our focus on both risk domains 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.

As a part of its portfolio management practice, PNC regularly conducts stress assessments and scenario analysis to better understand how certain credit risks could potentially impact its wholesale credit portfolio. This process involves working groups of business and risk employees who seek to understand the secular and cyclical nature of the risk and who 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. 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. In 2017, our environmental reviews focused on understanding the risks related to the ongoing volatility in the oil & gas industry and developing initial assessments of secular shifts resulting from the growing use of electric vehicles and renewable energy.

Similar to how we ensure that PNC’s annual environmental stress assessment is relevant to our business and valuable to internal and external stakeholders, 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. Also, in 2017, we 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. Additionally, and as discussed above, PNC launched its ESRM Rapid Risk Screen, an environmental and human rights risk screening process that has expanded environmental, social and governance (ESG) screening across the bank’s entire corporate lending portfolio.

PNC’s Board also has a specific Risk Committee, which holds in-person meetings at least quarterly.
<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Relevance &amp; Inclusion</th>
<th>Please Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current regulation</td>
<td>Relevant, always included</td>
<td>As part of the underwriting process, PNC Corporate &amp; Institutional banking engages with companies in the coal mining, electric power generation, and 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 and allow us to identify potential concerns and help clients better mitigate risks.</td>
</tr>
<tr>
<td>Emerging regulation</td>
<td>Relevant, sometimes included</td>
<td>Emerging environmental regulations that could have a meaningful impact on PNC's credit quality are identified and assessed by PNC Corporate &amp; Institutional Banking underwriters for impact on the portfolio. The Credit Portfolio Management team also looks for potential opportunities and threats centered around significant new regulations and then recommends actions based on the scenario and time constraints, to position the portfolio for optimal overall performance.</td>
</tr>
<tr>
<td>Technology</td>
<td>Relevant, sometimes included</td>
<td>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. Previous reviews have focused on developing initial assessments of secular shifts resulting from the growing use of electric vehicles and renewable energy.</td>
</tr>
<tr>
<td>Legal</td>
<td>Relevant, sometimes included</td>
<td>PNC conducts Commercial Background Research Automation (COBRA) reviews of select new clients for derogatory legal issues. Environmental risk screening is a component of the review. The Corporate &amp; 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.</td>
</tr>
<tr>
<td>Market</td>
<td>Relevant, sometimes included</td>
<td>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. Previous reviews have focused on understanding the risks related to the ongoing volatility in the oil &amp; gas industry, and impact of the steel and aluminum tariffs on steel producers and consumers.</td>
</tr>
<tr>
<td>Reputation</td>
<td>Relevant, sometimes included</td>
<td>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. We have gradually reduced our lending to coal mining companies and prohibit new lending to coal producers who have anything more than a de minimis exposure to mountaintop removal mining. Also, we have 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.</td>
</tr>
<tr>
<td>Acute physical</td>
<td>Relevant, sometimes included</td>
<td>In situations where acute physical risks are causing material credit implications, PNC has developed a procedure to assess potentially impacted borrowers, provide concise and accurate information to stakeholders of the risk to PNC's credit portfolio and determine action necessary after the portfolio impact is measured. Borrowers risk ratings and/or collateral values could be impacted from the event. For Hurricane Irma, PNC conducted a quick and robust review of exposure to companies in the affected areas. That review did not result in a negative impact on risk ratings.</td>
</tr>
<tr>
<td>Chronic physical</td>
<td>Relevant, not included</td>
<td>Not currently an included part of analysis process.</td>
</tr>
<tr>
<td>Upstream</td>
<td>Not evaluated</td>
<td></td>
</tr>
<tr>
<td>Downstream</td>
<td>Not evaluated</td>
<td></td>
</tr>
</tbody>
</table>
(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’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 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, 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 2017, PNC began developing an Environmental and Social Risk Management (ESRM) Rapid Risk Screen for use across all of Corporate & Institutional Banking. This Rapid Risk Screen, which was introduced in early 2018, will help us better identify and mitigate risk early in the lifecycle of a transaction. It encompasses environmental risk and human rights risk, and expands our focus on both risk domains 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.

As a part of its portfolio management practice, PNC regularly conducts stress assessments and scenario analysis to better understand how certain credit risks could potentially impact its wholesale credit portfolio. This process involves working groups of business and risk employees who seek to understand the secular and cyclical nature of the risk and who 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. 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. In 2017, our environmental reviews focused on understanding the risks related to the ongoing volatility in the oil & gas industry and developing initial assessments of secular shifts resulting from the growing use of electric vehicles and renewable energy.

Similar to how we ensure that PNC’s annual environmental stress assessment is relevant to our business and valuable to internal and external stakeholders, 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. Also, in 2017, we 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. Additionally, and as discussed above, PNC launched its ESRM Rapid Risk Screen, an environmental and human rights risk screening process that has expanded ESG screening across the bank’s entire corporate lending portfolio.

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

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Risk 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Where in the value chain does the risk driver occur?</strong></td>
<td>Direct operations</td>
</tr>
<tr>
<td><strong>Risk type</strong></td>
<td>Physical risk</td>
</tr>
<tr>
<td><strong>Primary climate-related risk driver</strong></td>
<td>Chronic: Rising mean temperatures</td>
</tr>
<tr>
<td><strong>Type of financial impact driver</strong></td>
<td>Increased operating costs (e.g., inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)</td>
</tr>
<tr>
<td><strong>Company-specific description</strong></td>
<td>Increasing levels of GHG emissions impact temperature extremes, making them more intense, more frequent and longer lasting. Extremely hot temperatures and heat waves stress HVAC systems and impact work locations and data centers. At the same time, however, extremely cold temperatures have the ability to freeze and crack pipes. The 2017 hurricane season was one of the most damaging in terms of life and property losses and affected hundreds of thousands of Americans. The three most violent hurricanes, Harvey, Irma and Maria, caused more than an estimated $40 billion in damage in markets where we have both employees and customers. Due to the impact of these disasters on customers and residents of the affected areas, PNC waived certain fees and contributed more than $900,000 in disaster relief, including matches to employee gifts.</td>
</tr>
<tr>
<td><strong>Time horizon</strong></td>
<td>Current</td>
</tr>
<tr>
<td><strong>Likelihood</strong></td>
<td>Likely</td>
</tr>
<tr>
<td><strong>Magnitude of impact</strong></td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Potential financial impact</strong></td>
<td>3000000</td>
</tr>
<tr>
<td><strong>Explanation of financial impact</strong></td>
<td>Temperature extremes increase demand on heating and cooling, which results in higher utility costs. If unmanaged, we estimate that the financial impact could increase our energy expenses annually by more than $3 million.</td>
</tr>
<tr>
<td><strong>Management method</strong></td>
<td>We manage increased operational costs through our energy management program, which is overseen by PNC’s Innovation and Performance Group. This group is responsible for managing the demand and supply sides of energy use in PNC’s buildings, while enhancing operational efficiencies. They track corporate utility use, conduct energy audits and implement energy efficiency projects across the footprint. PNC is also using automation, advanced data processing and cutting edge technology to increase efficiency. In 2017, we incorporated advanced features to ensure that PNC building systems are designed efficiently, installed appropriately and operated as intended. The effectiveness of this intelligent building strategy is largely dependent on analytics from various data sources, such as our utility bills, work order requests and building management system. To capture these analytics, PNC leverages hybrid intelligent systems, which use human and artificial intelligence to augment the capabilities of machines. PNC also plans to use automation to enhance its buildings’ operational efficiency, specifically by optimizing energy consumption. Furthermore, PNC regularly conducts energy audits to identify and address building system issues and to achieve peak building performance. In 2017, PNC conducted audits at more than 150 of its buildings and provided energy efficiency plans to building managers.</td>
</tr>
<tr>
<td><strong>Cost of management</strong></td>
<td>52000000</td>
</tr>
<tr>
<td><strong>Comment</strong></td>
<td>Represents the investment in lighting, HVAC and other retrofits over the last eight years.</td>
</tr>
</tbody>
</table>
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 driver
Reputation: 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. Also, we must 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 is 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

Potential financial impact

Explanation of financial impact
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.

Cost of management

Comment
The cost to manage this risk is embedded in the department budget.

Identifier
Risk 3

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

Risk type
Physical risk

Primary climate-related risk driver
Acute: Increased severity of extreme weather events such as cyclones and floods

**Type of financial impact driver**
Increased capital costs (e.g., damage to facilities)

**Company- specific description**
Our buildings are subject to changing weather patterns that have resulted in an increase in extreme climate-related incidents over the past decade. Hurricanes and tropical storms have the potential to impact PNC operations on an annual basis. While these natural disasters historically have targeted the Gulf Coast and Florida coast, their potential impact now extends up the eastern coast and into the south-central regions of the United States, large portions of PNC's footprint. In 2017, major tropical storms impacted PNC locations and business processes, resulting in delayed openings, early closures, total closures and the implementation of alternate work strategies to minimize business impact. These occurrences impacted PNC borrowers, depositors, suppliers and other counter parties. PNC employees' home lives also were affected, which added to the company's business disruption. PNC also could suffer adverse consequences to the extent that disasters affect the financial markets or the economy in general. These types of impacts could lead to an increase in delinquencies, bankruptcies or defaults tied to higher levels of nonperforming assets, net charge-offs and credit loss provisions.

**Time horizon**
Current

**Likelihood**
More likely than not

**Magnitude of impact**
Medium-high

**Potential financial impact**

**Explanation of financial impact**
The financial implications vary based on magnitude and geographical impact (PNC footprint). For example, during Hurricane Sandy, which impacted a major market for PNC, more than 500 branches remained closed for the better part of a week after the storm made landfall.

**Management method**
We manage service disruptions through our business resiliency procedures. Enterprise Crisis Management (ECM) engages the Crisis Management (CM) team to determine and assess potential and current business impacts, and CM processes and procedures and Business Continuity Plans are enacted. ECM and PNC Realty Services partner with the company's lines of business to implement Alternate Work Solutions, including Alternate Work Areas and Workload Transfer. We also have expanded alternative channels, such as online, mobile and ATMs, to conduct business. Customers continue to take advantage of these services. In 2017, approximately 63 percent of our retail banking customers used non-teller channels for the majority of their transactions, compared with 60 percent in 2016. We also build our retail branches to commercial grade standards, which can help mitigate damage during major storms. To mitigate the risk associated with future storms and to ensure that PNC branches in storm-prone areas can operate during severe weather and other emergency conditions, we equipped select branches with the ability to connect to an emergency generator using a mechanical transfer switch. Switch gears have been installed at more than 100 branches, and PNC has an agreement with one of its suppliers to ensure that it has access to both generators and fuel, as needed, during the hurricane season.

**Cost of management**

**Comment**
Varies based on magnitude and geographical impact (PNC footprint).

---

**Identifier**
Risk 4

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

**Risk type**
Physical risk

**Primary climate-related risk driver**
Chronic: Changes in precipitation patterns and extreme variability in weather patterns

**Type of financial impact driver**
Increased capital costs (e.g., damage to facilities)

**Company- specific description**
Coastal and inland flooding can significantly disrupt PNC's ability to operate, including during weather emergencies, when customer needs are often the highest.

<table>
<thead>
<tr>
<th>Time horizon</th>
<th>Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood</td>
<td>About as likely as not</td>
</tr>
<tr>
<td>Magnitude of impact</td>
<td>Medium-high</td>
</tr>
<tr>
<td>Potential financial impact</td>
<td></td>
</tr>
<tr>
<td>Explanation of financial impact</td>
<td>Financial impact depends on weather patterns and specific storm events.</td>
</tr>
<tr>
<td>Management method</td>
<td>Enterprise Crisis Management engages the Crisis Management Team to determine and assess potential and current business impacts. Crisis Management processes and procedures and Business Continuity Plans are enacted.</td>
</tr>
<tr>
<td>Cost of management</td>
<td></td>
</tr>
<tr>
<td>Comment</td>
<td>Varies based on magnitude and geographical impact (PNC footprint).</td>
</tr>
</tbody>
</table>

**Identifier**
Risk 5

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

**Risk type**
Transition risk

**Primary climate-related risk driver**
Policy and legal: Other

**Type of financial impact driver**
Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

**Company-specific description**
PNC monitors developments in key regulatory areas, especially with respect to fuel/energy taxes, primarily in our retail footprint. As our building portfolio's energy consumption is responsible for the majority of our Scope 1 and 2 GHG emissions, fuel/energy taxes and regulations could heighten PNC's operational costs.

<table>
<thead>
<tr>
<th>Time horizon</th>
<th>Short-term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood</td>
<td>Likely</td>
</tr>
<tr>
<td>Magnitude of impact</td>
<td>Medium-low</td>
</tr>
<tr>
<td>Potential financial impact</td>
<td></td>
</tr>
<tr>
<td>2100000</td>
<td></td>
</tr>
<tr>
<td>Explanation of financial impact</td>
<td>Fuel/energy taxes and regulation could increase our operational expenses due to higher utility costs. If unmanaged, we estimate that the financial impact could increase our annual energy expenses by more than $2.1 million.</td>
</tr>
<tr>
<td>Management method</td>
<td>PNC's Innovation and Performance Group oversees PNC's energy consumption. They manage the demand and supply sides of energy use in PNC's buildings, while enhancing operational efficiencies. The group tracks corporate utility use, conducts energy audits and implements energy efficiency projects across the footprint. Starting in 2016, PNC partnered with a big data energy analytics company, to use deep learning to analyze various buildings' energy consumption. This project helped PNC reduce its energy consumption at applied locations by 10 percent.</td>
</tr>
<tr>
<td>Cost of management</td>
<td></td>
</tr>
</tbody>
</table>
Comment
A key cost to manage this risk is capital projects that reduce energy consumption. For example, since 2010, we have invested more than $50 million in lighting retrofit initiatives that have a payback period of less than four years. Furthermore, in 2017, we’ve invested more than $2 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 a 2009 baseline).

Identifier
Risk 6

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 driver
Policy and legal: 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. Further, PNC conducts annual environmental risk reviews to increase awareness of the potential sensitivity of its relationships in carbon intensive industries to these legislative and regulatory initiatives.

Time horizon
Short-term

Likelihood
Likely

Magnitude of impact
Medium-low

Potential financial impact

Explanation of financial impact
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 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. Corporate & Institutional Banking also incorporated an environmental risk analysis into the due diligence it conducts during the earliest stage of its lending process across all industries. This environmental pre-screening process for prospective clients occurs prior to PNC’s presentation of a term sheet and before underwriting.

Cost of management

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

**Identifier**
Opp1

**Where in the value chain does the opportunity occur?**
Customer

**Opportunity type**
Energy source

**Primary climate-related opportunity driver**
Use of lower-emission sources of energy

**Type of financial impact driver**
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. The United States has installed more than 42 GW of solar, the same amount of energy needed to power approximately 8.3 million U.S. homes. 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 products and services, including PNC Energy Capital, which helps clients finance renewable energy solutions.

**Time horizon**
Short-term

**Likelihood**
More likely than not

**Magnitude of impact**
Medium-low

**Potential financial impact**

**Explanation of financial impact**
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. In 2017, PNC’s sustainable financing totaled more than $10 billion, which includes contributions from PNC’s Equipment Finance, Public Finance and Real Estate Finance businesses, as well as other areas. 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 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 will be 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. Once completed, the project will be one of the largest utility-scale energy storage installations in Massachusetts. Another example of PNC’s support of renewable energy solutions was PNC Energy Capital’s financing of a 4.7MWdc project. The project is located on 30 acres of land in Weld County, Colorado and produces energy that will be fed into the grid and used by the customers of Poudre Valley Rural Electric Association, Inc., a rural electric distribution cooperative. The project will also be used to create educational opportunities for students at the local high school. This marks the third solar transaction for which PNC Energy Capital has provided financing to Poudre Valley Electric Association.

**Cost to realize opportunity**

**Comment**
The cost to manage this opportunity is embedded in the department budget.
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 driver
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

Potential financial impact
12000000

Explanation of financial impact
Through our energy management program, we have reduced our energy costs by 15 percent since 2009 and expect to further decrease these costs by at least 30 percent by 2020 (compared to 2009). Over the next several years, we estimate the savings to be more than $12 million.

Strategy to realize opportunity
Our key method for managing this opportunity is constructing and operating a high-performing building portfolio. At the end of 2017, PNC had 291 LEED-certified projects and 205 ENERGY STAR-certified buildings. Also, we were able to reduce the environmental impact of the extraction, transport and disposal of virgin materials by selecting environmentally-friendly interior products. Among these products are LED lights, furniture that is 100 percent Greenguard certified, and carpeting that is more than 65 percent recycled. Furthermore, in 2017 PNC purchased 86,491 square yards of Interface’s Cool Carpet, enabling the company to retire 910 tons of verified GHG emissions through reduction credits (certificate number 16-406, issued 02/21/18). 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. Furthermore, PNC regularly conducts energy audits to identify and address building system issues and to achieve peak building performance. In 2017, PNC conducted audits at more than 150 of its buildings.

Cost to realize opportunity
Comment
A key cost to manage this risk are capital projects that reduce energy consumption. 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 2017, we invested $2 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).

Identifier
Opp3
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

**Potential financial impact**

**Explanation of financial impact**
In 2017, PNC's sustainable financing, including that for renewable and energy-efficient projects, totalled more than $10 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 2017, PNC AMG’s dedicated RI products, active and passive overlays, and other RI strategies totaled approximately $2.1 billion in assets under management spread across the business units of Hawthorn, Wealth Management, Institutional Asset Management and PNC Capital Advisors. Committed to improving its ability to help clients better express their values and beliefs, PNC has a team of dedicated professionals who provide RI support to AMG’s advisors and clients. PNC also underwrites municipal bonds that drive greater efficiency and pollution control. This includes both traditional bonds and designated “green bonds.” In 2016, PNC became a signatory to the Green Bond Principles, which are guidelines managed by the International Capital Markets Association that prescribe best practices for underwriting and issuing green bonds.

**Cost to realize opportunity**

**Comment**
The cost to manage this opportunity is embedded in the department budget.

---

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

<table>
<thead>
<tr>
<th>Impact</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products and services</td>
<td>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 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 establishment of policies and procedures governing our underwriting and portfolio management practices. PNC facilitates regular communication between business partners as it pertains to materiality, renewable energy financing, environmental assessments and socially responsible investing.</td>
</tr>
<tr>
<td>Supply chain and/or value chain</td>
<td>Impacted for some suppliers, facilities, or product lines: During 2017, PNC continued efforts to minimize business risk by maturing and enhancing 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. It also demonstrates PNC’s commitment to providing the tools and resources that support a holistic approach to managing risk across the organization. Also during the year, our supply chain organization successfully deployed a procure-to-pay model to facilitate the end-to-end management of the third-party life cycle. By supporting this type of procurement structure, which leverages technology to streamline the entire buying process for goods and services needed for our company — from supplier selection to payment — PNC is better positioned to further deliver on its commitment to create a sustainable supply chain. Furthermore, our customers will benefit from our ability to track supplier performance and to measure and improve departmental performance and customer service. The streamlining of our procurement functions, as well as the elevation of our accounts payable department from a back-office operation to a strategic component of our overall supply chain, are key steps toward creating and maintaining a more sustainable operation.</td>
</tr>
<tr>
<td>Adaptation and mitigation activities</td>
<td>Impacted for some suppliers, facilities, or product lines: PNC has 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 establishment of policies and procedures governing our underwriting and portfolio management practices. Corporate &amp; Institutional Banking’s environmental and social risk management efforts facilitate regular communication between business partners as it pertains to materiality, renewable energy financing, environmental assessments and socially responsible investing. In 2017, PNC began developing an Environmental and Social Risk Management (ESRM) Rapid Risk Screen (RRS) for use across all of Corporate &amp; Institutional Banking. This Rapid Risk Screen helps us better identify and mitigate risk early in the lifecycle of a transaction. The RRS expands our focus on environmental risk across all of the company’s wholesale lending activities. As a part of its portfolio management practice, PNC regularly conducts stress assessments and scenario analysis to better understand how certain credit risks could potentially impact its wholesale credit portfolio. This process involves working groups of business and risk employees who seek to understand the secular and cyclical nature of the risk and who 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). We’re also equally focused on understanding the business opportunities inherent in the transition to a low-carbon economy. In 2017, our environmental reviews focused on understanding the risks related to the ongoing volatility in the oil &amp; gas industry and developing initial assessments of secular shifts resulting from the growing use of electric vehicles and renewable energy.</td>
</tr>
<tr>
<td>Investment in R&amp;D</td>
<td>Impacted for some suppliers, facilities, or product lines: 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, startups, community organizations and industry associations, all of which help us drive innovation, reach our ambitious environmental goals and gain exposure to new opportunities. One especially notable partnership in 2017 was with a startup that distributes environmentally-friendly paints to the eastern United States. This partnership demonstrates PNC’s commitment to innovation and environmental sustainability and is one example of how our partnerships can help us discover intelligent solutions.</td>
</tr>
<tr>
<td>Operations</td>
<td>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 set ambitious environmental performance goals in 2010 to reduce carbon emissions and energy and water consumption by 30 percent by 2020. The company met its carbon and energy reduction goals in 2016 and 2017, respectively, and is on target to meet its water reduction goal. Due to improvements such as new lighting and HVAC systems, PNC’s branches and office buildings use less energy than ever before. Now, PNC is raising the bar on its environmental goals, setting 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.</td>
</tr>
<tr>
<td>Other, please specify</td>
<td>Please select</td>
</tr>
</tbody>
</table>
(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td></td>
<td>As we transition to a low-carbon economy, and as our own processes and procedures evolve, we are adjusting our approach to climate change to incorporate more of a focus on the opportunities inherent in that transition, as well as the risks. 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. Previous reviews have focused on understanding the risks related to the ongoing volatility in the oil &amp; gas industry, and impact of the steel and aluminum tariffs on steel producers and consumers.</td>
</tr>
<tr>
<td>Operating costs</td>
<td>Impacted</td>
</tr>
<tr>
<td></td>
<td>Through our energy management program, we have reduced our energy costs by 15 percent since 2009 and expect to further decrease these costs by at least 30 percent by 2020 (compared to 2009). Over the next few years, we estimate the savings to be more than $12 million.</td>
</tr>
<tr>
<td>Capital expenditures / capital allocation</td>
<td>Impacted</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>Acquisitions and divestments</td>
<td>Not yet impacted</td>
</tr>
<tr>
<td>Access to capital</td>
<td>Not evaluated</td>
</tr>
<tr>
<td>Assets</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td></td>
<td>PNC ended 2017 with $2.1 billion in responsible investing assets under management, which reflects a 5 percent increase compared to 2016. We have built adaptable offerings that incorporate both exclusionary and inclusionary screening, allowing us to meet the evolving needs of our institutional and wealth clients. 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.</td>
</tr>
<tr>
<td>Liabilities</td>
<td>Impacted for some suppliers, facilities, or product lines</td>
</tr>
<tr>
<td></td>
<td>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 &amp; 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 2017, PNC began developing an Environmental and Social Risk Management (ESRM) Rapid Risk Screen for use across all of Corporate &amp; Institutional Banking. This Rapid Risk Screen, which was introduced in early 2018, will help us 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.</td>
</tr>
<tr>
<td>Other</td>
<td>Please select</td>
</tr>
</tbody>
</table>

(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, cybersecurity, 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. In addition, the company is expanding and centralizing its CSR team by hiring new and leveraging existing talent to support the company’s ESG practices and communications.

PNC has set ambitious emissions, energy use and water reduction goals. We met our 2020 emissions and energy reduction goals of 30 percent early, and are one percent away from meeting our 2020 30 percent water reduction goal. 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).

PNC continues to invest in hiring staff in both operational sustainability, climate-focused risk management, and corporate social responsibility departments, and has also formalized the Board of Director’s oversight of Corporate Social Responsibility, including environmental sustainability issues.

C3.1d

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

<table>
<thead>
<tr>
<th>Climate-related scenarios</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2DS</td>
<td>As a part of its portfolio management practice, PNC regularly conducts stress assessments and scenario analysis to better understand how certain credit risks could potentially impact its wholesale credit portfolio. This process involves working groups of business and risk employees who seek to understand the secular and cyclical nature of the risk and who 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. 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. In 2017, our environmental reviews focused on understanding the risks related to the ongoing volatility in the oil &amp; gas industry and developing initial assessments of secular shifts resulting from the growing use of electric vehicles and renewable energy.</td>
</tr>
</tbody>
</table>

Please select
Please select
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.

<table>
<thead>
<tr>
<th>Target reference number</th>
<th>Abs 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td></td>
</tr>
<tr>
<td>Scope 1+2 (location-based)</td>
<td></td>
</tr>
<tr>
<td><strong>% emissions in Scope</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>% reduction from base year</strong></td>
<td>30</td>
</tr>
<tr>
<td><strong>Base year</strong></td>
<td>2009</td>
</tr>
<tr>
<td><strong>Start year</strong></td>
<td>2010</td>
</tr>
<tr>
<td><strong>Base year emissions covered by target (metric tons CO2e)</strong></td>
<td>480206</td>
</tr>
<tr>
<td><strong>Target year</strong></td>
<td>2020</td>
</tr>
<tr>
<td><strong>Is this a science-based target?</strong></td>
<td>No, but we anticipate setting one in the next 2 years</td>
</tr>
<tr>
<td><strong>% achieved (emissions)</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>Target status</strong></td>
<td>Replaced</td>
</tr>
<tr>
<td><strong>Please explain</strong></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Target reference number</th>
<th>Abs 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td></td>
</tr>
<tr>
<td>Scope 1+2 (location-based)</td>
<td></td>
</tr>
<tr>
<td><strong>% emissions in Scope</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>% reduction from base year</strong></td>
<td>75</td>
</tr>
<tr>
<td><strong>Base year</strong></td>
<td></td>
</tr>
</tbody>
</table>
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

% achieved (emissions)
56

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 42% 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

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

Target
Renewable energy 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

% achieved in reporting year
26

Target Status
Underway

Please explain
We set a target of 10% by 2020 in 2015 which we have increased to 50% by 2035 to ensure a deeper commitment to renewable energy. Using 2015 as a baseline, we have increased our purchasing of REC’s by 13% from our total purchased electricity. We have increased our renewable energy by purchasing Renewable Energy Certificates (RECs) and producing more energy than we consume at our Net Zero Energy Building.
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

KPI in baseline year
680000

KPI in target year

% 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 2017 by reducing our paper consumption by 15%. 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
97

Target Status
Replaced
Please explain
We set a goal to reduce our water consumption by 30% by 2020 using a 2012 baseline. Since we have reduced our total water consumption by 29%, we anticipate meeting and exceeding this 2020 goal and have set an 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
57

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 29%.

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
43

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.

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 projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

<table>
<thead>
<tr>
<th>Stage of Development</th>
<th>Number of projects</th>
<th>Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under investigation</td>
<td>577</td>
<td></td>
</tr>
<tr>
<td>To be implemented*</td>
<td>53</td>
<td>848</td>
</tr>
<tr>
<td>Implementation commenced*</td>
<td>73</td>
<td>1095</td>
</tr>
<tr>
<td>Implemented*</td>
<td>461</td>
<td>8978</td>
</tr>
<tr>
<td>Not to be implemented</td>
<td>106</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Activity type</th>
<th>Description of activity</th>
<th>Estimated annual CO2e savings (metric tonnes CO2e)</th>
<th>Scope</th>
<th>Voluntary/Mandatory</th>
<th>Annual monetary savings (unit currency – as specified in CC0.4)</th>
<th>Investment required (unit currency – as specified in CC0.4)</th>
<th>Payback period</th>
<th>Estimated lifetime of the initiative</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency: Building services</td>
<td>Lighting</td>
<td>1763</td>
<td>Scope 2 (location-based)</td>
<td>Voluntary</td>
<td>336796</td>
<td>1751342</td>
<td>4 - 10 years</td>
<td>16-20 years</td>
<td>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 buildings to reduce PNC’s Scope 2 emissions from purchased electricity.</td>
</tr>
<tr>
<td>Other, please specify (Green Standards)</td>
<td>&lt;Not Applicable&gt;</td>
<td>1654</td>
<td>Scope 3</td>
<td>Voluntary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CDP
Annual monetary savings (unit currency – as specified in CC0.4)
374451

Investment required (unit currency – as specified in CC0.4)
421610

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 2017—and with the help of Green Standards—we donated furniture to 20 charities, diverted more than 600 tons of materials from the landfill and reduced CO2 emissions by approximately 1,600 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.

Activity type
Energy efficiency: Building services

Description of activity
Other, please specify (HVAC, Lighting and Building Controls)

Estimated annual CO2e savings (metric tonnes CO2e)
5064

Scope
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
66000

Investment required (unit currency – as specified in CC0.4)
15261248

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. In 2017, we visited over 150 buildings, greatly exceeding our goal of 70. Based on site visits, we prepared and provided regional teams with energy efficiency plans to reduce consumption in their buildings based on problems with lighting, HVAC, and plug loads 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.

Activity type
Energy efficiency: Building fabric

Description of activity
Other, please specify (LEED Certification )

Estimated annual CO2e savings (metric tonnes CO2e)
38

Scope
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
6000

Investment required (unit currency – as specified in CC0.4)
24000

Payback period
1-3 years

Estimated lifetime of the initiative
>30 years

Comment
Voluntary design and construction of two new or major renovation office projects where one achieved LEED EBOM and the other a Commercial Interior 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 office building design and construction.

Activity type
Energy efficiency: Building services

Description of activity
Other, please specify (No-Cost Energy Conservation Measures)

Estimated annual CO2e savings (metric tonnes CO2e)
459

Scope
Scope 1
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in CC0.4)
25080

Investment required (unit currency – as specified in CC0.4)
100320

Payback period
4 - 10 years

Estimated lifetime of the initiative
>30 years

Comment
Based on the 150 energy audits that were completed in 2017, we implemented no-cost energy conservation measures at approximately 110 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.
(C4.3c) What methods do you use to drive investment in emissions reduction activities?

<table>
<thead>
<tr>
<th>Method</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedicated budget for energy efficiency</td>
<td>PNC budgeted $3 million every year for the Innovation and Performance Group to execute its energy audit and lighting retrofit program. Over the past seven years, PNC has invested more than $50 million in lighting retrofits.</td>
</tr>
<tr>
<td>Employee engagement</td>
<td>In 2017, PNC built off its first internal employee communications campaign focused on environmental sustainability, the Bring to Light energy campaign by bringing the Smart Insights campaign to employees. This campaign provided monthly intranet articles and targeted information to employees about innovation and sustainability at home and in the office. By encouraging behaviors that have the greatest impact and that are most visible to others, the campaign empowered employees to make simple changes that can lead to significant improvements and cost savings.</td>
</tr>
<tr>
<td>Dedicated budget for other emissions reduction activities</td>
<td>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. In 2017, for example, PNC updated its program that evaluates and enhances the efficiency of new or renovated buildings. Among other changes, we incorporated advanced features to ensure that PNC building systems are designed efficiently, installed appropriately and operated as intended. Also in 2017, we launched a life cycle assessment (LCA) on a newly-constructed PNC bank branch. LCAs account for all three phases of a building—design and construction, building operation, and disposal or end of life—and leverage external research, stakeholder engagement and data acquisition to calculate total environmental impact. This particular assessment will help us determine where we need to focus to enhance the bank branch’s overall efficiency and performance and will help inform future LCAs. The effectiveness of our intelligent building strategy is largely dependent on analytics from various data sources, such as our utility bills, work order requests and building management system. To capture these analytics, PNC leverages hybrid intelligent systems, which use human and artificial intelligence to augment the capabilities of machines. PNC also plans to use automation to enhance its buildings’ operational efficiency, specifically by optimizing energy consumption.</td>
</tr>
</tbody>
</table>

In 2017, PNC built off its first internal employee communications campaign focused on environmental sustainability, the Bring to Light energy campaign by bringing the Smart Insights campaign to employees. This campaign provided monthly intranet articles and targeted information to employees about innovation and sustainability at home and in the office. By encouraging behaviors that have the greatest impact and that are most visible to others, the campaign empowered employees to make simple changes that can lead to significant improvements and cost savings.

**Internal incentives/recognition programs**
- All PNC employees have the opportunity to acknowledge each other’s achievements by sending Spotlight recognitions. The Innovation and Performance Group uses the Spotlight program to recognize employees who participate in sustainability contests and initiatives.

**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: To maximize operational efficiency, we continuously analyze our building portfolio to identify opportunities for improving the performance of our buildings. We accomplish this by auditing utility bills and analyzing operational data. Based on energy use and energy cost data, we identify the 10 worst-performing buildings in each of our markets. We then determine how we can most effectively and economically enhance the performance of these 10 buildings.

**Other**
- Energy audits are performed on the poor-performing buildings to identify and correct building system problems, as well as to achieve peak performance in the buildings moving forward. In 2017, we visited more than 150 buildings and provided regional teams with energy efficiency plans to reduce consumption in their buildings based on problems with lighting, HVAC 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 energy problems.

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(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) 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**
- PNC actively invests in alternative energy, primarily solar, through PNC Energy Capital and Public Finance, among other PNC businesses. We finance a variety of energy projects, including solar, wind, geo-thermal, water treatment plants, waste-to-energy plants, land-fill gas plants, distributed and stand-by generation/co-generation systems, central plant improvements and energy conservation projects, HVAC, and lighting retrofits and upgrades. In 2017, PNC’s sustainable finance commitment totaled more than $10 billion. In 2017, PNC’s 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 will be 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. Once completed, the project will be one of the largest utility-scale energy storage installations in Massachusetts. One of
the largest components of PNC's sustainable finance efforts is our underwriting of bonds that drive greater environmental benefits. This includes both traditional bonds and designated "green bonds." In 2016, PNC became a signatory to the Green Bond Principles, guidelines managed by the International Capital Markets Association that prescribe best practices for underwriting and issuing green bonds, and 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?
Low-carbon product and 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

Level of aggregation
Product

Description of product/Group of products
Launched in 2008, PNC's Small Business Green Lending program discounts standard loan origination fees by 50 percent and interest rates by 0.5 percent for energy and water efficiency project loans of $500,000 or less. Projects include the purchase of low-emission fleet vehicles to assist with Scope 1 emissions reductions, the purchase of ENERGY STAR appliances, water efficient fixtures, solar hot water systems and energy efficient roofs, and efficiency upgrades to existing systems to assist with Scope 2 emissions reductions.

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

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 2017, approximately 63 percent of our retail banking customers used non-teller channels for the majority of their transactions, compared with 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
Please select

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

Comment

Level of aggregation
Group of products

Description of product/Group of products
PNC's Eco/Recycle spend for the year makes up 10% of our total spend for categories such as break room items, office supplies, paper and toner.

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

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

C6. Emissions data
C6.1

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

Row 1

Gross global Scope 1 emissions (metric tons CO2e)
37123

End-year of reporting period
<Not Applicable>

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?

Row 1

Scope 2, location-based
235769

Scope 2, market-based (if applicable)
223363

End-year of reporting period
<Not Applicable>

Comment
Location-based figure uses eGRID emission factors. Market-based figure is an approximation that incorporates purchased RECs. Both also include purchased steam and chilled water.

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
1774

Emissions calculation methodology

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

Emissions calculation methodology

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

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
7502

Emissions calculation methodology
Natural gas per region to calculate distribution losses. Methane Loss percent - EPA Natural Gas Star Program Report (1997)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation
Natural gas consumption stems directly from utility bills.

Upstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

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

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
681

**Emissions calculation methodology**
Used U.S. EPA's WARM tool based on data from our confidential document destruction vendor. [https://www.epa.gov/warm](https://www.epa.gov/warm)

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
100

**Explanation**
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. The company currently has reliable data on the paper waste generated during operations, which was shredded and recycled.

Business travel

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
17275

**Emissions calculation methodology**

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
80

**Explanation**
The emissions were provided by the rental car, hired vehicles, and air/rail travel suppliers.

Employee commuting

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
123314

**Emissions calculation methodology**

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
0

**Explanation**
The calculations are based on the survey results and not actual emissions.

Upstream leased assets

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**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**
Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**
Percentage of emissions calculated using data obtained from suppliers or value chain partners

**Explanation**
As a service based organization, we have limited emissions from downstream transportation and distribution.

Processing of sold products

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**
Percentage of emissions calculated using data obtained from suppliers or value chain partners

**Explanation**
As a service based organization, we have limited emissions from processing of sold products.

Use of sold products

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**
Percentage of emissions calculated using data obtained from suppliers or value chain partners

**Explanation**
As a service based organization, we have limited emissions from use of sold products.

End of life treatment of sold products

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**
Percentage of emissions calculated using data obtained from suppliers or value chain partners

**Explanation**
As a service based organization, we have limited emissions from end of life.

Downstream leased assets

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**
Percentage of emissions calculated using data obtained from suppliers or value chain partners

**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

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

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

Investments

Evaluation status
Relevant, not yet calculated

Metric tonnes CO2e

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

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

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

Explanation

Other (downstream)

Evaluation status
Relevant, calculated

Metric tonnes CO2e
1494

Emissions calculation methodology
Energy use for water Supply: 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
Water consumption data comes directly from utility bills.

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
0.00002203

Metric numerator (Gross global combined Scope 1 and 2 emissions)
276544

Metric denominator
unit total revenue

Metric denominator: Unit total
16329000000

Scope 2 figure used
Location-based

% change from previous year
23

Direction of change
Decreased

Reason for change
Change is due to a 7.7 percent increase in total revenue and a 17.5 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: \[1 – ((1 - 0.175) / (1 + 0.077))\] x 100 = 23.4 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
6.42

Metric numerator (Gross global combined Scope 1 and 2 emissions)
276544

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
52906

Scope 2 figure used
Location-based

% change from previous year
3

Direction of change
Decreased

Reason for change
Change is due to a 1.7 percent increase in number of FTE and a 17.5 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: \[1 – ((1 - 0.175) / (1 + 0.017))\] x 100 = 3.35 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) Does your organization have greenhouse gas emissions other than carbon dioxide?
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).

<table>
<thead>
<tr>
<th>Greenhouse gas</th>
<th>Scope 1 emissions (metric tons of CO2e)</th>
<th>GWP Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>27228</td>
<td>IPCC Fourth Assessment Report (AR4 - 100 year)</td>
</tr>
<tr>
<td>CH4</td>
<td>1</td>
<td>IPCC Fourth Assessment Report (AR4 - 100 year)</td>
</tr>
<tr>
<td>N2O</td>
<td>0.3</td>
<td>IPCC Fourth Assessment Report (AR4 - 100 year)</td>
</tr>
<tr>
<td>HFCs</td>
<td>8802</td>
<td>IPCC Fourth Assessment Report (AR4 - 100 year)</td>
</tr>
<tr>
<td>Other, please specify (HCFC)</td>
<td>1294</td>
<td>IPCC Fourth Assessment Report (AR4 - 100 year)</td>
</tr>
</tbody>
</table>

C7.2

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

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Scope 1 emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US, Latin America and Caribbean (USLAC)</td>
<td>37123</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Scope 1 emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>21017</td>
</tr>
<tr>
<td>Heating Oil</td>
<td>37</td>
</tr>
<tr>
<td>Propane</td>
<td>17</td>
</tr>
<tr>
<td>Diesel</td>
<td>658</td>
</tr>
<tr>
<td>Jet Fuel</td>
<td>3994</td>
</tr>
<tr>
<td>Leased Vehicles</td>
<td>1520</td>
</tr>
<tr>
<td>Refrigerants</td>
<td>9880</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Scope 2, location-based (metric tons CO2e)</th>
<th>Scope 2, market-based (metric tons CO2e)</th>
<th>Purchased and consumed electricity, heat, steam or cooling (MWh)</th>
<th>Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States of America</td>
<td>235769</td>
<td>223363</td>
<td>481508</td>
<td>22636</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Scope 2, location-based emissions (metric tons CO2e)</th>
<th>Scope 2, market-based emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>235769</td>
<td>223363</td>
</tr>
<tr>
<td>Steam</td>
<td>3644</td>
<td>3644</td>
</tr>
<tr>
<td>Chilled Water</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Change in emissions (metric tons CO2e)</th>
<th>Direction of change</th>
<th>Emissions value (percentage)</th>
<th>Please explain calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in renewable energy consumption</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
<tr>
<td>Other emissions reduction activities</td>
<td>58,467</td>
<td>Decreased</td>
<td>17.5</td>
</tr>
<tr>
<td>Divestment</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
<tr>
<td>Acquisitions</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
<tr>
<td>Mergers</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
<tr>
<td>Change in output</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
<tr>
<td>Change in methodology</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
<tr>
<td>Change in boundary</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
<tr>
<td>Change in physical operating conditions</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
<tr>
<td>Unidentified</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
<td>No change</td>
<td>0</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Whether Undertaken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel (excluding feedstocks)</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of purchased or acquired electricity</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of purchased or acquired heat</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of purchased or acquired steam</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of purchased or acquired cooling</td>
<td>Yes</td>
</tr>
<tr>
<td>Generation of electricity, heat, steam, or cooling</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Source of Energy Consumption</th>
<th>Heating Value</th>
<th>MWh from renewable sources</th>
<th>MWh from non-renewable sources</th>
<th>Total MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel (excluding feedstock)</td>
<td>HHV (higher heating value)</td>
<td>0</td>
<td>119267</td>
<td>119267</td>
</tr>
<tr>
<td>Consumption of purchased or acquired electricity</td>
<td>&lt;Not Applicable&gt;</td>
<td>22636</td>
<td>467829</td>
<td>490465</td>
</tr>
<tr>
<td>Consumption of purchased or acquired heat</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Consumption of purchased or acquired steam</td>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
<td>12061</td>
<td>12061</td>
</tr>
<tr>
<td>Consumption of purchased or acquired cooling</td>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
<td>1618</td>
<td>1618</td>
</tr>
<tr>
<td>Consumption of self-generated non-fuel renewable energy</td>
<td>&lt;Not Applicable&gt;</td>
<td>45</td>
<td>&lt;Not Applicable&gt;</td>
<td>45</td>
</tr>
<tr>
<td>Total energy consumption</td>
<td>&lt;Not Applicable&gt;</td>
<td>22681</td>
<td>600775</td>
<td>623456</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Fuel Application</th>
<th>Whether Undertaken</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel for the generation of electricity</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of fuel for the generation of steam</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of fuel for the generation of cooling</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of fuel for co-generation or tri-generation</td>
<td>No</td>
</tr>
</tbody>
</table>

(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**
- 116530

**MWh fuel consumed for the self-generation of electricity**
- 0
<table>
<thead>
<tr>
<th>Fuels (excluding feedstocks)</th>
<th>Heating value</th>
<th>Total fuel MWh consumed by the organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane Gas</td>
<td>HHV (higher heating value)</td>
<td>81</td>
</tr>
<tr>
<td>Diesel</td>
<td>HHV (higher heating value)</td>
<td>2560</td>
</tr>
<tr>
<td>Fuel Oil Number 2</td>
<td>HHV (higher heating value)</td>
<td>97</td>
</tr>
</tbody>
</table>

**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>
MWh fuel consumed for the 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>
(C8.2d) List the average emission factors of the fuels reported in C8.2c.

**Diesel**

**Emission factor**

10.19

**Unit**

kg CO2e per gallon

**Emission factor source**


**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**

10.14

**Unit**

kg CO2e per gallon

**Emission factor source**


**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**

1.92

**Unit**

kg CO2e per m3

**Emission factor source**


**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**


**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.

<table>
<thead>
<tr>
<th></th>
<th>Total Gross generation (MWh)</th>
<th>Generation that is consumed by the organization (MWh)</th>
<th>Gross generation from renewable sources (MWh)</th>
<th>Generation from renewable sources that is consumed by the organization (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>55</td>
<td>45</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>Heat</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Steam</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cooling</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

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

- **MWh consumed associated with low-carbon electricity, heat, steam or cooling**
  - 22636

- **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.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Verification/assurance status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>Third-party verification or assurance process in place</td>
</tr>
<tr>
<td>Scope 2 (location-based or market-based)</td>
<td>Third-party verification or assurance process in place</td>
</tr>
<tr>
<td>Scope 3</td>
<td>Third-party verification or assurance process in place</td>
</tr>
</tbody>
</table>

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**


**Page/ section reference**

1

**Relevant standard**

ISO14064-3

**Proportion of reported emissions verified (%)**

100

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**


**Page/ section reference**

1

**Relevant standard**

CDP
C10.1b

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

Scope
Scope 3 - all relevant categories

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Attach the statement

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

**Type of engagement**
Compliance & onboarding

**Details of engagement**
Included climate change in supplier selection / management mechanism

**% of suppliers by number**

**% total procurement spend (direct and indirect)**

**% Scope 3 emissions as reported in C6.5**

**Rationale for the coverage of your engagement**
We are focused on first managing our own emission sources but do monitor the environmental practices of our third party suppliers. We have started to engage some suppliers on environmental issues more broadly and plan to expand these efforts over the next few years. One target area has been our building material suppliers, from whom we have sourced products that have a lower carbon intensity. These products include but are not limited to those that are made from recycled materials, that are locally-harvested or manufactured, and/or that have carbon offsets. In 2017, for example, we purchased 86,491 yards of Interface’s Cool Carpet and subsequently retired 910 tons of verified GHG emissions reduction credits (certificate number 16-406, issued 21/Feb/18). We are in the process of evaluating the adoption of LEED v4’s Product Disclosure and Optimization, which requires suppliers of our building products and materials to provide Environmental Product Declarations (EPDs). EPDs incorporate lifecycle analysis data on a product’s environmental impact, including GHG emissions. We can use data from the EPDs to prioritize products with a lower impact on the environment. We have also had conversations with our office supply vendor about sustainability issues.

**Impact of engagement, including measures of success**
In 2017, approximately 10 percent of all office products purchased by PNC contained recycled content or held a green certification. We will continue to look for ways to expand our engagement with suppliers and look for environmentally friendly options, via purchasing, to further reduce our GHG emissions.

Comment

---

(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 educate customers about the climate change impacts of (using) your products, goods, and/or services

**Size of engagement**

**% Scope 3 emissions as reported in C6.5**

**Please explain the rationale for selecting this group of customers and scope of engagement**
PNC recognizes that environmental issues, including climate change, are impacting our business, our clients and the communities in which we operate. We are committed to keeping our customers engaged and informed about our priorities, goals and efforts in environmental sustainability. To this end, we maintain a robust communications strategy, which includes our annual Corporate Social Responsibility Report, ongoing social media campaigns, and communications campaigns via our media relations team and our brand journalism website, PNC Point of View.

**Impact of engagement, including measures of success**
Our efforts around Environmental and Social Risk Management have really resonated with our stakeholders. First, we have received incredible support and valuable feedback from our Board, which recognizes the importance of CSR. Second, we have received positive feedback from our investors, who increasingly understand the importance of considering long-term environmental risks on our credit portfolio. Our employees have been very supportive of our enhanced environmental due diligence and focus. And, finally, we can cite specific instances where we have won new customer business directly tied to our refined policies around things like lending to companies engaged in mountaintop removal coal mining. Furthermore, as PNC has enhanced its environmental lending due diligence, we’ve noticed more companies in environmentally sensitive businesses improving their own CSR efforts and leveraging these efforts to secure financing.
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?
   Funding research organizations
   Other

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?
   No
University Collaborations: How people interact with buildings greatly affects energy use. More than 40 percent of our individual energy use can be saved by changing the way we interact with buildings. Recognizing this savings opportunity, PNC’s Innovation and Performance Group collaborated with Carnegie Mellon University (CMU) in 2014. PNC and CMU conducted a plug load pilot study at 80 employee workstations by separating employees into four groups with varying levels of access and control of an intelligent energy dashboard. This study found that PNC could reduce its energy consumption by 40 percent by influencing employee behavior. Based on the success of the pilot study, we expanded this initiative by deploying smart plug devices at more than 2,850 employee desks. Furthermore, based on additional plug load studies, we found that our 40 percent energy savings was also possible on common appliances, including but not limited to water coolers, coffee makers and vending machines, by turning them off during unoccupied hours.

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.

Better Buildings Challenge: In late 2011, PNC agreed to participate as a “partner” in the President’s Better Buildings Challenge (BBC), which aims to make U.S. commercial buildings 20 percent more efficient by 2020. The BBC supports commercial and industrial building owners by providing technical assistance and proven solutions to energy efficiency. The program also provides a forum for matching Partners and Allies to enhance collaboration and problem solving in energy efficiency. Both Partners and Allies are publicly recognized for their leadership and innovation in energy efficiency. In 2017, PNC continued to work towards a 30 percent energy reduction goal by 2020 across 2,700 properties and 28 million square feet. PNC’s successful participation in the BBC will provide a great model for other organizations that have a large number of locations.

Innovative and Intelligent Buildings: Thanks to our 2003 commitment that all new construction and major renovations would follow the USGBC’s standards, we have reduced the environmental impact of our spaces and provided healthier environments for our customers and employees. PNC was an early adopter of green building and has since made sustainable design and construction a key ingredient in its long-term carbon strategy. To further enhance the performance of our buildings, the Innovation and Performance Group is working to revamp its existing green building program to focus more on innovation and intelligent building capabilities. We want to showcase our achievements while establishing a scientific basis for improvement and innovation, preparing the company for future success and leadership.

ENERGY STAR and LEED Certifications: We recognize top performing buildings through ENERGY STAR and LEED certification programs. In 2011, we added utility data from 2,400 PNC properties to the EPA’s ENERGY STAR Portfolio Manager, which we use as a tool to track building performance and identify poor performing buildings. At the end of 2017, we had 205 buildings spanning 3.0 million square-feet that were ENERGY STAR certified. We also had approximately 4.1 million square-feet of LEED certified space across 291 buildings.
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?

Our commitment to reducing our environmental impact extends to our third-party suppliers, including those who support PNC’s commitment to green building and whose operations we carefully evaluate before beginning an engagement or relationship. We firmly believe that our third parties and their actions are an extension of our own actions and reputation and subsequently expect our third parties to demonstrate sound values and ethical practices. Furthermore, PNC’s Code of Business Conduct and Ethics provides the ethical guidelines and expectations for conducting business on behalf of PNC. The Code is a resource for all PNC employees and business partners, such as vendors, agents, consultants and other representatives who serve as an extension of PNC, and they are expected to adhere to the spirit of the Code, and to any applicable provisions, when working on behalf of PNC.

Also, as we have made a strong commitment to emission reductions in our own operations, a key focus of our external engagements has related to green buildings. PNC’s Innovation and Performance Group carefully evaluates green building and other environmental performance vendors before engaging with them on a project, certification program or industry challenge to ensure that their goals align with our internal energy and GHG emissions targets. In addition, PNC Energy Capital evaluates trade associations representing the industries in which it is involved to ensure that they align with PNC’s overall strategy.

Furthermore, as part of its underwriting process, PNC Corporate & Institutional Banking requires companies in the coal mining, electric power generation, oil and gas industries to complete an enhanced environmental due diligence questionnaire. This questionnaire focuses on the borrower’s past and present environmental compliance with laws and regulations; the borrower’s financial resources, including liquidity and access to public debt and equity markets, 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. As part of our commitment to increasing transparency, we now report on the frequency with which we conduct this later-stage enhanced due diligence for potential new clients. In 2017, PNC conducted enhanced due diligence on 21 new clients, who were subject to our supplemental due diligence criteria, and ultimately approved nine for financing. In addition to reviewing new clients, in 2017, we conducted annual reviews for 172 existing clients in these industries that incorporate similar environmental assessments. These reviews facilitate greater client engagement and allow us to identify potential concerns and help clients better mitigate risks.

Finally, PNC is intentional in developing relationships with financial trade associations, including but not limited to the Clearinghouse, the American Bankers Association and the Financial Services Roundtable. While these relationships help us identify the risks of proposals or practices as they pertain to banking, we do engage in conversations about environmental issues with select organizations, including local chambers of commerce, as well as the Allegheny Conference in Pittsburgh, Pa. Furthermore, every PNC Regional President sits on the board of his or her respective chamber of commerce (or a similar organization, if a local chamber does not exist), and PNC’s CEO has always been on the board of the Allegheny Conference. This leadership engagement ensures that PNC is aware of and participates in conversations regarding environmental and other issues that impact the communities we serve.
(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

**Publication**
In voluntary sustainability report

**Status**
Complete

**Attach the document**
PNC_2017_CSR_Report.pdf

**Content elements**
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

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**Publication**
In voluntary communications

**Status**
Complete

**Attach the document**

**Content elements**
Emissions figures
Emission targets
Other metrics

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**C14. Signoff**

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**C-FI**

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

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**C14.1**

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

<table>
<thead>
<tr>
<th>Job title</th>
<th>Corresponding job category</th>
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<tbody>
<tr>
<td>Chairman, President, and Chief Executive Officer</td>
<td>Chief Executive Officer (CEO)</td>
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**Submit your response**

In which language are you submitting your response?
English
Please confirm how your response should be handled by CDP

<table>
<thead>
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<th>Public or Non-Public Submission</th>
<th>I am submitting to</th>
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<td></td>
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Please confirm below

I have read and accept the applicable Terms